

Statistical Output and Robustness Checks for the Analyses in Tables 2.2, 2.3, 2.4, 2.5, and 2.6

Note: Statistical output for the estimates of the required changes in Table 2.6 will be
in the analyses for Table 2.2, Model 2-3

[McGuireC1OutputT2-23456.pdf](#)

Web Appendix C1 to:

James W. McGuire
Wealth, Health, and Democracy in East Asia and Latin America
New York: Cambridge University Press, 2010

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105 Developing Countries Included in the Quantitative Analysis in Chapter 2

Africa, Sub-Saharan: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo (Brazzaville), Congo (Kinshasa), Cote d'Ivoire, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe

Asia, East: Cambodia, China, Fiji, Hong Kong, Indonesia, Korea (North), Korea (South), Laos, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Singapore, Taiwan, Thailand, Vietnam.

Asia, South: Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka.

Latin America and the Caribbean: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad & Tobago, Uruguay, Venezuela.

Middle East and North Africa: Afghanistan, Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, Yemen.

Three Political Science and Three Public Health Hypotheses

First evaluate public health hypotheses

- PH1: Spending promotes services
- PH2: Services promote survival
- PH3: Spending promotes survival

Next evaluate political science hypotheses

- PS1: Democracy promotes spending
- PS2: Democracy promotes services
- PS3: Democracy promotes survival

Titles of Tables 2.2, 2.3, 2.4, 2.5, and 2.6 in the Published Book

Table 2.2. Economy, Culture, Demography, Social Service Utilization, and Infant Mortality

Table 2.2.3. Public Health Care Spending, Public Health Service Utilization, and Infant Mortality

Table 2.2.4. Long-term Democratic Experience and Public Health Care Spending, Public Health Service Access/Utilization, and Infant Mortality

Table 2.2.5. Short-term Democratic Practice and Public Health Care Spending, Public Health Service Access/Utilization, and Infant Mortality

Table 2.2.6. Changes required to reduce infant mortality from 54 to 49 per 100
Output located in Table 2.2, Model 2-3

Associations Explored in Tables 2.2, 2.3, 2.4, and 2.5

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Table 2.2, Model 2-2: DV infant mortality, IV GDP/cap & income ineq (W is H medium variant)

Table 2.2, Model 2-3: DV infant mortality, IV 7 econ, cult, dem var (W is H broad variant)

(W is H broad variant is the baseline model, controlled for in most subsequent analyses)

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Table 2.2, Model 2-5: DV infant mortality, IV DTP immunization, control baseline

Table 2.2, Model 2-6: DV infant mortality, IV MCV immunization, control baseline

Table 2.2, Model 2-7: DV infant mortality, IV female schooling, control baseline

Table 2.2, Model 2-8: DV infant mortality, IV family planning effort, control baseline

Table 2.2, Model 2-9: DV infant mortality, IV % access to safe water, control baseline

Table 2.2, Model 2-10: DV infant mortality, IV % access to adequate sanitation, control baseline

Table 2.3, Model 3-1: DV Birth attendance, IV Pub health sp as % GDP, control baseline

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Table 2.3, Model 3-3: DV Measles immunizat, IV Pub health sp as % GDP, control baseline

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Table 2.5, Model 5-6: DV family planning, IV democracy 1980-1990, excluding fertility

Table 2.5, Model 5-7: DV fertility, IV democracy 1980-1990, excluding fertility

Table 2.5, Model 5-8: DV fertility, IV family planning, excluding fertility

Table 2.5, Model 5-9: DV access to improved water, IV democracy 1980-1990

Table 2.5, Model 5-10: DV infant mortality, IV democracy 1980-1990

Robustness checks: Specification, Imputation, Outliers, Endogeneity, Data Sources

Heteroskedasticity-robust standard errors used throughout

1. Alter the specification of the model
 - 1.1. Without fertility
 - 1.2. With female schooling
 - 1.3. With female literacy
 - 1.4. With geographical variables (remoteness, coastal/river access, tropical location)
 - 1.5. With regional dummies (Africa, Latin America, East Asia, South Asia)
2. Check whether imputation may be driving the results
 - 2.1. With missing data flags
3. Check whether outliers may be driving the results
 - 3.1. Robust regression
 - 3.2. Median regression
 - 3.3. Discard the two cases with highest values on the Cook's-D test
4. Endogeneity check
 - 4.1. Correlate candidate instrument (CI) and hypothesized endogenous regressor (HER)
 - 4.2. Does CI predict HER in presence of the exogenous regressors?
 - 4.3. Two-stage least squares using CI as an instrument for HER
 - 4.4. Hausman test to see if coefficients from 2SLS differ from those from OLS
5. Dependent variable (if infant mortality): Change definition or data source
 - 5.1. Change dependent variable: infant mortality to under-5 mortality (limrcom to lu5mrcom)
 - 5.2. Change data source for dep var: infant mortality (limrcom to limrwdi)
6. Independent variable (if spending or democracy): Change data source, transform, or vary
 - 6.1. Change data source for ind var: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
 - 6.2. Take natural log of indep var: WDI to ln WDI (hlxpuwdi to lhlxpuwd)
 - 6.3. Change data source for ind var: pavg0090 to pavg7090
 - 6.4. Change data source for ind var: pavg0090 to free7290
 - 6.5. Change data source for ind var: pavg8090 to pol90
 - 6.6. Change data source for ind var: pavg8090 to free8090
 - 6.7. Change data source for ind var: pavg8090 to free90
7. Control variable (if GDP or ethnic fragmentation): Change data source
 - 7.1. Change data source for ctrl var: GDP/cap at PPP (lgdph to lgdpmx)
 - 7.2. Change data source for ctrl var: GDP/cap at PPP (lgdph to lgdpmx), miss data flags
 - 7.3. Change data source for ctrl var: ethnic fragm (ethnl to ethnannx)
 - 7.4. Change data source for ctrl var: ethnic fragm (ethnl to ethnannx), miss data flags

Research Plans for Tables 2.2, 2.3, 2.4, and 2.5

Research Plan for Table 2.2

Research plan: Table 2.2, Models 2-1 to 2-3

Correlations among variables

Research plan: Table 2.2, Model 2-1: DV IMR, IV GDP per capita

Model 2-1: Infant mortality predicted by GDP per capita only

Research plan: Table 2.2, Model 2-2: DV IMR, IV GDP per capita & Income Ineq.

Model 2-2: Infant mortality predicted by GDP per capita and Gini index

Research plan: Table 2.2, Model 2-3: DV IMR, IV 7 Econ, Cultural, Demog. Var.

Model 2-3: Bivariate correlations among independent variables
 Model 2-3: Infant Mortality predicted by 7 baseline variables
 Model 2-3: Means and SDs of infant mortality, GDP per capita, Gini index
 Model 2-3: Use CLARIFY to estim magnitude of effect on limrcom of 1 SD changes in IVs
 Model 2-3: How much would IMR fall if the natural log of GDP per capita rose one SD?
 Model 2-3: How much of a rise in ln GDP per capita would reduce IMR from 54 to 49?
 Model 2-3: How much would infant mortality fall if the Gini index fell one SD?
 Model 2-3: How much of a fall in the Gini index would reduce IMR from 54 to 49?
 Model 2-3: How much would infant mortality fall if the Gini index fell one SD?
 Model 2-3: How much would infant mortality fall if ethnic fractionalization fell one SD?
 Model 2-3: How much would infant mortality fall if Muslim religion rose one SD?
 Model 2-3: How much would infant mortality fall if Muslim religion went from 0 to 1?
 Model 2-3: How much would infant mortality fall if fertility fell one SD?
 Model 2-3: How much would infant mortality fall if population density rose one SD?
 Model 2-3: How much would infant mortality fall if urbanization rose one SD?
 Model 2-3: Robust Check 1.1: Change specification: Exclude fertility
 Model 2-3: Robust Check 1.3: Change specification: Include female literacy
 Model 2-3: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-3: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-3: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-3: Robust Check 3.2: Outlier checks: Median regression
 Model 2-3: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 2-3: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)
 Model 2-3: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 2-3: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 2-3: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 2-3: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)
 Model 2-3: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 2-3: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-3: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-3: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-3: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.2, Model 2-4: DV IMR, IV Birth Attendance

Model 2-4: Bivariate correlations among independent variables
 Model 2-4: Infant mortality predicted by 7 baseline variables only (same as Model 3-4)
 Model 2-4: Infant Mortality predicted by 7 baseline variables + birth attendance
 Model 2-4: Means and SDs of Birth Attendance and Infant Mortality
 Model 2-4: How much would infant mortality fall if trained attendance at birth rose one SD?
 Model 2-4: Robust Check 1.1: Change specification: Exclude fertility
 Model 2-4: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 2-4: Robust Check 1.3: Change specification: Include female literacy
 Model 2-4: Robust Check 1.4: Change specification: Include geographical variables
 Model 2-4: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-4: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-4: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-4: Robust Check 3.2: Outlier checks: Median regression
 Model 2-4: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 2-4: Robust Check 4.1: Endog ck: Corr cand. inst (rpos) & hyp endg reg (delivcom)
 Model 2-4: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 2-4: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 2-4: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 2-4: Robust Check 5.1: DepV: change IMR to U5MR (limrcm to lu5mrcom)
 Model 2-4: Robust Check 5.2: DepV: Vary source: infant mortality (limrcm to limrwdi)
 Model 2-4: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-4: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-4: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-4: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.2, Model 2-5: DV IMR, IV DTP3 Immunization

Model 2-5: Bivariate correlations among independent variables
 Model 2-5: Infant mortality predicted by 7 baseline variables only (same as Model 3-4)
 Model 2-5: Infant Mortality predicted by 7 baseline variables + dtp3 immuniz
 Model 2-5: Means and SDs of DTP3 Immunization and Infant Mortality
 Model 2-5: How much would infant mortality fall if DTP3 immuniz rose one SD?
 Model 2-5: Robust Check 1.1: Change specification: Exclude fertility
 Model 2-5: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 2-5: Robust Check 1.3: Change specification: Include female literacy
 Model 2-5: Robust Check 1.4: Change specification: Include geographical variables
 Model 2-5: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-5: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-5: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-5: Robust Check 3.2: Outlier checks: Median regression
 Model 2-5: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 2-5: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)
 Model 2-5: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 2-5: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 2-5: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 2-5: Robust Check 5.1: DepV: change IMR to U5MR (limrcm to lu5mrcom)

Model 2-5: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 2-5: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-5: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-5: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-5: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.2, Model 2-6: DV IMR, IV MCV Immunization

Model 2-6: Bivariate correlations among independent variables
 Model 2-6: Infant mortality predicted by 7 baseline variables only (same as Model 3-4)
 Model 2-6: Infant Mortality predicted by 7 baseline variables + measles immuniz
 Model 2-6: Means and SDs of Measles Immunization and Infant Mortality
 Model 2-6: How much would infant mortality fall if measles immuniz rose one SD?
 Model 2-6: Robust Check 1.1: Change specification: Exclude fertility
 Model 2-6: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 2-6: Robust Check 1.3: Change specification: Include female literacy
 Model 2-6: Robust Check 1.4: Change specification: Include geographical variables
 Model 2-6: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-6: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-6: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-6: Robust Check 3.2: Outlier checks: Median regression
 Model 2-6: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 2-6: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)
 Model 2-6: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 2-6: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 2-6: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 2-6: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)
 Model 2-6: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 2-6: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-6: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-6: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-6: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.2, Model 2-7: DV IMR, IV Mean years of female schooling

Model 2-7: Bivariate correlations among independent variables
 Model 2-7: Infant mortality predicted by 7 baseline variables only (same as Model 3-4)
 Model 2-7: Infant Mortality predicted by 7 baseline variables + mean yrs fem school
 Model 2-7: Means and SDs of Mean Yrs Female School and Infant Mortality
 Model 2-7: How much would infant mortality fall if female schooling rose one SD?
 Model 2-7: Robust Check 1.1: Change specification: Exclude fertility
 Model 2-7: Robust Check 1.3: Change specification: Female literacy instead of female school
 Model 2-7: Robust Check 1.4: Change specification: Include geographical variables
 Model 2-7: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-7: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-7: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-7: Robust Check 3.2: Outlier checks: Median regression
 Model 2-7: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 2-7: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)
 Model 2-7: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 2-7: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 2-7: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS

Model 2-7: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)
 Model 2-7: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 2-7: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-7: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-7: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-7: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.2, Model 2-8: DV IMR, IV Family planning effort

Model 2-8: Bivariate correlations among independent variables
 Model 2-8: Infant Mortality predicted by six baseline variables only (excl. fertility)
 Model 2-8: Infant Mortality predicted by six baseline variables + family planning
 Model 2-8: Means and SDs of Family Planning and Infant Mortality
 Model 2-8: How much would infant mortality fall if family planning rose one SD?
 Model 2-8: Robust Check 1.1: Change specification: Include fertility
 Model 2-8: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 2-8: Robust Check 1.3: Change specification: Include female literacy
 Model 2-8: Robust Check 1.4: Change specification: Include geographical variables
 Model 2-8: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-8: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-8: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-8: Robust Check 3.2: Outlier checks: Median regression
 Model 2-8: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 2-8: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)
 Model 2-8: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 2-8: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-8: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-8: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-8: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.2, Model 2-9: DV IMR, IV Access to an improved water source

Model 2-9: Bivariate correlations among independent variables
 Model 2-9: Infant mortality predicted by 7 baseline variables only (same as Model 3-4)
 Model 2-9: Infant Mortality predicted by 7 baseline variables + % access impvd water
 Model 2-9: Means and SDs of access to an improved water source and infant mortality
 Model 2-9: How much would infant mortality fall if access to water rose one SD?
 Model 2-9: Robust Check 1.1: Change specification: Exclude fertility
 Model 2-9: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 2-9: Robust Check 1.3: Change specification: Include female literacy
 Model 2-9: Robust Check 1.4: Change specification: Include geographical variables
 Model 2-9: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-9: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-9: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-9: Robust Check 3.2: Outlier checks: Median regression
 Model 2-9: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 2-9: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)
 Model 2-9: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 2-9: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 2-9: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 2-9: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)
 Model 2-9: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

Model 2-9: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-9: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-9: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-9: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.2, Model 2-10: DV IMR, IV Access to adequate sanitation

Model 2-10: Bivariate correlations among independent variables
 Model 2-10: Infant mortality predicted by 7 baseline variables only (same as Model 3-4)
 Model 2-10: Infant Mortality predicted by 7 baseline variables + % access impvd sanit
 Model 2-10: Means and SDs of access to improved sanitation and infant mortality
 Model 2-10: How much would infant mortality fall if access to improved sanitation rose one SD?
 Model 2-10: Robust Check 1.1: Change specification: Exclude fertility
 Model 2-10: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 2-10: Robust Check 1.3: Change specification: Include female literacy
 Model 2-10: Robust Check 1.4: Change specification: Include geographical variables
 Model 2-10: Robust Check 1.5: Change specification: Include regional dummies
 Model 2-10: Robust Check 2.1: Imputation check: Include missing data flags
 Model 2-10: Robust Check 3.1: Outlier checks: Robust regression
 Model 2-10: Robust Check 3.2: Outlier checks: Median regression
 Model 2-10: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksds
 Model 2-10: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)
 Model 2-10: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 2-10: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 2-10: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 2-10: Robust Check 5.1: DepV: change IMR to U5MR (limrcm to lu5mrcom)
 Model 2-10: Robust Check 5.2: DepV: Vary source: infant mortality (limrcm to limrwdi)
 Model 2-10: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 2-10: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 2-10: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 2-10: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research Plan for Table 2.3

Research plan: Table 2.3, Model 3-1: DV Birth attendance, IV health spending

Model 3-1: Bivariate correlations among independent variables
 Model 3-1: Birth attendance predicted by 7 baseline variables only
 Model 3-1: Birth attendance predicted by 7 baseline variables + % GDP pub health sp
 Model 3-1: Means and SDs of % GDP to public health spending and birth attendance
 Model 3-1: How much would birth attendance rise if pub health spending as a % GDP rose 1 SD?
 Model 3-1: Robust Check 1.1: Change specification: Exclude fertility
 Model 3-1: Robust Check 1.2: Change specification: Include mean years of female school
 Model 3-1: Robust Check 1.3: Change specification: Include female literacy
 Model 3-1: Robust Check 1.4: Change specification: Include geog var (airdist, popcrgs, latcapab)
 Model 3-1: Robust Check 1.5: Change specification: Include regional dummies
 Model 3-1: Robust Check 2.1: Imputation check: Include missing data flags
 Model 3-1: Robust Check 3.1: Outlier checks: Robust regression
 Model 3-1: Robust Check 3.2: Outlier checks: Median regression
 Model 3-1: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksds
 Model 3-1: Robust Check 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)
 Model 3-1: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

Model 3-1: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 3-1: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 3-1: Robust Check 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
 Model 3-1: Robust Check 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to lhlxpuwd)
 Model 3-1: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 3-1: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 3-1: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 3-1: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.3, Model 3-2: DV DTP3 immz, IV health spending

Model 3-2: Bivariate correlations among independent variables
 Model 3-2: DTP3 immz predicted by 7 baseline variables only
 Model 3-2: DTP3 immz predicted by 7 baseline variables + % GDP pub health sp
 Model 3-2: Means and SDs of % GDP to public health spending and DTP3 immz
 Model 3-2: How much would DTP3 immz rise if pub health spending as a % GDP rose 1 SD?
 Model 3-2: Robust Check 1.1: Change specification: Exclude fertility
 Model 3-2: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 3-2: Robust Check 1.3: Change specification: Include female literacy
 Model 3-2: Robust Check 1.4: Change specification: Incl other geog var (airdist, popcrgs, latcapab)
 Model 3-2: Robust Check 1.5: Change specification: Include regional dummies
 Model 3-2: Robust Check 2.1: Imputation check: Include missing data flags
 Model 3-2: Robust Check 3.1: Outlier checks: Robust regression
 Model 3-2: Robust Check 3.2: Outlier checks: Median regression
 Model 3-2: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 3-2: Robust Check 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)
 Model 3-2: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 3-2: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 3-2: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 3-2: Robust Check 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
 Model 3-2: Robust Check 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to lhlxpuwd)
 Model 3-2: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 3-2: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 3-2: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 3-2: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.3, Model 3-3: DV measles immz, IV spending

Model 3-3: Bivariate correlations among independent variables
 Model 3-3: MCV immuniz predicted by 7 baseline variables only
 Model 3-3: MCV immuniz predicted by 7 baseline variables + % GDP pub health sp
 Model 3-3: Means and SDs of % GDP to public health spending and mcv immz
 Model 3-3: How much would mcv immz rise if pub health spending as a % GDP rose 1 SD?
 Model 3-3: Robust Check 1.1: Change specification: Exclude fertility
 Model 3-3: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 3-3: Robust Check 1.3: Change specification: Include female literacy
 Model 3-3: Robust Check 1.4: Change specification: Include geographical variables
 Model 3-3: Robust Check 1.5: Change specification: Include regional dummies
 Model 3-3: Robust Check 2.1: Imputation check: Include missing data flags
 Model 3-3: Robust Check 3.1: Outlier checks: Robust regression

Model 3-3: Robust Check 3.2: Outlier checks: Median regression
 Model 3-3: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 3-3: Robust Check 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)
 Model 3-3: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 3-3: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 3-3: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 3-3: Robust Check 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
 Model 3-3: Robust Check 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to lhlxpuwd)
 Model 3-3: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 3-3: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 3-3: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 3-3: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.3, Models 3-3 to 3-10: Pub Health Spend & Infant Mort in 1990

Table 2.3: t-score of hlxpuwdi (WB WDI 2002) or hlxpuwb (WB HNP 2001-02)

Table 2.3: Bivariate correlations among independent variables

Table 2.3: Infant mortality predicted by 7 baseline variables only (same as Model 3-4)

Research plan: Table 2.3, Model 3-4: DV IMR, IV health spending as % GDP *Health spending data from WB WDI; all cases included (no outliers excluded)*

Model 3-4: IMR predicted by 7 baseline variables + % GDP to pub health care (WDI)
 Model 3-4: Means and SDs of % GDP to Public Health Spending and Infant Mortality
 Model 3-4: How much would infant mortality fall if % GDP to pub hlth sp rose one SD?
 Model 3-4: How much would infant mortality fall if % GDP to pub hlth sp doubled?
 Model 3-4: Robust Check 1.1: Change specification: Exclude fertility
 Model 3-4: Robust Check 1.2: Change specification: Include mean years of female school
 Model 3-4: Robust Check 1.3: Change specification: Include female literacy
 Model 3-4: Robust Check 1.4: Change specification: Include geographical variables
 Model 3-4: Robust Check 1.5: Change specification: Include regional dummy variables
 Model 3-4: Robust Check 2.1: Imputation check: Include missing data flags
 Model 3-4: Robust Check 3.1: Outlier checks: Robust regression
 Model 3-4: Robust Check 3.2: Outlier checks: Median regression
 Model 3-4: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 (Same as Model 3-5)
 Model 3-4: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)
 Model 3-4: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 3-4: Robust Ck 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlxpuwdi
 Model 3-4: Robust Ck 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS
 Model 3-4: Robust Ck 5.1: DepV: change IMR to U5MR (limrcm to lu5mrcom)
 Model 3-4: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcm to limrwdi)
 Model 3-4: Robust Ck 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
 (Same as Model 3-6)
 Model 3-4: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to lhlxpuwd)
 Model 3-4: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 3-4: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 3-4: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 3-4: Robust Check 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.3, Model 3-5: DV IMR, IV health spending as % GDP

Health spending from WB WDI; excludes 2 outliers w/highest Cook's-D

Model 3-5: IMR pred by baseline var + % GDP to pub health care, discard 2 cases highest cooksd
 Model 3-5: Means and SDs of % GDP to public health spending and infant mortality
 Model 3-5: How much would infant mortality fall if % GDP to pub hlth sp rose one SD?
 Model 3-5: How much would infant mortality fall if % GDP to pub hlth sp doubled?
 Model 3-5: Robust Check 1.1: Change specification: Exclude fertility
 Model 3-5: Robust Check 1.2: Change specification: Include mean years of female school
 Model 3-5: Robust Check 1.3: Change specification: Include female literacy
 Model 3-5: Robust Check 1.4: Change specification: Include geographical variables
 Model 3-5: Robust Check 1.5: Change specification: Include regional dummy variables
 Model 3-5: Robust Check 2.1: Imputation check: Include missing data flags
 Model 3-5: Robust Check 3.1: Outlier checks: Robust regression
 Model 3-5: Robust Check 3.2: Outlier checks: Median regression
 Model 3-5: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)
 Model 3-5: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 3-5: Robust Ck 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlxpuwdi
 Model 3-5: Robust Ck 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS
 Model 3-5: Robust Ck 5.1: DepV: change IMR to U5MR (limrcom to lu5mrc)
 Model 3-5: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 3-5: Robust Ck 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
 (Same as Model 3-7)
 Model 3-5: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to lhlxpuwd)
 Model 3-5: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 3-5: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 3-5: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 3-5: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.3, Model 3-6: DV IMR, IV health spending as % GDP

Health spending data from WB HNP; all cases (outliers included)

Model 3-6: IMR predicted by 7 baseline variables + % GDP to pub health care (HNP)
 Model 3-6: Means and SDs of % GDP to Public Health Spending and Infant Mortality
 Model 3-6: How much would infant mortality fall if % GDP to pub hlth sp rose one SD?
 Model 3-6: How much would infant mortality fall if % GDP to pub hlth sp doubled?
 Model 3-6: Robust Check 1.1: Change specification: Exclude fertility
 Model 3-6: Robust Check 1.2: Change specification: Include mean years of female school
 Model 3-6: Robust Check 1.3: Change specification: Include female literacy
 Model 3-6: Robust Check 1.4: Change specification: Include geographical variables
 Model 3-6: Robust Check 1.5: Change specification: Include regional dummy variables
 Model 3-6: Robust Check 2.1: Imputation check: Include missing data flags
 Model 3-6: Robust Check 3.1: Outlier checks: Robust regression
 Model 3-6: Robust Check 3.2: Outlier checks: Median regression
 Model 3-6: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 (Same as Model 3-7)
 Model 3-6: Robust Ck 5.1: DepV: change IMR to U5MR (limrcom to lu5mrc)
 Model 3-6: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 3-6: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwb to lhlxpuwb)
 Model 3-6: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 3-6: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 3-6: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

Model 3-6: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.3, Model 3-7: DV IMR, IV health spending as % GDP

Health spending data from WB HNP; 2 outliers w/ highest Cook's-D exclud

- Model 3-7: IMR pred by baseline var + % GDP to pub health care, discard 2 cases highest cooksd
- Model 3-7: Means and SDs of % GDP to public health spending and infant mortality
- Model 3-7: How much would infant mortality fall if % GDP to pub hlth sp rose one SD?
- Model 3-7: How much would infant mortality fall if % GDP to pub hlth sp doubled?
- Model 3-7: Robust Check 1.1: Change specification: Exclude fertility
- Model 3-7: Robust Check 1.2: Change specification: Include mean years of female school
- Model 3-7: Robust Check 1.3: Change specification: Include female literacy
- Model 3-7: Robust Check 1.4: Change specification: Include geographical variables
- Model 3-7: Robust Check 1.5: Change specification: Include regional dummy variables
- Model 3-7: Robust Check 2.1: Imputation check: Include missing data flags
- Model 3-7: Robust Check 3.1: Outlier checks: Robust regression
- Model 3-7: Robust Check 3.2: Outlier checks: Median regression
- Model 3-7: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)
- Model 3-7: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
- Model 3-7: Robust Ck 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlxpuwdi
- Model 3-7: Robust Ck 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS
- Model 3-7: Robust Ck 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcm)
- Model 3-7: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
- Model 3-7: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwb to lhxpnuwb)
- Model 3-7: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx)
- Model 3-7: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx), msg flags
- Model 3-7: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
- Model 3-7: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.3, Model 3-8: Model 3-5 + birth attendance (delivcom)

Research plan: Table 2.3, Model 3-9: Model 3-5 + DTP3 immunization (dtp3con)

Research plan: Table 2.3, Model 3-10: Mod. 2-5 + Measles immunization (mcvcon)

Research Plan for Table 2.4

Research plan: Table 2.4, Model 4-1: DV health sp as % GDP, IV democ 1900-1990

- Model 4-1: Bivariate correlations among independent variables
- Model 4-1: DV health sp as % GDP, IV lgdph pop65 lpopd urbwdi
- Model 4-1: DV health sp as % GDP, IV democ 1900-1990, lgdph pop65 lpopd urbwdi
- Model 4-1: Robust Check 1.2: Change specification: Include mean years of female schooling
- Model 4-1: Robust Check 1.3: Change specification: Include female literacy
- Model 4-1: Robust Check 1.4: Change specification: Include geographical variables
- Model 4-1: Robust Check 1.5: Change specification: Include regional dummies
- Model 4-1: Robust Check 2.1: Imputation check: Include missing data flags
- Model 4-1: Robust Check 3.1: Outlier checks: Robust regression
- Model 4-1: Robust Check 3.2: Outlier checks: Median regression
- Model 4-1: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
- Model 4-1: Robust Check 6.3: Vary data source: IV: pavg0090 to pavg7090

Model 4-1: Robust Check 6.4: Vary data source: IV: pavg0090 to free7290
 Model 4-1: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 4-1: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

Research plan: Table 2.4, Model 4-2: DV attended births, IV democ 1900-1990

Model 4-2: Bivariate correlations among independent variables
 Model 4-2: Birth attendance predicted by 7 baseline var only (same as Model 4-1)
 Model 4-2: Birth attendance predicted by 7 baseline var + democ 1900-1990
 Model 4-2: Robust Check 1.1: Change specification: Exclude fertility
 Model 4-2: Robust Check 1.1a: Change specification: Exclude fertility, disc 2 cases highest cooksd
 Model 4-2: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 4-2: Robust Check 1.3: Change specification: Include female literacy
 Model 4-2: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-2: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-2: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-2: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-2: Robust Check 3.2: Outlier checks: Median regression
 Model 4-2: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd (same as Model 4-3)
 Model 4-2: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090
 Model 4-2: Robust Check 6.3a: IndV: Vary source: pavg0090 to pavg7090, disc 2 highst cooksd
 Model 4-2: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290
 Model 4-2: Robust Check 6.4a: IndV: Vary source: pavg0090 to free7290, disc 2 highst cooksd
 Model 4-2: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 4-2: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 4-2: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 4-2: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.4, Model 4-3: DV attended births, IV democ 1900-1990, - outliers

Same as Model 4-2: Robust Check 3.3
 Model 4-3: Means and SDs of birth attendance and long-term democratic experience
 Model 4-3: Estimate magnitude of effect on delivcom of a 1 SD chg in pavg0090
 Model 4-3: How much would birth attendance rise if long-term democracy rose one SD?

Research plan: Table 2.4, Model 4-4: DV female schooling, IV democ 1900-1990

Model 4-4: Bivariate correlations among independent variables
 Model 4-4: Female schooling predicted by 7 baseline var only
 Model 4-4: Female schooling predicted by 7 baseline var + democ 1900-1990
 Model 4-4: Robust Check 1.1: Change specification: Exclude fertility
 Model 4-4: Robust Check 1.1a: Change specification: Exclude fertility, disc 2 cases highest cooksd
 Model 4-4: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-4: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-4: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-4: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-4: Robust Check 3.2: Outlier checks: Median regression
 Model 4-4: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd (same as Model 4-3)
 Model 4-4: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090
 Model 4-4: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

Model 4-4: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 4-4: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 4-4: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 4-4: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.4, Model 4-5: DV fem school, IV democ 1900-1990, Fertil Excl

Model 4-5: Fem school predicted by six baseline variables excluding fertility
 Model 4-5: Fem school predicted by six baseline var excl fert + democ0090 (same M 3-4 RC 1.1)
 Model 4-5: Means and SDs of mean yrs fem school and long term democratic experience
 Model 4-5: How much would female schooling rise if LT demo exper rose one SD?
 Model 4-5: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-5: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-5: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-5: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-5: Robust Check 3.2: Outlier checks: Median regression
 Model 4-5: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks
 Model 4-5: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090
 Model 4-5: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290
 Model 4-5: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 4-5: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 4-5: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 4-5: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.4, Model 4-6: DV Fam Plan, IV Democ 1900-1990, Fertility Excl

Model 4-6: Bivariate correlations among independent variables
 Model 4-6: Family planning effort predicted by six baseline variables excluding fertility
 Model 4-6: Family planning effort predicted by six baseline var excl fert + democ 1900-1990
 Model 4-6: Means and SDs of family planning effort and long term democratic experience
 Model 4-6: How much would family planning effort rise if LT demo exper rose one SD?
 Model 4-6: Robust Check 1.1: Change specification: Include fertility
 Model 4-6: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 4-6: Robust Check 1.3: Change specification: Include female literacy
 Model 4-6: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-6: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-6: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-6: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-6: Robust Check 3.2: Outlier checks: Median regression
 Model 4-6: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks
 Model 4-6: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090
 Model 4-6: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290
 Model 4-6: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 4-6: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 4-6: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 4-6: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.4, Model 4-7: DV Fertility, IV Democ 1900-1990, Fertility Excl

Model 4-7: Bivariate correlations among independent variables
 Model 4-7: Fertility predicted by six baseline variables excluding fertility
 Model 4-7: Fertility predicted by six baseline var (excl fertility) + democ 1900-1990
 Model 4-7: Means and SDs of fertility and long term democratic experience
 Model 4-7: How much would female schooling rise if LT demo exper rose one SD?
 Model 4-7: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 4-7: Robust Check 1.3: Change specification: Include female literacy
 Model 4-7: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-7: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-7: Robust Check 1.6: Change specification: Include family planning effort
 Model 4-7: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-7: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-7: Robust Check 3.2: Outlier checks: Median regression
 Model 4-7: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd
 Model 4-7: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090
 Model 4-7: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290
 Model 4-7: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 4-7: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 4-7: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 4-7: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.4, Model 4-8: DV Fertility, IV Family Planning, Fertility Excl

Model 4-8: Bivariate correlations among independent variables
 Model 4-8: Fertility predicted by six baseline variables excluding fertility
 Model 4-8: Fertility predicted by six baseline var (excl fertility) + family planning
 Model 4-8: Means and SDs of fertility and family planning
 Model 4-8: How much would fertility fall if family planning rose one SD?
 Model 4-8: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 4-8: Robust Check 1.3: Change specification: Include female literacy
 Model 4-8: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-8: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-8: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-8: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-8: Robust Check 3.2: Outlier checks: Median regression
 Model 4-8: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd
 Model 4-8: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 4-8: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 4-8: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 4-8: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.4, Model 4-9: DV Access to Water, IV democ 1900-1990

Model 4-9: Bivariate correlations among independent variables
 Model 4-9: Safe water predicted by 7 baseline var only
 Model 4-9: Safe water predicted by 7 baseline var + democ 1900-1990
 Model 4-9: Means and SDs of access to improved water and long term democratic experience
 Model 4-9: How much would access to improved water rise if LT demo exper rose one SD?
 Model 4-9: Robust Check 1.1: Change specification: Exclude fertility

Model 4-9: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 4-9: Robust Check 1.3: Change specification: Include female literacy
 Model 4-9: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-9: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-9: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-9: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-9: Robust Check 3.2: Outlier checks: Median regression
 Model 4-9: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 4-9: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090
 Model 4-9: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290
 Model 4-9: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx)
 Model 4-9: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx), msg flags
 Model 4-9: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 4-9: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.4, Model 4-10: DV infant mortality, IV democ 1900-1990

Model 4-10: Bivariate correlations among independent variables
 Model 4-10: Infant mortality predicted by 7 baseline var only (same as Model 2-3)
 Model 4-10: Infant Mortality predicted by 7 baseline var + democ 1900-1990
 Model 4-10: Means and SDs of infant mortality and democ 1900-1990
 Model 4-10: How much would infant mortality fall if democ 1900-1990 rose one SD?
 Model 4-10: Robust Check 1.1: Change specification: Exclude fertility
 Model 4-10: Robust Check 1.1a: Change specification: Exclude fertility, discard 2 cases hi cooks
 Model 4-10: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 4-10: Robust Check 1.3: Change specification: Include female literacy
 Model 4-10: Robust Check 1.4: Change specification: Include geographical variables
 Model 4-10: Robust Check 1.5: Change specification: Include regional dummies
 Model 4-10: Robust Check 2.1: Imputation check: Include missing data flags
 Model 4-10: Robust Check 3.1: Outlier checks: Robust regression
 Model 4-10: Robust Check 3.2: Outlier checks: Median regression
 Model 4-10: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooks
 Model 4-10: Robust Check 4.1: Endog ck: Corr candid instrum (CI) & hypoth endog reg (HER)
 Model 4-10: Robust Check 4.2: Endog ck: Does CI predict HER in presence of exog regressors?
 Model 4-10: Robust Check 4.3: Endog ck: 2SLS using CI as instrument for HER
 Model 4-10: Robust Check 4.4: Endog ck: Hausman test for diff betw coeff of OLS & of 2SLS
 Model 4-10: Robust Check 4.2a: Endog ck: Does CI predict HER, disc 2 hi cooks?
 Model 4-10: Robust Check 4.3a: Endog ck: 2SLS using CI as instrum for HER, disc 2 hi cooks
 Model 4-10: Robust Check 4.4a: Endog ck: Hausman test, disc 2 hi cooks
 Model 4-10: Robust Check 5.1: DepV: change IMR to U5MR (limrcm to lu5mrcom)
 Model 4-10: Robust Check 5.2: DepV: Vary source: infant mortality (limrcm to limrwdi)
 Model 4-10: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090
 Model 4-10: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290
 Model 4-10: Robust Check 7.1: CtrlV: Vary source: GDP/cap at PPP (lgdph to lgdpdmx)
 Model 4-10: Robust Check 7.2: CtrlV: Vary source: lgdph to lgdpdmx, msg flags
 Model 4-10: Robust Check 7.3: CtrlV: Vary source: ethnic fragment (ethnl to ethnannx)
 Model 4-10: Robust Check 7.4: CtrlV: Vary source: ethnl to ethnannx, msg flags

Research Plan for Table 2.5

Research plan: Table 2.5, Model 5-1: DV health sp as % GDP, IV democ 1980-1990

Model 5-1: Bivariate correlations among independent variables
 Model 5-1: DV health sp as % GDP, IV lgdph pop65 lpopd urbwdi
 Model 5-1: DV health sp as % GDP, IV democ 1980-1990, lgdph pop65 lpopd urbwdi
 Model 5-1: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 5-1: Robust Check 1.3: Change specification: Include female literacy
 Model 5-1: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-1: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-1: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-1: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-1: Robust Check 3.2: Outlier checks: Median regression
 Model 5-1: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 5-1: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-1: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-1: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-1: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 5-1: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

Research plan: Table 2.5, Model 5-2: DV attended births, IV democ 1980-1990

Model 5-2: Bivariate correlations among independent variables
 Model 5-2: Birth attendance predicted by 7 baseline var only (same as Model 4-1)
 Model 5-2: Birth attendance predicted by 7 baseline var + democ 1980-1990
 Model 5-2: Robust Check 1.1: Change specification: Exclude fertility
 Model 5-2: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 5-2: Robust Check 1.3: Change specification: Include female literacy
 Model 5-2: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-2: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-2: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-2: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-2: Robust Check 3.2: Outlier checks: Median regression
 Model 5-2: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 5-2: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-2: Robust Check 6.5a: IndV: Vary source: pavg8090 to pol90, disc 2 higst cooksd
 Model 5-2: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-2: Robust Check 6.6a: IndV: Vary source: pavg8090 to free8090, disc 2 higst cooksd
 Model 5-2: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-2: Robust Check 6.7a: IndV: Vary source: pavg8090 to free90, disc 2 higst cooksd
 Model 5-2: Robust Check 7.1: CtrlV: Vary source: GDP/cap at PPP (lgdph to lgdpmx)
 Model 5-2: Robust Check 7.2: CtrlV: Vary source: lgdph to lgdpmx, msg flags
 Model 5-2: Robust Check 7.3: CtrlV: Vary source: ethnic fragment (ethnl to ethnannx)
 Model 5-2: Robust Check 7.4: CtrlV: Vary source: ethnl to ethnannx, msg flags

Research plan: Table 2.5, Model 5-3: DV attended births, IV democ 1980-1990, - outliers

Same as Model 5-2: Robust Check 3.3

Research plan: Table 2.5, Model 5-4: DV female schooling, IV democ 1980-1990

Model 5-4: Bivariate correlations among independent variables
 Model 5-4: Female schooling predicted by 7 baseline var only
 Model 5-4: Female schooling predicted by 7 baseline var + democ 1980-1990
 Model 5-4: Robust Check 1.1: Change specification: Exclude fertility
 Model 5-4: Robust Check 1.1a: Change specification: Exclude fertility, disc 2 cases highest cooksd
 Model 5-4: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-4: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-4: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-4: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-4: Robust Check 3.2: Outlier checks: Median regression
 Model 5-4: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd (same as Model 5-3)
 Model 5-4: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-4: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-4: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-4: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 5-4: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 5-4: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 5-4: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.5, Model 5-5: DV fem sch, IV democ 1980-1990, fertility excl

Model 5-5: Fem school predicted by six baseline variables excluding fertility
 Model 5-5: Fem school predicted by six baseline var excl fert + democ8090 (same M 4-4 RC 1.1)
 Model 5-5: Means and SDs of mean yrs fem school and short term democratic practice
 Model 5-5: How much would female schooling rise if ST demo practice rose one SD?
 Model 5-5: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-5: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-5: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-5: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-5: Robust Check 3.2: Outlier checks: Median regression
 Model 5-5: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd
 Model 5-5: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-5: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-5: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-5: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)
 Model 5-5: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 Model 5-5: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 5-5: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.5, Model 5-6: DV fam plan, IV democ 1980-1990, fertility excl

Model 5-6: Bivariate correlations among independent variables
 Model 5-6: Family planning effort predicted by six baseline variables excluding fertility
 Model 5-6: Family planning effort predicted by six baseline var excl fert + democ 1980-1990
 Model 5-6: Means and SDs of family planning effort and short term democratic practice
 Model 5-6: Estimate magnitude of effect on rtot of a 1 SD chg in pavg8090
 Model 5-6: How much would family planning effort rise if ST demo practice rose one SD?
 Model 5-6: Robust Check 1.1: Change specification: Include fertility
 Model 5-6: Robust Check 1.2: Change specification: Include mean years of female schooling

Model 5-6: Robust Check 1.3: Change specification: Include female literacy
 Model 5-6: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-6: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-6: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-6: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-6: Robust Check 3.2: Outlier checks: Median regression
 Model 5-6: Robust Check 3.3: Outlier checks: Discard 2 cases higst cooksrd
 Model 5-6: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-6: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-6: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-6: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx)
 Model 5-6: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx), msg flags
 Model 5-6: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 5-6: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.5, Model 5-7: DV fertility, IV democ 1980-1990, Fertility Excl

Model 5-7: Bivariate correlations among independent variables
 Model 5-7: Fertility predicted by six baseline variables excluding fertility
 Model 5-7: Fertility predicted by six baseline var (excl fertility) + democ 1980-1990
 Model 5-7: Means and SDs of fertility and short term democratic practice
 Model 5-7: How much would fertility fall if ST demo practice rose one SD?
 Model 5-7: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 5-7: Robust Check 1.3: Change specification: Include female literacy
 Model 5-7: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-7: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-7: Robust Check 1.6: Change specification: Include family planning effort
 Model 5-7: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-7: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-7: Robust Check 3.2: Outlier checks: Median regression
 Model 5-7: Robust Check 3.3: Outlier checks: Discard 2 cases higst cooksrd
 Model 5-7: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-7: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-7: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-7: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx)
 Model 5-7: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx), msg flags
 Model 5-7: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 5-7: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.5, Model 5-8: DV fertility, IV family Planning, Fertility Excl

Identical to Table 2.4, Model 4-8

Research plan: Table 2.5, Model 5-9: DV safe water, IV democ 1980-90

Model 5-9: Bivariate correlations among independent variables
 Model 5-9: Safe water predicted by 7 baseline var only
 Model 5-9: Safe water predicted by 7 baseline var + democ 1980-1990

Model 5-9: Means and SDs of access to improved water and short term democratic practice
 Model 5-9: How much would access to improved water rise if ST demo practice rose one SD?
 Model 5-9: Robust Check 1.1: Change specification: Exclude fertility
 Model 5-9: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 5-9: Robust Check 1.3: Change specification: Include female literacy
 Model 5-9: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-9: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-9: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-9: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-9: Robust Check 3.2: Outlier checks: Median regression
 Model 5-9: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 5-9: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-9: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-9: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-9: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx)
 Model 5-9: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpdmx), msg flags
 Model 5-9: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)
 Model 5-9: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

Research plan: Table 2.5, Model 5-10: DV IMR, IV democ 1980-1990

Model 5-10: Bivariate correlations among independent variables
 Model 5-10: Infant mortality predicted by 7 baseline var only (same as Model 2-3)
 Model 5-10: Infant mortality predicted by 7 baseline var + democ 1980-1990
 Model 5-10: Robust Check 1.1: Change specification: Exclude fertility
 Model 5-10: Robust Check 1.1a: Change specification: Exclude fertility, disc 2 cases hicooksd
 Model 5-10: Robust Check 1.2: Change specification: Include mean years of female schooling
 Model 5-10: Robust Check 1.3: Change specification: Include female literacy
 Model 5-10: Robust Check 1.4: Change specification: Include geographical variables
 Model 5-10: Robust Check 1.5: Change specification: Include regional dummies
 Model 5-10: Robust Check 2.1: Imputation check: Include missing data flags
 Model 5-10: Robust Check 3.1: Outlier checks: Robust regression
 Model 5-10: Robust Check 3.2: Outlier checks: Median regression
 Model 5-10: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 Model 5-10: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)
 Model 5-10: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)
 Model 5-10: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90
 Model 5-10: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090
 Model 5-10: Robust Check 6.7: IndV: Vary source: pavg8090 to free90
 Model 5-10: Robust Check 7.1: CtrlV: Vary source: GDP/cap at PPP (lgdph to lgdpdmx)
 Model 5-10: Robust Check 7.2: CtrlV: Vary source: lgdph to lgdpdmx, msg flags
 Model 5-10: Robust Check 7.3: CtrlV: Vary source: ethnic fragment (ethnl to ethnannx)
 Model 5-10: Robust Check 7.4: CtrlV: Vary source: ethnl to ethnannx, msg flags

Stata Do-Files for Each Model

To replicate the analyses in Tables 2.2, 2.3, 2.4, 2.5, and 2.6, or any of the analyses in this web appendix, cut and paste the block of cells ranging between A12 an IR117 in Web Appendix "McGuireD2DataT2T3T24T5" into the data window of the Stata statistical package, then run the following do files.

Initial Stata Do-File for all models

```
generate docs10wb = docswb/10
generate beds10wb = bedswb/10
generate latcapab = abs(latcap)
generate latcenab = abs(latcen)
generate limrcom = ln(imrcom)
generate lu5mrcom = ln(u5mrcom)
generate limrwdi = ln(imrwdi)
generate lu5mrwdi = ln(u5mrwdi)
generate limr85 = ln(imr85)
generate lu5mr85 = ln(u5mr85)
generate lpopcens = ln(popcens)
generate llifext = ln(lifext)
generate llifexf = ln(lifexf)
generate llifexm = ln(lifexm)
generate lmatmort = ln(matmort)
generate lgdpp61 = ln(gdpp61)
generate lgdpwdi = ln(gdpwdi)
generate lgdpdh = ln(gdph)
generate lgdpdm = ln(gdpm)
generate lhxpupwb = ln(hlxpuwb)
generate lhxpupwd = ln(hlxpuwdi)
generate lhxcpwxbx = ln(hlxcpwbx)
generate lpopdav = ln(popdav)
generate lpopd = ln(popd)
generate immzcon = ((dtp3con+mcvcon)/2)
generate ldocshdr = ln(docshdr)
generate lnurshdr = ln(nurshdr)
generate docnurs = (docshdr/nurshdr)
impute mysf litfewdi, g(mysfx)
impute gdpm gdpp61, g(gdpmx)
impute gdpp61 gdph, g(gdpp61x)
impute ethnann ethnln, g(ethnannx)
generate lgdpp61x = ln(gdpp61x)
generate lgdpmx = ln(gdpmx)
regress limrcom lgdpdh giniavni ethnln musl fertwdi lpopd urbwdi, r
```

Stata Do-Files for Table 2.2

Stata Do-File for Table 2.2, Models 2-1 to 2-3 (correlations)

```
correlate limrcom lgdpdh giniavni ethnln musl fertwdi lpopd urbwdi
```

Stata Do-File for Table 2.2, Model 2-1

```
regress limrcom lgdph, r
```

Stata Do-File for Table 2.2, Model 2-2

```
regress limrcom lgdph giniavni, r
```

Stata Do-File for Table 2.2, Model 2-3

```
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
summarize imrcom
summarize limrcom
summarize gdph
summarize lgdph
summarize giniavni
summarize musl
summarize ethnl
summarize fertwdi
summarize popd
summarize lpopd
summarize urbwdi
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
setx mean
simqi, tfunc(exp) fd(ev) changex(giniavni 44.15429 35.227838)
simqi, tfunc(exp) fd(ev) changex(ethnl .3922857 .0783214)
simqi, tfunc(exp) fd(ev) changex(musl .1904762 .5850363)
simqi, tfunc(exp) fd(ev) changex(musl 0 1)
simqi, tfunc(exp) fd(ev) changex(fertwdi 4.795238 6.469327)
simqi, tfunc(exp) fd(ev) changex(lpopd 5.258487068 6.839769971)
simqi, tfunc(exp) fd(ev) changex(urbwdi 43.81238 49.01238)
```

```
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi littfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi if ctry ~= "Cuba" & ctry ~= "Mongolia",
r
```

```
correlate fertwdi fertwdin
ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd urbwdi , first
estimates store ivfertwdin
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi
hausman ivfertwdin, constant
```

```
regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi, r
```

```

regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi ethnannf, r

```

Stata Do-File for Table 2.2, Model 2-4 to 2-10 (all service variables in one model)

```

correlate limrcom delivcom dtp3con mcvcon mysfx rtot watecom sanicom
regress limrcom lgdph giniavni ethnl musl lpopd fertwdi urbwdi delivcom dtp3con mcvcon mysfx rtot
watecom sanicom, r

```

Stata Do-File for Table 2.2, Model 2-4

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
summarize imrcom
summarize limrcom
summarize delivcom
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
setx mean
simqi, tfunc(exp) fd(ev) changex(delivcom 59.42718 87.32742)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi delivcom, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom if ctry ~= "Mongolia" & ctry ~= "Cuba", r

correlate delivcom rpos
ivreg limrcom lgdph giniavni ethnl musl lpopd urbwdi (delivcom = rpos), first
estimates store ivrpos
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom
hausman ivrpos, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi delivcom gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi delivcom, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi delivcom ethnannf, r

```

Stata Do-File for Table 2.2, Model 2-5

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
summarize imrcom
summarize limrcom

```

```

summarize dtp3con
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
setx mean
simqi, tfunc(exp) fd(ev) changex(dtp3con 71.93878 93.24064)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi dtp3con, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con airdist popergs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con if ctry ~= "Mongolia" & ctry ~= "Cuba", r

correlate fertwdi fertwdin
ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd dtp3con, first
estimates store ivfertdtp
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con
hausman ivfertdtp, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi dtp3con gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi dtp3con, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi dtp3con ethnannf, r

```

Stata Do-File for Table 2.2, Model 2-6

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r
summarize imrcom
summarize limrcom
summarize mcvcon
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r
setx mean
simqi, tfunc(exp) fd(ev) changex(mcvcon 71.40816 90.53812)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi mcvcon, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon if ctry ~= "Mongolia" & ctry ~= "Cuba", r

```

```

correlate fertwdi fertwdin
ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd mcvcon, first

```

```

estimates store ivfertmcv
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon
hausman ivfertmcv, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mcvcon gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mcvcon, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mcvcon ethnannf, r

```

Stata Do-File for Table 2.2, Model 2-7

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
summarize imrcom
summarize limrcom
summarize mysfx
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
setx mean
simqi, tfunc(exp) fd(ev) changex(mysfx 3.64511 5.854383)

```

```

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx if ctry ~= "Mongolia" & ctry ~=
"Cuba", r

```

```

correlate fertwdi fertwdin
ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd mysfx, first
estimates store ivfertmys
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
hausman ivfertmys, constant

```

```

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mysfx gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mysfx, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mysfx ethnannf, r

```

Stata Do-File for Table 2.2, Model 2-8

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi rtot
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot, r
summarize imrcom
summarize limrcom
summarize rtot
estsimp regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot, r

```

```

setx mean
simqi, tfunc(exp) fd(ev) changex(rtот 53.85 79.12719)

regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi rtот, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот mysfx, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот litfewdi, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот
qreg limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtот if ctry ~= "Namibia" & ctry ~= "Cuba", r
regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi rtот, r
regress limrcom lgdpmx giniavni ethnl musl lpopd urbwdi rtот, r
regress limrcom lgdpmx giniavni ethnl musl lpopd urbwdi rtот gdpmf, r
regress limrcom lgdph giniavni ethnannx musl lpopd urbwdi rtот, r
regress limrcom lgdph giniavni ethnannx musl lpopd urbwdi rtот ethnannf, r

```

Stata Do-File for Table 2.2, Model 2-9

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
summarize imrcom
summarize limrcom
summarize watecom
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
setx mean
simqi, tfunc(exp) fd(ev) changex(watecom 68.07619 91.55232)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi watecom, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom if ctry ~= "Mongolia" & ctry ~= "Cuba", r

correlate fertwdi fertwdin
ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd watecom, first
estimates store ivfertwate
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom
hausman ivfertwate, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi watecom gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi watecom, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi watecom ethnannf, r

```

Stata Do-File for Table 2.2, Model 2-10

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
summarize imrcom
summarize limrcom
summarize sanicom
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
setx mean
simqi, tfunc(exp) fd(ev) changex(sanicom 52.36275 81.62286)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi sanicom, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom if ctry ~= "Mongolia" & ctry ~= "Cuba", r

correlate fertwdi fertwdin
ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd sanicom, first
estimates store ivfertsani
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom
hausman ivfertsani, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi sanicom gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi sanicom, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi sanicom ethnannf, r

```

Stata Do-Files for Table 2.3

Stata Do-File for Table 2.3, Model 3-1

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi hlxpuwdi delivcom
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
summarize hlxpuwdi
summarize delivcom
estsimp regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi,
setx mean
simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)

```

```

regress delivcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx, r

```

```

regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
rreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
qreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Oman" & ctry ~=
"Myanmar", r

```

```

correlate hlxpuwdi hlxwdns
ivreg delivcom lgdph giniavni ethnl musl lpopd urbwdi (hlxpuwdi = hlxwdns), first
estimates store ivwdns
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
hausman ivwdns, constant

```

```

regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi, r
regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf, r

```

Stata Do-File for Table 2.3, Model 3-2

```

correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi dtp3con
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
summarize hlxpuwdi
summarize dtp3con
estsimp regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con,
setx mean
simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)

```

```

regress dtp3con lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx, r
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
rreg dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
qreg dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Laos" & ctry ~=
"Afghanistan", r

```

```

correlate hlxpuwdi hlxwdns
ivreg dtp3con lgdph giniavni ethnl musl lpopd urbwdi (hlxpuwdi = hlxwdns), first
estimates store ivdtpdv
regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
hausman ivdtpdv, constant

```

```

regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress dtp3con lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
regress dtp3con lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
regress dtp3con lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi, r

```

```
regress dtp3con lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf, r
```

Stata Do-File for Table 2.3, Model 3-3

```
correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi hlxpuwdi mcvcon
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
summarize hlxpuwdi
summarize mcv3con
estsimp regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcv3con,
setx mean
simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)

regress mcvcon lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx, r
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
rreg mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
qreg mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry == "Oman" & ctry ==
"Afghanistan", r

correlate hlxpuwdi hlxwdns
ivreg mcvcon lgdph giniavni ethnl musl lpopd urbwdi (hlxpuwdi = hlxwdns), first
estimates store ivmcvdv
regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
hausman ivmcvdv, constant

regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress mcvcon lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
regress mcvcon lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
regress mcvcon lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi, r
regress mcvcon lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf, r
```

Stata Do-File for Table 2.3, Models 3-4 to 3-10 (correlations)

```
correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi hlxwdns
```

Stata Do-File for Table 2.3, Model 3-4

```
correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi hlxwdns
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
summarize imrcom
summarize limrcom
summarize hlxpuwb
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
setx mean
```

```

simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)
simqi, fd(ev) changex(hlxpuwdi 2.001905 4.0039)
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry
~= "Cuba", r

correlate hlxpuwdi hlxwdns
ivreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwdi = hlxwdns), first
estimates store ivhxlximr
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
hausman hlximr, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwd, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf, r

```

Stata Do-File for Table 2.3, Model 3-5

```

regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry
~= "Cuba", r
summarize imrcom
summarize limrcom
summarize hlxpuwdi
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia"
& ctry ~= "Cuba", r
setx mean
simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)
simqi, fd(ev) changex(hlxpuwdi 2.001905 4.0039)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~=
"Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx if ctry ~= "Mongolia" &
ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi if ctry ~= "Mongolia"
& ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab if ctry
~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout if ctry ~=
"Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf if ctry ~=
"Mongolia" & ctry ~= "Cuba", r

```

```
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba"
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba"

correlate hlxpuwdi hlxwdns
ivreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwdi = hlxwdns) if ctry ~= "Mongolia" & ctry ~= "Cuba", first
estimates store hlxwdcooks
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba"
hausman hlxwdcooks, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwd if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Stata Do-File for Table 2.3, Model 3-6

```
correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi hlxpuwb
summarize imrcom
summarize limrcom
summarize hlxpuwb
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
setx mean
simqi, fd(ev) changex(hlxpuwb 2.24381 3.7308)
simqi, fd(ev) changex(hlxpuwb 2.24381 4.48762)
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwb, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdpmf, r
```

```
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb ethnannf, r
```

Stata Do-File for Table 2.3, Model 3-7

```
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
summarize imrcom
summarize limrcom
summarize hlxpuwb
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
setx mean
simqi, fd(ev) changex(hlxpuwb 2.24381 3.7308)
simqi, fd(ev) changex(hlxpuwb 2.24381 4.48762)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb mysfx if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb litfewdi if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb airdist popcrgs latcapab if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb afri lati east sout if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdphf giniavnf ethnlf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba"
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba"

correlate hlxpuwb hlxwdns
ivreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwb = hlxwdns) if ctry ~= "Mongolia" & ctry ~= "Cuba", first
estimates store hlxwbcoksd
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba"
hausman hlxwbcoksd, constant

regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdpmf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb ethnannf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Stata Do-File for Table 2.3, Model 3-8

```
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi delivcom if ctry ~= "Mongolia"
& ctry ~= "Cuba", r
```

Stata Do-File for Table 2.3, Model 3-9

```
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi dtp3con if ctry ~= "Mongolia"
& ctry ~= "Cuba", r
```

Stata Do-File for Table 2.3, Model 3-10

```
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mcvcon if ctry ~= "Mongolia"
& ctry ~= "Cuba", r
```

Stata Do-Files for Table 2.4

Stata Do-File for Table 2.4, Model 4-1

```
correlate hlxpuwdi lgdph giniavni age65 lpopd urbwdi pavg0090
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 mysfx, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 litfewdi, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 airdist popcrgs latcapab, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 afri lati east sout, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 gdphf, r
rreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090
qreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 if ctry ~= "Mongolia" & ctry ~= "Costa Rica", r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg7090, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 free7290, r
regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg0090, r
regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg0090 gdpmf, r
```

Stata Do-File for Table 2.4, Model 4-2

```
correlate delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
regress delivcom lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 mysfx, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 litfewdi, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati east sout, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
rreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
qreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
```

```

regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~= "Oman" & ctry ~= "Papua", r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg7090 if ctry ~= "Oman" & ctry ~= "Myanmar", r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free7290 if ctry ~= "Oman" & ctry ~= "Bangladesh", r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r
regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090, r

```

Stata Do-File for Table 2.4, Model 4-3

```

regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~= "Oman" & ctry ~= "Papua", r
summarize delivcom
summarize pavg0090
estsimp regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~= "Oman" & ctry ~= "Papua", r
setx mean
simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)

```

Stata Do-File for Table 2.4, Model 4-4

```

correlate mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Singapore" & ctry ~= "Oman", r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati east sout, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
rreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
qreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~= "Singapore" & ctry ~= "Swaziland", r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
regress mysfx lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
regress mysfx lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r
regress mysfx lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090, r
regress mysfx lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnannf, r

```

Stata Do-File for Table 2.4, Model 4-5

```

correlate mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r

```

```

summarize mysfx
summarize pavg0090
estsimp regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
setx mean
simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)

regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 afri lati east sout, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
rreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090
qreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Singapore" & ctry ~= "Oman", r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg7090, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi free7290, r
regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090, r
regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090 gdpmf, r
regress mysfx lgdph giniavni ethnannx musl lpopd urbwdi pavg0090, r
regress mysfx lgdph giniavni ethnannx musl lpopd urbwdi pavg0090 ethnannf, r

```

Stata Do-File for Table 2.4, Model 4-6

```

correlate rtot lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress rtot lgdph giniavni ethnl musl lpopd urbwdi, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
summarize rtot
summarize pavg0090
estsimp regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)

regress rtot lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 mysfx, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 litfewdi, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 afri lati east sout, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
rreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090
qreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Kuwait" & ctry ~= "Namibia", r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg7090, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi free7290, r
regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090, r
regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090 gdpmf, r
regress rtot lgdph giniavni ethnannx musl lpopd urbwdi pavg0090, r
regress rtot lgdph giniavni ethnannx musl lpopd urbwdi pavg0090 ethnannf, r

```

Stata Do-File for Table 2.4, Model 4-7

```

correlate fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
summarize fertwdi

```

```

summarize pavg0090
estsimp regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 mysfx, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 litfewdi, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 afri lati east sout, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 rtot, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
rreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090
qreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Oman" & ctry ~= "Thailand", r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg7090, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi free7290, r
regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090, r
regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090 gdpmf, r
regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg0090, r
regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg0090 ethnannf, r

```

Stata Do-File for Table 2.4, Model 4-8

```

correlate fertwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi rtot
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot, r
summarize fertwdi
summarize rtot
estsimp regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot, r
simqi, fd(ev) changex(rtот 53.85 79.12719)

regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot mysfx, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot litfewdi, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot airdist popcrgs latcapab, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot afri lati east sout, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot gdphf giniavnf ethnlf, r
rreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot
qreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot if ctry ~= "Oman" & ctry ~= "Myanmar", r
regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi rtot, r
regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi rtot gdpmf, r
regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi rtot, r
regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi rtot ethnannf, r

```

Stata Do-File for Table 2.4, Model 4-9

```

correlate watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
summarize watecom
summarize pavg0090
estsimp regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
setx mean

```

simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)

```

regress watecom lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 mysfx, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 litfewdi, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati east sout, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
rreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
qreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~= "Afghanistan" & ctry
~= "Somalia", r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r
regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090, r
regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnannf, r

```

Stata Do-File for Table 2.4, Model 4-10

```

correlate limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
summarize imrcom
summarize limrcom
summarize pavg0090
estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
setx mean
simqi, tfunc(exp) fd(ev) changex(pavg0090 -3.0848 2.210236)

regress limrcom lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~= "Mongolia" & ctry
~= "Cuba", r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnannf, r

```

Stata Do-Files for Table 2.5

Stata Do-File for Table 2.5, Model 5-1

correlate hlpxuwdi lgdph giniavni age65 lpopd urbwdi pavg8090

```

regress hlxpuwdi lgdph giniavni lpopd urbwdi age65, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 mysfx, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 litfewdi, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 airdist popcrgs latcapab, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 afri lati east sout, r
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 gdphf, r
rreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090
qreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090
regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 if ctry ~= "Mongolia" & ctry ~= "Cuba", r
regress hlxpuwdi lgdph giniavni giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
regress hlxpuwdi lgdph giniavni giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
regress hlxpuwdi lgdph giniavni giniavni ethnl musl fertwdi lpopd urbwdi free90, r
regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg8090, r
regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg8090 gdpmf, r
regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnannf, r

```

Stata Do-File for Table 2.5, Model 5-2

```

correlate delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress delivcom lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 mysfx, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 litfewdi, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati east sout, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
rreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
qreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry ~= "Oman" & ctry ~= "Myanmar", r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90 if ctry ~= "Oman" & ctry ~= "Bangladesh", r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090 if ctry ~= "Oman" & ctry ~= "Myanmar", r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90 if ctry ~= "Oman" & ctry ~= "Myanmar", r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnannf, r

```

Stata Do-File for Table 2.5, Model 5-3

```

regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry ~= "Oman" & ctry ~= "Myanmar", r

```

Stata Do-File for Table 2.5, Model 5-4

```

correlate mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati east sout, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
rreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
qreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry ~= "Singapore" & ctry ~= "Swaziland", r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
regress mysfx lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress mysfx lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
regress mysfx lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
regress mysfx lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnannf, r

```

Stata Do-File for Table 2.5, Model 5-5

```

correlate mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
summarize mysfx
summarize pavg8090
estsimp regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
setx mean
simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)

regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry ~= "Singapore" & ctry ~= "Oman", r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 afri lati east sout, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
rreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090
qreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry ~= "Singapore" & ctry ~= "Swaziland", r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg7090, r
regress mysfx lgdph giniavni ethnl musl lpopd urbwdi free7290, r
regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090, r
regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090 gdpmf, r
regress mysfx lgdph giniavni ethnannx musl lpopd urbwdi pavg8090, r
regress mysfx lgdph giniavni ethnannx musl lpopd urbwdi pavg8090 ethnannf, r

```

Stata Do-File for Table 2.5, Model 5-6

```

correlate rtot lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress rtot lgdph giniavni ethnl musl lpopd urbwdi, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r

```

```

summarize rtot
summarize pavg8090
estsimp regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
setx mean
simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)

regress rtot lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 mysfx, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 litfewdi, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 afri lati east sout, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
rreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090
qreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry ~= "Kuwait" & ctry ~= "Namibia", r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi pol90, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi free8090, r
regress rtot lgdph giniavni ethnl musl lpopd urbwdi free90, r
regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090, r
regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090 gdpmf, r
regress rtot lgdph giniavni ethnannx musl lpopd urbwdi pavg8090, r
regress rtot lgdph giniavni ethnannx musl lpopd urbwdi pavg8090 ethnannf, r

```

Stata Do-File for Table 2.5, Model 5-7

```

correlate fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
summarize fertwdi
summarize pavg8090
estsimp regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
setx mean
simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 rtot, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 mysfx, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 litfewdi, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 afri lati east sout, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
rreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090
qreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry ~= "Oman" & ctry ~= "Rwanda", r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pol90, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi free8090, r
regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi free90, r
regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090, r
regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090 gdpmf, r
regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg8090, r
regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg8090 ethnannf, r

```

Stata Do-File for Table 2.5, Model 5-8

Identical to Model 4-8

Stata Do-File for Table 2.5, Model 5-9

```

correlate watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
summarize watecom
summarize pavg8090
estsimp regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
setx mean
simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)
regress watecom lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 mysfx, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 litfewdi, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati east sout, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
rreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
qreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry ~= "Afghanistan" & ctry
~= "Somalia", r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnannf, r

```

Stata Do-File for Table 2.5, Model 5-10

```

correlate limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress limrcom lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 mysfx, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 litfewdi, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati east sout, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry ~= "Mongolia" & ctry
~= "Cuba", r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnannf, r

```

Table 2.2: Economy, Culture, Demography, Social Svc Utilization, Inf. Mortality**Table 2.2, Models 2-1 to 2-3: Correlations among variables**

```
. correlate limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi (obs=105)
```

	limrcom	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi
limrcom	1.0000							
lgdph	-0.8377	1.0000						
giniavni	0.1712	-0.0275	1.0000					
ethnl	0.5050	-0.4711	0.2512	1.0000				
musl	-0.0382	0.2810	-0.2888	-0.2869	1.0000			
fertwdi	0.7827	-0.6581	0.1486	0.4352	0.1280	1.0000		
lpopd	-0.4304	0.2105	-0.3196	-0.1984	-0.1269	-0.4301	1.0000	
urbwdi	-0.7438	0.8313	-0.0237	-0.4315	0.2495	-0.6012	0.1290	1.0000

Table 2.2, Model 2-1: Wealthier is Healthier, Narrow (GDP/cap and IMR)

```
. regress limrcom lgdph, r
```

Linear regression

Number of obs =	105
F(1, 103) =	240.32
Prob > F =	0.0000
R-squared =	0.7017
Root MSE =	.4432

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.7419919	.0478635	-15.50	0.000	-.8369179 -.6470658
_cons	9.615603	.3498856	27.48	0.000	8.921688 10.30952

Table 2.2, Model 2-2: Wealthier is Healthier, Intermediate (GDP/cap, Gini and IMR)

```
. regress limrcom lgdph giniavni, r
```

Linear regression

Number of obs =	105
F(2, 102) =	125.73
Prob > F =	0.0000
R-squared =	0.7236
Root MSE =	.42866

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.7383802	.0465675	-15.86	0.000	-.8307467 -.6460137
giniavni	.0134117	.0057105	2.35	0.021	.0020849 .0247386
_cons	8.996011	.4023595	22.36	0.000	8.197933 9.79409

Table 2.2, Model 2-3: Wealthier is Healthier, Broad (7 Baseline Variables and IMR)

(GDP/cap, Gini, Ethnic Fragn, 90%+ Musl, Fert, Pop Density, Urbaniz)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

		Number of obs =	105
		F(7, 97) =	115.48
		Prob > F =	0.0000
		R-squared =	0.8460
		Root MSE =	.32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Table 2.2, Model 2-3: Means and SDs of the 7 Baseline Variables, Infant Mortality

```
. summarize imrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

```
. summarize limrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

```
. summarize gdph
```

Variable	Obs	Mean	Std. Dev.	Min	Max
gdph	105	3060.371	3386.423	367	16753

```
. summarize lgdph
```

Variable	Obs	Mean	Std. Dev.	Min	Max
lgdph	105	7.588332	.91161	5.905362	9.726333

```
. summarize giniavni
```

Variable	Obs	Mean	Std. Dev.	Min	Max
giniavni	105	44.15429	8.926452	22	70.7

```
. summarize musl
```

Variable	Obs	Mean	Std. Dev.	Min	Max
musl	105	.1904762	.3945601	0	1

```
. summarize ethnl
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ethnl	105	.3922857	.3139643	0	.89

. summarize fertwdi

Variable	Obs	Mean	Std. Dev.	Min	Max
fertwdi	105	4.795238	1.674089	1.3	7.6

. summarize popd

Variable	Obs	Mean	Std. Dev.	Min	Max
popd	105	192.1905	742.0837	1	5762

. summarize lpopd

Variable	Obs	Mean	Std. Dev.	Min	Max
lpopd	105	3.7139	1.558825	0	8.659039

. summarize urbwdi

Variable	Obs	Mean	Std. Dev.	Min	Max
urbwdi	105	24.31472	5.2	100	

Table 2.2, Model 2-3; Table 2.6: Magnitude of Associations: CLARIFY

. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r

Linear regression

Number of obs =	105
F(7, 97) =	115.48
Prob > F =	0.0000
R-squared =	0.8460
Root MSE =	.32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Simulating main parameters. Please wait....

Note: Clarify is expanding your dataset from 105 observations to 1000 observations in order to accommodate the simulations. This will append missing values to the bottom of your original dataset.

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9
```

```
. setx mean
```

Table 2.2, Model 2-3: Fall in IMR Resulting from 1 SD rise in GDP/cap (ln)

```
. summarize lgdph
```

Variable	Obs	Mean	Std. Dev.	Min	Max
lgdph	105	7.588332	.91161	5.905362	9.726333

```
. display 7.588332+0.91161
8.499942
```

```
. simqi, tfunc(exp) fd(ev) changex(lgdph 7.588332 8.499942)
```

```
First Difference: lgdph 7.588332 8.499942
```

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-21.0478	2.577059	-25.88334 -15.93727

Table 2.2, Model 2-3: How much of a rise in GDP/cap would reduce IMR from 54 to 49?

```
. simqi, tfunc(exp) fd(ev) changex(lgdph 7.588332 7.76885)
```

```
First Difference: lgdph 7.588332 7.76885
```

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-5.003395	1.112023	-7.324123 -2.797171

```
. display exp(7.588332)
1975.0164
```

```
. display exp(7.76885)
2365.7491
```

```
. display 2365.7491-1975.0164
390.7327
```

Table 2.2, Model 2-3: Fall in IMR Resulting from 1 SD fall in Gini

```
summarize giniavni
```

Variable	Obs	Mean	Std. Dev.	Min	Max
giniavni	105	44.15429	8.926452	22	70.7

```
. display 44.15429-8.926452
35.227838
```

```
. simqi, tfunc(exp) fd(ev) changex(giniavni 44.15429 35.227838)

First Difference: giniavni 44.15429 35.227838

    Quantity of Interest |      Mean      Std. Err.      [95% Conf. Interval]
-----+-----+-----+-----+
dE[exp(limrcom)] | -4.764941   2.781271   -10.04159   .9394093
```

Table 2.2, Model 2-3: How much of a drop in the Gini would reduce IMR from 54 to 49?

```
. simqi, tfunc(exp) fd(ev) changex(giniavni 44.15429 34.715)

First Difference: giniavni 44.15429 34.715

    Quantity of Interest |      Mean      Std. Err.      [95% Conf. Interval]
-----+-----+-----+-----+
dE[exp(limrcom)] | -4.999074   2.93355   -10.44361   1.15461

. display 44.15429-34.715
9.43929
```

Table 2.2, Model 2-3: Fall in IMR Resulting from 1 SD fall in Ethnic Fragmentation

```
. simqi, tfunc(exp) fd(ev) changex(ethnl .3922857 .0783214)

First Difference: ethnl 0.3922857 0.0783214

    Quantity of Interest |      Mean      Std. Err.      [95% Conf. Interval]
-----+-----+-----+-----+
dE[exp(limrcom)] | -3.99712    2.167426   -8.142092   .5382385
```

Table 2.2, Model 2-3: Rise in IMR Resulting from 1 SD rise in 90+% Muslim?

```
. simqi, tfunc(exp) fd(ev) changex(musl .1904762 0.5850363)

First Difference: musl .1904762 0.5850363

    Quantity of Interest |      Mean      Std. Err.      [95% Conf. Interval]
-----+-----+-----+-----+
dE[exp(limrcom)] |  8.615586   2.939833   3.119864   14.21146
```

Table 2.2, Model 2-3: Rise in IMR Resulting from Change in 90+% Muslim from 0 to 1

```
. simqi, tfunc(exp) fd(ev) changex(musl 0 1)

First Difference: musl 0 1

    Quantity of Interest |      Mean      Std. Err.      [95% Conf. Interval]
-----+-----+-----+-----+
dE[exp(limrcom)] | 23.04241    7.81983    8.93091   39.0777
```

Table 2.2, Model 2-3: Fall in IMR Resulting from 1 SD Decline in Fertility

```
. simqi, tfunc(exp) fd(ev) changex(fertwdi 4.795238 6.469327)
```

First Difference: fertwdi 4.795238 3.121149

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-7.815935	2.611168	-12.63877 -2.419701

Table 2.2, Model 2-3: Fall in IMR Resulting from 1 SD rise in Population Density (ln)

```
. simqi, tfunc(exp) fd(ev) changex(lpoppd 5.258487068 6.839769971)
```

First Difference: lpoppd 5.258487068 6.839769971

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-5.298623	2.233874	-9.339048 -.5853043

Table 2.2, Model 2-3: Fall in IMR Resulting from 1 SD rise in Urbanization

```
. simqi, tfunc(exp) fd(ev) changex(urbwdi 43.81238 49.01238)
```

First Difference: urbwdi 43.81238 49.01238

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-1.290976	1.082965	-3.286854 .9146996

Table 2.2, Model 2-3: Robustness Checks

Model 2-3: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpoppd urbwdi, r
```

Linear regression

Number of obs =	105
F(6, 98) =	132.92
Prob > F =	0.0000
R-squared =	0.8344
Root MSE =	.33854

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5888096	.0653196	-9.01	0.000	-.7184342 -.459185
giniavni	.0122124	.0060355	2.02	0.046	.0002352 .0241896
ethnl	.3041219	.1261462	2.41	0.018	.0537889 .5544549
musl	.4988495	.1024674	4.87	0.000	.2955063 .7021926
lpoppd	-.0882054	.0305882	-2.88	0.005	-.1489067 -.0275042
urbwdi	-.0058387	.0023602	-2.47	0.015	-.0105224 -.001155
_cons	8.283047	.5246576	15.79	0.000	7.241881 9.324213

Model 2-3: Robust Check 1.2: Change specification: Include female school

(Same as Model 2-7)

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r

Linear regression

Number of obs = 105
 F(8, 96) = 104.97
 Prob > F = 0.0000
 R-squared = 0.8645
 Root MSE = .30943

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4394319	.0730844	-6.01	0.000	-.5845032	-.2943605
giniavni	.0102644	.0056537	1.82	0.073	-.000958	.0214868
ethnl	.1452183	.1168031	1.24	0.217	-.0866341	.3770707
musl	.2080264	.1078493	1.93	0.057	-.0060528	.4221056
fertwdi	.0247426	.0322253	0.77	0.444	-.0392242	.0887094
lpopd	-.087717	.0329019	-2.67	0.009	-.1530267	-.0224074
urbwdi	-.003442	.0021556	-1.60	0.114	-.0077208	.0008367
mysfx	-.0988089	.0264245	-3.74	0.000	-.151261	-.0463568
_cons	7.487967	.6560812	11.41	0.000	6.185656	8.790278

Model 2-3: Robust Check 1.3: Change specification: Include female literacy

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi litfewdi, r

Linear regression

Number of obs = 105
 F(8, 96) = 93.98
 Prob > F = 0.0000
 R-squared = 0.8591
 Root MSE = .31554

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4711799	.0696191	-6.77	0.000	-.6093728	-.332987
giniavni	.0108956	.0058049	1.88	0.064	-.000627	.0224182
ethnl	.1222384	.1149715	1.06	0.290	-.1059782	.3504549
musl	.2193586	.1115385	1.97	0.052	-.0020435	.4407606
fertwdi	.0252703	.0347329	0.73	0.469	-.043674	.0942146
lpopd	-.0900247	.0326033	-2.76	0.007	-.1547418	-.0253075
urbwdi	-.0040371	.0022305	-1.81	0.073	-.0084646	.0003904
litfewdi	-.0065319	.0020506	-3.19	0.002	-.0106023	-.0024616
_cons	7.746576	.6527258	11.87	0.000	6.450925	9.042226

Model 2-3: Robust Check 1.4: Change specification: Include geographical variables

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi airdist popcrgs latcapab, r

Linear regression

Number of obs = 105
 F(10, 94) = 80.87
 Prob > F = 0.0000
 R-squared = 0.8522
 Root MSE = .32656

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	

lgdph	-.493863	.0723868	-6.82	0.000	-.6375886	-.3501373
giniavni	.0108183	.00556	1.95	0.055	-.0002212	.0218578
ethnl	.2749203	.1135298	2.42	0.017	.0495042	.5003364
musl	.286786	.1188231	2.41	0.018	.0508601	.522712
fertwdi	.1002149	.035233	2.84	0.005	.0302589	.1701708
lpopd	-.0568937	.0300253	-1.89	0.061	-.1165096	.0027222
urbwdi	-.0046477	.0021975	-2.11	0.037	-.0090109	-.0002845
airdist	-7.05e-06	.0000172	-0.41	0.683	-.0000413	.0000272
popcrgs	-.0009792	.0011156	-0.88	0.382	-.0031943	.0012358
latcapab	.0058346	.003639	1.60	0.112	-.0013908	.01306
_cons	7.00672	.618905	11.32	0.000	5.77787	8.23557

Model 2-3: Robust Check 1.5: Change specification: Include regional dummies

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi afri lati east sout, r
Linear regression
Number of obs = 105
F( 11, 93) = 88.10
Prob > F = 0.0000
R-squared = 0.8484
Root MSE = .3325
```

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5307049	.0762016	-6.96	0.000	-.6820261	-.3793836
giniavni	.0115434	.0061129	1.89	0.062	-.0005957	.0236824
ethnl	.2398531	.1393845	1.72	0.089	-.0369369	.5166431
musl	.2622594	.0947373	2.77	0.007	.0741299	.4503888
fertwdi	.0897381	.0378019	2.37	0.020	.0146709	.1648052
lpopd	-.0749201	.0341989	-2.19	0.031	-.1428323	-.0070078
urbwdi	-.0039518	.0025272	-1.56	0.121	-.0089703	.0010668
afri	-.1528785	.1002895	-1.52	0.131	-.3520335	.0462765
lati	-.1455781	.1415527	-1.03	0.306	-.4266738	.1355175
east	-.1198455	.1355701	-0.88	0.379	-.3890608	.1493698
sout	.0057449	.1965277	0.03	0.977	-.38452	.3960099
_cons	7.490279	.673755	11.12	0.000	6.152335	8.828223

Model 2-3: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi gdphf giniavnf ethnlf, r
Linear regression
Number of obs = 105
F( 9, 94) =
Prob > F =
R-squared = 0.8548
Root MSE = .32367
```

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4955763	.0700391	-7.08	0.000	-.6346406	-.3565119
giniavni	.0065436	.0058061	1.13	0.263	-.0049844	.0180717
ethnl	.1927542	.1222893	1.58	0.118	-.0500541	.4355625
musl	.3331112	.1090332	3.06	0.003	.1166231	.5495992
fertwdi	.1040912	.0301251	3.46	0.001	.0442771	.1639054
lpopd	-.0745437	.0301429	-2.47	0.015	-.1343932	-.0146942
urbwdi	-.003605	.0024137	-1.49	0.139	-.0083975	.0011874

gdphf	-.1875885	.1163486	-1.61	0.110	-.4186014	.0434243
giniavnf	-.0157501	.0775404	-0.20	0.839	-.1697085	.1382082
ethnlf	-.3448947	.1662328	-2.07	0.041	-.6749538	-.0148355
_cons	7.278772	.5798107	12.55	0.000	6.127544	8.43

Model 2-3: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi

Huber iteration 1: maximum difference in weights = .48968512
Huber iteration 2: maximum difference in weights = .05646583
Huber iteration 3: maximum difference in weights = .01913562
Biweight iteration 4: maximum difference in weights = .15370421
Biweight iteration 5: maximum difference in weights = .01401505
Biweight iteration 6: maximum difference in weights = .00140891

Robust regression
Number of obs = 105
F( 7, 97) = 66.86
Prob > F = 0.0000
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5059025	.0783524	-6.46	0.000	-.6614103 -.3503946
giniavni	.0109959	.0045832	2.40	0.018	.0018995 .0200924
ethnl	.2417565	.1339787	1.80	0.074	-.024154 .5076671
musl	.3699707	.1156301	3.20	0.002	.1404771 .5994644
fertwdi	.0909155	.0348563	2.61	0.011	.0217354 .1600957
lpopd	-.0571733	.0262152	-2.18	0.032	-.1092032 -.0051433
urbwdi	-.0050255	.0026105	-1.93	0.057	-.0102066 .0001556
_cons	7.16629	.6200343	11.56	0.000	5.935693 8.396886

Model 2-3: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi
Iteration 1: WLS sum of weighted deviations = 26.83732

Iteration 1: sum of abs. weighted deviations = 31.944673
Iteration 2: sum of abs. weighted deviations = 26.467935
Iteration 3: sum of abs. weighted deviations = 26.440758
Iteration 4: sum of abs. weighted deviations = 26.413745
Iteration 5: sum of abs. weighted deviations = 26.329048
Iteration 6: sum of abs. weighted deviations = 26.287753
Iteration 7: sum of abs. weighted deviations = 26.249377
Iteration 8: sum of abs. weighted deviations = 26.241739

Median regression
Number of obs = 105
Raw sum of deviations 68.21916 (about 4.1271343)
Min sum of deviations 26.24174
Pseudo R2 = 0.6153
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4095141	.0780378	-5.25	0.000	-.5643976 -.2546307
giniavni	.0101286	.0047573	2.13	0.036	.0006866 .0195707
ethnl	.1414815	.1334232	1.06	0.292	-.1233265 .4062896
musl	.2817497	.1162184	2.42	0.017	.0510884 .512411
fertwdi	.1145593	.0344125	3.33	0.001	.0462601 .1828585
lpopd	-.0688711	.0266682	-2.58	0.011	-.1218002 -.0159421
urbwdi	-.0066575	.0026252	-2.54	0.013	-.0118678 -.0014472

_cons	6.554478	.61733	10.62	0.000	5.329249	7.779707
-------	----------	--------	-------	-------	----------	----------

Model 2-3: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi if ctry ~= "Cuba" & ctry ~= "Mongolia", r
```

Linear regression

Number of obs =	103
F(7, 95) =	108.75
Prob > F =	0.0000
R-squared =	0.8592
Root MSE =	.30983

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5360614	.0663991	-8.07	0.000	-.6678804	-.4042425
giniavni	.0109225	.0050251	2.17	0.032	.0009464	.0208987
ethnl	.2573677	.1165811	2.21	0.030	.025925	.4888104
musl	.3949138	.0971102	4.07	0.000	.2021258	.5877019
fertwdi	.0833224	.0287309	2.90	0.005	.0262843	.1403604
lpopd	-.0507647	.0248644	-2.04	0.044	-.1001269	-.0014025
urbwdi	-.0040637	.0021072	-1.93	0.057	-.008247	.0001195
_cons	7.358917	.5230776	14.07	0.000	6.320477	8.397357

Model 2-3: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)

```
. correlate fertwdi fertwdin  
(obs=105)
```

	fertwdi	fertwdin
fertwdi	1.0000	
fertwdin	0.6135	1.0000

Model 2-3: Robust Check 4.2: Endog.: Assoc. Betw. Cand. Inst. & Hypth. Endog. Rgrssr.

```
. ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd urbwdi , first
```

First-stage regressions

Source	SS	df	MS	Number of obs =	105
Model	210.682977	7	30.0975682	F(7, 97) =	36.14
Residual	80.7846455	97	.832831397	Prob > F =	0.0000
Total	291.467623	104	2.8025733	R-squared =	0.7228
				Adj R-squared =	0.7028
				Root MSE =	.9126

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5549833	.1987866	-2.79	0.006	-.9495196	-.1604469
giniavni	.0229528	.011698	1.96	0.053	-.0002645	.0461702
ethnl	.3813084	.3527228	1.08	0.282	-.3187487	1.081365
musl	1.012926	.2889069	3.51	0.001	.439526	1.586326
lpopd	-.2047622	.066019	-3.10	0.003	-.3357918	-.0737327

urbwdi	-.0187249	.006749	-2.77	0.007	-.0321197	-.0053301
fertwdin	.3281238	.066114	4.96	0.000	.1969059	.4593416
_cons	7.788379	1.423095	5.47	0.000	4.96393	10.61283

Model 2-3: Robust Check 4.3: Endog.: 2SLS Instrumenting for Hypoth. Endog. Regressor

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	105
Model	57.3701749	7	8.19573927	F(7, 97)	=	75.26
Residual	10.4443442	97	.107673652	Prob > F	=	0.0000
Total	67.8145191	104	.652062684	R-squared	=	0.8460
				Adj R-squared	=	0.8349
				Root MSE	=	.32814

limrcm	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	.0826706	.0724489	1.14	0.257	-.0611203 .2264616
lgdph	-.515707	.0929729	-5.55	0.000	-.7002325 -.3311815
giniavni	.0099976	.0046241	2.16	0.033	.0008202 .0191751
ethnl	.2339657	.1368163	1.71	0.090	-.0375767 .5055081
musl	.3663991	.1498064	2.45	0.016	.0690748 .6637233
lpopd	-.0724207	.0274562	-2.64	0.010	-.1269137 -.0179277
urbwdi	-.0046999	.0025993	-1.81	0.074	-.0098587 .000459
_cons	7.373919	.917908	8.03	0.000	5.552126 9.195712

Instrumented: fertwdi
 Instruments: lgdph giniavni ethnl musl lpopd urbwdi fertwdin

Model 2-3: Robust Check 4.4: Endog.: Hausman Test for Diff Betw. OLS & 2SLS Coeff.

```
. estimates store ivfertwdin
. regress limrcm lgdph giniavni ethnl musl fertwdi lpopd urbwdi
```

Source	SS	df	MS	Number of obs	=	105
Model	57.3734368	7	8.19620526	F(7, 97)	=	76.14
Residual	10.4410823	97	.107640024	Prob > F	=	0.0000
Total	67.8145191	104	.652062684	R-squared	=	0.8460
				Adj R-squared	=	0.8349
				Root MSE	=	.32809

limrcm	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5106892	.0732751	-6.97	0.000	-.6561199 -.3652584
giniavni	.0098456	.0042862	2.30	0.024	.0013386 .0183526
ethnl	.2291501	.1252967	1.83	0.070	-.0195291 .4778293
musl	.3573075	.1081371	3.30	0.001	.1426853 .5719297
fertwdi	.0883452	.0325976	2.71	0.008	.0236481 .1530424
lpopd	-.0713372	.0245164	-2.91	0.004	-.1199955 -.0226789
urbwdi	-.0046217	.0024413	-1.89	0.061	-.009467 .0002237
_cons	7.311515	.5798553	12.61	0.000	6.160663 8.462367

. hausman ivfertwdin, constant

Note: the rank of the differenced variance matrix (6) does not equal the number of coefficients being tested (8); be sure this is what you expect, or there may be problems computing the test.

Examine the output of your estimators for anything unexpected and possibly consider scaling your variables so that the coefficients are on a similar scale.

	---- Coefficients ----			
	(b) ivfertwdin	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	.0826706	.0883452	-.0056746	.0647011
lgdph	-.515707	-.5106892	-.0050178	.0572252
giniavni	.0099976	.0098456	.000152	.0017349
ethnl	.2339657	.2291501	.0048156	.0549494
musl	.3663991	.3573075	.0090916	.1036742
lpopd	-.0724207	-.0713372	-.0010835	.0123608
urbwdi	-.0046999	-.0046217	-.0000782	.0008923
_cons	7.373919	7.311515	.0624037	.7115637

b = consistent under Ho and Ha; obtained from ivreg

B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(6) &= (\text{b-B})'[(\text{V}_b-\text{V}_B)^{-1}](\text{b-B}) \\ &= 0.01 \\ \text{Prob>chi2} &= 1.0000 \end{aligned}$$

Model 2-3: Robust Check 5.1: DepV: IMR to U5MR (limrcom to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r

Linear regression

Number of obs = 105
F(7, 97) = 127.43
Prob > F = 0.0000
R-squared = 0.8470
Root MSE = .37356

lu5mrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5368629	.0887422	-6.05	0.000	-.7129917	-.3607342
giniavni	.0079543	.0065034	1.22	0.224	-.0049532	.0208617
ethnl	.3110266	.1422352	2.19	0.031	.028729	.5933242
musl	.2944396	.1222671	2.41	0.018	.0517731	.537106
fertwdi	.130953	.0361069	3.63	0.000	.0592908	.2026153
lpopd	-.0776653	.0357261	-2.17	0.032	-.1485717	-.0067588
urbwdi	-.0049228	.0026147	-1.88	0.063	-.0101122	.0002667
_cons	7.723981	.771688	10.01	0.000	6.192394	9.255568

Model 2-3: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwrdi)

. regress limrwrdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r

Linear regression

Number of obs = 105
F(7, 97) = 119.24
Prob > F = 0.0000
R-squared = 0.8626
Root MSE = .30776

limrwrdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	

	lgdph	.5058556	.0682149	-7.42	0.000	-.6412433	-.3704678
giniavni	.0112409	.0052224	2.15	0.034	.000876	.0216059	
ethnl	.1706326	.1091786	1.56	0.121	-.0460567	.387322	
musl	.2904627	.1026838	2.83	0.006	.0866637	.4942617	
fertwdi	.1093336	.0296951	3.68	0.000	.050397	.1682703	
lpopd	-.0486494	.0244377	-1.99	0.049	-.0971515	-.0001474	
urbwdi	-.0045243	.0022419	-2.02	0.046	-.0089738	-.0000749	
_cons	7.071855	.5887277	12.01	0.000	5.903393	8.240316	

Model 2-3: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	104
F(7, 96) =	107.58
Prob > F =	0.0000
R-squared =	0.8533
Root MSE =	.32169

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.5143	.0733762	-7.01	0.000	-.6599506 -.3686493
giniavni	.0102356	.0047567	2.15	0.034	.0007937 .0196776
ethnl	.2136929	.1160557	1.84	0.069	-.0166758 .4440616
musl	.2719265	.1046613	2.60	0.011	.0641756 .4796775
fertwdi	.0722882	.0338289	2.14	0.035	.0051383 .1394381
lpopd	-.0799197	.0251831	-3.17	0.002	-.1299079 -.0299316
urbwdi	-.0058811	.0020714	-2.84	0.006	-.0099927 -.0017694
_cons	7.527842	.6399151	11.76	0.000	6.25762 8.798063

Model 2-3: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi gdpmf, r
```

Linear regression

Number of obs =	104
F(8, 95) =	96.07
Prob > F =	0.0000
R-squared =	0.8534
Root MSE =	.32328

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.5117233	.0748456	-6.84	0.000	-.6603107 -.3631359
giniavni	.0100979	.0048905	2.06	0.042	.000389 .0198068
ethnl	.2189028	.1176576	1.86	0.066	-.0146771 .4524828
musl	.2706425	.1054216	2.57	0.012	.0613542 .4799307
fertwdi	.0709109	.0348863	2.03	0.045	.0016529 .1401689
lpopd	-.0810036	.0262143	-3.09	0.003	-.1330457 -.0289616
urbwdi	-.0059693	.0021226	-2.81	0.006	-.0101833 -.0017554
gdpmf	-.0412949	.1292917	-0.32	0.750	-.2979713 .2153815
_cons	7.528601	.6450238	11.67	0.000	6.248067 8.809135

Model 2-3: Robust Check 7.3: Vary data source: Ctrl Var: ethnic frag. (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	122.10
Prob > F =	0.0000
R-squared =	0.8455
Root MSE =	.32861

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4935497	.0780256	-6.33	0.000	-.6484089	-.3386905
giniavni	.0105083	.0057139	1.84	0.069	-.0008321	.0218488
ethnannx	.2617549	.1535352	1.70	0.091	-.04297	.5664798
musl	.3508572	.1097952	3.20	0.002	.132944	.5687703
fertwdi	.0965222	.0314267	3.07	0.003	.034149	.1588954
lpopd	-.0661552	.0314383	-2.10	0.038	-.1285516	-.0037588
urbwdi	-.0052579	.0023459	-2.24	0.027	-.0099139	-.0006019
_cons	7.064875	.6998943	10.09	0.000	5.675779	8.453972

Model 2-3: Robust Check 7.4: Vary data srce: Ctrl Var: ethnl to ethnannx, msng data flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi ethnannf, r
```

Linear regression

Number of obs =	105
F(8, 96) =	102.98
Prob > F =	0.0000
R-squared =	0.8464
Root MSE =	.32937

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5131973	.0865608	-5.93	0.000	-.6850192	-.3413754
giniavni	.0096883	.0058025	1.67	0.098	-.0018295	.0212061
ethnannx	.2507271	.1553341	1.61	0.110	-.0576088	.5590629
musl	.3517562	.1104932	3.18	0.002	.1324289	.5710834
fertwdi	.0929245	.0315198	2.95	0.004	.0303583	.1554907
lpopd	-.0667921	.0312814	-2.14	0.035	-.1288852	-.0046989
urbwdi	-.0046559	.002556	-1.82	0.072	-.0097295	.0004177
ethnannf	-.1022258	.1645227	-0.62	0.536	-.4288008	.2243492
_cons	7.257265	.7687531	9.44	0.000	5.731302	8.783228

Table 2.2, Models 2-4 to 2-10: Utilization of Basic Social Services and Infant Mortality

Table 2.2, Models 2-4 to 2-10: Correlations among the social service variables

```
. correlate limrcom delivcom.dtp3con mcvcon mysfx rtot watecom sanicom (obs=85)
```

	limrcom	delivcom	dtp3con	mcvcon	mysfx	rtot	watecom	sanicom
limrcom	1.0000							
delivcom	-0.8041	1.0000						
dtp3con	-0.5945	0.6519	1.0000					
mcvcon	-0.5489	0.6069	0.8965	1.0000				

mysfx	-0.7966	0.7348	0.4901	0.4744	1.0000			
rtot	-0.3303	0.1834	0.3159	0.3100	0.3877	1.0000		
watecom	-0.7775	0.7218	0.6727	0.6072	0.6573	0.3577	1.0000	
sanicom	-0.8410	0.7857	0.6499	0.5794	0.7057	0.1961	0.8101	1.0000

Table 2.2, Models 2-4 to 2-10: All social service variables included in the same model

```
. regress limrcom lgdph giniavni ethnl musl lpopd fertwdi urbwdi delivcom dtp3con mcvcon mysfx rtot
watecom sanicom, r
```

Linear regression

Number of obs = 85
F(14, 70) = 43.72
Prob > F = 0.0000
R-squared = 0.9023
Root MSE = .26264

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4118592	.0738907	-5.57	0.000	-.5592294 -.2644889
giniavni	.0152414	.0052222	2.92	0.005	.004826 .0256568
ethnl	.2482795	.1149751	2.16	0.034	.018969 .4775901
musl	.3169435	.1203648	2.63	0.010	.0768836 .5570035
lpopd	-.0385296	.0309511	-1.24	0.217	-.1002596 .0232004
fertwdi	-.0438262	.0388067	-1.13	0.263	-.1212238 .0335714
urbwdi	-.0041874	.0026685	-1.57	0.121	-.0095095 .0011347
delivcom	-.0060984	.0017399	-3.51	0.001	-.0095686 -.0026283
dtp3con	-.0038341	.0032584	-1.18	0.243	-.0103328 .0026647
mcvcon	.0023283	.003331	0.70	0.487	-.0043151 .0089718
mysfx	-.0538894	.0253714	-2.12	0.037	-.104491 -.0032878
rtot	-.0039877	.001393	-2.86	0.006	-.0067659 -.0012094
watecom	.0044901	.0027164	1.65	0.103	-.0009275 .0099077
sanicom	-.004009	.0020666	-1.94	0.056	-.0081306 .0001127
_cons	7.580976	.6759983	11.21	0.000	6.232739 8.929212

Table 2.2, Models 2-4 to 2-10: Social service utilization and infant mortality**Table 2.2: Summary: Robustness checks for Models 2-4 to 2-10 (service utiliz. & IMR)**

This table gives the t-score of the association between the utilization of basic social services (trained attendance at birth in Model 2-4, child immunization in Models 2-5 and 2-6), female schooling in Model 2-7, family planning in Model 2-8, improved water source in Model 2-9, improved sanitation in Model 2-10) in the context of 16 checks for robustness. The statistical output follows the table. In each check for robustness the 7 socioeconomic "baseline" variables (Model 2-3) are controlled for, as is also the case for Models 2-4 to 2-10 in Table 2.2.

	Model 2-4	Model 2-5	Model 2-6	Model 2-7	Model 2-8	Model 2-9	Model 2-10
Dependent variable	delivcom	dtp3con	mcvcon	mysfx	rtot*	watecom	sanicom
Basic Model	-3.92	-3.75	-2.57	-3.74	-2.49	-1.78	-3.68
1.1. Specif: Excl fertility	-4.66	-4.17	-3.00	-4.70	-1.09	-2.84	-4.27
1.2. Specif: Incl fem sch	-3.19	-3.24	-3.28		-1.17	-2.05	-2.97
1.3. Specif: Incl fem lit	-3.10	-2.24	-2.09	-3.19	-1.59	-1.74	-2.76
1.4. Specif: Incl geogr	-3.83	-3.85	-3.09	-4.10	-2.25	-1.50	-3.39
1.5. Specif: Incl reg dum	-4.24	-3.72	-2.67	-3.69	-2.61	-1.74	-3.51

2.1. Imput: msg data flags	-3.30	-3.11	-1.98	-3.71	-2.56	-1.52	-3.09
3.1. Outliers: rreg	-4.15	-3.10	-2.36	-3.83	-2.06	-1.20	-3.36
3.2. Outliers: qreg	-2.39	-1.81	-2.17	-2.79	-1.16	-0.70	-2.52
3.3. Outliers: cooksd	-4.58	-4.19	-3.13	-4.40	-2.71	-1.60	-3.71
4.4. Endog: 2SLS	-3.13	-2.75	-2.07	-2.79		-1.52	-3.20
5.1. DV lu5mr	-3.93	-3.38	-2.23	-3.87	-2.78	-1.90	-3.31
5.2. DV limrwdi	-4.58	-3.58	-2.78	-3.38	-2.22	-1.39	-3.72
7.1. IV lgdpmx	-5.01	-2.88	-2.02	-3.72	-1.44	-1.15	-3.07
7.2. IV lgdpmx, mdf	-4.96	-2.84	-2.01	-3.69	-1.43	-1.16	-3.06
7.3. IV ethnannx	-3.88	-3.49	-2.30	-3.97	-2.41	-1.72	-3.49
7.4. IV ethnannx, mdf	-3.58	-3.47	-2.33	-3.83	-2.29	-1.81	-3.44
Basic model clarify	-9.99	-6.25	-4.54	-10.97	-4.85	-4.28	-10.45

Table 2.2, Model 2-4: Trained Attendance at Birth and Infant Mortality**Model 2-4: Bivariate correlations among independent variables**

```
. correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom
(obs=103)
```

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	delivcom
lgdph	1.0000							
giniavni	-0.0087	1.0000						
ethnl	-0.4740	0.2447	1.0000					
musl	0.2922	-0.2972	-0.2867	1.0000				
fertwdi	-0.6565	0.1217	0.4296	0.1280	1.0000			
lpopd	0.1954	-0.2995	-0.1865	-0.1271	-0.4055	1.0000		
urbwdi	0.8283	0.0029	-0.4392	0.2681	-0.5968	0.1051	1.0000	
delivcom	0.7031	-0.0423	-0.3721	0.0313	-0.6992	0.1330	0.7087	1.0000

Model 2-4: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	115.48
Prob > F =	0.0000
R-squared =	0.8460
Root MSE =	.32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Model 2-4: Infant Mortality predicted by 7 baseline var. and trained attendance at birth

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
```

Linear regression

Number of obs =	103
F(8, 94) =	90.72
Prob > F =	0.0000
R-squared =	0.8607
Root MSE =	.31022

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.453796	.0684336	-6.63	0.000	-.5896725	-.3179196
giniavni	.0077974	.0057938	1.35	0.182	-.0037064	.0193012
ethnl	.2429785	.1107555	2.19	0.031	.0230708	.4628861
musl	.2846971	.110476	2.58	0.012	.0653443	.5040499
fertwdi	.0489119	.029416	1.66	0.100	-.0094942	.107318
lpopd	-.0889166	.0330208	-2.69	0.008	-.1544803	-.023353
urbwdi	-.0016754	.0021983	-0.76	0.448	-.0060402	.0026895
delivcom	-.0069125	.001763	-3.92	0.000	-.010413	-.003412
_cons	7.521111	.6256743	12.02	0.000	6.27882	8.763402

Model 2-4: Means and SDs of trained attendance at birth and infant mortality

```
. summarize imrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

```
. summarize limrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

```
. summarize delivcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
delivcom	103	59.42718	27.90024	7	100

Model 2-4: Change in IMR produced by a 1 SD change in trained att. at birth

```
. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
```

Linear regression

Number of obs =	103
F(8, 94) =	90.72
Prob > F =	0.0000
R-squared =	0.8607
Root MSE =	.31022

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.453796	.0684336	-6.63	0.000	-.5896725	-.3179196

giniavni	.0077974	.0057938	1.35	0.182	-.0037064	.0193012
ethnl	.2429785	.1107555	2.19	0.031	.0230708	.4628861
musl	.2846971	.110476	2.58	0.012	.0653443	.5040499
fertwdi	.0489119	.029416	1.66	0.100	-.0094942	.107318
lpopd	-.0889166	.0330208	-2.69	0.008	-.1544803	-.023353
urbwdi	-.0016754	.0021983	-0.76	0.448	-.0060402	.0026895
delivcom	-.0069125	.001763	-3.92	0.000	-.010413	-.003412
_cons	7.521111	.6256743	12.02	0.000	6.27882	8.763402

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean  

. simqi, tfunc(exp) fd(ev) changex(delivcom 59.42718 87.32742)
```

First Difference: delivcom 59.42718 87.32742

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-9.99197	2.352531	-14.5073 -5.289354

Model 2-4: How much of a rise in trained birth attendance would reduce IMR from 54 to 49?

```
. simqi, tfunc(exp) fd(ev) changex(delivcom 59.42718 72.72)
```

First Difference: delivcom 59.42718 72.72

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-5.000855	1.475196	-7.838043 -1.913948

display 72.72-59.42718
13.29282

Model 2-4: Robustness checks

Model 2-4: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi delivcom, r
```

Linear regression

Number of obs = 103
F(7, 95) = 105.22
Prob > F = 0.0000
R-squared = 0.8576
Root MSE = .31207

limrcom	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4846787	.0624027	-7.77	0.000	-.6085637 -.3607937
giniavni	.0087684	.0058717	1.49	0.139	-.0028885 .0204252
ethnl	.2773771	.1118199	2.48	0.015	.0553866 .4993675

musl	.347322	.1041839	3.33	0.001	.1404908	.5541531
lpopd	-.0988411	.0327795	-3.02	0.003	-.1639167	-.0337655
urbwdi	-.0019468	.0022125	-0.88	0.381	-.0063392	.0024455
delivcom	-.0078615	.0016886	-4.66	0.000	-.0112138	-.0045093
_cons	8.026422	.5180119	15.49	0.000	6.998038	9.054805

Model 2-4: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom mysfx, r
```

Linear regression

Number of obs = 103
 F(9, 93) = 87.04
 Prob > F = 0.0000
 R-squared = 0.8704
 Root MSE = .30091

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4142324	.0667232	-6.21	0.000	-.5467315	-.2817334
giniavni	.00855	.0057656	1.48	0.141	-.0028992	.0199993
ethnl	.1768433	.1116434	1.58	0.117	-.0448583	.3985449
musl	.1909099	.1054616	1.81	0.073	-.018516	.4003357
fertwdi	.0086012	.0331379	0.26	0.796	-.0572041	.0744066
lpopd	-.0968849	.0335522	-2.89	0.005	-.163513	-.0302569
urbwdi	-.0014287	.0022112	-0.65	0.520	-.0058196	.0029623
delivcom	-.0054311	.0017035	-3.19	0.002	-.0088139	-.0020482
mysfx	-.073902	.0270816	-2.73	0.008	-.1276807	-.0201233
_cons	7.623177	.6372013	11.96	0.000	6.357822	8.888533

Model 2-4: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom litfewdi, r
```

Linear regression

Number of obs = 103
 F(9, 93) = 77.06
 Prob > F = 0.0000
 R-squared = 0.8649
 Root MSE = .30715

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4412261	.0682471	-6.47	0.000	-.5767514	-.3057008
giniavni	.0087433	.0058453	1.50	0.138	-.0028643	.020351
ethnl	.176647	.1085471	1.63	0.107	-.038906	.3922
musl	.2139625	.1129873	1.89	0.061	-.0104078	.4383328
fertwdi	.0180677	.0330852	0.55	0.586	-.047633	.0837684
lpopd	-.0965492	.0334148	-2.89	0.005	-.1629042	-.0301941
urbwdi	-.0018272	.0022262	-0.82	0.414	-.0062481	.0025936
delivcom	-.0055958	.001805	-3.10	0.003	-.0091802	-.0020114
litfewdi	-.0039574	.0020292	-1.95	0.054	-.0079871	.0000723
_cons	7.74946	.6397255	12.11	0.000	6.479092	9.019828

Model 2-4: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom airdist popcrgs latcapab,
r
```

Linear regression

Number of obs = 103
F(11, 91) = 66.97
Prob > F = 0.0000
R-squared = 0.8683
Root MSE = .3066

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4449685	.0673051	-6.61	0.000	-.5786619	-.3112751
giniavni	.0083391	.0053724	1.55	0.124	-.0023325	.0190108
ethnl	.2880856	.0997609	2.89	0.005	.0899229	.4862484
musl	.2080681	.1273159	1.63	0.106	-.0448293	.4609655
fertwdi	.0611276	.0342527	1.78	0.078	-.0069111	.1291663
lpopd	-.0745661	.0317422	-2.35	0.021	-.137618	-.0115142
urbwdi	-.0013103	.0021725	-0.60	0.548	-.0056258	.0030051
delivcom	-.0072031	.0018783	-3.83	0.000	-.0109342	-.0034721
airdist	2.17e-06	.0000172	0.13	0.900	-.0000319	.0000363
popcrgs	-.0006857	.0009913	-0.69	0.491	-.0026548	.0012834
latcapab	.0068835	.0038142	1.80	0.074	-.000693	.01446
_cons	7.216112	.5963176	12.10	0.000	6.031601	8.400624

Model 2-4: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom afri lati east sout, r
```

Linear regression

Number of obs = 103
F(12, 90) = 60.25
Prob > F = 0.0000
R-squared = 0.8667
Root MSE = .31023

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4800677	.0711047	-6.75	0.000	-.6213295	-.3388059
giniavni	.0100578	.0057122	1.76	0.082	-.0012905	.0214061
ethnl	.1536599	.1268099	1.21	0.229	-.0982701	.4055898
musl	.1305082	.1266754	1.03	0.306	-.1211546	.382171
fertwdi	.0196311	.0361341	0.54	0.588	-.0521556	.0914179
lpopd	-.1004298	.0362433	-2.77	0.007	-.1724336	-.0284261
urbwdi	-.0000465	.0026807	-0.02	0.986	-.0053723	.0052792
delivcom	-.0082174	.0019376	-4.24	0.000	-.0120667	-.0043681
afri	-.116129	.120098	-0.97	0.336	-.3547246	.1224666
lati	-.3125927	.1577813	-1.98	0.051	-.6260527	.0008674
east	-.160239	.1620415	-0.99	0.325	-.4821628	.1616847
sout	-.1043877	.2238641	-0.47	0.642	-.5491327	.3403573
_cons	8.021371	.6397265	12.54	0.000	6.750443	9.2923

Model 2-4: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 103
F(10, 92) = 70.81

Prob > F = 0.0000
 R-squared = 0.8665
 Root MSE = .30698

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4429435	.0680538	-6.51	0.000	-.5781042	-.3077828
giniavni	.0057794	.0058784	0.98	0.328	-.0058956	.0174544
ethnl	.2120195	.1129697	1.88	0.064	-.012348	.436387
musl	.2673308	.1099314	2.43	0.017	.0489976	.4856641
fertwdi	.0582112	.0338746	1.72	0.089	-.0090668	.1254891
lpopd	-.0910877	.0320541	-2.84	0.006	-.1547499	-.0274255
urbwdi	-.0015047	.0022115	-0.68	0.498	-.0058969	.0028876
delivcom	-.0065359	.0019821	-3.30	0.001	-.0104725	-.0025992
gdphf (dropped)						
giniavnf	.0511667	.091879	0.56	0.579	-.1313128	.2336463
ethnlf	-.2967594	.1726823	-1.72	0.089	-.6397213	.0462025
_cons	7.482605	.5888805	12.71	0.000	6.313038	8.652173

Model 2-4: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom
```

```
Huber iteration 1: maximum difference in weights = .58198938
Huber iteration 2: maximum difference in weights = .08394717
Huber iteration 3: maximum difference in weights = .0246733
Biweight iteration 4: maximum difference in weights = .17785926
Biweight iteration 5: maximum difference in weights = .04205448
Biweight iteration 6: maximum difference in weights = .01582898
Biweight iteration 7: maximum difference in weights = .0052905
```

```
Robust regression
Number of obs = 103
F( 8, 94) = 72.51
Prob > F = 0.0000
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4462894	.0717779	-6.22	0.000	-.5888061	-.3037727
giniavni	.0101973	.0041717	2.44	0.016	.0019143	.0184803
ethnl	.2660402	.1201428	2.21	0.029	.0274939	.5045865
musl	.2984027	.106167	2.81	0.006	.0876057	.5091997
fertwdi	.049649	.0338277	1.47	0.146	-.0175168	.1168148
lpopd	-.0624587	.0240067	-2.60	0.011	-.1101245	-.0147929
urbwdi	-.0017742	.0024847	-0.71	0.477	-.0067076	.0031592
delivcom	-.0077757	.0018753	-4.15	0.000	-.0114992	-.0040522
_cons	7.290697	.5617547	12.98	0.000	6.17532	8.406074

Model 2-4: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom
Iteration 1: WLS sum of weighted deviations = 24.370931
```

```
Iteration 1: sum of abs. weighted deviations = 31.034282
Iteration 2: sum of abs. weighted deviations = 24.459794
Iteration 3: sum of abs. weighted deviations = 24.303811
Iteration 4: sum of abs. weighted deviations = 24.136985
Iteration 5: sum of abs. weighted deviations = 23.775386
```

Iteration 6: sum of abs. weighted deviations = 23.75782
 Iteration 7: sum of abs. weighted deviations = 23.749723
 Iteration 8: sum of abs. weighted deviations = 23.735634
 Iteration 9: sum of abs. weighted deviations = 23.622506
 Iteration 10: sum of abs. weighted deviations = 23.620109
 Iteration 11: sum of abs. weighted deviations = 23.612283
 Iteration 12: sum of abs. weighted deviations = 23.612027

Median regression Number of obs = 103
 Raw sum of deviations 66.22177 (about 4.1431346)
 Min sum of deviations 23.61203 Pseudo R2 = 0.6434

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.46502	.1294675	-3.59	0.001	-.7220807 -.2079593
giniavni	.0045166	.0075834	0.60	0.553	-.0105405 .0195736
ethnl	.2551711	.2153282	1.19	0.239	-.1723681 .6827103
musl	.2335827	.1875927	1.25	0.216	-.138887 .6060524
fertwdi	.0429526	.059919	0.72	0.475	-.0760178 .1619231
lpopd	-.0649894	.0422742	-1.54	0.128	-.1489259 .0189472
urbwdi	-.0003482	.0044907	-0.08	0.938	-.0092646 .0085681
delivcom	-.008259	.0034629	-2.39	0.019	-.0151346 -.0013834
_cons	7.713896	1.007056	7.66	0.000	5.714363 9.713429

Model 2-4: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom if ctry == "Mongolia" & ctry == "Cuba", r

Linear regression Number of obs = 101
 F(8, 92) = 84.57
 Prob > F = 0.0000
 R-squared = 0.8783
 Root MSE = .28613

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.474556	.0622818	-7.62	0.000	-.5982531 -.3508589	
giniavni	.0092863	.0048052	1.93	0.056	-.0002572 .0188298	
ethnl	.2772689	.1055301	2.63	0.010	.067677 .4868609	
musl	.3278446	.0958617	3.42	0.001	.1374551 .5182342	
fertwdi	.0405617	.0281289	1.44	0.153	-.0153046 .096428	
lpopd	-.0654267	.0261489	-2.50	0.014	-.1173607 -.0134927	
urbwdi	-.0009901	.0020347	-0.49	0.628	-.0050313 .003051	
delivcom	-.0074557	.0016291	-4.58	0.000	-.0106912 -.0042202	
_cons	7.54212	.513569	14.69	0.000	6.522128 8.562112	

Model 2-4: Robust Ck 4.1: Endog ck: Corr cand. inst (rpos) & hyp endg reg (delivcom)

. correlate delivcom rpos
 (obs=87)

	delivcom	rpos
delivcom	1.0000	
rpos	0.5405	1.0000

Model 2-4: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi (delivcom = rpos), first
```

First-stage regressions

Source	SS	df	MS	Number of obs = 87 F(8, 78) = 18.16 Prob > F = 0.0000 R-squared = 0.6507 Adj R-squared = 0.6149 Root MSE = 16.617		
delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.62992	4.111706	1.37	0.175	-2.555857	13.8157
giniavni	-.158857	.2572093	-0.62	0.539	-.6709214	.3532075
ethnl	-4.143097	7.369752	-0.56	0.576	-18.81515	10.52895
musl	-5.342489	6.289745	-0.85	0.398	-17.86441	7.179432
fertwdi	-3.113102	2.036527	-1.53	0.130	-7.167516	.9413115
lpopd	-2.15036	1.586488	-1.36	0.179	-5.308816	1.008095
urbwdi	.4176837	.1429754	2.92	0.005	.1330414	.7023259
rpos	5.150431	1.717122	3.00	0.004	1.731903	8.568959
_cons	24.36597	32.41469	0.75	0.454	-40.16672	88.89865

Model 2-4: Robust Check 4.3: Endog ck: 2SLS using rpos as instrument for delivcom

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs = 87 F(8, 78) = 63.75 Prob > F = 0.0000 R-squared = 0.8707 Adj R-squared = 0.8575 Root MSE = .2909		
limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
delivcom	-.011709	.0058363	-2.01	0.048	-.0233282	-.0000897
lgdph	-.4370814	.0845059	-5.17	0.000	-.6053196	-.2688432
giniavni	.0121807	.0046607	2.61	0.011	.0029019	.0214594
ethnl	.2576483	.1288253	2.00	0.049	.0011769	.5141196
musl	.3434107	.1166622	2.94	0.004	.1111541	.5756673
fertwdi	.0138187	.0474959	0.29	0.772	-.0807385	.1083758
lpopd	-.0441777	.030586	-1.44	0.153	-.1050697	.0167143
urbwdi	-.0013235	.0030574	-0.43	0.666	-.0074104	.0047633
_cons	7.434373	.5990918	12.41	0.000	6.241673	8.627073

Instrumented: delivcom
Instruments: lgdph giniavni ethnl musl fertwdi lpopd urbwdi rpos

Model 2-4: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store ivrpos2
```

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom if rpos == .

Source	SS	df	MS	Number of obs	=	87
Model	44.6715513	8	5.58394391	F(8, 78)	=	68.11
Residual	6.39442725	78	.081979837	Prob > F	=	0.0000
				R-squared	=	0.8748
Total	51.0659785	86	.593790448	Adj R-squared	=	0.8619
				Root MSE	=	.28632

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4602941	.0711308	-6.47	0.000	-.6019046 -.3186835
giniavni	.0128051	.0044383	2.89	0.005	.0039692 .0216411
ethnl	.2632123	.1263768	2.08	0.041	.0116154 .5148092
musl	.3631955	.1087884	3.34	0.001	.1466144 .5797766
fertwdi	.0319774	.0323726	0.99	0.326	-.0324715 .0964262
lpopd	-.0377467	.0276339	-1.37	0.176	-.0927616 .0172682
urbwdi	-.0022525	.0024656	-0.91	0.364	-.0071611 .0026561
delivcom	-.0087803	.0018473	-4.75	0.000	-.0124581 -.0051026
_cons	7.333558	.5591487	13.12	0.000	6.220379 8.446738

. hausman ivrpos2, constant

---- Coefficients -----				
	(b) ivrpos2	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
delivcom	-.011709	-.0087803	-.0029286	.0055362
lgdph	-.4370814	-.4602941	.0232127	.0456251
giniavni	.0121807	.0128051	-.0006245	.0014225
ethnl	.2576483	.2632123	-.005564	.024997
musl	.3434107	.3631955	-.0197848	.0421326
fertwdi	.0138187	.0319774	-.0181587	.0347546
lpopd	-.0441777	-.0377467	-.006431	.0131099
urbwdi	-.0013235	-.0022525	.000929	.0018079
_cons	7.434373	7.333558	.1008145	.2150901

b = consistent under H_0 and H_a ; obtained from ivreg

B = inconsistent under H_a , efficient under H_0 ; obtained from regress

Test: H_0 : difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(9) &= (\mathbf{b}-\mathbf{B})'[(V_b-V_B)^{-1}](\mathbf{b}-\mathbf{B}) \\ &= 0.28 \\ \text{Prob}>\text{chi2} &= 1.0000 \end{aligned}$$

Model 2-4: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r

Linear regression						Number of obs	=	103
						F(8, 94)	=	111.37
						Prob > F	=	0.0000
						R-squared	=	0.8642
						Root MSE	=	.35126

lu5mrcom	Robust	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]

lgdph	-.4673322	.0831029	-5.62	0.000	-.6323349	-.3023295
giniavni	.005719	.0064549	0.89	0.378	-.0070974	.0185355
ethnl	.3258983	.1315944	2.48	0.015	.0646146	.587182
musl	.2079594	.1224057	1.70	0.093	-.03508	.4509989
fertwdi	.087635	.0344367	2.54	0.013	.0192602	.1560097
lpopd	-.099524	.0366835	-2.71	0.008	-.17236	-.026688
urbwdi	-.0015978	.002476	-0.65	0.520	-.0065139	.0033183
delivcom	-.0080063	.0020372	-3.93	0.000	-.0120513	-.0039613
_cons	7.932082	.7326835	10.83	0.000	6.477322	9.386842

Model 2-4: Robust Check 5.2: DepV: Vary source: infant mortality (limrcm to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
```

Linear regression

					Number of obs = 103
					F(8, 94) = 96.89
					Prob > F = 0.0000
					R-squared = 0.8792
					Root MSE = .28628

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4566801	.0635509	-7.19	0.000	-.5828619	-.3304984
giniavni	.0095227	.0052091	1.83	0.071	-.00082	.0198654
ethnl	.1766518	.0989264	1.79	0.077	-.0197689	.3730725
musl	.2382771	.1033395	2.31	0.023	.0330941	.4434601
fertwdi	.0602871	.0280151	2.15	0.034	.0046624	.1159118
lpopd	-.0643856	.0265299	-2.43	0.017	-.1170613	-.0117099
urbwdi	-.0017911	.0022204	-0.81	0.422	-.0061997	.0026176
delivcom	-.0071071	.0015515	-4.58	0.000	-.0101877	-.0040264
_cons	7.380559	.5728807	12.88	0.000	6.24309	8.518027

Model 2-4: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcm lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi delivcom, r
```

Linear regression

					Number of obs = 102
					F(8, 93) = 92.30
					Prob > F = 0.0000
					R-squared = 0.8767
					Root MSE = .29334

limrcm	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.4673723	.0682462	-6.85	0.000	-.6028958	-.3318487
giniavni	.0080546	.0046914	1.72	0.089	-.0012617	.0173709
ethnl	.2193924	.1050701	2.09	0.040	.010744	.4280408
musl	.207511	.1019992	2.03	0.045	.0049608	.4100613
fertwdi	.021369	.0318692	0.67	0.504	-.041917	.0846549
lpopd	-.101818	.0262576	-3.88	0.000	-.1539603	-.0496757
urbwdi	-.0022408	.0020735	-1.08	0.283	-.0063583	.0018767
delivcom	-.0082057	.0016389	-5.01	0.000	-.0114602	-.0049513
_cons	7.937826	.6452172	12.30	0.000	6.656553	9.219099

Model 2-4: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi delivcom gdpmf, r
```

Linear regression

Number of obs = 102
 $F(9, 92) = 82.42$
 Prob > F = 0.0000
 R-squared = 0.8767
 Root MSE = .29491

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.4662466	.0694156	-6.72	0.000	-.6041121 -.3283812
giniavni	.0080293	.0047342	1.70	0.093	-.0013733 .0174319
ethnl	.2213686	.1076288	2.06	0.043	.0076085 .4351288
musl	.2076547	.1023595	2.03	0.045	.00436 .4109494
fertwdi	.0206965	.0326599	0.63	0.528	-.0441689 .0855618
lpopd	-.1024414	.027217	-3.76	0.000	-.1564967 -.0483861
urbwdi	-.0023094	.0021717	-1.06	0.290	-.0066225 .0020038
delivcom	-.0081967	.0016536	-4.96	0.000	-.0114809 -.0049125
gdpmf	-.0201536	.1518105	-0.13	0.895	-.3216625 .2813552
_cons	7.938161	.6490569	12.23	0.000	6.649078 9.227244

Model 2-4: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi delivcom, r
```

Linear regression

Number of obs = 103
 $F(8, 94) = 94.02$
 Prob > F = 0.0000
 R-squared = 0.8603
 Root MSE = .31073

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4352549	.073224	-5.94	0.000	-.5806428 -.289867
giniavni	.0085396	.0057564	1.48	0.141	-.0028898 .019969
ethnannx	.2797711	.143363	1.95	0.054	-.0048794 .5644217
musl	.2795799	.1120079	2.50	0.014	.0571855 .5019743
fertwdi	.0568537	.0302128	1.88	0.063	-.0031345 .1168419
lpopd	-.0835068	.032877	-2.54	0.013	-.1487849 -.0182286
urbwdi	-.0023772	.002264	-1.05	0.296	-.0068724 .002118
delivcom	-.0069544	.0017925	-3.88	0.000	-.0105134 -.0033954
_cons	7.26059	.6781971	10.71	0.000	5.914014 8.607167

Model 2-4: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi delivcom ethnannf, r
```

Linear regression

Number of obs = 103
 $F(9, 93) = 86.16$
 Prob > F = 0.0000
 R-squared = 0.8603
 Root MSE = .31238

limrcom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4322442	.0863646	-5.00	0.000	-.6037473	-.2607411
giniavni	.008625	.0058645	1.47	0.145	-.0030209	.0202708
ethnannx	.2815839	.1475586	1.91	0.059	-.0114382	.5746061
musl	.2787379	.1127353	2.47	0.015	.054868	.5026078
fertwdi	.0571123	.030779	1.86	0.067	-.0040088	.1182333
lpopd	-.0834579	.0331009	-2.52	0.013	-.1491898	-.017726
urbwdi	-.0024316	.0022794	-1.07	0.289	-.0069579	.0020947
delivcom	-.0069972	.0019521	-3.58	0.001	-.0108736	-.0031208
ethnannf	.0142108	.1699991	0.08	0.934	-.3233737	.3517953
_cons	7.235657	.7798721	9.28	0.000	5.686986	8.784329

Table 2.2, Model 2-5: Child Immunization (DTP3) and Infant Mortality***Model 2-5: Bivariate correlations among independent variables***

```
. correlate lgdph giniavni ethnln musl fertwdi lpopd urbwdi dtp3con (obs=98)
```

	lgdph	giniavni	ethnln	musl	fertwdi	lpopd	urbwdi	dtp3con
lgdph	1.0000							
giniavni	0.0553	1.0000						
ethnln	-0.4639	0.1837	1.0000					
musl	0.3037	-0.2999	-0.2504	1.0000				
fertwdi	-0.6226	0.0745	0.4365	0.1169	1.0000			
lpopd	0.0816	-0.2807	-0.1644	-0.1579	-0.3660	1.0000		
urbwdi	0.8128	0.0595	-0.4289	0.2752	-0.5620	-0.0329	1.0000	
dtp3con	0.5026	-0.0153	-0.3702	0.1021	-0.4714	0.1826	0.3716	1.0000

Model 2-5: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

```
. regress limrcom lgdph giniavni ethnln musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	115.48
Prob > F =	0.0000
R-squared =	0.8460
Root MSE =	.32809

limrcom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnln	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Model 2-5: Infant Mortality predicted by 7 baseline variables and DTP3 immuniz.

.	regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi.dtp3con, r
Linear regression	Number of obs = 98
	F(8, 89) = 67.89
	Prob > F = 0.0000
	R-squared = 0.8403
	Root MSE = .31488
<hr/>	
limrcom	Robust
	Coef. Std. Err. t P> t [95% Conf. Interval]
lgdph	-.4558915 .0706083 -6.46 0.000 -.5961888 -.3155943
giniavni	.0110655 .0061646 1.80 0.076 -.0011834 .0233145
ethnl	.165532 .1160929 1.43 0.157 -.0651422 .3962061
musl	.3879822 .1176958 3.30 0.001 .1541232 .6218412
fertwdi	.0614774 .0298948 2.06 0.043 .002077 .1208778
lpopd	-.0752324 .0369623 -2.04 0.045 -.1486757 -.0017891
urbwdi	-.0058671 .0021473 -2.73 0.008 -.0101337 -.0016004
dtp3con	-.0054856 .0014611 -3.75 0.000 -.0083888 -.0025824
_cons	7.458449 .6583748 11.33 0.000 6.150272 8.766625

Model 2-5: Means and SDs of DTP3 immunization and infant mortality

.	summarize imrcom
	Variable Obs Mean Std. Dev. Min Max
	imrcom 105 70.13333 45.54712 6 202
.	summarize limrcom
	Variable Obs Mean Std. Dev. Min Max
	limrcom 105 3.985123 .807504 1.791759 5.308268
.	summarize dtp3con
	Variable Obs Mean Std. Dev. Min Max
	dtp3con 98 71.93878 21.30186 17 99

Model 2-5: How much would infant mortality fall if DTP3 immuniz. rose one SD?

.	estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
Linear regression	Number of obs = 98
	F(8, 89) = 67.89
	Prob > F = 0.0000
	R-squared = 0.8403
	Root MSE = .31488
<hr/>	
limrcom	Robust
	Coef. Std. Err. t P> t [95% Conf. Interval]
lgdph	-.4558915 .0706083 -6.46 0.000 -.5961888 -.3155943
giniavni	.0110655 .0061646 1.80 0.076 -.0011834 .0233145
ethnl	.165532 .1160929 1.43 0.157 -.0651422 .3962061
musl	.3879822 .1176958 3.30 0.001 .1541232 .6218412

fertwdi	.0614774	.0298948	2.06	0.043	.002077	.1208778
lpopd	-.0752324	.0369623	-2.04	0.045	-.1486757	-.0017891
urbwdi	-.0058671	.0021473	-2.73	0.008	-.0101337	-.0016004
dtp3con	-.0054856	.0014611	-3.75	0.000	-.0083888	-.0025824
_cons	7.458449	.6583748	11.33	0.000	6.150272	8.766625

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(dtp3con 71.93878 93.24064)
```

First Difference: dtp3con 71.93878 93.24064

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-6.25499	1.861705	-9.715178 -2.498915

Model 2-5: Robustness checks

Model 2-5: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi dtp3con, r
```

Linear regression

Number of obs =	98
F(7, 90) =	75.96
Prob > F =	0.0000
R-squared =	0.8338
Root MSE =	.3194

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5000411	.0639488	-7.82	0.000	-.6270865	-.3729957
giniavni	.0127049	.0062476	2.03	0.045	.000293	.0251169
ethnl	.206926	.1195664	1.73	0.087	-.0306136	.4444655
musl	.4804089	.11214	4.28	0.000	.2576233	.7031945
lpopd	-.0892254	.035323	-2.53	0.013	-.1594008	-.01905
urbwdi	-.0069539	.0022238	-3.13	0.002	-.0113719	-.0025358
dtp3con	-.0060964	.0014612	-4.17	0.000	-.0089993	-.0031936
_cons	8.124436	.5309509	15.30	0.000	7.069609	9.179262

Model 2-5: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl fertwdi lpopd urbwdi dtp3con mysfx, r
```

Linear regression

Number of obs =	98
F(9, 88) =	60.94
Prob > F =	0.0000
R-squared =	0.8543
Root MSE =	.30242

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4080175	.0702727	-5.81	0.000	-.5476697	-.2683653
giniavni	.0110045	.0062141	1.77	0.080	-.0013446	.0233537
ethnl	.1037922	.1131035	0.92	0.361	-.1209772	.3285616
musl	.2624634	.1144736	2.29	0.024	.0349711	.4899556
fertwdi	.013974	.0313862	0.45	0.657	-.0483995	.0763475
lpopd	-.0891711	.0388022	-2.30	0.024	-.1662823	-.0120599
urbwdi	-.0047177	.0021673	-2.18	0.032	-.0090248	-.0004106
dtp3con	-.0046688	.0014405	-3.24	0.002	-.0075314	-.0018061
mysfx	-.0799484	.0264126	-3.03	0.003	-.132438	-.0274589
_cons	7.606316	.6803512	11.18	0.000	6.254261	8.958371

Model 2-5: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con litfewdi, r
```

Linear regression

Number of obs =	98
F(9, 88) =	58.62
Prob > F =	0.0000
R-squared =	0.8476
Root MSE =	.30934

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4376973	.0685841	-6.38	0.000	-.5739938	-.3014008
giniavni	.0119109	.0064207	1.86	0.067	-.0008489	.0246707
ethnl	.1018582	.1114274	0.91	0.363	-.1195803	.3232968
musl	.2839536	.1195295	2.38	0.020	.0464138	.5214934
fertwdi	.0205484	.0340861	0.60	0.548	-.0471907	.0882874
lpopd	-.0862712	.038122	-2.26	0.026	-.1620306	-.0105117
urbwdi	-.0051299	.0022015	-2.33	0.022	-.0095048	-.0007549
dtp3con	-.004688	.0014682	-3.19	0.002	-.0076058	-.0017702
litfewdi	-.004672	.0020886	-2.24	0.028	-.0088227	-.0005213
_cons	7.739178	.671836	11.52	0.000	6.404046	9.074311

Model 2-5: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con airdist popcrgs latcapab, r
```

Linear regression

Number of obs =	98
F(11, 86) =	50.10
Prob > F =	0.0000
R-squared =	0.8510
Root MSE =	.3094

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.434114	.070921	-6.12	0.000	-.5751004	-.2931277
giniavni	.0115512	.0054886	2.10	0.038	.0006402	.0224623
ethnl	.2246835	.112132	2.00	0.048	.0017724	.4475946
musl	.294298	.1405928	2.09	0.039	.0148087	.5737873
fertwdi	.0714749	.0330431	2.16	0.033	.0057873	.1371624
lpopd	-.0549898	.0339434	-1.62	0.109	-.1224671	.0124875

urbwdi	-.0056054	.0020163	-2.78	0.007	-.0096138	-.001597
dtp3con	-.0057869	.0015028	-3.85	0.000	-.0087744	-.0027994
airdist	8.24e-07	.0000177	0.05	0.963	-.0000344	.000036
popcrgs	-.0012282	.0010951	-1.12	0.265	-.0034052	.0009488
latcapab	.0072119	.0038901	1.85	0.067	-.0005214	.0149452
_cons	7.079922	.6072995	11.66	0.000	5.872651	8.287194

Model 2-5: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con afri lati east sout, r
```

Linear regression

Number of obs =	98
F(12, 85) =	44.58
Prob > F =	0.0000
R-squared =	0.8468
Root MSE =	.31551

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4819524	.0735763	-6.55	0.000	-.6282418	-.3356631
giniavni	.0143993	.006087	2.37	0.020	.0022966	.0265019
ethnl	.1230793	.1431003	0.86	0.392	-.1614424	.4076011
musl	.2113306	.109673	1.93	0.057	-.0067287	.4293899
fertwdi	.0440889	.03526	1.25	0.215	-.0260174	.1141953
lpopd	-.0825162	.0374992	-2.20	0.030	-.1570747	-.0079578
urbwdi	-.0048341	.0026572	-1.82	0.072	-.0101172	.000449
dtp3con	-.0063489	.0017061	-3.72	0.000	-.0097411	-.0029568
afri	-.2002468	.1217637	-1.64	0.104	-.4423457	.0418521
lati	-.3194273	.1470158	-2.17	0.033	-.6117342	-.0271205
east	-.2230956	.1661279	-1.34	0.183	-.5534024	.1072111
sout	-.0576741	.1937749	-0.30	0.767	-.4429506	.3276024
_cons	7.875188	.6653978	11.84	0.000	6.552199	9.198177

Model 2-5: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs =	98
F(10, 87) =	54.80
Prob > F =	0.0000
R-squared =	0.8466
Root MSE =	.31206

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4482639	.0707286	-6.34	0.000	-.5888446	-.3076833
giniavni	.0082844	.0063301	1.31	0.194	-.0042973	.020866
ethnl	.1372143	.11746	1.17	0.246	-.0962502	.3706789
musl	.3706159	.1162084	3.19	0.002	.1396392	.6015926
fertwdi	.0759163	.0307226	2.47	0.015	.0148517	.1369808
lpopd	-.0765335	.0353769	-2.16	0.033	-.1468489	-.0062181
urbwdi	-.0050653	.0022437	-2.26	0.026	-.009525	-.0006057
dtp3con	-.0048119	.0015459	-3.11	0.003	-.0078845	-.0017393
gdphf	(dropped)					
giniavnf	.0041011	.0829041	0.05	0.961	-.1606798	.168882
ethnlf	-.2869628	.1789441	-1.60	0.112	-.6426336	.0687081

_cons	7.405777	.6157159	12.03	0.000	6.181975	8.629579
-------	----------	----------	-------	-------	----------	----------

Model 2-5: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con
```

```
Huber iteration 1: maximum difference in weights = .53501044
Huber iteration 2: maximum difference in weights = .06171693
Huber iteration 3: maximum difference in weights = .02168817
Biweight iteration 4: maximum difference in weights = .15530791
Biweight iteration 5: maximum difference in weights = .03660003
Biweight iteration 6: maximum difference in weights = .02904456
Biweight iteration 7: maximum difference in weights = .01921269
Biweight iteration 8: maximum difference in weights = .01264146
Biweight iteration 9: maximum difference in weights = .00758423
```

```
Robust regression
Number of obs = 98
F( 8, 89) = 53.74
Prob > F = 0.0000
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.448218	.076842	-5.83	0.000	-.6009015 -.2955345
giniavni	.0145238	.0047502	3.06	0.003	.0050853 .0239623
ethnl	.1926589	.1298719	1.48	0.141	-.0653937 .4507115
musl	.4214728	.1134064	3.72	0.000	.1961366 .6468089
fertwdi	.0656813	.033863	1.94	0.056	-.0016039 .1329664
lpopd	-.0419104	.0274161	-1.53	0.130	-.0963855 .0125648
urbwdi	-.0061705	.0025898	-2.38	0.019	-.0113164 -.0010247
dtp3con	-.005889	.0019014	-3.10	0.003	-.009667 -.0021109
_cons	7.127888	.5977686	11.92	0.000	5.940135 8.315641

Model 2-5: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con
Iteration 1: WLS sum of weighted deviations = 23.524329
```

```
Iteration 1: sum of abs. weighted deviations = 25.097662
Iteration 2: sum of abs. weighted deviations = 24.958402
Iteration 3: sum of abs. weighted deviations = 23.468889
Iteration 4: sum of abs. weighted deviations = 23.107893
Iteration 5: sum of abs. weighted deviations = 23.101055
Iteration 6: sum of abs. weighted deviations = 23.095505
Iteration 7: sum of abs. weighted deviations = 23.025015
Iteration 8: sum of abs. weighted deviations = 22.967935
Iteration 9: sum of abs. weighted deviations = 22.952894
```

```
Median regression
Number of obs = 98
Raw sum of deviations 59.91331 (about 4.1271343)
Min sum of deviations 22.95289
Pseudo R2 = 0.6169
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4686084	.1044022	-4.49	0.000	-.6760532 -.2611635
giniavni	.0131619	.0063749	2.06	0.042	.0004952 .0258287
ethnl	.0987434	.1777827	0.56	0.580	-.2545071 .451994
musl	.3441702	.1482927	2.32	0.023	.0495157 .6388247
fertwdi	.0743075	.0458856	1.62	0.109	-.0168662 .1654812

lpopd	-.039146	.0379893	-1.03	0.306	-.11463	.036338
urbwdi	-.0059531	.0034944	-1.70	0.092	-.0128964	.0009902
dtp3con	-.0046619	.0025768	-1.81	0.074	-.009782	.0004582
_cons	7.274059	.8174523	8.90	0.000	5.649799	8.89832

Model 2-5: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress limrcm lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con if ctry ~= "Mongolia" &
ctry ~= "Cuba", r
```

Linear regression

Number of obs =	96
F(8, 87) =	65.26
Prob > F =	0.0000
R-squared =	0.8565
Root MSE =	.29341

limrcm	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4757561	.0651161	-7.31	0.000	-.6051813	-.3463308
giniavni	.0127631	.0050663	2.52	0.014	.0026932	.0228329
ethnl	.2020241	.1105933	1.83	0.071	-.0177922	.4218403
musl	.4326246	.1024856	4.22	0.000	.2289234	.6363257
fertwdi	.0595922	.0288225	2.07	0.042	.0023043	.1168801
lpopd	-.0463704	.0276537	-1.68	0.097	-.1013352	.0085944
urbwdi	-.0051668	.0020024	-2.58	0.012	-.0091467	-.0011869
dtp3con	-.0056653	.0013517	-4.19	0.000	-.008352	-.0029785
_cons	7.394162	.5381033	13.74	0.000	6.324623	8.463701

Model 2-5: Robust Ck 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)

```
. correlate fertwdi fertwdin
(obs=105)
```

	fertwdi	fertwdin
fertwdi	1.0000	
fertwdin	0.6135	1.0000

Model 2-5: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcm lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd urbwdi dtp3con, first
```

First-stage regressions

Source	SS	df	MS	Number of obs =	98
Model	182.154374	8	22.7692968	F(8, 89) =	27.55
Residual	73.5652187	89	.826575492	Prob > F =	0.0000
Total	255.719593	97	2.63628446	R-squared =	0.7123
				Adj R-squared =	0.6865
				Root MSE =	.90916

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3774893	.2123996	-1.78	0.079	-.7995227	.0445441
giniavni	.0230846	.0129	1.79	0.077	-.0025474	.0487165

ethnl	.1685732	.3670933	0.46	0.647	-.5608333	.8979798
musl	.9064585	.3039873	2.98	0.004	.3024423	1.510475
lpopd	-.2466389	.0727651	-3.39	0.001	-.3912217	-.1020562
urbwdi	-.0234638	.0070533	-3.33	0.001	-.0374787	-.009449
dtp3con	-.0108684	.0051719	-2.10	0.038	-.0211449	-.0005919
fertwdin	.3380813	.0671854	5.03	0.000	.2045853	.4715773
_cons	7.61126	1.452287	5.24	0.000	4.725597	10.49692

Model 2-5: Robust Check 4.3: Endog ck: 2SLS using fertwdin as instrument for fertwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	98
Model	46.414841	8	5.80185513	F(8, 89)	=	58.16
Residual	8.82435317	89	.099150036	Prob > F	=	0.0000
Total	55.2391942	97	.569476229	R-squared	=	0.8403

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	.0611155	.068827	0.89	0.377	-.0756424 .1978734
lgdph	-.4561514	.0854685	-5.34	0.000	-.6259756 -.2863273
giniavni	.0110752	.0048238	2.30	0.024	.0014904 .02066
ethnl	.1657756	.1307872	1.27	0.208	-.0940957 .425647
musl	.3885263	.1417879	2.74	0.007	.1067967 .6702558
lpopd	-.0753148	.029645	-2.54	0.013	-.1342188 -.0164108
urbwdi	-.0058735	.0026999	-2.18	0.032	-.0112381 -.0005089
dtp3con	-.0054892	.0019163	-2.86	0.005	-.0092968 -.0016815
_cons	7.462369	.8716388	8.56	0.000	5.730441 9.194297

Instrumented: fertwdi

Instruments: lgdph giniavni ethnl musl lpopd urbwdi dtp3con fertwdin

Model 2-5: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store imrdtp
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con
```

Source	SS	df	MS	Number of obs	=	98
Model	46.4148534	8	5.80185668	F(8, 89)	=	58.52
Residual	8.8243408	89	.099149897	Prob > F	=	0.0000
Total	55.2391942	97	.569476229	R-squared	=	0.8403

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4558915	.0735044	-6.20	0.000	-.6019433 -.3098398
giniavni	.0110655	.0045438	2.44	0.017	.002037 .0200941
ethnl	.165532	.1242309	1.33	0.186	-.0813122 .4123762
musl	.3879822	.1084806	3.58	0.001	.1724334 .6035309
fertwdi	.0614774	.0323922	1.90	0.061	-.0028853 .12584
lpopd	-.0752324	.0262253	-2.87	0.005	-.1273415 -.0231234
urbwdi	-.0058671	.0024773	-2.37	0.020	-.0107894 -.0009448
dtp3con	-.0054856	.0018188	-3.02	0.003	-.0090995 -.0018717
_cons	7.458449	.5718047	13.04	0.000	6.322285 8.594613

```
. hausman imrdtp
```

Note: the rank of the differenced variance matrix (5) does not equal the number of coefficients being tested (8); be sure this is what you expect, or there may be problems computing the test. Examine the output of your estimators for anything unexpected and possibly consider scaling your variables so that the coefficients are on a similar scale.

	Coefficients			
	(b) imrdtp	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	.0611155	.0614774	-.0003619	.0607281
lgdph	-.4561514	-.4558915	-.0002599	.0436116
giniavni	.0110752	.0110655	9.65e-06	.0016194
ethnl	.1657756	.165532	.0002437	.0408898
musl	.3885263	.3879822	.0005441	.0913004
lpopd	-.0753148	-.0752324	-.0000824	.0138225
urbwdi	-.0058735	-.0058671	-6.40e-06	.0010735
dtp3con	-.0054892	-.0054856	-3.60e-06	.0006034

b = consistent under H_0 and H_a ; obtained from ivreg

B = inconsistent under H_a , efficient under H_0 ; obtained from regress

Test: H_0 : difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(5) &= (\mathbf{b}-\mathbf{B})'[(\mathbf{V}_b-\mathbf{V}_B)^{-1}](\mathbf{b}-\mathbf{B}) \\ &= 0.00 \\ \text{Prob}>\text{chi2} &= 1.0000 \end{aligned}$$

Model 2-5: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

```
. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
```

Linear regression

Number of obs	=	98
F(8, 89)	=	74.38
Prob > F	=	0.0000
R-squared	=	0.8409
Root MSE	=	.36203

lu5mrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4812357	.085772	-5.61	0.000	-.6516628	-.3108086
giniavni	.009339	.0067704	1.38	0.171	-.0041135	.0227916
ethnl	.2461181	.1415021	1.74	0.085	-.0350437	.5272798
musl	.3253721	.1309187	2.49	0.015	.0652395	.5855048
fertwdi	.1010447	.0352053	2.87	0.005	.0310925	.1709969
lpopd	-.0880886	.0402115	-2.19	0.031	-.167988	-.0081893
urbwdi	-.0065323	.0025879	-2.52	0.013	-.0116745	-.0013901
dtp3con	-.005408	.0016017	-3.38	0.001	-.0085905	-.0022254
_cons	7.903564	.78117	10.12	0.000	6.351396	9.455732

Model 2-5: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
```

Linear regression

Number of obs	=	98
F(8, 89)	=	71.44

Prob > F = 0.0000
 R-squared = 0.8569
 Root MSE = .29458

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4529289	.066935	-6.77	0.000	-.5859274	-.3199304
giniavni	.0124194	.0054337	2.29	0.025	.0016228	.023216
ethnl	.1162873	.1059592	1.10	0.275	-.0942513	.3268259
musl	.3191183	.1115199	2.86	0.005	.0975307	.5407059
fertwdi	.0848311	.0290614	2.92	0.004	.0270868	.1425755
lpopd	-.0495575	.0277864	-1.78	0.078	-.1047686	.0056535
urbwdi	-.0056003	.0021937	-2.55	0.012	-.0099592	-.0012414
dtp3con	-.0049708	.0013888	-3.58	0.001	-.0077302	-.0022113
_cons	7.166265	.595756	12.03	0.000	5.982511	8.35002

Model 2-5: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi dtp3con, r
```

Linear regression

Number of obs = 97
 F(8, 88) = 58.35
 Prob > F = 0.0000
 R-squared = 0.8411
 Root MSE = .31562

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.4627316	.0742094	-6.24	0.000	-.6102071	-.3152561
giniavni	.0102312	.0053477	1.91	0.059	-.0003962	.0208586
ethnl	.1587683	.1160528	1.37	0.175	-.0718623	.3893988
musl	.3120464	.1130049	2.76	0.007	.0874729	.5366199
fertwdi	.0560315	.0338915	1.65	0.102	-.0113207	.1233837
lpopd	-.0741005	.0304505	-2.43	0.017	-.1346145	-.0135866
urbwdi	-.0063707	.0021345	-2.98	0.004	-.0106125	-.0021289
dtp3con	-.0047597	.0016512	-2.88	0.005	-.0080411	-.0014783
_cons	7.569432	.7000992	10.81	0.000	6.178132	8.960733

Model 2-5: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi dtp3con gdpmf, r
```

Linear regression

Number of obs = 97
 F(9, 87) = 51.42
 Prob > F = 0.0000
 R-squared = 0.8411
 Root MSE = .31742

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.4620151	.076091	-6.07	0.000	-.6132542	-.3107759
giniavni	.0102165	.0054113	1.89	0.062	-.0005392	.0209721
ethnl	.1599439	.1182155	1.35	0.180	-.0750222	.3949099
musl	.3119742	.113648	2.75	0.007	.0860864	.537862
fertwdi	.0556181	.0353879	1.57	0.120	-.0147191	.1259553

lpopd	-.0745683	.0330776	-2.25	0.027	-.1403137	-.008823
urbwdi	-.006414	.0023292	-2.75	0.007	-.0110436	-.0017844
dtp3con	-.0047513	.0016746	-2.84	0.006	-.0080797	-.0014228
gdpmf	-.0110907	.1601638	-0.07	0.945	-.3294336	.3072521
_cons	7.569495	.7043109	10.75	0.000	6.169601	8.969389

Model 2-5: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi dtp3con, r
```

Linear regression

Number of obs = 98
 F(8, 89) = 69.53
 Prob > F = 0.0000
 R-squared = 0.8386
 Root MSE = .31654

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.45055	.0741761	-6.07	0.000	-.5979363	-.3031636
giniavni	.0116219	.0060938	1.91	0.060	-.0004864	.0237302
ethnannx	.1381949	.1580238	0.87	0.384	-.1757951	.4521848
musl	.3808982	.1183657	3.22	0.002	.1457081	.6160884
fertwdi	.0685481	.0304896	2.25	0.027	.0079659	.1291302
lpopd	-.0731537	.0363711	-2.01	0.047	-.1454222	-.0008852
urbwdi	-.0062715	.0022229	-2.82	0.006	-.0106884	-.0018547
dtp3con	-.0053863	.0015418	-3.49	0.001	-.0084499	-.0023227
_cons	7.350379	.7119187	10.32	0.000	5.935811	8.764946

Model 2-5: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi dtp3con ethnannf, r
```

Linear regression

Number of obs = 98
 F(9, 88) = 61.03
 Prob > F = 0.0000
 R-squared = 0.8397
 Root MSE = .31726

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4705159	.0824681	-5.71	0.000	-.6344039	-.306628
giniavni	.0108138	.0060651	1.78	0.078	-.0012393	.0228668
ethnannx	.1238898	.1617308	0.77	0.446	-.1975162	.4452958
musl	.3847276	.1177683	3.27	0.002	.1506878	.6187674
fertwdi	.0647267	.0310945	2.08	0.040	.0029329	.1265205
lpopd	-.0739386	.0362566	-2.04	0.044	-.145991	-.0018861
urbwdi	-.005713	.0023455	-2.44	0.017	-.0103741	-.0010519
dtp3con	-.0054163	.0015626	-3.47	0.001	-.0085216	-.0023109
ethnannf	-.1077232	.1721327	-0.63	0.533	-.4498007	.2343543
_cons	7.551218	.7838746	9.63	0.000	5.993432	9.109004

Table 2.2, Model 2-6: Child Immunization (Measles/MCV) and Infant Mortality

Model 2-6: Bivariate correlations among independent variables

```
. correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon
(obs=98)
```

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	mcvcon
lgdph	1.0000							
giniavni	0.0553	1.0000						
ethnl	-0.4639	0.1837	1.0000					
musl	0.3037	-0.2999	-0.2504	1.0000				
fertwdi	-0.6226	0.0745	0.4365	0.1169	1.0000			
lpopd	0.0816	-0.2807	-0.1644	-0.1579	-0.3660	1.0000		
urbwdi	0.8128	0.0595	-0.4289	0.2752	-0.5620	-0.0329	1.0000	
mcvcon	0.4840	0.0387	-0.3921	0.0494	-0.4666	0.1234	0.4005	1.0000

Model 2-6: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	115.48
Prob > F =	0.0000
R-squared =	0.8460
Root MSE =	.32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Model 2-6: Infant mortality predicted by 7 baseline variables and measles immuniz.

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r
```

Linear regression

Number of obs =	98
F(8, 89) =	70.47
Prob > F =	0.0000
R-squared =	0.8318
Root MSE =	.32308

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4818317	.0730201	-6.60	0.000	-.6269212	-.3367423
giniavni	.0111445	.006353	1.75	0.083	-.0014787	.0237677
ethnl	.1659513	.1167596	1.42	0.159	-.0660474	.3979501
musl	.3699984	.1164028	3.18	0.002	.1387085	.6012882
fertwdi	.0676102	.0297072	2.28	0.025	.0085825	.1266378
lpopd	-.0796007	.0365054	-2.18	0.032	-.1521362	-.0070652
urbwdi	-.0052329	.0022062	-2.37	0.020	-.0096165	-.0008492
mcvcon	-.004213	.0016412	-2.57	0.012	-.0074739	-.000952

_cons	7.519909	.65283	11.52	0.000	6.222749	8.817068
-------	----------	--------	-------	-------	----------	----------

Model 2-6: Means and SDs of measles immunization and infant mortality

. summarize imrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

. summarize limrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

. summarize mcvcon

Variable	Obs	Mean	Std. Dev.	Min	Max
mcvcon	98	71.40816	19.12996	20	98

Model 2-6: How much would infant mortality fall if measles immuniz. rose one SD?

. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r

Linear regression

Number of obs = 98
F(8, 89) = 70.47
Prob > F = 0.0000
R-squared = 0.8318
Root MSE = .32308

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4818317	.0730201	-6.60	0.000	-.6269212	-.3367423
giniavni	.0111445	.006353	1.75	0.083	-.0014787	.0237677
ethnl	.1659513	.1167596	1.42	0.159	-.0660474	.3979501
musl	.3699984	.1164028	3.18	0.002	.1387085	.6012882
fertwdi	.0676102	.0297072	2.28	0.025	.0085825	.1266378
lpopd	-.0796007	.0365054	-2.18	0.032	-.1521362	-.0070652
urbwdi	-.0052329	.0022062	-2.37	0.020	-.0096165	-.0008492
mcvcon	-.004213	.0016412	-2.57	0.012	-.0074739	-.000952
_cons	7.519909	.65283	11.52	0.000	6.222749	8.817068

Simulating main parameters. Please wait....

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

. setx mean

. simqi, tfunc(exp) fd(ev) changex(mcvcon 71.40816 90.53812)

First Difference: mcvcon 71.40816 90.53812

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-4.538882	1.870991	-8.133821 -.666523

Model 2-6: Robustness checks

Model 2-6: Robust Check 1.1: Change specification: Exclude fertility

. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi mcvcon, r

Linear regression

Number of obs =	98
F(7, 90) =	79.09
Prob > F =	0.0000
R-squared =	0.8240
Root MSE =	.3287

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5326743	.0672043	-7.93	0.000	-.6661875	-.3991611
giniavni	.0129921	.0064316	2.02	0.046	.0002145	.0257696
ethnl	.2096368	.1212468	1.73	0.087	-.0312412	.4505148
musl	.4696138	.1110563	4.23	0.000	.2489811	.6902466
lpopd	-.095601	.035213	-2.71	0.008	-.1655578	-.0256442
urbwdi	-.006362	.0022806	-2.79	0.006	-.0108928	-.0018311
mcvcon	-.0049044	.0016365	-3.00	0.004	-.0081556	-.0016532
_cons	8.269234	.5371021	15.40	0.000	7.202187	9.336281

Model 2-6: Robust Check 1.2: Change specification: Include mean years of female school

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon mysfx, r

Linear regression

Number of obs =	98
F(9, 88) =	61.95
Prob > F =	0.0000
R-squared =	0.8485
Root MSE =	.30835

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4253266	.072495	-5.87	0.000	-.5693952	-.2812579
giniavni	.0110786	.0063756	1.74	0.086	-.0015916	.0237487
ethnl	.0980945	.1131555	0.87	0.388	-.1267783	.3229674
musl	.2369608	.1139951	2.08	0.041	.0104194	.4635021
fertwdi	.0150071	.0315035	0.48	0.635	-.0475995	.0776137
lpopd	-.0939817	.0385635	-2.44	0.017	-.1706185	-.0173449
urbwdi	-.0040946	.0022108	-1.85	0.067	-.0084881	.000299
mcvcon	-.0036161	.0016424	-2.20	0.030	-.00688	-.0003522
mysfx	-.0865034	.0263832	-3.28	0.001	-.1389344	-.0340725
_cons	7.6729	.6763317	11.34	0.000	6.328833	9.016967

Model 2-6: Robust Check 1.3: Change specification: Include female literacy

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon litfewdi, r

Linear regression

Number of obs = 98
 F(9, 88) = 59.32
 Prob > F = 0.0000
 R-squared = 0.8413
 Root MSE = .31565

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4576009	.070376	-6.50	0.000	-.5974584	-.3177434
giniavni	.0120718	.0066181	1.82	0.072	-.0010804	.025224
ethnl	.0950869	.1116487	0.85	0.397	-.1267915	.3169653
musl	.2557481	.1183415	2.16	0.033	.0205692	.490927
fertwdi	.0206665	.0343514	0.60	0.549	-.0475997	.0889328
lpopd	-.0913311	.0380302	-2.40	0.018	-.1669081	-.015754
urbwdi	-.0045021	.0022575	-1.99	0.049	-.0089885	-.0000157
mcvcon	-.0034376	.0016441	-2.09	0.039	-.0067048	-.0001704
litfewdi	-.0052693	.0020899	-2.52	0.013	-.0094225	-.0011161
_cons	7.823455	.6688517	11.70	0.000	6.494253	9.152658

Model 2-6: Robust Check 1.4: Change specification: Include geographical variables

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon airdist popcrgs latcapab, r

Linear regression

Number of obs = 98
 F(11, 86) = 50.30
 Prob > F = 0.0000
 R-squared = 0.8442
 Root MSE = .31636

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4495234	.0717794	-6.26	0.000	-.5922161	-.3068306
giniavni	.0119748	.0056487	2.12	0.037	.0007456	.0232041
ethnl	.2297485	.1130619	2.03	0.045	.0049889	.4545081
musl	.2594311	.1364395	1.90	0.061	-.0118016	.5306637
fertwdi	.0776822	.0324875	2.39	0.019	.0130992	.1422652
lpopd	-.0577068	.0331906	-1.74	0.086	-.1236874	.0082739
urbwdi	-.0050731	.0020858	-2.43	0.017	-.0092195	-.0009267
mcvcon	-.0050794	.0016447	-3.09	0.003	-.0083489	-.0018099
airdist	-4.64e-06	.0000182	-0.25	0.800	-.0000408	.0000316
popcrgs	-.0014505	.0011128	-1.30	0.196	-.0036626	.0007617
latcapab	.0077999	.0037781	2.06	0.042	.0002891	.0153106
_cons	7.11393	.5973738	11.91	0.000	5.92639	8.30147

Model 2-6: Robust Check 1.5: Change specification: Include regional dummy variables

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon afri lati east sout, r

Linear regression

Number of obs = 98
 F(12, 85) = 45.79
 Prob > F = 0.0000
 R-squared = 0.8363
 Root MSE = .32613

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5095128	.0768275	-6.63	0.000	-.6622665	-.3567591
giniavni	.0142775	.0063748	2.24	0.028	.0016026	.0269524
ethnl	.1228396	.138754	0.89	0.378	-.1530405	.3987197
musl	.2404962	.1129636	2.13	0.036	.0158943	.4650981
fertwdi	.0572344	.0355156	1.61	0.111	-.0133802	.1278489
lpopd	-.0861142	.0370933	-2.32	0.023	-.1598657	-.0123627
urbwdi	-.0039628	.0026973	-1.47	0.145	-.0093257	.0014002
mvcvcon	-.0047988	.0017977	-2.67	0.009	-.0083731	-.0012244
afri	-.140928	.1205658	-1.17	0.246	-.380645	.0987891
lati	-.2406279	.149636	-1.61	0.112	-.5381444	.0568885
east	-.1416555	.1627179	-0.87	0.386	-.4651824	.1818713
sout	.007814	.1941054	0.04	0.968	-.3781194	.3937475
_cons	7.824985	.6677391	11.72	0.000	6.49734	9.152629

Model 2-6: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mvcvcon gdphf giniavnf ethnlf, r
Linear regression
Number of obs =      98
F( 10,     87) =    54.80
Prob > F       =  0.0000
R-squared       =  0.8395
Root MSE        = .31922
```

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4711844	.0725067	-6.50	0.000	-.6152993	-.3270695
giniavni	.0079626	.0064358	1.24	0.219	-.0048292	.0207543
ethnl	.1382775	.1180081	1.17	0.244	-.0962764	.3728315
musl	.35308	.1147192	3.08	0.003	.1250633	.5810968
fertwdi	.084166	.0304036	2.77	0.007	.0237356	.1445965
lpopd	-.0805874	.0344867	-2.34	0.022	-.1491334	-.0120415
urbwdi	-.0043749	.0023265	-1.88	0.063	-.0089991	.0002493
mvcvcon	-.003408	.0017227	-1.98	0.051	-.0068321	.0000161
gdphf (dropped)						
giniavnf	-.0055193	.0826346	-0.07	0.947	-.1697645	.158726
ethnlf	-.3101672	.1833002	-1.69	0.094	-.6744962	.0541618
_cons	7.442414	.6029995	12.34	0.000	6.243887	8.64094

Model 2-6: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mvcvcon
Huber iteration 1: maximum difference in weights = .57194139
Huber iteration 2: maximum difference in weights = .07594531
Huber iteration 3: maximum difference in weights = .01951453
Biweight iteration 4: maximum difference in weights = .20063055
Biweight iteration 5: maximum difference in weights = .06444671
Biweight iteration 6: maximum difference in weights = .02114381
Biweight iteration 7: maximum difference in weights = .01504065
Biweight iteration 8: maximum difference in weights = .00303635

Robust regression
Number of obs =      98
F(  8,     89) =    50.44
```

Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4686901	.0781641	-6.00	0.000	-.6240004 -.3133797
giniavni	.0151531	.0049041	3.09	0.003	.0054087 .0248975
ethnl	.1951078	.1351686	1.44	0.152	-.0734693 .463685
musl	.407195	.1168812	3.48	0.001	.1749546 .6394353
fertwdi	.0709203	.0348324	2.04	0.045	.0017091 .1401316
lpopd	-.0427949	.0282227	-1.52	0.133	-.0988728 .013283
urbwdi	-.0057505	.0026558	-2.17	0.033	-.0110275 -.0004736
mcvcon	-.0051134	.0021647	-2.36	0.020	-.0094146 -.0008123
_cons	7.155746	.6201872	11.54	0.000	5.923447 8.388045

Model 2-6: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon
Iteration 1: WLS sum of weighted deviations = 24.003039
```

```
Iteration 1: sum of abs. weighted deviations = 24.015558
Iteration 2: sum of abs. weighted deviations = 23.846776
Iteration 3: sum of abs. weighted deviations = 23.776935
Iteration 4: sum of abs. weighted deviations = 23.461552
Iteration 5: sum of abs. weighted deviations = 23.402355
Iteration 6: sum of abs. weighted deviations = 23.376691
Iteration 7: sum of abs. weighted deviations = 23.369758
Iteration 8: sum of abs. weighted deviations = 23.369539
Iteration 9: sum of abs. weighted deviations = 23.353291
Iteration 10: sum of abs. weighted deviations = 23.347451
Iteration 11: sum of abs. weighted deviations = 23.330011
Iteration 12: sum of abs. weighted deviations = 23.325544
Iteration 13: sum of abs. weighted deviations = 23.319282
Iteration 14: sum of abs. weighted deviations = 23.317398
Iteration 15: sum of abs. weighted deviations = 23.309886
Iteration 16: sum of abs. weighted deviations = 23.307252
Iteration 17: sum of abs. weighted deviations = 23.306096
```

```
Median regression
Number of obs = 98
Raw sum of deviations 59.91331 (about 4.1271343)
Min sum of deviations 23.3061
Pseudo R2 = 0.6110
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4623039	.0733271	-6.30	0.000	-.6080034 -.3166045
giniavni	.0136654	.004659	2.93	0.004	.0044081 .0229227
ethnl	.1303989	.133112	0.98	0.330	-.1340918 .3948895
musl	.3273406	.1095812	2.99	0.004	.1096051 .5450761
fertwdi	.0762649	.0340677	2.24	0.028	.0085732 .1439567
lpopd	-.0350957	.0273862	-1.28	0.203	-.0895114 .01932
urbwdi	-.0066472	.0023788	-2.79	0.006	-.0113738 -.0019205
mcvcon	-.0044201	.0020381	-2.17	0.033	-.0084698 -.0003704
_cons	7.1712	.5976953	12.00	0.000	5.983592 8.358808

Model 2-6: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon if ctry ~= "Mongolia" & ctry
~= "Cuba", r
```

Linear regression

Number of obs = 96
 F(8, 87) = 67.11
 Prob > F = 0.0000
 R-squared = 0.8478
 Root MSE = .30212

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5014962	.0679755	-7.38	0.000	-.6366048	-.3663876
giniavni	.0128617	.0052312	2.46	0.016	.002464	.0232593
ethnl	.2000497	.1122795	1.78	0.078	-.023118	.4232175
musl	.4136997	.1014485	4.08	0.000	.2120599	.6153396
fertwdi	.0653094	.0282819	2.31	0.023	.009096	.1215227
lpopd	-.0508177	.0270569	-1.88	0.064	-.1045963	.0029609
urbwdi	-.0045092	.0020832	-2.16	0.033	-.0086498	-.0003687
mcvcon	-.0045577	.0014548	-3.13	0.002	-.0074493	-.001666
_cons	7.467374	.5367951	13.91	0.000	6.400436	8.534313

Model 2-6: Robust Ck 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)

```
. correlate fertwdi fertwdin
(obs=105)
```

	fertwdi	fertwdin
fertwdi	1.0000	
fertwdin	0.6135	1.0000

Model 2-6: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd urbwdi mcvcon, first
```

First-stage regressions

Source	SS	df	MS	Number of obs = 98
Model	180.951765	8	22.6189706	F(8, 89) = 26.92
Residual	74.7678284	89	.840087959	Prob > F = 0.0000
Total	255.719593	97	2.63628446	R-squared = 0.7076
				Adj R-squared = 0.6813
				Root MSE = .91656

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4325741	.2093384	-2.07	0.042	-.848525 -.0166231
giniavni	.0237618	.0130145	1.83	0.071	-.0020978 .0496213
ethnl	.1674854	.3730314	0.45	0.655	-.57372 .9086909
musl	.8927095	.3074297	2.90	0.005	.2818532 1.503566
lpopd	-.2569396	.0730232	-3.52	0.001	-.4020352 -.1118441
urbwdi	-.0222909	.0070916	-3.14	0.002	-.0363818 -.0082001
mcvcon	-.0098446	.0057676	-1.71	0.091	-.0213047 .0016155
fertwdin	.3314625	.0676951	4.90	0.000	.1969538 .4659713
_cons	7.939033	1.459826	5.44	0.000	5.03839 10.83968

Model 2-6: Robust Check 4.3: Endog ck: 2SLS using fertwdin as instrument for fertwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs = 98		
Model	45.9240564	8	5.74050705	F(8, 89) = 54.42		
Residual	9.31513782	89	.10466447	Prob > F = 0.0000		
Total	55.2391942	97	.569476229	R-squared = 0.8314		
				Adj R-squared = 0.8162		
				Root MSE = .32352		

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	.0513602	.0720875	0.71	0.478	-.0918762 .1945965
lgdph	-.4940517	.0887029	-5.57	0.000	-.6703024 -.3178009
giniavni	.0115886	.0049917	2.32	0.023	.0016702 .0215069
ethnl	.1764511	.1353352	1.30	0.196	-.0924571 .4453593
musl	.3939408	.1459589	2.70	0.008	.1039236 .6839581
lpopd	-.0834464	.0308748	-2.70	0.008	-.1447939 -.0220989
urbwdi	-.0055042	.0027482	-2.00	0.048	-.0109649 -.0000436
mvccon	-.0043791	.002165	-2.02	0.046	-.0086809 -.0000774
_cons	7.700008	.9232867	8.34	0.000	5.865457 9.534559

Instrumented: fertwdi

Instruments: lgdph giniavni ethnl musl lpopd urbwdi mvccon fertwdin

Model 2-6: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store imrmcv
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mvccon
```

Source	SS	df	MS	Number of obs = 98		
Model	45.9491183	8	5.74363979	F(8, 89) = 55.02		
Residual	9.29007589	89	.104382875	Prob > F = 0.0000		
Total	55.2391942	97	.569476229	R-squared = 0.8318		
				Adj R-squared = 0.8167		
				Root MSE = .32308		

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4818317	.0744192	-6.47	0.000	-.6297011 -.3339624
giniavni	.0111445	.0046692	2.39	0.019	.001867 .020422
ethnl	.1659513	.1286926	1.29	0.201	-.0897582 .4216609
musl	.3699984	.1112814	3.32	0.001	.1488847 .5911121
fertwdi	.0676102	.0331636	2.04	0.044	.0017148 .1335055
lpopd	-.0796007	.0268705	-2.96	0.004	-.1329919 -.0262095
urbwdi	-.0052329	.0025285	-2.07	0.041	-.010257 -.0002087
mvccon	-.004213	.002061	-2.04	0.044	-.008308 -.0001179
_cons	7.519909	.5904739	12.74	0.000	6.346649 8.693168

```
. hausman imrmcv
```

	Coefficients			
	(b) imrmcv	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	.0513602	.0676102	-.01625	.0640061
lgdph	-.4940517	-.4818317	-.0122199	.0482699
giniavni	.0115886	.0111445	.0004441	.0017652
ethnl	.1764511	.1659513	.0104998	.0418787

musl	.3939408	.3699984	.0239425	.0944482
lpopd	-.0834464	-.0796007	-.0038457	.0152061
urbwdi	-.0055042	-.0052329	-.0002714	.0010766
mcvcon	-.0043791	-.004213	-.0001662	.000663

b = consistent under H_0 and H_a ; obtained from ivreg
B = inconsistent under H_a , efficient under H_0 ; obtained from regress

Test: H_0 : difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(8) &= (\mathbf{b}-\mathbf{B})'[(\mathbf{V}_b-\mathbf{V}_B)^{-1}](\mathbf{b}-\mathbf{B}) \\ &= 0.06 \\ \text{Prob>chi2} &= 1.0000 \end{aligned}$$

Model 2-6: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r

Linear regression

Number of obs =	98
F(8, 89) =	77.02
Prob > F =	0.0000
R-squared =	0.8344
Root MSE =	.36936

lu5mrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5075985	.088139	-5.76	0.000	-.6827287	-.3324682
giniavni	.0093977	.0069343	1.36	0.179	-.0043806	.023176
ethnl	.2480113	.1407682	1.76	0.082	-.031692	.5277147
musl	.3078298	.1301361	2.37	0.020	.049252	.5664075
fertwdi	.1074158	.0351261	3.06	0.003	.037621	.1772105
lpopd	-.0923903	.0396904	-2.33	0.022	-.1712544	-.0135262
urbwdi	-.0059023	.0026317	-2.24	0.027	-.0111315	-.0006731
mcvcon	-.0040306	.0018075	-2.23	0.028	-.0076221	-.0004392
_cons	7.959804	.7812034	10.19	0.000	6.40757	9.512039

Model 2-6: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r

Linear regression

Number of obs =	98
F(8, 89) =	74.28
Prob > F =	0.0000
R-squared =	0.8512
Root MSE =	.30046

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4741152	.0689473	-6.88	0.000	-.6111121	-.3371184
giniavni	.0125472	.005593	2.24	0.027	.0014341	.0236604
ethnl	.1123197	.1063406	1.06	0.294	-.0989769	.3236162
musl	.3022727	.1102341	2.74	0.007	.0832399	.5213056
fertwdi	.0894336	.0284028	3.15	0.002	.0329979	.1458694
lpopd	-.05353	.0273517	-1.96	0.053	-.1078773	.0008173
urbwdi	-.0050396	.0022052	-2.29	0.025	-.0094214	-.0006578
mcvcon	-.0041782	.0015009	-2.78	0.007	-.0071604	-.0011959
_cons	7.234737	.5905577	12.25	0.000	6.061311	8.408162

Model 2-6: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mcvcon, r
```

Linear regression

		Number of obs =	97
		F(8, 88) =	59.63
		Prob > F =	0.0000
		R-squared =	0.8352
		Root MSE =	.32141

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.4902006	.0755902	-6.48	0.000	-.6404202 -.339981
giniavni	.0102875	.0054666	1.88	0.063	-.0005762 .0211511
ethnl	.1567806	.1154113	1.36	0.178	-.0725752 .3861363
musl	.294108	.1111278	2.65	0.010	.0732649 .5149511
fertwdi	.0599081	.0338022	1.77	0.080	-.0072667 .1270828
lpopd	-.0779848	.0294859	-2.64	0.010	-.1365818 -.0193877
urbwdi	-.0057825	.0021742	-2.66	0.009	-.0101032 -.0014617
mcvcon	-.0036618	.0018089	-2.02	0.046	-.0072566 -.0000669
_cons	7.669485	.6879495	11.15	0.000	6.30233 9.03664

Model 2-6: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mcvcon gdpmf, r
```

Linear regression

		Number of obs =	97
		F(9, 87) =	52.74
		Prob > F =	0.0000
		R-squared =	0.8353
		Root MSE =	.32317

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.486946	.0777993	-6.26	0.000	-.6415805 -.3323115
giniavni	.0102295	.0055148	1.85	0.067	-.0007318 .0211907
ethnl	.1614621	.1168084	1.38	0.170	-.0707072 .3936314
musl	.2939406	.1114284	2.64	0.010	.0724646 .5154165
fertwdi	.0581365	.0355635	1.63	0.106	-.0125498 .1288228
lpopd	-.0798809	.032032	-2.49	0.015	-.1435479 -.0162139
urbwdi	-.0059655	.002371	-2.52	0.014	-.0106781 -.0012528
mcvcon	-.003651	.0018197	-2.01	0.048	-.0072679 -.000034
gdpmf	-.0457223	.1667707	-0.27	0.785	-.3771971 .2857526
_cons	7.669486	.6925302	11.07	0.000	6.293007 9.045964

Model 2-6: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mcvcon, r
```

Linear regression

		Number of obs =	98
		F(8, 89) =	72.14
		Prob > F =	0.0000

R-squared = 0.8304
Root MSE = .3244

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4749089	.0765901	-6.20	0.000	-.6270919	-.3227259
giniavni	.0116827	.0062614	1.87	0.065	-.0007586	.024124
ethnannx	.1528282	.1558741	0.98	0.330	-.1568902	.4625467
musl	.3650308	.1170398	3.12	0.002	.1324752	.5975863
fertwdi	.0745826	.0306036	2.44	0.017	.0137739	.1353912
lpopd	-.0770196	.0358866	-2.15	0.035	-.1483255	-.0057137
urbwdi	-.0056658	.0022857	-2.48	0.015	-.0102074	-.0011243
mccvcon	-.0040726	.0017697	-2.30	0.024	-.0075889	-.0005563
_cons	7.389173	.7108193	10.40	0.000	5.97679	8.801556

Model 2-6: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mccvcon ethnannf, r

Linear regression

Number of obs = 98
F(9, 88) = 63.18
Prob > F = 0.0000
R-squared = 0.8318
Root MSE = .32494

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4969176	.0855028	-5.81	0.000	-.6668365	-.3269987
giniavni	.010792	.0061855	1.74	0.085	-.0015003	.0230843
ethnannx	.1342742	.1608082	0.83	0.406	-.1852983	.4538467
musl	.3689137	.1166168	3.16	0.002	.1371623	.6006651
fertwdi	.0700126	.0313818	2.23	0.028	.0076479	.1323773
lpopd	-.0779892	.0357194	-2.18	0.032	-.1489741	-.0070044
urbwdi	-.0050356	.0024278	-2.07	0.041	-.0098603	-.000211
mccvcon	-.0042097	.0018091	-2.33	0.022	-.007805	-.0006144
ethnannf	-.1206456	.1758905	-0.69	0.495	-.470191	.2288997
_cons	7.621211	.7980288	9.55	0.000	6.035297	9.207126

Table 2.2, Model 2-7: Mean Years of Female Schooling and Infant Mortality

Model 2-7: Bivariate correlations among independent variables

. correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
(obs=105)

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	mysfx
lgdph	1.0000							
giniavni	-0.0275	1.0000						
ethnl	-0.4711	0.2512	1.0000					
musl	0.2810	-0.2888	-0.2869	1.0000				
fertwdi	-0.6581	0.1486	0.4352	0.1280	1.0000			
lpopd	0.2105	-0.3196	-0.1984	-0.1269	-0.4301	1.0000		
urbwdi	0.8313	-0.0237	-0.4315	0.2495	-0.6012	0.1290	1.0000	
mysfx	0.6837	0.0183	-0.4249	-0.1713	-0.7968	0.2252	0.6413	1.0000

Model 2-7: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r

Linear regression

Number of obs =	105
F(7, 97) =	115.48
Prob > F =	0.0000
R-squared =	0.8460
Root MSE =	.32809

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Model 2-7: Infant mortality predicted by 7 baseline var. and mean years female schooling

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r

Linear regression

Number of obs =	105
F(8, 96) =	104.97
Prob > F =	0.0000
R-squared =	0.8645
Root MSE =	.30943

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4394319	.0730844	-6.01	0.000	-.5845032	-.2943605
giniavni	.0102644	.0056537	1.82	0.073	-.000958	.0214868
ethnl	.1452183	.1168031	1.24	0.217	-.0866341	.3770707
musl	.2080264	.1078493	1.93	0.057	-.0060528	.4221056
fertwdi	.0247426	.0322253	0.77	0.444	-.0392242	.0887094
lpopd	-.087717	.0329019	-2.67	0.009	-.1530267	-.0224074
urbwdi	-.003442	.0021556	-1.60	0.114	-.0077208	.0008367
mysfx	-.0988089	.0264245	-3.74	0.000	-.151261	-.0463568
_cons	7.487967	.6560812	11.41	0.000	6.185656	8.790278

Model 2-7: Means and SDs of mean years of female schooling and infant mortality

. summarize imrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

. summarize limrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	70.13333	45.54712	6	202

```

limrcom |      105    3.985123    .807504   1.791759   5.308268
summarize mysfx

Variable |      Obs       Mean     Std. Dev.      Min      Max
-----+-----+-----+-----+-----+-----+
mysfx |      105    3.64511   2.209273   .1377345    9.045

```

Model 2-7: How much would infant mortality fall if female schooling rose one SD?

```
. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
```

Linear regression

Number of obs =	105
F(8, 96) =	104.97
Prob > F =	0.0000
R-squared =	0.8645
Root MSE =	.30943

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4394319	.0730844	-6.01	0.000	-.5845032	-.2943605
giniavni	.0102644	.0056537	1.82	0.073	-.000958	.0214868
ethnl	.1452183	.1168031	1.24	0.217	-.0866341	.3770707
musl	.2080264	.1078493	1.93	0.057	-.0060528	.4221056
fertwdi	.0247426	.0322253	0.77	0.444	-.0392242	.0887094
lpopd	-.087717	.0329019	-2.67	0.009	-.1530267	-.0224074
urbwdi	-.003442	.0021556	-1.60	0.114	-.0077208	.0008367
mysfx	-.0988089	.0264245	-3.74	0.000	-.151261	-.0463568
_cons	7.487967	.6560812	11.41	0.000	6.185656	8.790278

Simulating main parameters. Please wait....

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10
```

```
. setx mean
```

```
. simqi, tfunc(exp) fd(ev) changex(mysfx 3.64511 5.854383)
```

First Difference: mysfx 3.64511 5.854383

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-10.97422	2.724867	-15.90924 -5.307392

Model 2-7: How much of a rise in female schooling would reduce IMR from 54 to 49?

```
simqi, tfunc(exp) fd(ev) changex(mysfx 3.64511 4.59)
```

First Difference: mysfx 3.64511 4.59

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]

dE[exp(limrcom)]		-5.00255	1.523502	-7.99328	-1.947559
------------------	--	----------	----------	----------	-----------

Model 2-7: Robustness checks

Model 2-7: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi mysfx, r
```

Linear regression

Number of obs =	105
F(7, 97) =	119.40
Prob > F =	0.0000
R-squared =	0.8638
Root MSE =	.30861

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4490615	.0682453	-6.58	0.000	-.5845095	-.3136135
giniavni	.0108038	.0056868	1.90	0.060	-.0004829	.0220905
ethnl	.1529662	.1162726	1.32	0.191	-.0778028	.3837351
musl	.2235355	.1071242	2.09	0.040	.0109237	.4361473
lpopd	-.0928482	.0324748	-2.86	0.005	-.1573018	-.0283946
urbwdi	-.0035853	.0021989	-1.63	0.106	-.0079496	.0007789
mysfx	-.1083019	.0230617	-4.70	0.000	-.154073	-.0625309
_cons	7.709816	.5453904	14.14	0.000	6.627367	8.792265

Model 2-7: Robust Check 1.3: Change specification: Female literacy instead of fem school

```
. regress limrcom lgdph giniavni ethnl fertwdi lpopd urbwdi litfewdi, r
```

Linear regression

Number of obs =	105
F(8, 96) =	93.98
Prob > F =	0.0000
R-squared =	0.8591
Root MSE =	.31554

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4711799	.0696191	-6.77	0.000	-.6093728	-.332987
giniavni	.0108956	.0058049	1.88	0.064	-.000627	.0224182
ethnl	.1222384	.1149715	1.06	0.290	-.1059782	.3504549
musl	.2193586	.1115385	1.97	0.052	-.0020435	.4407606
fertwdi	.0252703	.0347329	0.73	0.469	-.043674	.0942146
lpopd	-.0900247	.0326033	-2.76	0.007	-.1547418	-.0253075
urbwdi	-.0040371	.0022305	-1.81	0.073	-.0084646	.0003904
litfewdi	-.0065319	.0020506	-3.19	0.002	-.0106023	-.0024616
_cons	7.746576	.6527258	11.87	0.000	6.450925	9.042226

Model 2-7: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx airdist popcrsgs latcapab, r
```

Linear regression

Number of obs =	105
F(11, 93) =	79.25
Prob > F =	0.0000
R-squared =	0.8739

Root MSE = .30327

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4284521	.0705824	-6.07	0.000	-.5686148	-.2882894
giniavni	.0107677	.0052106	2.07	0.042	.0004205	.0211149
ethnl	.1736476	.1063878	1.63	0.106	-.0376174	.3849127
musl	.1192898	.1159544	1.03	0.306	-.1109727	.3495523
fertwdi	.0292982	.0377205	0.78	0.439	-.0456073	.1042037
lpopd	-.0708447	.0306482	-2.31	0.023	-.1317059	-.0099835
urbwdi	-.0028141	.0020826	-1.35	0.180	-.0069497	.0013216
mysfx	-.1107011	.0270186	-4.10	0.000	-.1643547	-.0570476
airdist	8.93e-06	.0000173	0.52	0.606	-.0000253	.0000432
popcrgs	-.0009706	.0010001	-0.97	0.334	-.0029566	.0010155
latcapab	.0072779	.0035384	2.06	0.043	.0002513	.0143046
_cons	7.191878	.616037	11.67	0.000	5.96855	8.415205

Model 2-7: Robust Check 1.5: Change specification: Include regional dummy variables

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx afri lati east sout, r

Linear regression

Number of obs = 105
F(12, 92) = 74.17
Prob > F = 0.0000
R-squared = 0.8657
Root MSE = .31463

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4612023	.0772146	-5.97	0.000	-.6145572	-.3078475
giniavni	.0120573	.0057382	2.10	0.038	.0006608	.0234539
ethnl	.1349658	.1409293	0.96	0.341	-.144932	.4148636
musl	.1750252	.1106946	1.58	0.117	-.0448239	.3948743
fertwdi	.0307933	.0386506	0.80	0.428	-.0459701	.1075566
lpopd	-.0906438	.035071	-2.58	0.011	-.1602978	-.0209898
urbwdi	-.0024965	.0024326	-1.03	0.307	-.0073278	.0023349
mysfx	-.0985915	.0266889	-3.69	0.000	-.151598	-.045585
afri	-.0669366	.1082614	-0.62	0.538	-.2819531	.1480799
lati	-.0722825	.1465803	-0.49	0.623	-.3634037	.2188386
east	.0078177	.1439107	0.05	0.957	-.2780014	.2936368
sout	.0515537	.2011324	0.26	0.798	-.3479125	.45102
_cons	7.561706	.694574	10.89	0.000	6.182222	8.94119

Model 2-7: Robust Check 2.1: Imputation check: Include missing data flags

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx gdphf giniavnf ethnlf, r

Linear regression

Number of obs = 105
F(10, 93) = .
Prob > F = .
R-squared = 0.8732
Root MSE = .30402

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	

	lgdph	.4243832	.0702976	-6.04	0.000	-.5639803	-.2847861
giniavni		.0068741	.0056628	1.21	0.228	-.0043711	.0181192
ethnl		.1097177	.1173226	0.94	0.352	-.1232618	.3426972
musl		.1837597	.1097477	1.67	0.097	-.0341775	.401697
fertwdi		.0422303	.0320892	1.32	0.191	-.0214925	.1059531
lpopd		-.0909584	.0316006	-2.88	0.005	-.1537109	-.0282059
urbwdi		-.002285	.0022887	-1.00	0.321	-.0068299	.00226
mysfx		-.0991721	.0267562	-3.71	0.000	-.1523046	-.0460397
gdphf		-.1804841	.110599	-1.63	0.106	-.4001119	.0391437
giniavnf		-.0371927	.0708489	-0.52	0.601	-.1778844	.1034991
ethnlf		-.3299648	.1777008	-1.86	0.066	-.6828435	.0229138
_cons		7.450614	.5923637	12.58	0.000	6.274297	8.626931

Model 2-7: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
```

```
Huber iteration 1: maximum difference in weights = .56393386
Huber iteration 2: maximum difference in weights = .05949397
Huber iteration 3: maximum difference in weights = .02882206
Biweight iteration 4: maximum difference in weights = .18160751
Biweight iteration 5: maximum difference in weights = .04825816
Biweight iteration 6: maximum difference in weights = .00644188
```

Robust regression

Number of obs =	105
F(8, 96) =	71.81
Prob > F =	0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4258007	.0742062	-5.74	0.000	-.5730989 -.2785025
giniavni	.0121641	.0041757	2.91	0.004	.0038753 .0204528
ethnl	.1533007	.124352	1.23	0.221	-.093536 .4001374
musl	.2178585	.1136216	1.92	0.058	-.0076786 .4433955
fertwdi	.0232233	.036581	0.63	0.527	-.0493894 .095836
lpopd	-.0684253	.0243292	-2.81	0.006	-.1167184 -.0201322
urbwdi	-.0036973	.0024012	-1.54	0.127	-.0084636 .0010691
mysfx	-.1080472	.028242	-3.83	0.000	-.1641071 -.0519873
_cons	7.271462	.5669205	12.83	0.000	6.146134 8.39679

Model 2-7: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
Iteration 1: WLS sum of weighted deviations = 24.892472
```

```
Iteration 1: sum of abs. weighted deviations = 25.076978
Iteration 2: sum of abs. weighted deviations = 24.986601
Iteration 3: sum of abs. weighted deviations = 24.583801
Iteration 4: sum of abs. weighted deviations = 24.523345
Iteration 5: sum of abs. weighted deviations = 24.47838
Iteration 6: sum of abs. weighted deviations = 24.434342
Iteration 7: sum of abs. weighted deviations = 24.431764
Iteration 8: sum of abs. weighted deviations = 24.430875
Iteration 9: sum of abs. weighted deviations = 24.402042
Iteration 10: sum of abs. weighted deviations = 24.398742
Iteration 11: sum of abs. weighted deviations = 24.395256
Iteration 12: sum of abs. weighted deviations = 24.390162
Iteration 13: sum of abs. weighted deviations = 24.389517
```

Median regression
 Raw sum of deviations 68.21916 (about 4.1271343)
 Min sum of deviations 24.38952
 Number of obs = 105
 Pseudo R2 = 0.6425

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3884024	.1167056	-3.33	0.001	-.6200612 -.1567436
giniavni	.0067594	.0066546	1.02	0.312	-.0064499 .0199687
ethnl	.0901683	.1861864	0.48	0.629	-.2794087 .4597454
musl	.04828	.1724378	0.28	0.780	-.2940063 .3905663
fertwdi	.0215974	.0580384	0.37	0.711	-.0936079 .1368027
lpopd	-.1099009	.0381136	-2.88	0.005	-.1855558 -.0342461
urbwdi	-.0026631	.0037779	-0.70	0.483	-.0101622 .0048359
mysfx	-.1244322	.044613	-2.79	0.006	-.2129884 -.035876
_cons	7.477735	.8942458	8.36	0.000	5.702671 9.252799

Model 2-7: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx if ctry ~= "Mongolia" & ctry
~= "Cuba", r
```

Linear regression
 Number of obs = 103
 F(8, 94) = 104.45
 Prob > F = 0.0000
 R-squared = 0.8822
 Root MSE = .28493

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4566192	.0661849	-6.90	0.000	-.5880308 -.3252076
giniavni	.0119583	.0044657	2.68	0.009	.0030915 .0208251
ethnl	.1712346	.1120085	1.53	0.130	-.0511609 .39363
musl	.2403254	.0979747	2.45	0.016	.0457943 .4348564
fertwdi	.014323	.0305503	0.47	0.640	-.0463354 .0749813
lpopd	-.0645687	.0250014	-2.58	0.011	-.1142096 -.0149278
urbwdi	-.0028488	.0020455	-1.39	0.167	-.0069101 .0012126
mysfx	-.1085279	.0246644	-4.40	0.000	-.1574996 -.0595561
_cons	7.496368	.5355737	14.00	0.000	6.432974 8.559762

Model 2-7: Robust Ck 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)

```
. correlate fertwdi fertwdin  

(obs=105)
```

	fertwdi	fertwdin
fertwdi	1.0000	
fertwdin	0.6135	1.0000

Model 2-7: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd urbwdi mysfx, first
```

First-stage regressions

Source	SS	df	MS	Number of obs	=	105
Model	224.071864	8	28.008983	F(8, 96)	=	39.90
Residual	67.3957584	96	.70203915	Prob > F	=	0.0000
Total	291.467623	104	2.8025733	R-squared	=	0.7688
				Adj R-squared	=	0.7495
				Root MSE	=	.83788

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.2671488	.1940475	-1.38	0.172	-.65233 .1180324
giniavni	.0202062	.0107587	1.88	0.063	-.0011496 .041562
ethnl	.1031475	.3300483	0.31	0.755	-.5519932 .7582882
musl	.4281207	.2971389	1.44	0.153	-.1616953 1.017937
lpopd	-.2134631	.0606465	-3.52	0.001	-.3338454 -.0930807
urbwdi	-.0110225	.0064425	-1.71	0.090	-.0238108 .0017658
mysfx	-.2992142	.0685158	-4.37	0.000	-.4352169 -.1632114
fertwdin	.2302102	.0647093	3.56	0.001	.1017632 .3586571
_cons	7.162134	1.314426	5.45	0.000	4.55302 9.771248

Model 2-7: Robust Check 4.3: Endog ck: 2SLS using fertwdin as instrument for fertwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	105
Model	58.2927996	8	7.28659995	F(8, 96)	=	73.84
Residual	9.52171952	96	.099184578	Prob > F	=	0.0000
Total	67.8145191	104	.652062684	R-squared	=	0.8596
				Adj R-squared	=	0.8479
				Root MSE	=	.31494

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	-.0410424	.1056534	-0.39	0.699	-.2507628 .1686781
lgdph	-.4650348	.0827308	-5.62	0.000	-.6292541 -.3008154
giniavni	.0116985	.0046508	2.52	0.014	.0024668 .0209302
ethnl	.1658181	.1264607	1.31	0.193	-.0852043 .4168406
musl	.2492616	.1281366	1.95	0.055	-.0050876 .5036108
lpopd	-.1013597	.0316116	-3.21	0.002	-.1641083 -.0386111
urbwdi	-.0038231	.0024358	-1.57	0.120	-.0086582 .001012
mysfx	-.1240487	.0471888	-2.63	0.010	-.2177178 -.0303796
_cons	8.077813	1.05127	7.68	0.000	5.991058 10.16457

Instrumented: fertwdi

Instruments: lgdph giniavni ethnl musl lpopd urbwdi mysfx fertwdin

Model 2-7: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store imrmysfx
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx
```

Source	SS	df	MS	Number of obs	=	105
Model	58.6229186	8	7.32786483	F(8, 96)	=	76.53
Residual	9.19160049	96	.095745838	Prob > F	=	0.0000
				R-squared	=	0.8645
				Adj R-squared	=	0.8532

Total	67.8145191	104	.652062684	Root MSE	= .30943
-------	------------	-----	------------	----------	----------

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4394319	.0718681	-6.11	0.000	-.582089 -.2967748
giniavni	.0102644	.0040442	2.54	0.013	.0022368 .018292
ethnl	.1452183	.1204338	1.21	0.231	-.093841 .3842776
musl	.2080264	.1100416	1.89	0.062	-.0104044 .4264572
fertwdi	.0247426	.0354284	0.70	0.487	-.0455822 .0950674
lpopd	-.087717	.0235626	-3.72	0.000	-.1344885 -.0409456
urbwdi	-.003442	.0023255	-1.48	0.142	-.0080582 .0011741
mysfx	-.0988089	.0273521	-3.61	0.000	-.1531025 -.0445154
_cons	7.487967	.5490578	13.64	0.000	6.398096 8.577838

. hausman imrmysfx

	---- Coefficients ----			
	(b) imrmysfx	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	-.0410424	.0247426	-.065785	.0995363
lgdph	-.4650348	-.4394319	-.0256029	.04098
giniavni	.0116985	.0102644	.0014341	.0022966
ethnl	.1658181	.1452183	.0205998	.0385745
musl	.2492616	.2080264	.0412352	.0656494
lpopd	-.1013597	-.087717	-.0136427	.0210736
urbwdi	-.0038231	-.003442	-.0003811	.0007247
mysfx	-.1240487	-.0988089	-.0252398	.0384532

b = consistent under Ho and Ha; obtained from ivreg

B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

```
chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          =      0.44
Prob>chi2 =    0.9999
```

Model 2-7: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r

Linear regression

Number of obs = 105
F(8, 96) = 122.68
Prob > F = 0.0000
R-squared = 0.8661
Root MSE = .35125

lu5mrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4539494	.0906238	-5.01	0.000	-.6338361 -.2740626
giniavni	.0084416	.0063267	1.33	0.185	-.0041168 .0209999
ethnl	.2133652	.1342464	1.59	0.115	-.0531117 .4798422
musl	.120739	.1233568	0.98	0.330	-.1241223 .3656004
fertwdi	.0569463	.0370396	1.54	0.127	-.0165767 .1304693
lpopd	-.0967244	.0368617	-2.62	0.010	-.1698942 -.0235546
urbwdi	-.0035501	.0025104	-1.41	0.161	-.0085333 .001433
mysfx	-.1149721	.0297151	-3.87	0.000	-.1739561 -.0559881
_cons	7.929297	.7792953	10.17	0.000	6.382408 9.476186

Model 2-7: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
```

Linear regression

Number of obs = 105
 F(8, 96) = 112.97
 Prob > F = 0.0000
 R-squared = 0.8765
 Root MSE = .29334

limrwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4444928	.0675681	-6.58	0.000	-.5786144	-.3103712
giniavni	.0116016	.0050386	2.30	0.023	.0016001	.021603
ethnl	.0983553	.1078338	0.91	0.364	-.1156931	.3124037
musl	.1619102	.1016636	1.59	0.115	-.0398905	.363711
fertwdi	.0545626	.032571	1.68	0.097	-.0100903	.1192156
lpopd	-.0627548	.0256114	-2.45	0.016	-.113593	-.0119166
urbwdi	-.0035085	.0021892	-1.60	0.112	-.007854	.000837
mysfx	-.0850887	.0251463	-3.38	0.001	-.1350038	-.0351736
_cons	7.223805	.6038306	11.96	0.000	6.025211	8.4224

Model 2-7: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mysfx, r
```

Linear regression

Number of obs = 104
 F(8, 95) = 93.82
 Prob > F = 0.0000
 R-squared = 0.8698
 Root MSE = .30466

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	-.438075	.0745667	-5.87	0.000	-.5861087	-.2900414
giniavni	.0103211	.0046525	2.22	0.029	.0010847	.0195576
ethnl	.1345342	.110009	1.22	0.224	-.0838614	.3529298
musl	.1361456	.1000411	1.36	0.177	-.0624611	.3347523
fertwdi	.0147722	.0347146	0.43	0.671	-.054145	.0836895
lpopd	-.095583	.0272896	-3.50	0.001	-.1497597	-.0414064
urbwdi	-.0048175	.0019629	-2.45	0.016	-.0087143	-.0009206
mysfx	-.0945244	.0253803	-3.72	0.000	-.1449107	-.044138
_cons	7.632787	.6686685	11.41	0.000	6.305312	8.960262

Model 2-7: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi mysfx gdpmf, r
```

Linear regression

Number of obs = 104
 F(9, 94) = 91.79
 Prob > F = 0.0000
 R-squared = 0.8698
 Root MSE = .30626

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.4373697	.0755021	-5.79	0.000	-.5872809	-.2874584
giniavni	.0102789	.0048015	2.14	0.035	.0007454	.0198123
ethnl	.136216	.1130061	1.21	0.231	-.0881603	.3605923
musl	.1359012	.1007863	1.35	0.181	-.0642123	.3360147
fertwdi	.0144135	.0355898	0.40	0.686	-.0562508	.0850778
lpopd	-.0958977	.0282938	-3.39	0.001	-.1520758	-.0397197
urbwdi	-.0048457	.0020056	-2.42	0.018	-.0088277	-.0008636
mysfx	-.0944208	.0255547	-3.69	0.000	-.1451603	-.0436814
gdpmf	-.0126431	.0942054	-0.13	0.894	-.1996901	.1744039
_cons	7.632904	.6726488	11.35	0.000	6.297344	8.968464

Model 2-7: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mysfx, r
```

Linear regression

Number of obs = 105
 F(8, 96) = 108.94
 Prob > F = 0.0000
 R-squared = 0.8658
 Root MSE = .30788

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4202149	.0762914	-5.51	0.000	-.571652	-.2687777
giniavni	.0106111	.0056425	1.88	0.063	-.0005892	.0218113
ethnannx	.2207317	.139161	1.59	0.116	-.0555006	.4969641
musl	.2072936	.1037336	2.00	0.049	.001384	.4132032
fertwdi	.0266777	.0320333	0.83	0.407	-.0369079	.0902632
lpopd	-.0836919	.0331022	-2.53	0.013	-.1493993	-.0179845
urbwdi	-.0038975	.0022131	-1.76	0.081	-.0082905	.0004956
mysfx	-.1019891	.0256962	-3.97	0.000	-.1529957	-.0509826
_cons	7.266578	.6986213	10.40	0.000	5.879826	8.65333

Model 2-7: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi mysfx ethnannf, r
```

Linear regression

Number of obs = 105
 F(9, 95) = 94.84
 Prob > F = 0.0000
 R-squared = 0.8662
 Root MSE = .30907

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4337145	.0843037	-5.14	0.000	-.6010785	-.2663506
giniavni	.0100773	.0058594	1.72	0.089	-.0015551	.0217096
ethnannx	.2139779	.1407206	1.52	0.132	-.0653878	.4933436
musl	.2093158	.1044745	2.00	0.048	.0019076	.4167239
fertwdi	.0250398	.0320098	0.78	0.436	-.0385077	.0885874
lpopd	-.08393	.0331595	-2.53	0.013	-.1497599	-.0181001

urbwdi	-.00352	.0023438	-1.50	0.136	-.008173	.0011331
mysfx	-.1009675	.0263578	-3.83	0.000	-.1532944	-.0486406
ethnannf	-.0664163	.1441259	-0.46	0.646	-.3525424	.2197099
_cons	7.389553	.7664111	9.64	0.000	5.868035	8.911072

Table 2.2, Model 2-8: Family Planning and Infant Mortality**Model 2-8: Bivariate correlations among independent variables**

```
. correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi rtot
(obs=88)
```

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	rtot
lgdph	1.0000							
giniavni	0.0065	1.0000						
ethnl	-0.5103	0.2484	1.0000					
musl	0.3196	-0.3123	-0.2666	1.0000				
fertwdi	-0.6072	0.1177	0.4830	0.1129	1.0000			
lpopd	0.1386	-0.4069	-0.2024	-0.1395	-0.4124	1.0000		
urbwdi	0.8151	0.0227	-0.4898	0.2816	-0.5552	0.0537	1.0000	
rtot	0.1510	-0.0697	-0.1341	-0.2636	-0.5919	0.4690	0.0354	1.0000

Model 2-8: Infant mortality predicted by 6 baseline variables only (excl. fertility)

```
. regress limrcm lgdph giniavni ethnl musl lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(6, 98) =	132.92
Prob > F =	0.0000
R-squared =	0.8344
Root MSE =	.33854

limrcm	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5888096	.0653196	-9.01	0.000	-.7184342 -.459185
giniavni	.0122124	.0060355	2.02	0.046	.0002352 .0241896
ethnl	.3041219	.1261462	2.41	0.018	.0537889 .5544549
musl	.4988495	.1024674	4.87	0.000	.2955063 .7021926
lpopd	-.0882054	.0305882	-2.88	0.005	-.1489067 -.0275042
urbwdi	-.0058387	.0023602	-2.47	0.015	-.0105224 -.001155
_cons	8.283047	.5246576	15.79	0.000	7.241881 9.324213

Model 2-8: Infant mortality predicted by 6 baseline variables and family planning

```
. regress limrcm lgdph giniavni ethnl musl lpopd urbwdi rtot, r
```

Linear regression

Number of obs =	88
F(7, 80) =	62.86
Prob > F =	0.0000
R-squared =	0.8354
Root MSE =	.32413

limrcm	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]

lgdph	-.5698748	.0697342	-8.17	0.000	-.7086503	-.4310992
giniavni	.0168337	.0062112	2.71	0.008	.0044732	.0291943
ethnl	.3407941	.1334611	2.55	0.013	.075198	.6063902
musl	.4984561	.104099	4.79	0.000	.2912926	.7056197
lpopd	-.0120054	.026872	-0.45	0.656	-.0654824	.0414716
urbwdi	-.0071189	.0024876	-2.86	0.005	-.0120694	-.0021684
rtot	-.0036285	.0014571	-2.49	0.015	-.0065283	-.0007288
_cons	7.871109	.5139207	15.32	0.000	6.848375	8.893844

Model 2-8: Means and SDs of family planning and infant mortality

. summarize imrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

. summarize limrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

. summarize rtot

Variable	Obs	Mean	Std. Dev.	Min	Max
rtot	88	53.85	25.27719	0	104

Model 2-8: How much would infant mortality fall if family planning rose one SD?

. estsimp regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot, r

Linear regression
Number of obs = 88
F(7, 80) = 62.86
Prob > F = 0.0000
R-squared = 0.8354
Root MSE = .32413

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf.	Interval]
lgdph	-.5698748	.0697342	-8.17	0.000	-.7086503	-.4310992
giniavni	.0168337	.0062112	2.71	0.008	.0044732	.0291943
ethnl	.3407941	.1334611	2.55	0.013	.075198	.6063902
musl	.4984561	.104099	4.79	0.000	.2912926	.7056197
lpopd	-.0120054	.026872	-0.45	0.656	-.0654824	.0414716
urbwdi	-.0071189	.0024876	-2.86	0.005	-.0120694	-.0021684
rtot	-.0036285	.0014571	-2.49	0.015	-.0065283	-.0007288
_cons	7.871109	.5139207	15.32	0.000	6.848375	8.893844

Simulating main parameters. Please wait....

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000

Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(rtrot 53.85 79.12719)
```

First Difference: rtrot 53.85 79.12719

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-4.853298	2.082365	-8.734154 - .7980232

Model 2-8: Robustness checks

Model 2-8: Robust Check 1.1: Change specification: Include fertility

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi rtrot, r
```

Linear regression

Number of obs = 88
 F(8, 79) = 56.79
 Prob > F = 0.0000
 R-squared = 0.8402
 Root MSE = .32136

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5337248	.0730988	-7.30	0.000	-.6792243 -.3882252
giniavni	.0154551	.0062367	2.48	0.015	.0030413 .027869
ethnl	.2876362	.1368544	2.10	0.039	.0152343 .560038
musl	.4311498	.1157433	3.73	0.000	.2007685 .6615311
fertwdi	.0621622	.0388405	1.60	0.113	-.0151479 .1394723
lpopd	-.0090258	.0281162	-0.32	0.749	-.0649898 .0469382
urbwdi	-.0058635	.0026401	-2.22	0.029	-.0111184 -.0006085
rtot	-.0019322	.0017746	-1.09	0.280	-.0054644 .0016
_cons	7.239549	.6312973	11.47	0.000	5.982983 8.496115

Model 2-8: Robust Check 1.2: Change specification: Include female schooling

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtrot mysfx, r
```

Linear regression

Number of obs = 88
 F(8, 79) = 66.20
 Prob > F = 0.0000
 R-squared = 0.8655
 Root MSE = .29486

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4656617	.0712951	-6.53	0.000	-.6075712 -.3237523
giniavni	.0152818	.0054665	2.80	0.007	.004401 .0261627
ethnl	.1999814	.1305956	1.53	0.130	-.0599627 .4599254
musl	.265381	.1166687	2.27	0.026	.0331576 .4976043
lpopd	-.031303	.0298613	-1.05	0.298	-.0907404 .0281343
urbwdi	-.003856	.0025597	-1.51	0.136	-.008951 .001239
rtot	-.0016037	.0013687	-1.17	0.245	-.004328 .0011206
mysfx	-.1082712	.024351	-4.45	0.000	-.1567407 -.0598017

_cons	7.46578	.5303315	14.08	0.000	6.410182	8.521379
-------	---------	----------	-------	-------	----------	----------

Model 2-8: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot litfewdi, r
```

Linear regression

Number of obs =	88
F(8, 79) =	60.78
Prob > F =	0.0000
R-squared =	0.8617
Root MSE =	.29895

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4720078	.0685129	-6.89	0.000	-.6083792	-.3356364
giniavni	.0170288	.0056387	3.02	0.003	.0058051	.0282524
ethnl	.1600492	.1291067	1.24	0.219	-.0969313	.4170296
musl	.2525189	.1164057	2.17	0.033	.0208191	.4842187
lpopd	-.0235422	.028845	-0.82	0.417	-.0809567	.0338723
urbwdi	-.0051339	.0025447	-2.02	0.047	-.010199	-.0000687
rtot	-.0021624	.0013572	-1.59	0.115	-.0048639	.0005391
litfewdi	-.007508	.0018294	-4.10	0.000	-.0111492	-.0038667
_cons	7.541584	.5092531	14.81	0.000	6.527941	8.555227

Model 2-8: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot airdist popcrgs latcapab, r
```

Linear regression

Number of obs =	88
F(10, 77) =	47.21
Prob > F =	0.0000
R-squared =	0.8395
Root MSE =	.32629

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5557973	.0703481	-7.90	0.000	-.6958782	-.4157164
giniavni	.0167534	.0063427	2.64	0.010	.0041235	.0293833
ethnl	.3304656	.1383738	2.39	0.019	.0549282	.606003
musl	.4695986	.1145751	4.10	0.000	.2414504	.6977468
lpopd	.0044385	.0312622	0.14	0.887	-.0578126	.0666895
urbwdi	-.0069227	.0024941	-2.78	0.007	-.0118891	-.0019563
rtot	-.0035063	.001558	-2.25	0.027	-.0066087	-.0004039
airdist	-4.27e-08	.0000193	-0.00	0.998	-.0000385	.0000384
popcrgs	-.0015503	.0013539	-1.15	0.256	-.0042463	.0011456
latcapab	.0020492	.0036531	0.56	0.576	-.005225	.0093233
_cons	7.73976	.5173731	14.96	0.000	6.709538	8.769981

Model 2-8: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot afri lati east sout, r
```

Linear regression

Number of obs =	88
F(11, 76) =	53.76

Prob > F = 0.0000
 R-squared = 0.8429
 Root MSE = .32492

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5536116	.0727468	-7.61	0.000	-.6984994	-.4087237
giniavni	.0164831	.0070674	2.33	0.022	.0024071	.0305591
ethnl	.4102426	.1509994	2.72	0.008	.1095013	.710984
musl	.3667196	.1132483	3.24	0.002	.141166	.5922731
lpopd	-.0127647	.02675	-0.48	0.635	-.0660419	.0405125
urbwdi	-.0080335	.0024659	-3.26	0.002	-.0129447	-.0031224
rtot	-.0039443	.0015127	-2.61	0.011	-.0069572	-.0009314
afri	-.1910853	.1251069	-1.53	0.131	-.4402573	.0580867
lati	-.1113717	.1419867	-0.78	0.435	-.3941626	.1714193
east	-.2743875	.1221441	-2.25	0.028	-.5176586	-.0311164
sout	-.0108703	.2102321	-0.05	0.959	-.4295838	.4078433
_cons	7.959952	.5174305	15.38	0.000	6.9294	8.990504

Model 2-8: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot gdphf giniavnf ethnl, r
```

Linear regression

Number of obs = 88
 F(9, 78) = 44.56
 Prob > F = 0.0000
 R-squared = 0.8407
 Root MSE = .32297

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5618693	.0727093	-7.73	0.000	-.7066223	-.4171162
giniavni	.0143612	.0059658	2.41	0.018	.0024843	.0262382
ethnl	.3148759	.133351	2.36	0.021	.0493945	.5803574
musl	.4868547	.1001588	4.86	0.000	.2874538	.6862555
lpopd	-.0157232	.0281382	-0.56	0.578	-.071742	.0402955
urbwdi	-.006648	.0024456	-2.72	0.008	-.0115169	-.0017791
rtot	-.0042777	.0016737	-2.56	0.013	-.0076098	-.0009456
gdphf	(dropped)					
giniavnf	-.0248658	.1048109	-0.24	0.813	-.2335283	.1837966
ethnlf	-.2331406	.177141	-1.32	0.192	-.5858011	.11952
_cons	7.980384	.5009717	15.93	0.000	6.983026	8.977742

Model 2-8: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot
```

Huber iteration 1: maximum difference in weights = .33795818
 Huber iteration 2: maximum difference in weights = .0185231
 Biweight iteration 3: maximum difference in weights = .15668194
 Biweight iteration 4: maximum difference in weights = .00855726

Robust regression

Number of obs = 88
 F(7, 80) = 49.79
 Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5649725	.0809869	-6.98	0.000	-.7261415 -.4038034
giniavni	.01683	.0053461	3.15	0.002	.0061909 .0274692
ethnl	.3305236	.1502543	2.20	0.031	.031508 .6295393
musl	.4879802	.1214943	4.02	0.000	.2461987 .7297616
lpopd	-.0149969	.0345788	-0.43	0.666	-.0838109 .053817
urbwdi	-.0074109	.0028925	-2.56	0.012	-.0131671 -.0016547
rtot	-.0036659	.00178	-2.06	0.043	-.0072082 -.0001236
_cons	7.871808	.5499604	14.31	0.000	6.777352 8.966264

Model 2-8: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot
Iteration 1: WLS sum of weighted deviations = 22.460501
```

```
Iteration 1: sum of abs. weighted deviations = 22.636769
Iteration 2: sum of abs. weighted deviations = 22.383356
Iteration 3: sum of abs. weighted deviations = 22.32905
Iteration 4: sum of abs. weighted deviations = 22.177426
Iteration 5: sum of abs. weighted deviations = 22.131902
Iteration 6: sum of abs. weighted deviations = 22.115701
Iteration 7: sum of abs. weighted deviations = 22.047732
Iteration 8: sum of abs. weighted deviations = 22.025954
```

```
Median regression
Number of obs = 88
Raw sum of deviations 55.24062 (about 4.0775375)
Min sum of deviations 22.02595
Pseudo R2 = 0.6013
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5879553	.103058	-5.71	0.000	-.7930473 -.3828634
giniavni	.0128082	.007466	1.72	0.090	-.0020495 .027666
ethnl	.2197964	.2064682	1.06	0.290	-.1910884 .6306813
musl	.384786	.1622997	2.37	0.020	.0617993 .7077727
lpopd	-.0360718	.0432943	-0.83	0.407	-.1222302 .0500866
urbwdi	-.0065645	.0036602	-1.79	0.077	-.0138484 .0007195
rtot	-.0025702	.0022089	-1.16	0.248	-.0069661 .0018257
_cons	8.291231	.7039855	11.78	0.000	6.890255 9.692207

Model 2-8: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi rtot if ctry ~= "Namibia" & ctry ~= "Cuba",
r
```

```
Linear regression
Number of obs = 86
F( 7, 78) = 70.61
Prob > F = 0.0000
R-squared = 0.8466
Root MSE = .30891
```

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5784057	.0665648	-8.69	0.000	-.7109261 -.4458853
giniavni	.0165658	.0055052	3.01	0.004	.0056059 .0275257
ethnl	.3307699	.132617	2.49	0.015	.0667497 .5947901

musl	.463537	.1005738	4.61	0.000	.26331	.663764
lpopd	-.0237378	.0249143	-0.95	0.344	-.0733384	.0258628
urbwdi	-.0065726	.0021009	-3.13	0.002	-.0107552	-.00239
rtot	-.0037508	.0013816	-2.71	0.008	-.0065014	-.0010002
_cons	8.000923	.4585767	17.45	0.000	7.087967	8.91388

Model 2-8: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

```
. regress lu5mrcom lgdph giniavni ethnl musl lpopd urbwdi rtot, r
```

Linear regression

Number of obs =	88
F(7, 80) =	81.01
Prob > F =	0.0000
R-squared =	0.8499
Root MSE =	.35693

lu5mrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.6608821	.0756541	-8.74	0.000	-.8114385 -.5103257
giniavni	.017074	.0071944	2.37	0.020	.0027568 .0313913
ethnl	.4475146	.1419161	3.15	0.002	.1650926 .7299366
musl	.5209506	.1111041	4.69	0.000	.2998464 .7420548
lpopd	-.0095131	.0294487	-0.32	0.748	-.0681178 .0490916
urbwdi	-.0078545	.0028029	-2.80	0.006	-.0134325 -.0022765
rtot	-.0045626	.0016434	-2.78	0.007	-.0078332 -.0012921
_cons	8.886439	.5602077	15.86	0.000	7.77159 10.00129

Model 2-8: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl lpopd urbwdi rtot, r
```

Linear regression

Number of obs =	88
F(7, 80) =	68.10
Prob > F =	0.0000
R-squared =	0.8295
Root MSE =	.32697

limrwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5788798	.0702356	-8.24	0.000	-.7186532 -.4391065
giniavni	.016121	.0064804	2.49	0.015	.0032247 .0290173
ethnl	.2882039	.1267808	2.27	0.026	.035902 .5405058
musl	.467303	.1057037	4.42	0.000	.256946 .67766
lpopd	-.0155063	.0263569	-0.59	0.558	-.0679581 .0369456
urbwdi	-.0068384	.002715	-2.52	0.014	-.0122414 -.0014354
rtot	-.0033956	.0015299	-2.22	0.029	-.0064403 -.000351
_cons	8.007002	.5200564	15.40	0.000	6.972057 9.041947

Model 2-8: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl lpopd urbwdi rtot, r
```

Linear regression

Number of obs = 88
 F(7, 80) = 54.72
 Prob > F = 0.0000
 R-squared = 0.8285
 Root MSE = .33088

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	-.5482328	.0683971	-8.02	0.000	-.6843474	-.4121182
giniavni	.0157771	.0054091	2.92	0.005	.0050127	.0265415
ethnl	.3133165	.1342227	2.33	0.022	.0462048	.5804281
musl	.4147282	.1061761	3.91	0.000	.203431	.6260254
lpopd	-.0355721	.0285623	-1.25	0.217	-.0924129	.0212687
urbwdi	-.0077128	.0024041	-3.21	0.002	-.0124972	-.0029284
rtot	-.0023604	.0016399	-1.44	0.154	-.005624	.0009031
_cons	7.851159	.4997004	15.71	0.000	6.856724	8.845595

Model 2-8: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

. regress limrcom lgdpmx giniavni ethnl musl lpopd urbwdi rtot gdpmf, r

Linear regression

Number of obs = 88
 F(8, 79) = 48.00
 Prob > F = 0.0000
 R-squared = 0.8291
 Root MSE = .33233

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	-.5575841	.0718621	-7.76	0.000	-.7006221	-.414546
giniavni	.0161672	.0055222	2.93	0.004	.0051756	.0271588
ethnl	.3122915	.1353041	2.31	0.024	.0429754	.5816076
musl	.4234994	.1094447	3.87	0.000	.2056552	.6413437
lpopd	-.0307293	.0308221	-1.00	0.322	-.0920791	.0306206
urbwdi	-.00738	.0025358	-2.91	0.005	-.0124274	-.0023326
rtot	-.0023608	.001652	-1.43	0.157	-.005649	.0009275
gdpmf	.1395557	.1005954	1.39	0.169	-.0606744	.3397859
_cons	7.868473	.4993104	15.76	0.000	6.874621	8.862326

Model 2-8: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

. regress limrcom lgdph giniavni ethnannx musl lpopd urbwdi rtot, r

Linear regression

Number of obs = 88
 F(7, 80) = 67.27
 Prob > F = 0.0000
 R-squared = 0.8301
 Root MSE = .32936

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5708206	.0742181	-7.69	0.000	-.7185192	-.4231219
giniavni	.0187236	.0060701	3.08	0.003	.0066437	.0308036

ethnannx	.2901538	.1574734	1.84	0.069	-.0232282	.6035358
musl	.511832	.1073477	4.77	0.000	.2982032	.7254609
lpopd	-.0080796	.0265511	-0.30	0.762	-.0609179	.0447587
urbwdi	-.0082999	.0025932	-3.20	0.002	-.0134606	-.0031393
rtot	-.0037107	.0015408	-2.41	0.018	-.0067771	-.0006444
_cons	7.802701	.563814	13.84	0.000	6.680676	8.924727

Model 2-8: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl lpopd urbwdi rtot ethnannf, r
```

Linear regression

Number of obs =	88
F(8, 79) =	57.08
Prob > F =	0.0000
R-squared =	0.8400
Root MSE =	.32164

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6214234	.0770613	-8.06	0.000	-.7748101	-.4680367
giniavni	.0153899	.0059286	2.60	0.011	.0035893	.0271906
ethnannx	.2295987	.1573108	1.46	0.148	-.0835205	.5427179
musl	.4594112	.1054399	4.36	0.000	.2495383	.6692842
lpopd	-.0066967	.0265813	-0.25	0.802	-.0596054	.0462121
urbwdi	-.0061401	.0026862	-2.29	0.025	-.0114869	-.0007933
rtot	-.0034213	.0014947	-2.29	0.025	-.0063964	-.0004463
ethnannf	-.4243452	.1831211	-2.32	0.023	-.7888386	-.0598517
_cons	8.282779	.5745105	14.42	0.000	7.139244	9.426313

Table 2.2, Model 2-9: Access to An Improved Water Source and Infant Mortality

Model 2-9: Bivariate correlations among independent variables

```
. correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom  
(obs=105)
```

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	watecom
lgdph	1.0000							
giniavni	-0.0275	1.0000						
ethnl	-0.4711	0.2512	1.0000					
musl	0.2810	-0.2888	-0.2869	1.0000				
fertwdi	-0.6581	0.1486	0.4352	0.1280	1.0000			
lpopd	0.2105	-0.3196	-0.1984	-0.1269	-0.4301	1.0000		
urbwdi	0.8313	-0.0237	-0.4315	0.2495	-0.6012	0.1290	1.0000	
watecom	0.7379	-0.1631	-0.4812	0.2361	-0.6924	0.3243	0.6841	1.0000

Model 2-9: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	115.48
Prob > F =	0.0000

R-squared = 0.8460
Root MSE = .32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Model 2-9: Infant mortality predicted by 7 baseline variables and % access impvd water

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
```

Linear regression

Number of obs =	105
F(8, 96) =	93.54
Prob > F =	0.0000
R-squared =	0.8493
Root MSE =	.32622

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4876714	.0732522	-6.66	0.000	-.6330758	-.3422669
giniavni	.009813	.0056758	1.73	0.087	-.0014534	.0210794
ethnl	.214739	.1192614	1.80	0.075	-.0219929	.4514709
musl	.390946	.1056888	3.70	0.000	.1811553	.6007366
fertwdi	.0702058	.0329494	2.13	0.036	.0048018	.1356098
lpopd	-.0665065	.0309674	-2.15	0.034	-.1279763	-.0050368
urbwdi	-.0040935	.0023028	-1.78	0.079	-.0086646	.0004776
watecom	-.0034114	.001921	-1.78	0.079	-.0072245	.0004017
_cons	7.415669	.6449675	11.50	0.000	6.135419	8.69592

Model 2-9: Means and SDs of access to an improved water source and infant mortality

```
. summarize imrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

```
. summarize limrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

```
. summarize watecom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
watecom	105	68.07619	23.47613	4	100

Model 2-9: How much would infant mortality fall if water access rose one SD?

```
. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
Linear regression
```

Number of obs = 105
 F(8, 96) = 93.54
 Prob > F = 0.0000
 R-squared = 0.8493
 Root MSE = .32622

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4876714	.0732522	-6.66	0.000	-.6330758 -.3422669
giniavni	.009813	.0056758	1.73	0.087	-.0014534 .0210794
ethnl	.214739	.1192614	1.80	0.075	-.0219929 .4514709
musl	.390946	.1056888	3.70	0.000	.1811553 .6007366
fertwdi	.0702058	.0329494	2.13	0.036	.0048018 .1356098
lpopd	-.0665065	.0309674	-2.15	0.034	-.1279763 -.0050368
urbwdi	-.0040935	.0023028	-1.78	0.079	-.0086646 .0004776
watecom	-.0034114	.001921	-1.78	0.079	-.0072245 .0004017
_cons	7.415669	.6449675	11.50	0.000	6.135419 8.69592

Simulating main parameters. Please wait....
 % of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
 Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(watecom 68.07619 91.55232)
```

First Difference: watecom 68.07619 91.55232

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-4.278153	2.465548	-8.863958 .680479

Model 2-9: Robustness checks

Model 2-9: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi watecom, r
```

Linear regression

Number of obs = 105
F(7, 97) = 102.38
Prob > F = 0.0000
R-squared = 0.8429
Root MSE = .33137

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]

lgdph	-.530233	.0681316	-7.78	0.000	-.6654554	-.3950107
giniavni	.0114347	.0057858	1.98	0.051	-.0000486	.0229179
ethnl	.2594228	.1226205	2.12	0.037	.016055	.5027905
musl	.505713	.0993364	5.09	0.000	.3085577	.7028683
lpopd	-.0757663	.0295608	-2.56	0.012	-.1344364	-.0170963
urbwdi	-.0046718	.0023538	-1.98	0.050	-.0093434	-2.22e-07
watecom	-.0051162	.0018013	-2.84	0.005	-.0086913	-.0015411
_cons	8.140085	.5130736	15.87	0.000	7.121776	9.158394

Model 2-9: Robust Check 1.2: Change specification: Include female schooling

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom mysfx, r
```

Linear regression

Number of obs = 105
 F(9, 95) = 85.39
 Prob > F = 0.0000
 R-squared = 0.8682
 Root MSE = .30668

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4138899	.0728616	-5.68	0.000	-.5585385	-.2692413
giniavni	.010235	.0054827	1.87	0.065	-.0006495	.0211196
ethnl	.1287113	.1160288	1.11	0.270	-.101635	.3590576
musl	.2420306	.1049799	2.31	0.023	.0336192	.4504421
fertwdi	.0045164	.0336055	0.13	0.893	-.062199	.0712317
lpopd	-.0827675	.0323491	-2.56	0.012	-.1469885	-.0185464
urbwdi	-.0028619	.0021855	-1.31	0.194	-.0072006	.0014768
watecom	-.003647	.0017826	-2.05	0.044	-.0071859	-.000108
mysfx	-.1001046	.0264178	-3.79	0.000	-.1525506	-.0476586
_cons	7.601629	.6552895	11.60	0.000	6.300715	8.902543

Model 2-9: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom litfewdi, r
```

Linear regression

Number of obs = 105
 F(9, 95) = 77.11
 Prob > F = 0.0000
 R-squared = 0.8621
 Root MSE = .31378

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4496436	.0693077	-6.49	0.000	-.5872367	-.3120505
giniavni	.0108528	.0056893	1.91	0.059	-.0004418	.0221474
ethnl	.1096694	.1150853	0.95	0.343	-.1188039	.3381427
musl	.2530098	.108073	2.34	0.021	.0384577	.4675619
fertwdi	.0086539	.036761	0.24	0.814	-.064326	.0816338
lpopd	-.0852046	.031965	-2.67	0.009	-.1486632	-.021746
urbwdi	-.0035393	.0022872	-1.55	0.125	-.00808	.0010013
watecom	-.003257	.0018716	-1.74	0.085	-.0069726	.0004586
litfewdi	-.0064592	.0020291	-3.18	0.002	-.0104875	-.002431
_cons	7.841174	.6585298	11.91	0.000	6.533827	9.148521

Model 2-9: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom airdist popcrgs latcapab, r
```

Linear regression

Number of obs = 105
 $F(11, 93) = 68.31$
 Prob > F = 0.0000
 R-squared = 0.8545
 Root MSE = .32577

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4764952	.0739766	-6.44	0.000	-.623398 -.3295924
giniavni	.0106871	.005507	1.94	0.055	-.0002487 .0216229
ethnl	.2567568	.1122423	2.29	0.024	.0338658 .4796478
musl	.3237642	.1177612	2.75	0.007	.0899139 .5576145
fertwdi	.0829019	.0367674	2.25	0.026	.0098892 .1559147
lpopd	-.0533887	.0299039	-1.79	0.077	-.1127719 .0059945
urbwdi	-.0041743	.002238	-1.87	0.065	-.0086186 .00027
watecom	-.002859	.0019121	-1.50	0.138	-.0066561 .0009382
airdist	-5.72e-06	.0000171	-0.33	0.739	-.0000397 .0000283
popcrgs	-.0009779	.0011056	-0.88	0.379	-.0031734 .0012176
latcapab	.0052151	.0036807	1.42	0.160	-.002094 .0125242
_cons	7.128994	.6209622	11.48	0.000	5.895886 8.362101

Model 2-9: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom afri lati east sout, r
```

Linear regression

Number of obs = 105
 $F(12, 92) = 75.95$
 Prob > F = 0.0000
 R-squared = 0.8518
 Root MSE = .33051

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4992788	.0774766	-6.44	0.000	-.6531541 -.3454035
giniavni	.0109882	.0060627	1.81	0.073	-.0010528 .0230292
ethnl	.2344135	.1371099	1.71	0.091	-.0378986 .5067256
musl	.2977259	.096958	3.07	0.003	.1051589 .4902929
fertwdi	.0693512	.0405523	1.71	0.091	-.0111892 .1498915
lpopd	-.0692289	.0339838	-2.04	0.045	-.1367237 -.001734
urbwdi	-.0036783	.0025534	-1.44	0.153	-.0087495 .0013929
watecom	-.0035563	.0020459	-1.74	0.086	-.0076197 .000507
afri	-.1472235	.1005089	-1.46	0.146	-.3468428 .0523958
lati	-.1294773	.1400359	-0.92	0.358	-.4076007 .1486462
east	-.1448103	.1396984	-1.04	0.303	-.4222633 .1326427
sout	.0061815	.2104242	0.03	0.977	-.4117392 .4241022
_cons	7.576723	.6733136	11.25	0.000	6.239464 8.913982

Model 2-9: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 105

F(10, 93) = .
 Prob > F = .
 R-squared = 0.8573
 Root MSE = .32256

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4764778	.071082	-6.70	0.000	-.6176325	-.335323
giniavni	.0065269	.0056888	1.15	0.254	-.0047699	.0178236
ethnl	.1846417	.1201363	1.54	0.128	-.0539251	.4232085
musl	.3632092	.1049355	3.46	0.001	.1548282	.5715903
fertwdi	.0884299	.03274	2.70	0.008	.0234147	.153445
lpopd	-.0696007	.0299183	-2.33	0.022	-.1290126	-.0101889
urbwdi	-.0030033	.0024696	-1.22	0.227	-.0079075	.0019009
watecom	-.0030677	.0020143	-1.52	0.131	-.0070677	.0009323
gdphf	-.2358734	.1322675	-1.78	0.078	-.4985306	.0267837
giniavnf	-.03153	.0769751	-0.41	0.683	-.1843872	.1213272
ethnlf	-.3121732	.1690387	-1.85	0.068	-.6478504	.0235041
_cons	7.373749	.590483	12.49	0.000	6.201167	8.546331

Model 2-9: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom
```

```
Huber iteration 1: maximum difference in weights = .5136385
Huber iteration 2: maximum difference in weights = .10695618
Huber iteration 3: maximum difference in weights = .02091259
Biweight iteration 4: maximum difference in weights = .15249576
Biweight iteration 5: maximum difference in weights = .01129421
Biweight iteration 6: maximum difference in weights = .00237195
```

Robust regression

Number of obs = 105
 F(8, 96) = 58.86
 Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4847718	.0799572	-6.06	0.000	-.6434856	-.326058
giniavni	.010524	.0045705	2.30	0.023	.0014517	.0195963
ethnl	.2265994	.1340255	1.69	0.094	-.039439	.4926379
musl	.3941147	.1179468	3.34	0.001	.1599921	.6282373
fertwdi	.0744275	.0372463	2.00	0.049	.0004942	.1483608
lpopd	-.0562426	.0263836	-2.13	0.036	-.1086135	-.0038716
urbwdi	-.0045031	.0026322	-1.71	0.090	-.0097279	.0007217
watecom	-.003025	.002517	-1.20	0.232	-.0080212	.0019713
_cons	7.287932	.6230533	11.70	0.000	6.051181	8.524683

Model 2-9: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom
Iteration 1: WLS sum of weighted deviations = 26.61911
```

```
Iteration 1: sum of abs. weighted deviations = 33.009388
Iteration 2: sum of abs. weighted deviations = 26.722951
Iteration 3: sum of abs. weighted deviations = 26.435588
Iteration 4: sum of abs. weighted deviations = 26.347719
Iteration 5: sum of abs. weighted deviations = 26.334318
```

Iteration 6: sum of abs. weighted deviations = 26.30988
 Iteration 7: sum of abs. weighted deviations = 26.230653
 Iteration 8: sum of abs. weighted deviations = 26.133689
 Iteration 9: sum of abs. weighted deviations = 26.092969
 Iteration 10: sum of abs. weighted deviations = 26.076248
 Iteration 11: sum of abs. weighted deviations = 26.068431
 Iteration 12: sum of abs. weighted deviations = 26.067659
 Iteration 13: sum of abs. weighted deviations = 26.062506
 Iteration 14: sum of abs. weighted deviations = 26.061144

Median regression Number of obs = 105
 Raw sum of deviations 68.21916 (about 4.1271343)
 Min sum of deviations 26.06114 Pseudo R2 = 0.6180

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3902589	.0977283	-3.99	0.000	-.5842481 -.1962696
giniavni	.0076124	.0056818	1.34	0.183	-.0036659 .0188907
ethnl	.1640973	.1592136	1.03	0.305	-.1519392 .4801338
musl	.2478138	.1410521	1.76	0.082	-.0321724 .5277999
fertwdi	.1112956	.0449141	2.48	0.015	.0221419 .2004493
lpopd	-.0651266	.0328191	-1.98	0.050	-.1302719 .0000188
urbwdi	-.0058497	.003237	-1.81	0.074	-.0122751 .0005757
watecom	-.0021884	.0031131	-0.70	0.484	-.0083677 .003991
_cons	6.634279	.765061	8.67	0.000	5.115645 8.152913

Model 2-9: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom if ctry ~= "Mongolia" & ctry ~= "Cuba", r

Linear regression Number of obs = 103
 F(8, 94) = 89.05
 Prob > F = 0.0000
 R-squared = 0.8620
 Root MSE = .30842

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5154035	.0672155	-7.67	0.000	-.6488615 -.3819456
giniavni	.0108365	.0049152	2.20	0.030	.0010772 .0205959
ethnl	.2437662	.114995	2.12	0.037	.0154409 .4720915
musl	.4237522	.0949268	4.46	0.000	.2352729 .6122315
fertwdi	.0671451	.0312112	2.15	0.034	.0051745 .1291157
lpopd	-.0470013	.0246208	-1.91	0.059	-.0958863 .0018838
urbwdi	-.0035923	.0021561	-1.67	0.099	-.0078733 .0006888
watecom	-.0030387	.0018979	-1.60	0.113	-.0068069 .0007296
_cons	7.455762	.5284704	14.11	0.000	6.406472 8.505052

Model 2-9: Robust Ck 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)

. correlate fertwdi fertwdin
 (obs=105)

	fertwdi	fertwdin
fertwdi	1.0000	

fertwdin | 0.6135 1.0000

Model 2-9: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

. ivreg limrcom lgdph giniavni ethnl musl (fertwdin = fertwdin) lpopd urbwdi watecom, first

First-stage regressions

Source	SS	df	MS	Number of obs	=	105
Model	221.630495	8	27.7038119	F(8, 96)	=	38.08
Residual	69.8371279	96	.727470082	Prob > F	=	0.0000
Total	291.467623	104	2.8025733	R-squared	=	0.7604
				Adj R-squared	=	0.7404
				Root MSE	=	.85292

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3168287	.1956677	-1.62	0.109	-.7052261 .0715686
giniavni	.0197636	.0109639	1.80	0.075	-.0019997 .0415268
ethnl	.2106116	.3325809	0.63	0.528	-.4495563 .8707795
musl	1.072902	.2704566	3.97	0.000	.5360493 1.609754
lpopd	-.1499104	.0633013	-2.37	0.020	-.2755624 -.0242584
urbwdi	-.0133928	.0064556	-2.07	0.041	-.0262072 -.0005785
watecom	-.02227	.0057408	-3.88	0.000	-.0336653 -.0108747
fertwdin	.311362	.0619414	5.03	0.000	.1884092 .4343148
_cons	7.329993	1.335273	5.49	0.000	4.679498 9.980489

Model 2-9: Robust Check 4.3: Endog ck: 2SLS using fertwdin as instrument for fertwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	105
Model	57.5961151	8	7.19951439	F(8, 96)	=	67.25
Residual	10.218404	96	.106441709	Prob > F	=	0.0000
Total	67.8145191	104	.652062684	R-squared	=	0.8493
				Adj R-squared	=	0.8368
				Root MSE	=	.32625

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	.0751192	.0760964	0.99	0.326	-.075931 .2261693
lgdph	-.4846927	.0851182	-5.69	0.000	-.653651 -.3157345
giniavni	.0096995	.0045402	2.14	0.035	.0006872 .0187118
ethnl	.2116118	.1322112	1.60	0.113	-.0508253 .4740489
musl	.382914	.1560428	2.45	0.016	.0731714 .6926566
lpopd	-.0658585	.0261755	-2.52	0.014	-.1178165 -.0139004
urbwdi	-.0040531	.0025173	-1.61	0.111	-.0090499 .0009438
watecom	-.0032921	.0028659	-1.15	0.254	-.0089808 .0023966
_cons	7.364971	.9086783	8.11	0.000	5.561259 9.168683

Instrumented: fertwdi
Instruments: lgdph giniavni ethnl musl lpopd urbwdi watecom fertwdin

Model 2-9: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store imrwate

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom
```

Source	SS	df	MS	Number of obs	=	105
Model	57.5982448	8	7.1997806	F(8, 96)	=	67.65
Residual	10.2162744	96	.106419524	Prob > F	=	0.0000
Total	67.8145191	104	.652062684	R-squared	=	0.8493

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4876714	.0745598	-6.54	0.000	-.6356714 -.3396714
giniavni	.009813	.0042619	2.30	0.023	.0013531 .0182729
ethnl	.214739	.1249782	1.72	0.089	-.0333408 .4628189
musl	.390946	.109985	3.55	0.001	.1726275 .6092644
fertwdi	.0702058	.034732	2.02	0.046	.0012633 .1391484
lpopd	-.0665065	.0246026	-2.70	0.008	-.1153422 -.0176708
urbwdi	-.0040935	.0024545	-1.67	0.099	-.0089656 .0007786
watecom	-.0034114	.0023471	-1.45	0.149	-.0080704 .0012476
_cons	7.415669	.5809949	12.76	0.000	6.262404 8.568935

```
. hausman imrwate
```

---- Coefficients -----				
	(b) imrwate	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	.0751192	.0702058	.0049133	.0677078
lgdph	-.4846927	-.4876714	.0029787	.0410602
giniavni	.0096995	.009813	-.0001135	.0015651
ethnl	.2116118	.214739	-.0031272	.0431304
musl	.382914	.390946	-.008032	.1106918
lpopd	-.0658585	-.0665065	.000648	.0089372
urbwdi	-.0040531	-.0040935	.0000405	.0005588
watecom	-.0032921	-.0034114	.0001193	.0016445

b = consistent under H_0 and H_a ; obtained from ivreg
 B = inconsistent under H_a , efficient under H_0 ; obtained from regress

Test: H_0 : difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(8) &= (\mathbf{b}-\mathbf{B})'[(\mathbf{V}_b-\mathbf{V}_B)^{-1}](\mathbf{b}-\mathbf{B}) \\ &= 0.01 \\ \text{Prob}>\text{chi2} &= 1.0000 \end{aligned}$$

Model 2-9: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

```
. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
```

lu5mrcom	Robust	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]

lgdph	-.5091913	.0894301	-5.69	0.000	-.6867087	-.3316739
giniavni	.0079151	.0063566	1.25	0.216	-.0047027	.0205328
ethnl	.2937018	.1399495	2.10	0.038	.0159043	.5714993
musl	.3348792	.1186598	2.82	0.006	.0993413	.5704171
fertwdi	.1091461	.0382128	2.86	0.005	.0332943	.1849979
lpopd	-.0718578	.034916	-2.06	0.042	-.1411656	-.0025501
urbwdi	-.0042878	.0026546	-1.62	0.110	-.0095571	.0009815
watecom	-.0041011	.0021627	-1.90	0.061	-.008394	.0001918
_cons	7.849194	.7678223	10.22	0.000	6.325078	9.373309

Model 2-9: Robust Check 5.2: DepV: Vary source: infant mortality (limrcm to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
```

Linear regression

Number of obs =	105
F(8, 96) =	97.02
Prob > F =	0.0000
R-squared =	0.8643
Root MSE =	.30738

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4892416	.0687012	-7.12	0.000	-.6256125	-.3528708
giniavni	.0112174	.0051401	2.18	0.032	.0010143	.0214204
ethnl	.1602309	.1084036	1.48	0.143	-.0549486	.3754105
musl	.3147424	.1015461	3.10	0.003	.1131751	.5163097
fertwdi	.0962409	.0317785	3.03	0.003	.033161	.1593207
lpopd	-.0451627	.0244726	-1.85	0.068	-.0937404	.003415
urbwdi	-.0041431	.0022667	-1.83	0.071	-.0086426	.0003563
watecom	-.0024623	.0017762	-1.39	0.169	-.005988	.0010634
_cons	7.147032	.5898642	12.12	0.000	5.976161	8.317903

Model 2-9: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcm lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi watecom, r
```

Linear regression

Number of obs =	104
F(8, 95) =	90.20
Prob > F =	0.0000
R-squared =	0.8546
Root MSE =	.32193

limrcm	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.4930697	.0741729	-6.65	0.000	-.6403214	-.345818
giniavni	.0100578	.00473	2.13	0.036	.0006676	.019448
ethnl	.2050697	.1162306	1.76	0.081	-.0256772	.4358167
musl	.2933813	.1073837	2.73	0.008	.0801977	.5065649
fertwdi	.0621914	.0361931	1.72	0.089	-.009661	.1340439
lpopd	-.0770401	.0253256	-3.04	0.003	-.1273178	-.0267625
urbwdi	-.0056543	.0021294	-2.66	0.009	-.0098817	-.0014268
watecom	-.0022021	.0019146	-1.15	0.253	-.0060031	.0015989
_cons	7.551233	.6466695	11.68	0.000	6.267432	8.835035

Model 2-9: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags
 . regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi watecom gdpmf, r

Linear regression

Number of obs = 104
 F(9, 94) = 82.44
 Prob > F = 0.0000
 R-squared = 0.8548
 Root MSE = .32344

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	-.4883293	.0765466	-6.38	0.000	-.6403144	-.3363443
giniavni	.0098464	.0048712	2.02	0.046	.0001746	.0195183
ethnl	.2123875	.1175693	1.81	0.074	-.0210491	.4458242
musl	.2924278	.1076137	2.72	0.008	.0787582	.5060973
fertwdi	.0597125	.0376701	1.59	0.116	-.0150824	.1345074
lpopd	-.0785148	.0261925	-3.00	0.003	-.1305207	-.026509
urbwdi	-.0057746	.0021714	-2.66	0.009	-.0100861	-.0014632
watecom	-.0022989	.0019787	-1.16	0.248	-.0062278	.0016299
gdpmf	-.0610086	.1315556	-0.46	0.644	-.3222154	.2001982
_cons	7.553383	.6529277	11.57	0.000	6.25698	8.849786

Model 2-9: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi watecom, r

Linear regression

Number of obs = 105
 F(8, 96) = 97.97
 Prob > F = 0.0000
 R-squared = 0.8487
 Root MSE = .3269

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4725924	.0776987	-6.08	0.000	-.6268232	-.3183616
giniavni	.0104429	.0056072	1.86	0.066	-.0006874	.0215731
ethnannx	.2400932	.155	1.55	0.125	-.0675793	.5477657
musl	.3835317	.1073746	3.57	0.001	.1703947	.5966687
fertwdi	.0783037	.0340779	2.30	0.024	.0106596	.1459478
lpopd	-.0618562	.030693	-2.02	0.047	-.1227814	-.000931
urbwdi	-.0046905	.0024011	-1.95	0.054	-.0094566	.0000756
watecom	-.0033509	.0019461	-1.72	0.088	-.0072139	.0005121
_cons	7.189404	.7078491	10.16	0.000	5.784334	8.594473

Model 2-9: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi watecom ethnannf >, r

Linear regression

Number of obs = 105
 F(9, 95) = 83.37
 Prob > F = 0.0000
 R-squared = 0.8503
 Root MSE = .32684

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4969675	.0845287	-5.88	0.000	-.6647782	-.3291567
giniavni	.0093057	.00566	1.64	0.103	-.0019308	.0205421
ethnannx	.2221512	.1575781	1.41	0.162	-.090681	.5349833
musl	.3889343	.1067008	3.65	0.000	.1771064	.6007623
fertwdi	.0710288	.034589	2.05	0.043	.002361	.1396965
lpopd	-.0621849	.0304103	-2.04	0.044	-.1225571	-.0018128
urbwdi	-.0037895	.0025967	-1.46	0.148	-.0089447	.0013657
watecom	-.0037781	.0020833	-1.81	0.073	-.007914	.0003578
ethnannf	-.1407225	.1584312	-0.89	0.377	-.4552482	.1738032
_cons	7.470118	.7773105	9.61	0.000	5.926962	9.013275

Table 2.2, Model 2-10: Access to Improved Sanitation and Infant Mortality**Model 2-10: Bivariate correlations among independent variables**

```
correlate lgdph giniavni ethnln musl fertwdi lpopd urbwdi sanicom
(obs=102)
```

	lgdph	giniavni	ethnln	musl	fertwdi	lpopd	urbwdi
lgdph	1.0000						
giniavni	-.0089	1.0000					
ethnln	-.4762	0.2450	1.0000				
musl	0.3118	-0.2976	-0.2896	1.0000			
fertwdi	-.6393	0.1244	0.4297	0.1206	1.0000		
lpopd	0.1331	-0.3160	-0.1810	-0.1179	-0.3650	1.0000	
urbwdi	0.8187	0.0030	-0.4408	0.2880	-0.5760	0.0326	1.0000
sanicom	0.8238	-0.1412	-0.4585	0.2372	-0.6596	0.1616	0.7661

Model 2-10: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

```
. regress limrcom lgdph giniavni ethnln musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	115.48
Prob > F =	0.0000
R-squared =	0.8460
Root MSE =	.32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnln	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Model 2-10: Infant mortality predicted by 7 baseline var. and access to improved sanitation

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
```

Linear regression

Number of obs =	102
F(8, 93) =	72.97
Prob > F =	0.0000
R-squared =	0.8446
Root MSE =	.31671

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3925397	.0771795	-5.09	0.000	-.545803 -.2392764
giniavni	.0067525	.0058518	1.15	0.251	-.0048679 .0183729
ethnl	.2365155	.1124566	2.10	0.038	.013199 .4598321
musl	.3339288	.1102725	3.03	0.003	.1149496 .5529081
fertwdi	.0712898	.0332693	2.14	0.035	.0052235 .137356
lpopd	-.0712563	.0367101	-1.94	0.055	-.1441552 .0016426
urbwdi	-.0020539	.002255	-0.91	0.365	-.0065319 .0024241
sanicom	-.0067957	.0018458	-3.68	0.000	-.0104611 -.0031302
_cons	6.890374	.6797207	10.14	0.000	5.540583 8.240164

Model 2-10: Means and SDs of access to improved sanitation and infant mortality

```
. summarize imrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

```
. summarize limrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

```
. summarize sanicom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
sanicom	102	52.36275	29.26011	3	100

Model 2-10: How much would infant mortality fall if access to sanitation rose one SD?

```
. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
```

Linear regression

Number of obs =	102
F(8, 93) =	72.97
Prob > F =	0.0000
R-squared =	0.8446
Root MSE =	.31671

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3925397	.0771795	-5.09	0.000	-.545803 -.2392764

giniavni	.0067525	.0058518	1.15	0.251	-.0048679	.0183729
ethnl	.2365155	.1124566	2.10	0.038	.013199	.4598321
musl	.3339288	.1102725	3.03	0.003	.1149496	.5529081
fertwdi	.0712898	.0332693	2.14	0.035	.0052235	.137356
lpopd	-.0712563	.0367101	-1.94	0.055	-.1441552	.0016426
urbwdi	-.0020539	.002255	-0.91	0.365	-.0065319	.0024241
sanicom	-.0067957	.0018458	-3.68	0.000	-.0104611	-.0031302
_cons	6.890374	.6797207	10.14	0.000	5.540583	8.240164

Simulating main parameters. Please wait....

Note: Clarify is expanding your dataset from 105 observations to 1000 observations in order to accommodate the simulations. This will append missing values to the bottom of your original dataset.

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(sanicom 52.36275 81.62286)
```

First Difference: sanicom 52.36275 81.62286

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-10.45067	2.710295	-15.56707 -5.009596

Model 2-10: Robustness checks

Model 2-10: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi sanicom, r
```

Linear regression	Number of obs = 102
	F(7, 94) = 86.03
	Prob > F = 0.0000
	R-squared = 0.8367
	Root MSE = .32292

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4373057	.0728727	-6.00	0.000	-.5819961 -.2926152
giniavni	.0082304	.0060177	1.37	0.175	-.0037178 .0201786
ethnl	.287771	.1158186	2.48	0.015	.0578105 .5177314
musl	.445417	.1013719	4.39	0.000	.2441406 .6466933
lpopd	-.0845035	.035056	-2.41	0.018	-.1541081 -.014899
urbwdi	-.0027982	.0022199	-1.26	0.211	-.0072059 .0016095
sanicom	-.00776	.0018177	-4.27	0.000	-.0113691 -.0041509
_cons	7.596917	.5664155	13.41	0.000	6.472286 8.721548

Model 2-10: Robust Check 1.2: Change specification: Include female schooling

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom mysfx, r
```

Linear regression	Number of obs = 102
	F(9, 92) = 70.99
	Prob > F = 0.0000
	R-squared = 0.8584

Root MSE = .30398

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3563297	.0758712	-4.70	0.000	-.5070165	-.2056428
giniavni	.0076562	.0057581	1.33	0.187	-.0037798	.0190923
ethnl	.1621017	.1096578	1.48	0.143	-.0556882	.3798916
musl	.2170755	.1060194	2.05	0.043	.0065118	.4276392
fertwdi	.0190187	.0349253	0.54	0.587	-.050346	.0883833
lpopd	-.0856704	.03742	-2.29	0.024	-.1599897	-.0113511
urbwdi	-.0016045	.0022322	-0.72	0.474	-.0060378	.0028289
sanicom	-.0055745	.0018794	-2.97	0.004	-.0093071	-.0018418
mysfx	-.0830382	.0263884	-3.15	0.002	-.1354478	-.0306285
_cons	7.146941	.6992749	10.22	0.000	5.758121	8.535762

Model 2-10: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom litfewdi, r
```

Linear regression

Number of obs =	102
F(9, 92) =	64.95
Prob > F =	0.0000
R-squared =	0.8521
Root MSE =	.31067

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3873563	.0746785	-5.19	0.000	-.5356743	-.2390384
giniavni	.0081633	.0059093	1.38	0.170	-.0035731	.0198997
ethnl	.1583481	.1092413	1.45	0.151	-.0586146	.3753107
musl	.2321246	.1127308	2.06	0.042	.0082314	.4560177
fertwdi	.0274454	.0363952	0.75	0.453	-.0448386	.0997294
lpopd	-.0827111	.0366847	-2.25	0.027	-.1555701	-.0098521
urbwdi	-.0019874	.0022962	-0.87	0.389	-.006548	.0025731
sanicom	-.0053685	.0019442	-2.76	0.007	-.0092299	-.001507
litfewdi	-.0049357	.0021636	-2.28	0.025	-.0092328	-.0006385
_cons	7.289939	.7022631	10.38	0.000	5.895183	8.684694

Model 2-10: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom airdist popcrgs latcapab, r
```

Linear regression

Number of obs =	102
F(11, 90) =	54.39
Prob > F =	0.0000
R-squared =	0.8510
Root MSE =	.31527

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3726837	.0769058	-4.85	0.000	-.5254704	-.219897
giniavni	.0079982	.0055791	1.43	0.155	-.0030857	.019082
ethnl	.2866397	.1083714	2.64	0.010	.071341	.5019384
musl	.2643011	.1208758	2.19	0.031	.0241603	.5044419
fertwdi	.0824744	.0383055	2.15	0.034	.0063739	.1585749

lpopd	-.055318	.0344202	-1.61	0.112	-.1236998	.0130637
urbwdi	-.0021944	.0022194	-0.99	0.325	-.0066037	.0022149
sanicom	-.0066337	.0019559	-3.39	0.001	-.0105194	-.0027479
airdist	-.000013	.0000174	-0.75	0.458	-.0000475	.0000216
popcrgs	-.0011008	.00105	-1.05	0.297	-.0031868	.0009853
latcapab	.0052043	.0037516	1.39	0.169	-.0022489	.0126575
_cons	6.591065	.6618971	9.96	0.000	5.276091	7.906039

Model 2-10: Robust Check 1.5: Change specification: Include regional dummy variables

```
regress limrcm lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom afri lati east sout, r
```

Linear regression

Number of obs =	102
F(12, 89) =	55.84
Prob > F =	0.0000
R-squared =	0.8475
Root MSE =	.32069

limrcm	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4041078	.0840232	-4.81	0.000	-.5710601	-.2371555
giniavni	.0078177	.0060952	1.28	0.203	-.0042933	.0199287
ethnl	.2507664	.1342813	1.87	0.065	-.0160477	.5175805
musl	.2102545	.0937663	2.24	0.027	.0239428	.3965662
fertwdi	.0641329	.0403296	1.59	0.115	-.0160011	.144267
lpopd	-.0757521	.0384504	-1.97	0.052	-.1521522	.000648
urbwdi	-.0019729	.00283	-0.70	0.488	-.0075961	.0036502
sanicom	-.0070375	.0020021	-3.51	0.001	-.0110157	-.0030592
afri	-.1864248	.1015766	-1.84	0.070	-.3882554	.0154058
lati	-.1899371	.1353312	-1.40	0.164	-.4588373	.0789631
east	-.1971346	.1569724	-1.26	0.212	-.5090354	.1147662
sout	-.0942961	.1757492	-0.54	0.593	-.4435059	.2549137
_cons	7.160058	.7025021	10.19	0.000	5.764202	8.555915

Model 2-10: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcm lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs =	102
F(10, 91) =	56.26
Prob > F =	0.0000
R-squared =	0.8508
Root MSE =	.31369

limrcm	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3909138	.075919	-5.15	0.000	-.5417176	-.24011
giniavni	.0045345	.0058904	0.77	0.443	-.007166	.0162351
ethnl	.2063489	.114456	1.80	0.075	-.0210039	.4337017
musl	.3155838	.1090344	2.89	0.005	.0990005	.5321672
fertwdi	.0871194	.0329252	2.65	0.010	.0217175	.1525212
lpopd	-.0734313	.0352788	-2.08	0.040	-.1435083	-.0033543
urbwdi	-.0015275	.0023141	-0.66	0.511	-.0061242	.0030691
sanicom	-.0060514	.0019595	-3.09	0.003	-.0099437	-.0021591
gdphf (dropped)						
giniavnf	-.0111894	.0729368	-0.15	0.878	-.1560694	.1336906

ethnlf	-.2832388	.178051	-1.59	0.115	-.6369152	.0704376
_cons	6.880841	.632859	10.87	0.000	5.623744	8.137937

Model 2-10: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom
```

```
Huber iteration 1: maximum difference in weights = .55387808
Huber iteration 2: maximum difference in weights = .15891086
Huber iteration 3: maximum difference in weights = .058084
Huber iteration 4: maximum difference in weights = .01233931
Biweight iteration 5: maximum difference in weights = .18548726
Biweight iteration 6: maximum difference in weights = .03046153
Biweight iteration 7: maximum difference in weights = .01400725
Biweight iteration 8: maximum difference in weights = .00382491
```

```
Robust regression
Number of obs = 102
F( 8, 93) = 59.69
Prob > F = 0.0000
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3752351	.0823483	-4.56	0.000	-.5387625 -.2117076
giniavni	.0093682	.0044427	2.11	0.038	.000546 .0181905
ethnl	.2654827	.1263661	2.10	0.038	.0145446 .5164208
musl	.3546343	.1102349	3.22	0.002	.1357298 .5735389
fertwdi	.0764923	.0340217	2.25	0.027	.008932 .1440526
lpopd	-.0418226	.0258902	-1.62	0.110	-.0932355 .0095902
urbwdi	-.0023009	.0026101	-0.88	0.380	-.007484 .0028822
sanicom	-.0073781	.0021971	-3.36	0.001	-.0117411 -.003015
_cons	6.52733	.601311	10.86	0.000	5.333246 7.721415

Model 2-10: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom
Iteration 1: WLS sum of weighted deviations = 25.06439
```

```
Iteration 1: sum of abs. weighted deviations = 25.361472
Iteration 2: sum of abs. weighted deviations = 24.888519
Iteration 3: sum of abs. weighted deviations = 24.851139
Iteration 4: sum of abs. weighted deviations = 24.613531
Iteration 5: sum of abs. weighted deviations = 24.606678
Iteration 6: sum of abs. weighted deviations = 24.577554
Iteration 7: sum of abs. weighted deviations = 24.566944
Iteration 8: sum of abs. weighted deviations = 24.546452
Iteration 9: sum of abs. weighted deviations = 24.536221
Iteration 10: sum of abs. weighted deviations = 24.510662
Iteration 11: sum of abs. weighted deviations = 24.496837
Iteration 12: sum of abs. weighted deviations = 24.486956
Iteration 13: sum of abs. weighted deviations = 24.448168
Iteration 14: sum of abs. weighted deviations = 24.430248
Iteration 15: sum of abs. weighted deviations = 24.40737
Iteration 16: sum of abs. weighted deviations = 24.389818
```

```
Median regression
Number of obs = 102
Raw sum of deviations 63.87039 (about 4.1431346)
Min sum of deviations 24.38982
Pseudo R2 = 0.6181
```

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.2652755	.1313257	-2.02	0.046	-.5260622 -.0044887
giniavni	.0088065	.0074174	1.19	0.238	-.0059229 .0235359
ethnl	.2912498	.2078874	1.40	0.165	-.1215733 .7040729
musl	.2915659	.1774564	1.64	0.104	-.0608274 .6439592
fertwdi	.0868388	.0548241	1.58	0.117	-.0220309 .1957085
lpopd	-.0319492	.0426377	-0.75	0.456	-.1166192 .0527208
urbwdi	-.0016191	.0041174	-0.39	0.695	-.0097954 .0065573
sanicom	-.0088737	.0035251	-2.52	0.014	-.0158738 -.0018736
_cons	5.746344	.9618477	5.97	0.000	3.836305 7.656383

Model 2-10: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom if ctry ==> "Mongolia" & ctry == "Cuba", r
```

Linear regression

Number of obs =	100
F(8, 91) =	68.14
Prob > F =	0.0000
R-squared =	0.8595
Root MSE =	.29642

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4142016	.0710708	-5.83	0.000	-.555375 -.2730281
giniavni	.0084747	.0051179	1.66	0.101	-.0016914 .0186408
ethnl	.2723105	.1075736	2.53	0.013	.0586288 .4859923
musl	.3787388	.0963171	3.93	0.000	.1874167 .570061
fertwdi	.0676307	.0322582	2.10	0.039	.0035538 .1317077
lpopd	-.0449282	.0305685	-1.47	0.145	-.1056488 .0157925
urbwdi	-.0015414	.0021953	-0.70	0.484	-.0059021 .0028194
sanicom	-.006783	.0018264	-3.71	0.000	-.0104108 -.0031552
_cons	6.849351	.5963946	11.48	0.000	5.664686 8.034016

Model 2-10: Robust Ck 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)

```
. correlate fertwdi fertwdin  
(obs=105)
```

	fertwdi	fertwdin
fertwdi	1.0000	
fertwdin	0.6135	1.0000

Model 2-10: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd urbwdi sanicom, first
```

First-stage regressions

Source	SS	df	MS	Number of obs =	102
Model	192.219143	8	24.0273929	F(8, 93) =	30.10
Residual	74.2260566	93	.79812964	Prob > F =	0.0000

R-squared =	0.7214
Adj R-squared =	0.6975

Total	266.4452	101	2.63807128	Root MSE	= .89338
-------	----------	-----	------------	----------	----------

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3274069	.2248998	-1.46	0.149	-.7740132 .1191995
giniavni	.0180859	.011942	1.51	0.133	-.0056285 .0418003
ethnl	.254901	.3503446	0.73	0.469	-.4408139 .9506159
musl	1.00317	.2866301	3.50	0.001	.43398 1.572361
lpopd	-.2154067	.0685518	-3.14	0.002	-.351537 -.0792765
urbwdi	-.0165918	.0071448	-2.32	0.022	-.0307801 -.0024036
sanicom	-.0121936	.0058495	-2.08	0.040	-.0238095 -.0005777
fertwdin	.3214521	.0658939	4.88	0.000	.1905999 .4523043
_cons	6.925731	1.485938	4.66	0.000	3.974952 9.87651

Model 2-10: Robust Check 4.3: Endog ck: 2SLS using fertwdin as instrument for fertwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs =	102
Model	50.6957945	8	6.33697432	F(8, 93) =	62.71
Residual	9.32832055	93	.100304522	Prob > F =	0.0000
Total	60.0241151	101	.594298169	R-squared =	0.8446
				Adj R-squared =	0.8312
				Root MSE =	.31671

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	.071356	.0726695	0.98	0.329	-.0729512 .2156633
lgdph	-.3924981	.0892297	-4.40	0.000	-.5696906 -.2153056
giniavni	.0067511	.0044895	1.50	0.136	-.002164 .0156663
ethnl	.2364679	.1304529	1.81	0.073	-.0225856 .4955214
musl	.3338252	.1469019	2.27	0.025	.0421071 .6255433
lpopd	-.071244	.0277185	-2.57	0.012	-.1262874 -.0162006
urbwdi	-.0020532	.002606	-0.79	0.433	-.0072283 .0031218
sanicom	-.0067948	.0022928	-2.96	0.004	-.0113478 -.0022417
_cons	6.889717	.8655327	7.96	0.000	5.170941 8.608494

Instrumented: fertwdi

Instruments: lgdph giniavni ethnl musl lpopd urbwdi sanicom fertwdin

Model 2-10: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store imrsani
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom
```

Source	SS	df	MS	Number of obs =	102
Model	50.6957949	8	6.33697437	F(8, 93) =	63.18
Residual	9.32832014	93	.100304518	Prob > F =	0.0000
Total	60.0241151	101	.594298169	R-squared =	0.8446
				Adj R-squared =	0.8312
				Root MSE =	.31671

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3925397	.0793971	-4.94	0.000	-.5502066 -.2348728
giniavni	.0067525	.0042835	1.58	0.118	-.0017536 .0152586

ethnl	.2365155	.1218374	1.94	0.055	-.0054294	.4784605
musl	.3339288	.1062842	3.14	0.002	.1228694	.5449883
fertwdi	.0712898	.0328024	2.17	0.032	.0061507	.1364288
lpopd	-.0712563	.0249624	-2.85	0.005	-.1208266	-.021686
urbwdi	-.0020539	.0025165	-0.82	0.416	-.0070513	.0029434
sanicom	-.0067957	.0021184	-3.21	0.002	-.0110024	-.002589
_cons	6.890374	.5797612	11.88	0.000	5.739083	8.041665

. hausman imrsani

Note: the rank of the differenced variance matrix (3) does not equal the number of coefficients being tested (8); be sure this is what you expect, or there may be problems computing the test. Examine the output of your estimators for anything unexpected and possibly consider scaling your variables so that the coefficients are on a similar scale.

	---- Coefficients ----			
	(b) imrsani	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	.071356	.0712898	.0000663	.0648449
lgdph	-.3924981	-.3925397	.0000416	.040719
giniavni	.0067511	.0067525	-1.37e-06	.0013443
ethnl	.2364679	.2365155	-.0000476	.0466218
musl	.3338252	.3339288	-.0001036	.1014092
lpopd	-.071244	-.0712563	.0000123	.0120496
urbwdi	-.0020532	-.0020539	6.92e-07	.000677
sanicom	-.0067948	-.0067957	8.96e-07	.0008771

b = consistent under H_0 and H_a ; obtained from ivreg

B = inconsistent under H_a , efficient under H_0 ; obtained from regress

Test: H_0 : difference in coefficients not systematic

```
chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          =      0.00
Prob>chi2 =    1.0000
```

Model 2-10: Robust Check 5.1: DepV: change IMR to U5MR (imrcm to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r

Linear regression

Number of obs = 102
 $F(8, 93) = 80.83$
 Prob > F = 0.0000
 R-squared = 0.8464
 Root MSE = .36285

lu5mrcom	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4096311	.0978108	-4.19	0.000	-.6038639 -.2153982
giniavni	.0047237	.0066672	0.71	0.480	-.0085161 .0179635
ethnl	.3147545	.1332603	2.36	0.020	.0501259 .5793831
musl	.2678857	.1221563	2.19	0.031	.0253075 .5104638
fertwdi	.1151728	.0387785	2.97	0.004	.0381663 .1921793
lpopd	-.0818321	.0405013	-2.02	0.046	-.1622596 -.0014046
urbwdi	-.0024012	.0026894	-0.89	0.374	-.0077418 .0029394
sanicom	-.0071498	.0021599	-3.31	0.001	-.0114389 -.0028606
_cons	7.271886	.8159934	8.91	0.000	5.651484 8.892287

Model 2-10: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
```

Linear regression

Number of obs = 102
 $F(8, 93) = 79.79$
 Prob > F = 0.0000
 R-squared = 0.8626
 Root MSE = .29485

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3992965	.0718562	-5.56	0.000	-.5419887	-.2566044
giniavni	.0086589	.0052738	1.64	0.104	-.0018139	.0191317
ethnl	.173157	.1005496	1.72	0.088	-.0265145	.3728285
musl	.2876611	.1052309	2.73	0.007	.0786934	.4966287
fertwdi	.0850558	.031474	2.70	0.008	.0225547	.1475569
lpopd	-.0439106	.0289945	-1.51	0.133	-.1014879	.0136666
urbwdi	-.002201	.0022786	-0.97	0.337	-.0067258	.0023238
sanicom	-.0065992	.0017749	-3.72	0.000	-.0101239	-.0030746
_cons	6.728444	.6184246	10.88	0.000	5.500375	7.956512

Model 2-10: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi sanicom, r
```

Linear regression

Number of obs = 101
 $F(8, 92) = 67.09$
 Prob > F = 0.0000
 R-squared = 0.8492
 Root MSE = .31355

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.4099485	.0808898	-5.07	0.000	-.5706027	-.2492944
giniavni	.0077065	.0048487	1.59	0.115	-.0019235	.0173365
ethnl	.2212194	.1113849	1.99	0.050	-5.67e-07	.4424394
musl	.2775262	.1069672	2.59	0.011	.0650801	.4899722
fertwdi	.0584133	.036241	1.61	0.110	-.0135645	.1303911
lpopd	-.0786456	.0315549	-2.49	0.014	-.1413165	-.0159748
urbwdi	-.0031364	.0023429	-1.34	0.184	-.0077897	.0015168
sanicom	-.0063646	.0020718	-3.07	0.003	-.0104793	-.00225
_cons	7.122723	.7245959	9.83	0.000	5.683613	8.561833

Model 2-10: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi sanicom gdpmf, r
```

Linear regression

Number of obs = 101
 $F(9, 91) = 58.72$
 Prob > F = 0.0000
 R-squared = 0.8493
 Root MSE = .31514

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.4112695	.0814547	-5.05	0.000	-.5730693	-.2494697
giniavni	.007741	.0048925	1.58	0.117	-.0019773	.0174593
ethnl	.2160287	.1128721	1.91	0.059	-.0081778	.4402352
musl	.2775071	.108045	2.57	0.012	.0628889	.4921253
fertwdi	.0601154	.0367947	1.63	0.106	-.0129727	.1332036
lpopd	-.076751	.0333005	-2.30	0.023	-.1428983	-.0106037
urbwdi	-.0029091	.0025448	-1.14	0.256	-.007964	.0021458
sanicom	-.0064799	.0021156	-3.06	0.003	-.0106822	-.0022775
gdpmf	.0549071	.2191937	0.25	0.803	-.3804942	.4903084
_cons	7.112693	.7267494	9.79	0.000	5.669095	8.556292

Model 2-10: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi sanicom, r
```

Linear regression

Number of obs = 102
 F(8, 93) = 75.79
 Prob > F = 0.0000
 R-squared = 0.8422
 Root MSE = .31911

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3847625	.0804299	-4.78	0.000	-.5444802	-.2250447
giniavni	.0076405	.0058598	1.30	0.195	-.0039959	.0192769
ethnannx	.2240378	.1409737	1.59	0.115	-.055908	.5039836
musl	.3239013	.1106455	2.93	0.004	.1041813	.5436213
fertwdi	.0807395	.0338925	2.38	0.019	.0134357	.1480432
lpopd	-.0677707	.0359203	-1.89	0.062	-.1391014	.00356
urbwdi	-.0027998	.0023442	-1.19	0.235	-.0074549	.0018553
sanicom	-.00653	.0018698	-3.49	0.001	-.0102431	-.0028169
_cons	6.719634	.7153742	9.39	0.000	5.299043	8.140226

Model 2-10: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi sanicom ethnannf, r
```

Linear regression

Number of obs = 102
 F(9, 92) = 65.93
 Prob > F = 0.0000
 R-squared = 0.8427
 Root MSE = .32034

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3998635	.0903895	-4.42	0.000	-.5793848	-.2203422
giniavni	.0071697	.0059121	1.21	0.228	-.0045722	.0189116
ethnannx	.2154701	.1438504	1.50	0.138	-.0702291	.5011693
musl	.3264894	.1104149	2.96	0.004	.1071959	.5457828
fertwdi	.0782106	.0343458	2.28	0.025	.0099969	.1464243
lpopd	-.0684293	.0358479	-1.91	0.059	-.1396263	.0027678
urbwdi	-.0024457	.0024969	-0.98	0.330	-.0074048	.0025134
sanicom	-.0064621	.0018801	-3.44	0.001	-.0101961	-.0027281
ethnannf	-.0747285	.1807286	-0.41	0.680	-.433671	.284214

_cons	6.859991	.7961276	8.62	0.000	5.278813	8.441169
-------	----------	----------	------	-------	----------	----------

Table 2.3: Public Health Spending, Health Service Utilization, and Infant Mortality**Table 2.3: Summary of robustness checks for Models 3-1, 3-2, and 3-3**

This table gives the t-score of the association between the share of GDP devoted to public health spending and the utilization of common maternal and infant health care services (trained attendance at birth in Model 3-1, child immunization in Models 3-2 and 3-3) in the context of 16 checks for robustness. The statistical output follows the table. In each check for robustness the 7 socioeconomic "baseline" variables (Model 2-3) are controlled for, just as in the models in Table 2.3.

	3-1 delivcom	3-2 dpt3con	3-3 mcvcon
Basic Model	**3.19	*2.25	**3.13
1.1. Specif: Excl fertility	***3.51	*2.37	**3.25
1.2. Specif: Incl fem sch	*2.74	*2.05	**3.04
1.3. Specif: Incl fem lit	*2.26	†1.89	**2.82
1.4. Specif: Incl geogr	**3.15	*2.25	**3.20
1.5. Specif: Incl reg dum	***3.90	**2.67	***3.74
2.1. Imput: msg data flags	**3.10	†1.89	**2.66
3.1. Outliers: rreg	**2.76	†1.68	*2.34
3.2. Outliers: qreg	***3.48	0.95	*2.61
3.3. Outliers: cooksd	***3.51	†1.90	**3.05
4.4. Endog: 2SLS	0.38	1.57	1.51
6.1. IV hlxpuwb	***3.35	**2.67	**2.86
6.2. IV lhxpudw	***3.56	***3.38	***4.39
7.1. IV lgdpmx	**3.07	*2.36	**3.17
7.2. IV lgdpmx, mdf	**3.12	*2.29	**3.13
7.3. IV ethnannx	**3.26	*2.14	**3.08
7.4. IV ethnannx, mdf	***3.44	*2.11	**3.00

Table 2.3, Model 3-1: Public Health Spending/GDP and Trained Attendance At Birth**Model 3-1: Bivariate correlations among independent variables**

```
. correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi hlxpuwdi delivcom  
(obs=103)
```

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	hlxpuwdi	hlxpuwdi
lgdph	1.0000								
giniavni	-0.0087	1.0000							
ethnl	-0.4740	0.2447	1.0000						
musl	0.2922	-0.2972	-0.2867	1.0000					
fertwdi	-0.6565	0.1217	0.4296	0.1280	1.0000				
lpopd	0.1954	-0.2995	-0.1865	-0.1271	-0.4055	1.0000			
urbwdi	0.8283	0.0029	-0.4392	0.2681	-0.5968	0.1051	1.0000		
hlxpuwdi	0.2568	0.0840	-0.2272	0.0227	-0.2360	-0.1793	0.3429	1.0000	
delivcom	0.7031	-0.0423	-0.3721	0.0313	-0.6992	0.1330	0.7087	0.4184	

Model 3-1: Birth attendance predicted by 7 baseline variables only

. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi

Source	SS	df	MS	Number of obs	=	103
Model	51477.8811	7	7353.98302	F(7, 95)	=	25.02
Residual	27921.3227	95	293.90866	Prob > F	=	0.0000
Total	79399.2039	102	778.423567	R-squared	=	0.6483
				Adj R-squared	=	0.6224
				Root MSE	=	17.144

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.711868	3.846366	2.00	0.048	.0758649 15.34787
giniavni	-.234277	.2269607	-1.03	0.305	-.684851 .2162971
ethnl	.9348624	6.572201	0.14	0.887	-12.11261 13.98233
musl	-8.358008	5.744649	-1.45	0.149	-19.76258 3.046562
fertwdi	-6.312923	1.733646	-3.64	0.000	-9.754646 -2.871199
lpopd	-2.495193	1.288191	-1.94	0.056	-5.052575 .0621895
urbwdi	.3812785	.1301847	2.93	0.004	.1228292 .6397277
_cons	35.74748	30.51346	1.17	0.244	-24.8294 96.32436

Model 3-1: Birth attendance predicted by 7 baseline variables and pub health sp/GDP

. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r

Linear regression	Number of obs	=	103
F(8, 94)	=	47.09	
Prob > F	=	0.0000	
R-squared	=	0.6729	
Root MSE	=	16.621	

delivcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	8.251252	4.54096	1.82	0.072	-.7649317 17.26744
giniavni	-.2488197	.188877	-1.32	0.191	-.6238395 .1262001
ethnl	3.315681	6.033629	0.55	0.584	-8.664231 15.29559
musl	-7.283396	4.993135	-1.46	0.148	-17.19738 2.630589
fertwdi	-5.858123	1.921699	-3.05	0.003	-9.673702 -2.042544
lpopd	-1.580643	1.119976	-1.41	0.161	-3.804381 .6430945
urbwdi	.3156719	.1256206	2.51	0.014	.0662492 .5650945
hlxpuwdi	3.81771	1.196239	3.19	0.002	1.442548 6.192871
_cons	20.7688	37.65842	0.55	0.583	-54.00288 95.54049

Model 3-1: Means and SDs of % GDP to public health spending and birth attendance

. summarize hlxpuwdi

Variable	Obs	Mean	Std. Dev.	Min	Max
hlxpuwdi	105	2.001905	1.275206	0	7

. summarize delivcom

Variable	Obs	Mean	Std. Dev.	Min	Max
delivcom	103	59.42718	27.90024	7	100

Model 3-1: How much would birth attendance rise if pub health spending/GDP rose 1 SD?

```
. estsmp regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi,  
> r
```

Linear regression

Number of obs =	103
F(8, 94) =	47.09
Prob > F =	0.0000
R-squared =	0.6729
Root MSE =	16.621

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	8.251252	4.54096	1.82	0.072	-.7649317 17.26744
giniavni	-.2488197	.188877	-1.32	0.191	-.6238395 .1262001
ethnl	3.315681	6.033629	0.55	0.584	-8.664231 15.29559
musl	-7.283396	4.993135	-1.46	0.148	-17.19738 2.630589
fertwdi	-5.858123	1.921699	-3.05	0.003	-9.673702 -2.042544
lpopd	-1.580643	1.119976	-1.41	0.161	-3.804381 .6430945
urbwdi	.3156719	.1256206	2.51	0.014	.0662492 .5650945
hlxpuwdi	3.81771	1.196239	3.19	0.002	1.442548 6.192871
_cons	20.7688	37.65842	0.55	0.583	-54.00288 95.54049

Simulating main parameters. Please wait....

Note: Clarify is expanding your dataset from 105 observations to 1000 observations in order to accommodate the simulations. This will append missing values to the bottom of your original dataset.

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000  
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10
```

. setx mean

. simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)

First Difference: hlxpuwdi 2.001905 3.277111

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(delivcom)	4.894825	1.565343	1.718245 7.981657

Model 3-1: Robustness checks

Model 3-1: Robust Check 1.1: Change specification: Exclude fertility

```
. regress delivcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs =	103
F(7, 95) =	40.06

Prob > F = 0.0000
 R-squared = 0.6311
 Root MSE = 17.559

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	13.48294	3.843582	3.51	0.001	5.852462	21.11341
giniavni	-.4119464	.1991054	-2.07	0.041	-.8072205	-.0166723
ethnl	-.8967402	6.414611	-0.14	0.889	-13.63135	11.83787
musl	-16.67263	4.098066	-4.07	0.000	-24.80832	-8.536945
lpopd	-.4390474	1.168026	-0.38	0.708	-2.757872	1.879777
urbwdi	.3925543	.1352529	2.90	0.005	.1240434	.6610652
hlxpuwdi	4.322037	1.231286	3.51	0.001	1.877625	6.76645
_cons	-44.88779	26.64933	-1.68	0.095	-97.7934	8.017806

Model 3-1: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx, r
```

Linear regression

Number of obs =	103
F(9, 93) =	42.82
Prob > F =	0.0000
R-squared =	0.6965
Root MSE =	16.097

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.464301	4.570794	1.20	0.235	-3.61239	14.54099
giniavni	-.267919	.17819	-1.50	0.136	-.621769	.0859311
ethnl	6.35519	5.231114	1.21	0.227	-4.032766	16.74315
musl	-1.838512	4.96041	-0.37	0.712	-11.6889	8.01188
fertwdi	-3.303354	2.285219	-1.45	0.152	-7.841345	1.234638
lpopd	-1.112214	1.16463	-0.95	0.342	-3.424938	1.200509
urbwdi	.2834029	.1157814	2.45	0.016	.053484	.5133219
hlxpuwdi	3.195544	1.164274	2.74	0.007	.8835269	5.507561
mysfx	3.911953	1.542101	2.54	0.013	.8496452	6.974261
_cons	15.00368	38.13979	0.39	0.695	-60.73439	90.74174

Model 3-1: Robust Check 1.3: Change specification: Include female literacy

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r
```

Linear regression

Number of obs =	103
F(9, 93) =	48.74
Prob > F =	0.0000
R-squared =	0.7134
Root MSE =	15.643

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.767517	4.252885	1.36	0.178	-2.67787	14.2129
giniavni	-.3100409	.1823468	-1.70	0.092	-.6721455	.0520636
ethnl	9.312088	5.47255	1.70	0.092	-1.555313	20.17949
musl	.7913792	5.048419	0.16	0.876	-9.233781	10.81654

fertwdi	-1.972895	1.937355	-1.02	0.311	-5.820098	1.874308
lpopd	-.7218345	1.111479	-0.65	0.518	-2.929011	1.485342
urbwdi	.2984626	.1143985	2.61	0.011	.0712898	.5256353
hlxpuwdi	2.72965	1.209294	2.26	0.026	.3282326	5.131068
litfewdi	.4057638	.1243637	3.26	0.002	.1588021	.6527256
_cons	-3.201772	33.47274	-0.10	0.924	-69.67199	63.26845

Model 3-1: Robust Check 1.4: Change specification: Include geographical variables

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r
```

Linear regression

Number of obs =	103
F(11, 91) =	36.11
Prob > F =	0.0000
R-squared =	0.6807
Root MSE =	16.692

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.812281	4.740289	1.44	0.154	-2.60372	16.22828
giniavni	-.3002747	.2003229	-1.50	0.137	-.6981916	.0976422
ethnl	2.569855	5.824115	0.44	0.660	-8.999034	14.13874
musl	-7.137599	5.847078	-1.22	0.225	-18.7521	4.476904
fertwdi	-5.707643	2.258926	-2.53	0.013	-10.19472	-1.220565
lpopd	-1.535141	1.260377	-1.22	0.226	-4.038724	.9684423
urbwdi	.3557863	.1283773	2.77	0.007	.1007806	.6107921
hlxpuwdi	3.743959	1.189776	3.15	0.002	1.380615	6.107304
airdist	.0013916	.0009342	1.49	0.140	-.0004641	.0032473
popcrgs	.0332882	.0653132	0.51	0.612	-.0964484	.1630247
latcapab	.0980711	.182555	0.54	0.592	-.264552	.4606942
_cons	21.231	41.0566	0.52	0.606	-60.32289	102.7849

Model 3-1: Robust Check 1.5: Change specification: Include regional dummies

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
```

Linear regression

Number of obs =	103
F(12, 90) =	42.50
Prob > F =	0.0000
R-squared =	0.7347
Root MSE =	15.299

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.989398	4.699993	1.27	0.206	-3.347959	15.32675
giniavni	-.1286967	.202916	-0.63	0.528	-.5318247	.2744313
ethnl	-8.515075	7.004067	-1.22	0.227	-22.42988	5.399726
musl	-13.54531	6.797569	-1.99	0.049	-27.04987	-.0407533
fertwdi	-8.399198	2.16415	-3.88	0.000	-12.69866	-4.099737
lpopd	-2.104945	1.031978	-2.04	0.044	-4.155149	-.0547419
urbwdi	.3822632	.1208103	3.16	0.002	.1422524	.622274
hlxpuwdi	3.973419	1.019452	3.90	0.000	1.9481	5.998738
afri	3.117046	7.363126	0.42	0.673	-11.51109	17.74518
lati	-20.89182	7.609313	-2.75	0.007	-36.00905	-5.774595
east	-4.600719	8.504167	-0.54	0.590	-21.49573	12.29429

sout	-13.26798	12.617	-1.05	0.296	-38.33385	11.79789
_cons	54.33424	40.81654	1.33	0.186	-26.75493	135.4234

Model 3-1: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
Linear regression
Number of obs = 103
F( 10, 92) = 38.44
Prob > F = 0.0000
R-squared = 0.6940
Root MSE = 16.251
```

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.943312	3.988723	1.99	0.049	.0213628	15.86526
giniavni	-.1268646	.1938498	-0.65	0.514	-.5118671	.2581379
ethnl	4.127212	5.935897	0.70	0.489	-7.661992	15.91642
musl	-7.233594	5.068725	-1.43	0.157	-17.30052	2.833331
fertwdi	-7.11001	1.807048	-3.93	0.000	-10.69896	-3.521058
lpopd	-1.497105	1.110983	-1.35	0.181	-3.703613	.7094036
urbwdi	.2415236	.12904	1.87	0.064	-.014761	.4978083
hlxpuwdi	3.694542	1.192889	3.10	0.003	1.325361	6.063723
gdphf (dropped)						
giniavnf	9.615227	4.835653	1.99	0.050	.0112018	19.21925
ethnlf	4.235596	6.012378	0.70	0.483	-7.705504	16.1767
_cons	24.05042	33.41789	0.72	0.474	-42.32038	90.42123

Model 3-1: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
Huber iteration 1: maximum difference in weights = .54379223
Huber iteration 2: maximum difference in weights = .07742036
Huber iteration 3: maximum difference in weights = .02844888
Biweight iteration 4: maximum difference in weights = .15594065
Biweight iteration 5: maximum difference in weights = .03836834
Biweight iteration 6: maximum difference in weights = .0085122

Robust regression
Number of obs = 103
F( 8, 94) = 23.52
Prob > F = 0.0000
```

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.3366	3.845709	2.69	0.009	2.700856 17.97235
giniavni	-.2764323	.2266567	-1.22	0.226	-.7264646 .1736
ethnl	5.439524	6.625876	0.82	0.414	-7.716308 18.59536
musl	-8.125293	5.750271	-1.41	0.161	-19.54259 3.292006
fertwdi	-5.360818	1.739734	-3.08	0.003	-8.8151 -1.906536
lpopd	-1.627487	1.333976	-1.22	0.226	-4.276127 1.021153
urbwdi	.293884	.1324318	2.22	0.029	.0309376 .5568304
hlxpuwdi	4.085955	1.478943	2.76	0.007	1.149479 7.022431
_cons	3.668407	31.01089	0.12	0.906	-57.90444 65.24126

Model 3-1: Robust Check 3.2: Outlier checks: Median regression

```
. greg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
Iteration 1: WLS sum of weighted deviations = 1269.6316

Iteration 1: sum of abs. weighted deviations = 9625.4237
Iteration 2: sum of abs. weighted deviations = 1262.7028
Iteration 3: sum of abs. weighted deviations = 1260.8199
Iteration 4: sum of abs. weighted deviations = 1255.1114
Iteration 5: sum of abs. weighted deviations = 1252.779
Iteration 6: sum of abs. weighted deviations = 1251.5892
Iteration 7: sum of abs. weighted deviations = 1250.6907
Iteration 8: sum of abs. weighted deviations = 1250.394
Iteration 9: sum of abs. weighted deviations = 1250.3871

Median regression
Number of obs = 103
Raw sum of deviations 2456 (about 61)
Min sum of deviations 1250.387
Pseudo R2 = 0.4909
```

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.03835	3.127914	3.21	0.002	3.827803 16.2489
giniavni	-.4550941	.1845519	-2.47	0.015	-.8215262 -.088662
ethnl	7.088273	5.492712	1.29	0.200	-3.817636 17.99418
musl	-8.409115	4.814023	-1.75	0.084	-17.96747 1.149241
fertwdi	-5.913531	1.399697	-4.22	0.000	-8.692661 -3.1344
lpopd	-2.338902	1.105715	-2.12	0.037	-4.534326 -.1434783
urbwdi	.2796092	.1062478	2.63	0.010	.0686517 .4905667
hlxpuwdi	3.824518	1.099556	3.48	0.001	1.641324 6.007712
_cons	19.99704	25.36376	0.79	0.432	-30.3633 70.35738

Model 3-1: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi if ctry == "Oman" & ctry
~= "Myanmar", r

Linear regression
Number of obs = 101
F( 8, 92) = 50.25
Prob > F = 0.0000
R-squared = 0.7037
Root MSE = 15.771
```

delivcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.972333	4.042637	1.97	0.052	-.0566937 16.00136
giniavni	-.2352453	.1768181	-1.33	0.187	-.5864213 .1159307
ethnl	5.229479	5.961565	0.88	0.383	-6.610703 17.06966
musl	-7.658435	4.704208	-1.63	0.107	-17.0014 1.684529
fertwdi	-5.92826	1.617772	-3.66	0.000	-9.141296 -2.715225
lpopd	-1.274668	1.135206	-1.12	0.264	-3.529285 .9799497
urbwdi	.3304144	.1254109	2.63	0.010	.0813375 .5794913
hlxpuwdi	4.173773	1.188164	3.51	0.001	1.813977 6.533569
_cons	18.69378	33.38096	0.56	0.577	-47.60369 84.99125

Model 3-1: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)

```
. correlate hlxpuwdi hlxwdns
```

(obs=104)

	hlxpuwdi	hlxwdns
hlxpuwdi	1.0000	
hlxwdns	0.4546	1.0000

Model 3-1: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwdi = hlxwdns), first
```

First-stage regressions

Source	SS	df	MS	Number of obs	=	103
Model	54.698789	8	6.83734862	F(8, 94)	=	5.63
Residual	114.157711	94	1.21444374	Prob > F	=	0.0000
Total	168.8565	102	1.65545589	R-squared	=	0.3239
				Adj R-squared	=	0.2664
				Root MSE	=	1.102

hlxpuwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.0757748	.2477807	-0.31	0.760	-.5677492 .4161996
giniavni	-.0074927	.0148557	-0.50	0.615	-.036989 .0220037
ethnl	-.1139319	.4409485	-0.26	0.797	-.9894454 .7615816
musl	-.4437587	.3714554	-1.19	0.235	-1.181292 .2937746
fertwdi	-.0993302	.1115485	-0.89	0.375	-.3208123 .1221519
lpopd	-.2140229	.0830476	-2.58	0.012	-.3789158 -.0491299
urbwdi	.0142688	.0083995	1.70	0.093	-.0024087 .0309463
hlxwdns	.3855961	.0955644	4.03	0.000	.1958507 .5753414
_cons	2.841817	1.97967	1.44	0.154	-1.088863 6.772497

Model 3-1: Robust Check 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlxpuwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	103
Model	52661.7135	8	6582.71418	F(8, 94)	=	22.64
Residual	26737.4904	94	284.441387	Prob > F	=	0.0000
Total	79399.2039	102	778.423567	R-squared	=	0.6633
				Adj R-squared	=	0.6346
				Root MSE	=	16.865

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
hlxpuwdi	1.422777	3.792898	0.38	0.708	-6.108111 8.953666
lgdph	7.912884	3.821668	2.07	0.041	.3248734 15.5009
giniavni	-.2396967	.2237424	-1.07	0.287	-.6839425 .2045491
ethnl	1.822142	6.884572	0.26	0.792	-11.84734 15.49162
musl	-7.957524	5.751331	-1.38	0.170	-19.37693 3.461879
fertwdi	-6.143429	1.764335	-3.48	0.001	-9.646558 -2.640299
lpopd	-2.15436	1.559342	-1.38	0.170	-5.25047 .94175
urbwdi	.3568283	.1437031	2.48	0.015	.0715024 .6421542
_cons	30.16525	33.50424	0.90	0.370	-36.3582 96.68871

Instrumented: hlxpuwdi

Instruments: lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxwdns

Model 3-1: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store ivwdns
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
```

Source	SS	df	MS	Number of obs	=	103
Model	53429.8941	8	6678.73676	F(8, 94)	=	24.17
Residual	25969.3098	94	276.269253	Prob > F	=	0.0000
Total	79399.2039	102	778.423567	R-squared	=	0.6729

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	8.251252	3.734674	2.21	0.030	.8359684 15.66654
giniavni	-.2488197	.2201126	-1.13	0.261	-.6858585 .1882191
ethnl	3.315681	6.434571	0.52	0.608	-9.460311 16.09167
musl	-7.283396	5.584248	-1.30	0.195	-18.37105 3.804258
fertwdi	-5.858123	1.689504	-3.47	0.001	-9.212672 -2.503574
lpopd	-1.580643	1.295461	-1.22	0.225	-4.152811 .9915243
urbwdi	.3156719	.1286082	2.45	0.016	.0603173 .5710264
hlxpuwdi	3.81771	1.436243	2.66	0.009	.9660161 6.669403
_cons	20.7688	30.11554	0.69	0.492	-39.0263 80.5639

```
. hausman ivwdns
```

---- Coefficients ----				
	(b) ivwdns	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
hlxpuwdi	1.422777	3.81771	-2.394932	3.510453
lgdph	7.912884	8.251252	-.3383675	.8107725
giniavni	-.2396967	-.2488197	.009123	.0401384
ethnl	1.822142	3.315681	-1.493539	2.448189
musl	-7.957524	-7.283396	-.6741273	1.376221
fertwdi	-6.143429	-5.858123	-.2853055	.5083866
lpopd	-2.15436	-1.580643	-.5737168	.8679454
urbwdi	.3568283	.3156719	.0411564	.0641134

b = consistent under Ho and Ha; obtained from ivreg
 B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

```
chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          =      0.47
  Prob>chi2 =      0.9999
```

Model 3-1: Robust Ck 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs	=	103
F(8, 94)	=	46.65
Prob > F	=	0.0000
R-squared	=	0.6763
Root MSE	=	16.536

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.513136	4.40876	1.70	0.092	-1.24056	16.26683
giniavni	-.2322485	.1846387	-1.26	0.212	-.5988529	.134356
ethnl	4.181078	5.968821	0.70	0.485	-7.670155	16.03231
musl	-6.78713	5.104074	-1.33	0.187	-16.92139	3.347128
fertwdi	-6.563385	1.932632	-3.40	0.001	-10.40067	-2.726099
lpopd	-1.869744	1.088785	-1.72	0.089	-4.031552	.2920642
urbwdi	.3351347	.1192435	2.81	0.006	.098374	.5718954
hlxpuwb	3.311527	.9895807	3.35	0.001	1.346691	5.276362
_cons	29.01001	35.75184	0.81	0.419	-41.9761	99.99613

Model 3-1: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to hlxpuwd)

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwd, r
```

Linear regression

Number of obs =	103
F(8, 94) =	49.01
Prob > F =	0.0000
R-squared =	0.6784
Root MSE =	16.48

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.751886	4.48288	1.95	0.054	-.1489764	17.65275
giniavni	-.3117208	.1851524	-1.68	0.096	-.6793453	.0559036
ethnl	1.058245	5.592337	0.19	0.850	-10.04547	12.16196
musl	-8.547277	5.019832	-1.70	0.092	-18.51427	1.419717
fertwdi	-5.670542	1.873706	-3.03	0.003	-9.390829	-1.950256
lpopd	-1.852032	1.038925	-1.78	0.078	-3.914843	.2107787
urbwdi	.2899388	.1270653	2.28	0.025	.0376477	.5422298
hlxpuwd	8.198906	2.302741	3.56	0.001	3.626761	12.77105
_cons	25.61421	36.30773	0.71	0.482	-46.47563	97.70406

Model 3-1: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwd, r
```

Linear regression

Number of obs =	102
F(8, 93) =	43.11
Prob > F =	0.0000
R-squared =	0.6616
Root MSE =	16.762

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	5.830689	4.511807	1.29	0.199	-3.128865	14.79024
giniavni	-.261006	.1914881	-1.36	0.176	-.6412635	.1192515
ethnl	2.63069	6.210203	0.42	0.673	-9.701541	14.96292
musl	-5.579204	4.863469	-1.15	0.254	-15.23709	4.078681
fertwdi	-6.204189	2.03317	-3.05	0.003	-10.24166	-2.166716
lpopd	-1.63059	1.170379	-1.39	0.167	-3.95473	.6935503
urbwdi	.3606391	.1164574	3.10	0.003	.1293778	.5919005

hlxpuwdi	3.796459	1.238606	3.07	0.003	1.336833	6.256085
_cons	39.60169	38.6098	1.03	0.308	-37.06973	116.2731

Model 3-1: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
```

Linear regression

Number of obs = 102
 F(9, 92) = 38.23
 Prob > F = 0.0000
 R-squared = 0.6618
 Root MSE = 16.847

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	5.67824	4.391028	1.29	0.199	-3.042721	14.3992
giniavni	-.2574052	.1936109	-1.33	0.187	-.6419331	.1271227
ethnl	2.36224	6.077415	0.39	0.698	-9.708031	14.43251
musl	-5.59905	4.879069	-1.15	0.254	-15.2893	4.091201
fertwdi	-6.116353	2.108555	-2.90	0.005	-10.30413	-1.92858
lpopd	-1.557237	1.201215	-1.30	0.198	-3.942953	.8284793
urbwdi	.3693133	.1081992	3.41	0.001	.1544203	.5842063
hlxpuwdi	3.764232	1.206322	3.12	0.002	1.368373	6.160091
gdpmf	2.528136	15.50625	0.16	0.871	-28.26861	33.32489
_cons	39.62965	38.90775	1.02	0.311	-37.64451	116.9038

Model 3-1: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 103
 F(8, 94) = 47.24
 Prob > F = 0.0000
 R-squared = 0.6737
 Root MSE = 16.601

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.681722	4.640187	1.87	0.064	-.5314769	17.89492
giniavni	-.2411337	.1892287	-1.27	0.206	-.6168517	.1345843
ethnannx	5.433245	6.689248	0.81	0.419	-7.848413	18.7149
musl	-7.121736	4.878412	-1.46	0.148	-16.80794	2.564465
fertwdi	-5.765486	1.89937	-3.04	0.003	-9.536729	-1.994242
lpopd	-1.453057	1.113376	-1.31	0.195	-3.663691	.7575758
urbwdi	.3022776	.1234077	2.45	0.016	.0572488	.5473064
hlxpuwdi	3.880018	1.191447	3.26	0.002	1.514372	6.245664
_cons	14.90385	39.72571	0.38	0.708	-63.97248	93.78018

Model 3-1: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf, r
```

Linear regression

Number of obs = 103

F(9, 93) = 40.07
 Prob > F = 0.0000
 R-squared = 0.6946
 Root MSE = 16.149

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	12.10292	5.005157	2.42	0.018	2.163672	22.04217
giniavni	-.1219882	.204624	-0.60	0.553	-.528331	.2843546
ethnannx	7.86267	6.537898	1.20	0.232	-5.1203	20.84564
musl	-7.650245	5.212564	-1.47	0.146	-18.00136	2.700875
fertwdi	-5.060965	1.953984	-2.59	0.011	-8.94119	-1.18074
lpopd	-1.183101	1.117294	-1.06	0.292	-3.401825	1.035623
urbwdi	.2078497	.1315275	1.58	0.117	-.0533377	.4690372
hlxpuwdi	4.178333	1.215245	3.44	0.001	1.765098	6.591568
ethnannf	17.86057	8.431802	2.12	0.037	1.116682	34.60446
_cons	-19.66454	44.55622	-0.44	0.660	-108.1444	68.81529

Table 2.3, Model 3-2: Public health spending/GDP and DTP3 Immunization**Model 3-2: Bivariate correlations among independent variables**

```
. correlate lgdph giniavni ethnln musl fertwdi lpopd urbwdi hlxpuwdi hlxpuwdi dtp3con
(obs=98)
```

	lgdph	giniavni	ethnln	musl	fertwdi	lpopd	urbwdi	hlxpuwdi	hlxpuwdi
lgdph	1.0000								
giniavni	0.0553	1.0000							
ethnln	-0.4639	0.1837	1.0000						
musl	0.3037	-0.2999	-0.2504	1.0000					
fertwdi	-0.6226	0.0745	0.4365	0.1169	1.0000				
lpopd	0.0816	-0.2807	-0.1644	-0.1579	-0.3660	1.0000			
urbwdi	0.8128	0.0595	-0.4289	0.2752	-0.5620	-0.0329	1.0000		
hlxpuwdi	0.2598	0.0658	-0.2482	0.0241	-0.2458	-0.1809	0.3561	1.0000	
hlxpuwdi	0.2598	0.0658	-0.2482	0.0241	-0.2458	-0.1809	0.3561	1.0000	1.0000
dtp3con	0.5026	-0.0153	-0.3702	0.1021	-0.4714	0.1826	0.3716	0.2934	0.2934
		dtp3con							
dtp3con		1.0000							

Model 3-2: DTP3 immuniz predicted by 7 baseline variables only

```
. regress dtp3con lgdph giniavni ethnln musl fertwdi lpopd urbwdi, r
```

Linear regression
 Number of obs = 98
 F(7, 90) = 5.68
 Prob > F = 0.0000
 R-squared = 0.3191
 Root MSE = 18.249

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	9.669254	3.932528	2.46	0.016	1.8566	17.48191

giniavni	.1054687	.2497112	0.42	0.674	-.3906262	.6015636
ethnl	-9.336667	6.801629	-1.37	0.173	-22.84929	4.175957
musl	2.107929	6.430967	0.33	0.744	-10.66831	14.88417
fertwdi	-3.151612	1.609842	-1.96	0.053	-6.349845	.0466205
lpopd	.7661703	1.420784	0.54	0.591	-2.056466	3.588807
urbwdi	-.1454248	.1249389	-1.16	0.248	-.3936376	.1027881
_cons	16.01652	29.31241	0.55	0.586	-42.2177	74.25074

Model 3-2: DTP3 immunz predicted by 7 baseline variables and pub health sp/GDP

```
. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs =	98
F(8, 89) =	6.14
Prob > F =	0.0000
R-squared =	0.3507
Root MSE =	17.92

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	10.22498	3.933963	2.60	0.011	2.408276	18.04168
giniavni	.1078792	.239947	0.45	0.654	-.3688904	.5846488
ethnl	-7.076158	6.939308	-1.02	0.311	-20.86442	6.7121
musl	3.104501	6.185836	0.50	0.617	-9.186623	15.39563
fertwdi	-2.739265	1.621979	-1.69	0.095	-5.962103	.4835728
lpopd	1.53907	1.473171	1.04	0.299	-1.388089	4.466229
urbwdi	-.2012167	.1174769	-1.71	0.090	-.4346408	.0322075
hlxpuwdi	3.272068	1.453312	2.25	0.027	.3843691	6.159768
_cons	1.716385	29.9947	0.06	0.954	-57.88244	61.31521

Model 3-2: Means and SDs of % GDP to public health spending and DTP3 immz

```
. summarize hlxpuwdi
```

Variable	Obs	Mean	Std. Dev.	Min	Max
hlxpuwdi	105	2.001905	1.275206	0	7

```
. summarize dtp3con
```

Variable	Obs	Mean	Std. Dev.	Min	Max
dtp3con	98	71.93878	21.30186	17	99

Model 3-2: How much would DTP3 immz rise if pub health spending/GDP rose 1 SD?

```
. estsimp regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs =	98
F(8, 89) =	6.14
Prob > F =	0.0000
R-squared =	0.3507
Root MSE =	17.92

dtp3con		Robust Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.22498	3.933963	2.60	0.011	2.408276	18.04168
giniavni	.1078792	.239947	0.45	0.654	-.3688904	.5846488
ethnl	-7.076158	6.939308	-1.02	0.311	-20.86442	6.7121
musl	3.104501	6.185836	0.50	0.617	-9.186623	15.39563
fertwdi	-2.739265	1.621979	-1.69	0.095	-5.962103	.4835728
lpopd	1.53907	1.473171	1.04	0.299	-1.388089	4.466229
urbwdi	-.2012167	.1174769	-1.71	0.090	-.4346408	.0322075
hlxpuwdi	3.272068	1.453312	2.25	0.027	.3843691	6.159768
_cons	1.716385	29.9947	0.06	0.954	-57.88244	61.31521

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)
```

First Difference: hlxpuwdi 2.001905 3.277111

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(dtp3con)	4.172606	1.889536	.3083191 8.018772

Model 3-2: Robustness checks

Model 3-2: Robust Check 1.1: Change specification: Exclude fertility

```
. regress dtp3con lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 98
F(7, 90) = 5.91
Prob > F = 0.0000
R-squared = 0.3343
Root MSE = 18.044

dtp3con		Robust Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	12.54378	3.391595	3.70	0.000	5.805789	19.28178
giniavni	.0364746	.2312577	0.16	0.875	-.4229592	.4959084
ethnl	-9.040406	6.618273	-1.37	0.175	-22.18876	4.107948
musl	-.9605022	5.419817	-0.18	0.860	-11.72792	9.806911
lpopd	2.256815	1.446334	1.56	0.122	-.6165796	5.130209
urbwdi	-.1602129	.1226581	-1.31	0.195	-.4038947	.0834688
hlxpuwdi	3.527754	1.487324	2.37	0.020	.5729258	6.482582
_cons	-29.22985	22.94114	-1.27	0.206	-74.80642	16.34673

Model 3-2: Robust Check 1.2: Change specification: Include mean years of female school

. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx, r

Linear regression

Number of obs = 98
 F(9, 88) = 5.86
 Prob > F = 0.0000
 R-squared = 0.3620
 Root MSE = 17.864

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.770613	3.981244	2.20	0.030	.8587258	16.6825
giniavni	.1070342	.238623	0.45	0.655	-.3671788	.5812473
ethnl	-5.525553	6.950977	-0.79	0.429	-19.33916	8.288052
musl	6.137638	6.822117	0.90	0.371	-7.419886	19.69516
fertwdi	-1.513126	1.949607	-0.78	0.440	-5.38756	2.361309
lpopd	1.807	1.501709	1.20	0.232	-1.177331	4.791331
urbwdi	-.2223119	.114557	-1.94	0.056	-.4499699	.0053461
hlxpuwdi	2.985784	1.458047	2.05	0.044	.0882224	5.883347
mysfx	2.015117	1.433104	1.41	0.163	-.8328766	4.86311
_cons	-1.089218	30.62197	-0.04	0.972	-61.94394	59.7655

Model 3-2: Robust Check 1.3: Change specification: Include female literacy

. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r

Linear regression

Number of obs = 98
 F(9, 88) = 5.70
 Prob > F = 0.0000
 R-squared = 0.3713
 Root MSE = 17.733

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.912893	3.963266	2.25	0.027	1.036735	16.78905
giniavni	.0636068	.2433292	0.26	0.794	-.4199588	.5471725
ethnl	-4.079433	7.051889	-0.58	0.564	-18.09358	9.934714
musl	7.777734	6.970853	1.12	0.268	-6.075371	21.63084
fertwdi	-.7539404	2.083842	-0.36	0.718	-4.895138	3.387257
lpopd	1.907866	1.506645	1.27	0.209	-1.086274	4.902007
urbwdi	-.2216296	.1178546	-1.88	0.063	-.455841	.0125817
hlxpuwdi	2.74894	1.453978	1.89	0.062	-.1405362	5.638417
litfewdi	.2205985	.1374374	1.61	0.112	-.0525294	.4937264
_cons	-9.855842	31.04331	-0.32	0.752	-71.54791	51.83622

Model 3-2: Robust Check 1.4: Change specification: Include geographical variables

. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r

Linear regression

Number of obs = 98
 F(11, 86) = 4.44
 Prob > F = 0.0000
 R-squared = 0.3584
 Root MSE = 18.122

dtp3con		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	9.364327	4.276179	2.19	0.031	.8635656	17.86509
giniavni	.078828	.2428521	0.32	0.746	-.403946	.561602
ethnl	-7.495519	7.456914	-1.01	0.318	-22.31937	7.328336
musl	3.069523	7.473515	0.41	0.682	-11.78733	17.92638
fertwdi	-2.662745	1.896271	-1.40	0.164	-6.432407	1.106918
lpopd	1.720691	1.574292	1.09	0.277	-1.408897	4.850279
urbwdi	-.1734973	.1184578	-1.46	0.147	-.4089837	.0619891
hlxpuwdi	3.244504	1.443655	2.25	0.027	.3746119	6.114395
airdist	.0009578	.0010436	0.92	0.361	-.0011168	.0030323
popcrgs	.0079148	.0705833	0.11	0.911	-.1324001	.1482298
latcapab	.0960277	.1901216	0.51	0.615	-.2819215	.473977
_cons	.5272046	33.37339	0.02	0.987	-65.81689	66.8713

Model 3-2: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
```

Linear regression

Number of obs = 98
F(12, 85) = 7.32
Prob > F = 0.0000
R-squared = 0.4096
Root MSE = 17.484

dtp3con		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.965431	4.127368	1.93	0.057	-.2408813	16.17174
giniavni	.3066385	.2630058	1.17	0.247	-.2162876	.8295646
ethnl	-11.77917	7.394482	-1.59	0.115	-26.48138	2.923044
musl	-10.24286	5.933269	-1.73	0.088	-22.03979	1.554066
fertwdi	-4.697609	1.810811	-2.59	0.011	-8.297986	-1.097232
lpopd	1.074198	1.385499	0.78	0.440	-1.680546	3.828942
urbwdi	-.1518633	.1319305	-1.15	0.253	-.4141763	.1104498
hlxpuwdi	3.523146	1.318976	2.67	0.009	.9006677	6.145625
afri	-12.21667	8.079631	-1.51	0.134	-28.28114	3.847798
lati	-26.4607	7.077461	-3.74	0.000	-40.53259	-12.38881
east	-18.11021	7.939418	-2.28	0.025	-33.8959	-2.324524
sout	-12.83508	9.336676	-1.37	0.173	-31.39889	5.728733
_cons	37.28189	31.90861	1.17	0.246	-26.16098	100.7248

Model 3-2: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 98
F(10, 87) = 6.81
Prob > F = 0.0000
R-squared = 0.3668
Root MSE = 17.899

dtp3con		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	9.469955	3.792645	2.50	0.014	1.931663	17.00825
giniavni	.2426082	.269642	0.90	0.371	-.2933345	.7785509

ethnl	-6.043277	7.183207	-0.84	0.402	-20.32068	8.234126
musl	3.796161	6.498859	0.58	0.561	-9.121024	16.71335
fertwdi	-3.532644	1.731829	-2.04	0.044	-6.974841	-.0904463
lpopd	1.499939	1.498109	1.00	0.319	-1.477716	4.477593
urbwdi	-.2359592	.1256471	-1.88	0.064	-.4856964	.013778
hlxpuwdi	2.812711	1.489252	1.89	0.062	-.1473394	5.772761
gdphf (dropped)						
giniavnf	2.100762	6.319495	0.33	0.740	-10.45992	14.66144
ethnlf	11.2455	6.350678	1.77	0.080	-1.377159	23.86816
_cons	6.20514	28.11703	0.22	0.826	-49.68051	62.09079

Model 3-2: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
```

```
Huber iteration 1: maximum difference in weights = .42743451
Huber iteration 2: maximum difference in weights = .07364948
Huber iteration 3: maximum difference in weights = .02277256
Biweight iteration 4: maximum difference in weights = .15374502
Biweight iteration 5: maximum difference in weights = .00698476
```

Robust regression

Number of obs = 98
 $F(8, 89) = 4.93$
 $P\text{rob} > F = 0.0000$

dtp3con	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.2875	4.37544	2.35	0.021	1.593597 18.98141
giniavni	.0583034	.2777248	0.21	0.834	-.49353 .6101368
ethnl	-9.437365	7.61832	-1.24	0.219	-24.5748 5.700074
musl	2.71673	6.652065	0.41	0.684	-10.50078 15.93424
fertwdi	-2.568507	1.961892	-1.31	0.194	-6.466746 1.329731
lpopd	1.096542	1.650962	0.66	0.508	-2.183886 4.376969
urbwdi	-.2124194	.1534068	-1.38	0.170	-.5172355 .0923968
hlxpuwdi	2.837438	1.688461	1.68	0.096	-.5174972 6.192374
_cons	7.184741	35.70556	0.20	0.841	-63.76146 78.13094

Model 3-2: Robust Check 3.2: Outlier checks: Median regression

```
. qreg dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
Iteration 1: WLS sum of weighted deviations = 1376.0196
```

```
Iteration 1: sum of abs. weighted deviations = 1589.6081
Iteration 2: sum of abs. weighted deviations = 1370.1606
Iteration 3: sum of abs. weighted deviations = 1364.8767
Iteration 4: sum of abs. weighted deviations = 1355.0893
Iteration 5: sum of abs. weighted deviations = 1348.4335
Iteration 6: sum of abs. weighted deviations = 1347.2201
Iteration 7: sum of abs. weighted deviations = 1338.4609
Iteration 8: sum of abs. weighted deviations = 1329.1241
Iteration 9: sum of abs. weighted deviations = 1320.4899
Iteration 10: sum of abs. weighted deviations = 1319.4017
Iteration 11: sum of abs. weighted deviations = 1317.6085
Iteration 12: sum of abs. weighted deviations = 1313.8588
Iteration 13: sum of abs. weighted deviations = 1312.8195
Iteration 14: sum of abs. weighted deviations = 1311.9416
Iteration 15: sum of abs. weighted deviations = 1311.7741
Iteration 16: sum of abs. weighted deviations = 1311.7722
Iteration 17: sum of abs. weighted deviations = 1311.2514
```

Iteration 18: sum of abs. weighted deviations = 1311.0705

Median regression
 Raw sum of deviations 1630 (about 80)
 Min sum of deviations 1311.071
 Number of obs = 98
 Pseudo R2 = 0.1957

dtp3con	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	9.327728	3.313406	2.82	0.006	2.74406 15.9114
giniavni	-.0144348	.2149415	-0.07	0.947	-.441519 .4126494
ethnl	-19.12798	6.037451	-3.17	0.002	-31.12426 -7.13169
musl	5.164685	5.307423	0.97	0.333	-5.381052 15.71042
fertwdi	-2.991134	1.521747	-1.97	0.052	-6.014813 .0325454
lpopd	.2332714	1.282125	0.18	0.856	-2.314284 2.780827
urbwdi	-.1727664	.1175829	-1.47	0.145	-.4064011 .0608682
hlxpuwdi	1.244602	1.304321	0.95	0.343	-1.347055 3.836259
_cons	28.1646	27.27163	1.03	0.305	-26.02354 82.35274

Model 3-2: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Laos" & ctry
~= "Afghanistan", r
```

Linear regression
 Number of obs = 96
 F(8, 87) = 5.86
 Prob > F = 0.0000
 R-squared = 0.3464
 Root MSE = 17.072

dtp3con	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.13589	3.742162	2.71	0.008	2.697938 17.57384
giniavni	.0699126	.2127493	0.33	0.743	-.3529497 .492775
ethnl	-9.726335	6.658172	-1.46	0.148	-22.96017 3.507504
musl	4.347654	5.277883	0.82	0.412	-6.14271 14.83802
fertwdi	-2.69875	1.48651	-1.82	0.073	-5.65335 .2558496
lpopd	1.058209	1.375456	0.77	0.444	-1.675658 3.792076
urbwdi	-.2435564	.1130183	-2.16	0.034	-.4681925 -.0189204
hlxpuwdi	2.458607	1.291241	1.90	0.060	-.1078742 5.025088
_cons	10.70877	29.33498	0.37	0.716	-47.59767 69.01521

Model 3-2: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)

```
. correlate hlxpuwdi hlxwdns  

(obs=104)
```

	hlxpuwdi	hlxwdns
hlxpuwdi	1.0000	
hlxwdns	0.4546	1.0000

Model 3-2: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwdi = hlxwdns), first  

First-stage regressions
```

Source	SS	df	MS	Number of obs	=	98
Model	55.9581394	8	6.99476743	F(8, 89)	=	5.79
Residual	107.591652	89	1.20889496	Prob > F	=	0.0000
Total	163.549791	97	1.68608032	R-squared	=	0.3421
				Adj R-squared	=	0.2830
				Root MSE	=	1.0995

hlxpuwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.0850674	.2499789	-0.34	0.734	-.5817701 .4116353
giniavni	-.015473	.0162149	-0.95	0.343	-.0476916 .0167456
ethnl	-.1327357	.4487158	-0.30	0.768	-1.024325 .7588531
musl	-.5567362	.3830286	-1.45	0.150	-1.317806 .2043335
fertwdi	-.1164589	.1113437	-1.05	0.298	-.3376965 .1047788
lpopd	-.252718	.0915236	-2.76	0.007	-.4345734 -.0708627
urbwdi	.0121397	.0086755	1.40	0.165	-.0050983 .0293777
hlxwdns	.4248194	.0983342	4.32	0.000	.2294314 .6202073
_cons	3.477963	2.0047	1.73	0.086	-.5053337 7.461259

Model 3-2: Robust Check 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlxpuwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	98
Model	14456.3365	8	1807.04206	F(8, 89)	=	5.59
Residual	29559.2962	89	332.126923	Prob > F	=	0.0000
Total	44015.6327	97	453.769409	R-squared	=	0.3284
				Adj R-squared	=	0.2681
				Root MSE	=	18.224

dtp3con	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
hlxpuwdi	6.016843	3.836701	1.57	0.120	-1.606601 13.64029
lgdph	10.69114	4.181737	2.56	0.012	2.382122 19.00017
giniavni	.1099013	.262765	0.42	0.677	-.4122072 .6320097
ethnl	-5.17993	7.599824	-0.68	0.497	-20.28062 9.920757
musl	3.940476	6.382494	0.62	0.539	-8.741404 16.62236
fertwdi	-2.393368	1.907472	-1.25	0.213	-6.183473 1.396738
lpopd	2.187416	1.765973	1.24	0.219	-1.321534 5.696367
urbwdi	-.2480177	.1568516	-1.58	0.117	-.5596784 .063643
_cons	-10.27928	37.06145	-0.28	0.782	-83.91958 63.36102

Instrumented: hlxpuwdi

Instruments: lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxwdns

Model 3-2: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

- . estimates store ivwdnsdtp
- . regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi

Source	SS	df	MS	Number of obs	=	98
Model	15436.8903	8	1929.61129	F(8, 89)	=	6.01
Residual	28578.7423	89	321.109465	Prob > F	=	0.0000
				R-squared	=	0.3507
				Adj R-squared	=	0.2924

Total	44015.6327	97	453.769409	Root MSE	=	17.92
-------	------------	----	------------	----------	---	-------

dtp3con	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.22498	4.070317	2.51	0.014	2.137343 18.31261
giniavni	.1078792	.2583576	0.42	0.677	-.4054718 .6212303
ethnl	-7.076158	7.087053	-1.00	0.321	-21.15798 7.005666
musl	3.104501	6.18818	0.50	0.617	-9.191281 15.40028
fertwdi	-2.739265	1.825079	-1.50	0.137	-6.365658 .8871281
lpopd	1.53907	1.535832	1.00	0.319	-1.512596 4.590735
urbwdi	-.2012167	.142709	-1.41	0.162	-.4847763 .082343
hlxpuwdi	3.272068	1.570715	2.08	0.040	.1510907 6.393046
_cons	1.716385	33.21562	0.05	0.959	-64.28235 67.71512

. hausman ivwdnsdtp

---- Coefficients ----				
	(b) ivwdnsdtp	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
hlxpuwdi	6.016843	3.272068	2.744774	3.500447
lgdph	10.69114	10.22498	.4661678	.9588746
giniavni	.1099013	.1078792	.002022	.0479248
ethnl	-5.17993	-7.076158	1.896228	2.744266
musl	3.940476	3.104501	.8359747	1.5629
fertwdi	-2.393368	-2.739265	.3458973	.5545581
lpopd	2.187416	1.53907	.6483464	.8717112
urbwdi	-.2480177	-.2012167	-.046801	.0650889

b = consistent under Ho and Ha; obtained from ivreg

B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

```
chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          =      0.61
Prob>chi2 =    0.9997
```

Model 3-2: Robust Ck 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)

. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r

Linear regression

Number of obs =	98
F(8, 89) =	6.05
Prob > F =	0.0000
R-squared =	0.3633
Root MSE =	17.746

dtp3con	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	9.573838	4.081184	2.35	0.021	1.464613 17.68306
giniavni	.1329311	.2375689	0.56	0.577	-.3391132 .6049754
ethnl	-5.726467	6.851887	-0.84	0.406	-19.34102 7.888086
musl	3.960444	6.359723	0.62	0.535	-8.67619 16.59708
fertwdi	-3.246844	1.61692	-2.01	0.048	-6.459629 -.0340591
lpopd	1.549895	1.390857	1.11	0.268	-1.213709 4.313498
urbwdi	-.1783792	.1169399	-1.53	0.131	-.4107362 .0539779
hlxpuwb	3.261822	1.219978	2.67	0.009	.8377513 5.685893
_cons	5.607475	29.8511	0.19	0.851	-53.70603 64.92098

Model 3-2: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to lhlnpuwd)

```
. regress dtp3con lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 98
 $F(8, 89) = 7.75$
 Prob > F = 0.0000
 R-squared = 0.4010
 Root MSE = 17.212

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	11.0544	3.845128	2.87	0.005	3.414217	18.69459
giniavni	.0260565	.2217722	0.12	0.907	-.4146002	.4667133
ethnl	-8.993035	6.052468	-1.49	0.141	-21.01916	3.033091
musl	2.046805	5.621962	0.36	0.717	-9.123914	13.21752
fertwdi	-2.342085	1.558823	-1.50	0.137	-5.439434	.7552644
lpopd	1.532952	1.287139	1.19	0.237	-1.024565	4.09047
urbwdi	-.2596248	.108872	-2.38	0.019	-.4759511	-.0432984
hlxpuwdi	10.17134	3.006657	3.38	0.001	4.19718	16.1455
_cons	2.067402	29.07879	0.07	0.943	-55.71154	59.84635

Model 3-2: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress dtp3con lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 97
 $F(8, 88) = 6.26$
 Prob > F = 0.0000
 R-squared = 0.3822
 Root MSE = 17.461

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	11.26978	3.943254	2.86	0.005	3.433395	19.10617
giniavni	.1472726	.2370439	0.62	0.536	-.3238023	.6183476
ethnl	-5.941065	6.772273	-0.88	0.383	-19.39953	7.517403
musl	4.807704	5.673735	0.85	0.399	-6.467652	16.08306
fertwdi	-2.257853	1.648439	-1.37	0.174	-5.533779	1.018073
lpopd	1.785751	1.474176	1.21	0.229	-1.143864	4.715365
urbwdi	-.1833112	.1098179	-1.67	0.099	-.4015512	.0349288
hlxpuwdi	3.330817	1.409962	2.36	0.020	.528813	6.132821
_cons	-13.40521	31.49076	-0.43	0.671	-75.98649	49.17607

Model 3-2: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress dtp3con lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
```

Linear regression

Number of obs = 97
 $F(9, 87) = 5.55$
 Prob > F = 0.0000
 R-squared = 0.3845
 Root MSE = 17.529

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	10.77739	3.961917	2.72	0.008	2.902651	18.65213
giniavni	.1551887	.2390837	0.65	0.518	-.3200161	.6303935
ethnl	-6.657263	6.818609	-0.98	0.332	-20.20999	6.895461
musl	4.801462	5.721976	0.84	0.404	-6.571584	16.17451
fertwdi	-2.013797	1.70384	-1.18	0.240	-5.400363	1.372769
lpopd	2.034008	1.586141	1.28	0.203	-1.11862	5.186635
urbwdi	-.1555493	.1147751	-1.36	0.179	-.3836773	.0725788
hlxpuwdi	3.23665	1.415701	2.29	0.025	.4227911	6.050509
gdpmf	6.523946	7.633592	0.85	0.395	-8.648644	21.69654
_cons	-13.02216	31.69335	-0.41	0.682	-76.01613	49.97181

Model 3-2: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress dtp3con lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 98
 F(8, 89) = 7.20
 Prob > F = 0.0000
 R-squared = 0.3752
 Root MSE = 17.578

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.63336	3.879144	2.23	0.029	.9255847	16.34114
giniavni	.0918072	.238116	0.39	0.701	-.3813242	.5649385
ethnannx	-17.64508	7.872441	-2.24	0.027	-33.28745	-2.002708
musl	1.821774	5.993745	0.30	0.762	-10.08767	13.73122
fertwdi	-2.907961	1.465389	-1.98	0.050	-5.819658	.0037368
lpopd	1.015966	1.449595	0.70	0.485	-1.864348	3.89628
urbwdi	-.1626164	.1145367	-1.42	0.159	-.3901984	.0649656
hlxpuwdi	2.913449	1.363989	2.14	0.035	.2032312	5.623667
_cons	23.66182	30.2073	0.78	0.436	-36.35945	83.68309

Model 3-2: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress dtp3con lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf, r
```

Linear regression

Number of obs = 98
 F(9, 88) = 6.33
 Prob > F = 0.0000
 R-squared = 0.3752
 Root MSE = 17.678

dtp3con	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.604329	4.142297	2.08	0.041	.3723835	16.83627
giniavni	.0906622	.2588823	0.35	0.727	-.423812	.6051363
ethnannx	-17.6671	8.082139	-2.19	0.031	-33.72865	-1.605546
musl	1.826163	5.930102	0.31	0.759	-9.958669	13.61099
fertwdi	-2.913609	1.476043	-1.97	0.052	-5.846934	.0197168
lpopd	1.01411	1.471011	0.69	0.492	-1.909214	3.937435

urbwdi	-.1617727	.1298698	-1.25	0.216	-.4198617	.0963162
hlxpuwdi	2.910556	1.380659	2.11	0.038	.1667859	5.654326
ethnannf	-.1510952	7.925505	-0.02	0.985	-15.90137	15.59918
_cons	23.95737	34.63362	0.69	0.491	-44.86968	92.78441

Table 2.3, Model 3-3: Public health spending/GDP and Measles (MCV) Immuniz.**Model 3-3: Bivariate correlations among independent variables**

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	hlxpuwdi	hlxpuwdi
lgdph	1.0000								
giniavni	0.0553	1.0000							
ethnl	-0.4639	0.1837	1.0000						
musl	0.3037	-0.2999	-0.2504	1.0000					
fertwdi	-0.6226	0.0745	0.4365	0.1169	1.0000				
lpopd	0.0816	-0.2807	-0.1644	-0.1579	-0.3660	1.0000			
urbwdi	0.8128	0.0595	-0.4289	0.2752	-0.5620	-0.0329	1.0000		
hlxpuwdi	0.2598	0.0658	-0.2482	0.0241	-0.2458	-0.1809	0.3561	1.0000	
hlxpuwdi	0.2598	0.0658	-0.2482	0.0241	-0.2458	-0.1809	0.3561	1.0000	1.0000
mcvcon	0.4840	0.0387	-0.3921	0.0494	-0.4666	0.1234	0.4005	0.3710	0.3710
		mcvcon							
mcvcon			1.0000						

Model 3-3: MCV immuniz predicted by 7 baseline variables only

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs = 98
 F(7, 90) = 6.14
 Prob > F = 0.0000
 R-squared = 0.3077
 Root MSE = 16.524

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.432844	3.748899	1.72	0.090	-1.014999	13.88069
giniavni	.1560713	.230042	0.68	0.499	-.3009472	.6130898
ethnl	-12.05751	6.324839	-1.91	0.060	-24.62291	.5078849
musl	-1.524013	6.116788	-0.25	0.804	-13.67608	10.62805
fertwdi	-2.647936	1.510358	-1.75	0.083	-5.648527	.3526545
lpopd	-.039263	1.367679	-0.03	0.977	-2.756396	2.67787
urbwdi	-.0388088	.116898	-0.33	0.741	-.2710472	.1934295
_cons	35.44299	27.72402	1.28	0.204	-19.6356	90.52159

Model 3-3: MCV immuniz predicted by 7 baseline variables + % GDP pub health sp

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 98
 F(8, 89) = 6.67

Prob > F = 0.0000
 R-squared = 0.3591
 Root MSE = 15.988

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.06876	3.712197	1.90	0.060	-.3072965	14.44482
giniavni	.1588296	.2102896	0.76	0.452	-.2590113	.5766706
ethnl	-9.4708	6.209782	-1.53	0.131	-21.8095	2.867903
musl	-.3836304	5.768251	-0.07	0.947	-11.84502	11.07776
fertwdi	-2.176085	1.515351	-1.44	0.155	-5.187056	.8348854
lpopd	.845169	1.333563	0.63	0.528	-1.804593	3.494931
urbwdi	-.1026517	.106443	-0.96	0.337	-.3141518	.1088483
hlxpuwdi	3.744242	1.197788	3.13	0.002	1.364262	6.124222
_cons	19.07929	28.14368	0.68	0.500	-36.8416	75.00018

Model 3-3: Means and SDs of % GDP to public health spending and mcv immz

. summarize hlxpuwdi

Variable	Obs	Mean	Std. Dev.	Min	Max
hlxpuwdi	105	2.001905	1.275206	0	7

. summarize mcvcon

Variable	Obs	Mean	Std. Dev.	Min	Max
mcvcon	98	71.40816	19.12996	20	98

Model 3-3: How much would MCV immz rise if pub health spending/GDP rose 1 SD?

. estsimp regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r

Linear regression

Number of obs = 98
 F(8, 89) = 6.67
 Prob > F = 0.0000
 R-squared = 0.3591
 Root MSE = 15.988

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.06876	3.712197	1.90	0.060	-.3072965	14.44482
giniavni	.1588296	.2102896	0.76	0.452	-.2590113	.5766706
ethnl	-9.4708	6.209782	-1.53	0.131	-21.8095	2.867903
musl	-.3836304	5.768251	-0.07	0.947	-11.84502	11.07776
fertwdi	-2.176085	1.515351	-1.44	0.155	-5.187056	.8348854
lpopd	.845169	1.333563	0.63	0.528	-1.804593	3.494931
urbwdi	-.1026517	.106443	-0.96	0.337	-.3141518	.1088483
hlxpuwdi	3.744242	1.197788	3.13	0.002	1.364262	6.124222
_cons	19.07929	28.14368	0.68	0.500	-36.8416	75.00018

Simulating main parameters. Please wait....

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10
```

```
. setx mean
. simqi, fd(ev) changex(hlxpuwdi 2.001905 3.277111)
```

First Difference: hlxpuwdi 2.001905 3.277111

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(mcvcon)	4.745586	1.476834	1.792023 7.689022

Model 3-3: Robustness checks

Model 3-3: Robust Check 1.1: Change specification: Exclude fertility

```
. regress mcvcon lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs =	98
F(7, 90) =	6.77
Prob > F =	0.0000
R-squared =	0.3462
Root MSE =	16.058

mcvcon	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	8.910832	3.160989	2.82	0.006	2.630976 15.19069
giniavni	.1021054	.2026251	0.50	0.616	-.3004447 .5046556
ethnl	-11.03121	5.971214	-1.85	0.068	-22.89407 .8316497
musl	-3.612889	5.058931	-0.71	0.477	-13.66334 6.437561
lpopd	1.415349	1.295993	1.09	0.278	-1.159368 3.990066
urbwdi	-.0700782	.1093074	-0.64	0.523	-.2872364 .14708
hlxpuwdi	3.94736	1.21369	3.25	0.002	1.536153 6.358567
_cons	-5.504549	20.44108	-0.27	0.788	-46.11433 35.10523

Model 3-3: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx, r
```

Linear regression

Number of obs =	98
F(9, 88) =	5.97
Prob > F =	0.0000
R-squared =	0.3614
Root MSE =	16.049

mcvcon	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.474926	3.793817	1.71	0.091	-1.064488 14.01434
giniavni	.1584846	.2109358	0.75	0.454	-.260706 .5776752
ethnl	-8.83767	6.364835	-1.39	0.168	-21.48644 3.811102
musl	.8548354	6.289523	0.14	0.892	-11.64427 13.35394
fertwdi	-1.675438	1.745469	-0.96	0.340	-5.144191 1.793315

lpopd	.9545682	1.358004	0.70	0.484	-1.74418	3.653317
urbwdi	-.1112652	.1070415	-1.04	0.301	-.3239876	.1014572
hlxpuwdi	3.627349	1.194758	3.04	0.003	1.253018	6.00168
mysfx	.8227962	1.268638	0.65	0.518	-1.698355	3.343947
_cons	17.93373	28.63879	0.63	0.533	-38.97985	74.8473

Model 3-3: Robust Check 1.3: Change specification: Include female literacy

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r
```

Linear regression

Number of obs = 98
 F(9, 88) = 6.20
 Prob > F = 0.0000
 R-squared = 0.3683
 Root MSE = 15.963

mcvcon	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.282711	3.775407	1.66	0.100	-1.220117 13.78554
giniavni	.1323067	.2154658	0.61	0.541	-.2958863 .5604997
ethnl	-7.675509	6.396406	-1.20	0.233	-20.38702 5.036005
musl	2.416031	6.403245	0.38	0.707	-10.30907 15.14113
fertwdi	-.9867084	1.860214	-0.53	0.597	-4.683494 2.710077
lpopd	1.066109	1.357432	0.79	0.434	-1.631502 3.763721
urbwdi	-.1148808	.1069771	-1.07	0.286	-.3274753 .0977136
hlxpuwdi	3.430844	1.214993	2.82	0.006	1.016301 5.845387
litfewdi	.1321571	.120807	1.09	0.277	-.1079215 .3722357
_cons	12.14655	28.67959	0.42	0.673	-44.92786 69.22095

Model 3-3: Robust Check 1.4: Change specification: Include geographical variables

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r
```

Linear regression

Number of obs = 98
 F(11, 86) = 6.90
 Prob > F = 0.0000
 R-squared = 0.3746
 Root MSE = 16.066

mcvcon	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.625985	3.835193	1.99	0.050	.0018724 15.2501
giniavni	.1732379	.220964	0.78	0.435	-.2660239 .6124997
ethnl	-7.574203	6.367621	-1.19	0.238	-20.23261 5.084208
musl	-3.398392	6.473084	-0.53	0.601	-16.26646 9.469672
fertwdi	-1.815412	1.732022	-1.05	0.298	-5.258557 1.627732
lpopd	1.41078	1.357295	1.04	0.302	-1.287432 4.108993
urbwdi	-.0918681	.109103	-0.84	0.402	-.3087577 .1250215
hlxpuwdi	3.636754	1.135852	3.20	0.002	1.378755 5.894752
airdist	.0000151	.0008379	0.02	0.986	-.0016506 .0016807
popcrgs	-.0345719	.0577897	-0.60	0.551	-.149454 .0803103
latcapab	.2259654	.157041	1.44	0.154	-.0862217 .5381525
_cons	7.511201	28.67959	0.26	0.794	-49.50195 64.52435

Model 3-3: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
```

Linear regression

Number of obs = 98
 $F(12, 85) = 6.83$
 Prob > F = 0.0000
 R-squared = 0.4084
 Root MSE = 15.718

mcvcon	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	4.782316	4.252335	1.12	0.264	-3.672464 13.2371
giniavni	.3719727	.2247887	1.65	0.102	-.0749675 .8189129
ethnl	-15.93278	6.52067	-2.44	0.017	-28.89761 -2.967938
musl	-7.60852	7.901059	-0.96	0.338	-23.31794 8.100902
fertwdi	-3.567122	1.651023	-2.16	0.034	-6.849797 -.2844471
lpopd	.5359763	1.322774	0.41	0.686	-2.094052 3.166005
urbwdi	-.0139211	.1322693	-0.11	0.916	-.276908 .2490657
hlxpuwdi	4.065325	1.086572	3.74	0.000	1.904928 6.225721
afri	-3.739322	9.850782	-0.38	0.705	-23.32532 15.84667
lati	-18.36667	10.25264	-1.79	0.077	-38.75166 2.018323
east	-7.179725	9.560894	-0.75	0.455	-26.18934 11.82989
sout	-3.604666	9.797845	-0.37	0.714	-23.08541 15.87608
_cons	41.32555	33.93211	1.22	0.227	-26.14057 108.7917

Model 3-3: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 98
 $F(10, 87) = 6.02$
 Prob > F = 0.0000
 R-squared = 0.3710
 Root MSE = 16.02

mcvcon	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.498456	3.568653	1.82	0.072	-.5946288 13.59154
giniavni	.253797	.2404489	1.06	0.294	-.2241213 .7317153
ethnl	-8.564112	6.369456	-1.34	0.182	-21.2241 4.095872
musl	.045633	6.03467	0.01	0.994	-11.94893 12.04019
fertwdi	-2.667078	1.601981	-1.66	0.100	-5.851189 .5170332
lpopd	.7708975	1.386168	0.56	0.580	-1.984261 3.526056
urbwdi	-.1201836	.1130845	-1.06	0.291	-.3449514 .1045842
hlxpuwdi	3.309612	1.246327	2.66	0.009	.8324012 5.786822
gdphf	(dropped)				
giniavnf	-.0835801	6.182207	-0.01	0.989	-12.37139 12.20422
ethnlf	10.00925	7.657662	1.31	0.195	-5.211184 25.22968
_cons	22.46169	26.54861	0.85	0.400	-30.30654 75.22993

Model 3-3: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
```

Huber iteration 1: maximum difference in weights = .39793075

Huber iteration 2: maximum difference in weights = .08045214
 Huber iteration 3: maximum difference in weights = .01809753
 Biweight iteration 4: maximum difference in weights = .14979829
 Biweight iteration 5: maximum difference in weights = .00825799

Robust regression

Number of obs = 98
 $F(8, 89) = 5.41$
 $\text{Prob} > F = 0.0000$

mcvcon	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.803261	3.888304	1.75	0.084	-.9227164 14.52924
giniavni	.1861108	.2468046	0.75	0.453	-.3042847 .6765062
ethnl	-12.50987	6.770141	-1.85	0.068	-25.96199 .9422589
musl	.7720685	5.911462	0.13	0.896	-10.97388 12.51802
fertwdi	-1.915785	1.743467	-1.10	0.275	-5.380016 1.548446
lpopd	.9954706	1.467154	0.68	0.499	-1.919733 3.910674
urbwdi	-.1083826	.1363274	-0.80	0.429	-.3792623 .1624971
hlxpuwdi	3.50495	1.500477	2.34	0.022	.5235331 6.486366
_cons	20.19986	31.73031	0.64	0.526	-42.8476 83.24732

Model 3-3: Robust Check 3.2: Outlier checks: Median regression

. qreg mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
 Iteration 1: WLS sum of weighted deviations = 1231.4757

Iteration 1: sum of abs. weighted deviations = 21387.338
 Iteration 2: sum of abs. weighted deviations = 1231.7536
 Iteration 3: sum of abs. weighted deviations = 1224.3042
 Iteration 4: sum of abs. weighted deviations = 1195.3686
 Iteration 5: sum of abs. weighted deviations = 1191.7657
 Iteration 6: sum of abs. weighted deviations = 1190.5205
 Iteration 7: sum of abs. weighted deviations = 1183.9911
 Iteration 8: sum of abs. weighted deviations = 1183.947
 Iteration 9: sum of abs. weighted deviations = 1180.0373
 Iteration 10: sum of abs. weighted deviations = 1179.2588
 Iteration 11: sum of abs. weighted deviations = 1178.7981
 Iteration 12: sum of abs. weighted deviations = 1178.5767
 Iteration 13: sum of abs. weighted deviations = 1178.437

Median regression

Number of obs = 98
 Raw sum of deviations 1476 (about 78)
 Min sum of deviations 1178.437 Pseudo R2 = 0.2016

mcvcon	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	2.963436	4.191352	0.71	0.481	-5.364691 11.29156
giniavni	.2014393	.2491323	0.81	0.421	-.2935813 .6964599
ethnl	-16.21854	7.485356	-2.17	0.033	-31.09178 -1.345299
musl	5.9716	6.678182	0.89	0.374	-7.297806 19.24101
fertwdi	-3.146163	1.849345	-1.70	0.092	-6.820772 .5284468
lpopd	.7886237	1.51762	0.52	0.605	-2.226856 3.804103
urbwdi	-.0523293	.1408528	-0.37	0.711	-.3322009 .2275422
hlxpuwdi	4.150285	1.588365	2.61	0.011	.9942375 7.306332
_cons	52.67087	32.95397	1.60	0.114	-12.80796 118.1497

Model 3-3: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry == "Oman" & ctry == "Afghanistan", r

Linear regression

Number of obs = 96
 F(8, 87) = 6.40
 Prob > F = 0.0000
 R-squared = 0.3564
 Root MSE = 15.42

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.071464	3.679999	1.11	0.272	-3.242934	11.38586
giniavni	.2802335	.2068123	1.36	0.179	-.1308284	.6912953
ethnl	-8.463888	6.328954	-1.34	0.185	-21.04337	4.115594
musl	3.983175	4.943475	0.81	0.423	-5.842517	13.80887
fertwdi	-3.252073	1.503657	-2.16	0.033	-6.240754	-.2633925
lpopd	1.159147	1.372948	0.84	0.401	-1.569736	3.88803
urbwdi	-.0949709	.1064509	-0.89	0.375	-.3065537	.1166119
hlxpuwdi	3.613352	1.183827	3.05	0.003	1.260368	5.966337
_cons	39.3361	27.67219	1.42	0.159	-15.66537	94.33756

Model 3-3: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)

. correlate hlxpuwdi hlxwdns
 (obs=104)

	hlxpuwdi	hlxwdns
hlxpuwdi	1.0000	
hlxwdns	0.4546	1.0000

Model 3-3: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

. ivreg mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwdi = hlxwdns), first

First-stage regressions

Source	SS	df	MS	Number of obs	= 98
Model	55.9581394	8	6.99476743	F(8, 89)	= 5.79
Residual	107.591652	89	1.20889496	Prob > F	= 0.0000
Total	163.549791	97	1.68608032	R-squared	= 0.3421
				Adj R-squared	= 0.2830
				Root MSE	= 1.0995

hlxpuwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.0850674	.2499789	-0.34	0.734	-.5817701 .4116353
giniavni	-.015473	.0162149	-0.95	0.343	-.0476916 .0167456
ethnl	-.1327357	.4487158	-0.30	0.768	-1.024325 .7588531
musl	-.5567362	.3830286	-1.45	0.150	-1.317806 .2043335
fertwdi	-.1164589	.1113437	-1.05	0.298	-.3376965 .1047788
lpopd	-.252718	.0915236	-2.76	0.007	-.4345734 -.0708627
urbwdi	.0121397	.0086755	1.40	0.165	-.0050983 .0293777
hlxwdns	.4248194	.0983342	4.32	0.000	.2294314 .6202073
_cons	3.477963	2.0047	1.73	0.086	-.5053337 7.461259

Model 3-3: Robust Check 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlpxuwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	98
Model	12509.904	8	1563.738	F(8, 89)	=	5.57
Residual	22987.7695	89	258.289544	Prob > F	=	0.0000
Total	35497.6735	97	365.955397	R-squared	=	0.3524
				Adj R-squared	=	0.2942
				Root MSE	=	16.071

mcvcon	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
hlpxuwdi	5.095477	3.383447	1.51	0.136	-1.627359 11.81831
lgdph	7.298251	3.687721	1.98	0.051	-.0291718 14.62567
giniavni	.1598251	.2317228	0.69	0.492	-.3006033 .6202534
ethnl	-8.537299	6.702007	-1.27	0.206	-21.85405 4.779446
musl	.0279146	5.628489	0.00	0.996	-11.15577 11.2116
fertwdi	-2.005802	1.68213	-1.19	0.236	-5.348158 1.336553
lpopd	1.164346	1.557347	0.75	0.457	-1.93007 4.258761
urbwdi	-.1256916	.1383217	-0.91	0.366	-.4005338 .1491506
_cons	13.1739	32.68314	0.40	0.688	-51.7668 78.1146

Instrumented: hlpxuwdi

Instruments: lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxwdns

Model 3-3: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store iwdnsmcv
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlpxuwdi
```

Source	SS	df	MS	Number of obs	=	98
Model	12747.5443	8	1593.44303	F(8, 89)	=	6.23
Residual	22750.1292	89	255.619429	Prob > F	=	0.0000
Total	35497.6735	97	365.955397	R-squared	=	0.3591
				Adj R-squared	=	0.3015
				Root MSE	=	15.988

mcvcon	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.06876	3.631605	1.95	0.055	-.1471622 14.28468
giniavni	.1588296	.230511	0.69	0.493	-.2991908 .61685
ethnl	-9.4708	6.323188	-1.50	0.138	-22.03484 3.093239
musl	-.3836304	5.521198	-0.07	0.945	-11.35413 10.58687
fertwdi	-2.176085	1.628366	-1.34	0.185	-5.411614 1.059443
lpopd	.845169	1.370295	0.62	0.539	-1.877578 3.567916
urbwdi	-.1026517	.1273273	-0.81	0.422	-.3556484 .1503449
hlpxuwdi	3.744242	1.401418	2.67	0.009	.9596536 6.528831
_cons	19.07929	29.63554	0.64	0.521	-39.80589 77.96447

```
. hausman iwdnsmcv
```

	---- Coefficients ----			
	(b) iwdnsmcv	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
hlpxuwdi	5.095477	3.744242	1.351235	3.079568

lgdph	7.298251	7.06876	.2294915	.6408825
giniavni	.1598251	.1588296	.0009954	.0236679
ethnl	-8.537299	-9.4708	.933501	2.221305
musl	.0279146	-.3836304	.4115451	1.093734
fertwdi	-2.005802	-2.176085	.1702831	.4218816
lpopd	1.164346	.845169	.3191769	.7400145
urbwdi	-.1256916	-.1026517	-.0230398	.0540429

b = consistent under Ho and Ha; obtained from ivreg

B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

```
chi2(8) = (b-B)'[(V b-V B)^(-1)](b-B)
          =
          0.19
Prob>chi2 =      1.0000
```

Model 3-3: Robust Ck 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs	=	98
F(8, 89)	=	6.77
Prob > F	=	0.0000
R-squared	=	0.3536
Root MSE	=	16.056

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.345516	3.84434	1.65	0.102	-1.293106	13.98414
giniavni	.1812059	.2139335	0.85	0.399	-.2438755	.6062872
ethnl	-8.753326	6.498853	-1.35	0.181	-21.66641	4.159756
musl	.1714756	6.035278	0.03	0.977	-11.82049	12.16344
fertwdi	-2.735096	1.544182	-1.77	0.080	-5.803353	.3331616
lpopd	.6780296	1.278024	0.53	0.597	-1.861377	3.217436
urbwdi	-.0689699	.1079487	-0.64	0.525	-.2834617	.145522
hlxpuwb	2.985337	1.042752	2.86	0.005	.9134105	5.057263
_cons	25.91626	27.88527	0.93	0.355	-29.49118	81.32371

Model 3-3: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to hlxpuwd)

```
. regress mcvcon lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwd, r
```

Linear regression

Number of obs	=	98
F(8, 89)	=	9.10
Prob > F	=	0.0000
R-squared	=	0.4090
Root MSE	=	15.353

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.816306	3.638446	2.15	0.034	.5867922	15.04582
giniavni	.0767559	.1980119	0.39	0.699	-.3166895	.4702013
ethnl	-11.7143	5.477126	-2.14	0.035	-22.59723	-.8313647
musl	-1.585062	5.376852	-0.29	0.769	-12.26875	9.098629
fertwdi	-1.839395	1.463839	-1.26	0.212	-4.748012	1.069222

lpopd	.7265848	1.227378	0.59	0.555	-1.71219	3.165359
urbwdi	-.1528697	.0990759	-1.54	0.126	-.3497313	.043992
hlxpuwdi	10.15895	2.312417	4.39	0.000	5.564225	14.75367
_cons	21.51087	27.08795	0.79	0.429	-32.3123	75.33405

Model 3-3: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress mcvcon lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 97
 F(8, 88) = 6.61
 Prob > F = 0.0000
 R-squared = 0.3806
 Root MSE = 15.702

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	7.037226	3.769268	1.87	0.065	-.4534024	14.52786
giniavni	.2065298	.2083262	0.99	0.324	-.2074747	.6205343
ethnl	-8.65951	6.15363	-1.41	0.163	-20.88856	3.569537
musl	1.168829	5.480514	0.21	0.832	-9.722541	12.0602
fertwdi	-1.951285	1.560484	-1.25	0.214	-5.052419	1.14985
lpopd	1.128678	1.33255	0.85	0.399	-1.519485	3.776841
urbwdi	-.067738	.1026769	-0.66	0.511	-.2717867	.1363107
hlxpuwdi	3.763273	1.18821	3.17	0.002	1.401956	6.12459
_cons	12.47745	29.66731	0.42	0.675	-46.4801	71.435

Model 3-3: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress mcvcon lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
```

Linear regression

Number of obs = 97
 F(9, 87) = 5.80
 Prob > F = 0.0000
 R-squared = 0.3806
 Root MSE = 15.791

mcvcon	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	7.085966	3.855506	1.84	0.069	-.5772699	14.7492
giniavni	.2057462	.2106448	0.98	0.331	-.2129332	.6244256
ethnl	-8.588617	6.356023	-1.35	0.180	-21.2219	4.044667
musl	1.169447	5.50875	0.21	0.832	-9.779789	12.11868
fertwdi	-1.975442	1.627592	-1.21	0.228	-5.210458	1.259573
lpopd	1.104105	1.436639	0.77	0.444	-1.751371	3.95958
urbwdi	-.070486	.1112064	-0.63	0.528	-.2915207	.1505487
hlxpuwdi	3.772595	1.204391	3.13	0.002	1.378738	6.166451
gdpmf	-.6457709	5.601125	-0.12	0.908	-11.77861	10.48707
_cons	12.43953	29.77955	0.42	0.677	-46.75054	71.62961

Model 3-3: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress mcvcon lgdph giniavni ethnannx musl fertwdi lpopd hlxpuwdi, r
```

Linear regression

		Number of obs =	98
		F(7, 90) =	9.69
		Prob > F =	0.0000
		R-squared =	0.3932
		Root MSE =	15.471

mcvcon	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	4.305348	2.960685	1.45	0.149	-1.57657	10.18727
giniavni	.1315974	.2034204	0.65	0.519	-.2725327	.5357274
ethnannx	-20.56829	7.785579	-2.64	0.010	-36.0357	-5.100875
musl	-1.976818	5.412329	-0.37	0.716	-12.72935	8.775719
fertwdi	-2.286164	1.386954	-1.65	0.103	-5.04159	.469262
lpopd	.3599379	1.23948	0.29	0.772	-2.102505	2.82238
hlxpuwdi	3.246386	1.052929	3.08	0.003	1.154559	5.338213
_cons	48.2605	26.73696	1.81	0.074	-4.857138	101.3781

Model 3-3: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress mcvcon lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf  
>, r
```

Linear regression

		Number of obs =	98
		F(9, 88) =	7.45
		Prob > F =	0.0000
		R-squared =	0.3964
		Root MSE =	15.604

mcvcon	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	4.657057	3.984273	1.17	0.246	-3.260849	12.57496
giniavni	.1087368	.216328	0.50	0.616	-.3211696	.5386433
ethnannx	-20.71015	8.107297	-2.55	0.012	-36.8217	-4.598602
musl	-1.540721	5.186254	-0.30	0.767	-11.84731	8.765869
fertwdi	-2.564033	1.390711	-1.84	0.069	-5.327779	.1997127
lpopd	.2301987	1.299856	0.18	0.860	-2.352991	2.813389
urbwdi	-.0378537	.1180623	-0.32	0.749	-.2724777	.1967702
hlxpuwdi	3.313586	1.104901	3.00	0.004	1.117827	5.509344
ethnannf	-3.470229	8.599076	-0.40	0.688	-20.55909	13.61863
_cons	50.14212	31.91803	1.57	0.120	-13.28825	113.5725

Table 2.3, Models 3-4 to 3-10: Public Health Spending and Infant Mortality

Table 2.3: Summary of robustness checks for Models 3-4, 3-5, 3-6, and 3-7

This table gives the t-score of the association between the share of GDP devoted to public health spending and infant mortality in the context of 16 checks for robustness. The statistical output follows the table. In each check for robustness the 7 socioeconomic "baseline" variables (Model 2-3) are controlled for, just as in the models in Table 2.3.

Model 3-4 Model 3-5 Model 3-6 Model 3-7

Dependent variable	Spending data from WDI, all cases included	Spending data from WDI, 2 outliers excluded	Spending data from HNP, all cases included	Spending data from HNP, 2 outliers excluded
Basic Model	-1.21	*-2.39	-1.21	-1.85
1.1. Specif: Excl fertility	-1.39	*-2.44	-1.00	-1.33
1.2. Specif: Incl fem sch	-0.80	*-2.01	-0.62	-1.15
1.3. Specif: Incl fem lit	-0.77	†-1.91	-0.56	-1.04
1.4. Specif: Incl geogr	-1.49	*-2.41	-1.36	-1.90
1.5. Specif: Incl reg dum	-1.10	*-2.59	-1.13	-1.97
2.1. Imput: msg data flags	-0.84	*-2.09	-0.75	-1.53
3.1. Outliers: rreg	-2.19	*-2.11	-1.59	-1.49
3.2. Outliers: qreg	-1.06	-0.81	-1.16	-1.02
3.3. Outliers: cooksd	-2.39		-1.85	
4.4. Endog: 2SLS	-0.94	-1.06		-1.02
5.1. DV: lu5mrcom	-1.38	*-2.61	-1.36	-1.84
5.2. DV: limrwdi	-1.61	*-2.38	-1.43	-1.72
6.2a: IV: lhlpwuwd	-1.34	†-1.77		
6.2b. IV: lhlpwuwb			-1.40	-1.77
7.1. IV: lgdpdmx	-1.53	*-2.26	-1.12	-1.41
7.2. IV: lgdpdmx, mdf	-1.50	*-2.23	-1.09	-1.39
7.3. IV: ethnannx	-1.19	*-2.34	-1.15	-1.79
7.4. IV: ethnannx, mdf	-1.28	*-2.36	-1.10	-1.76
Basic model clarify		-4.45		-3.07

Table 2.3: Bivariate correlations among independent variables

```
. correlate lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlpxpuwdi hlxdns
(obs=104)
```

	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	hlpxpuwdi	hlxdns
lgdph	1.0000								
giniavni	-0.0076	1.0000							
ethnl	-0.4703	0.2481	1.0000						
musl	0.2908	-0.2990	-0.2894	1.0000					
fertwdi	-0.6499	0.1266	0.4350	0.1217	1.0000				
lpopd	0.1918	-0.3031	-0.1943	-0.1208	-0.4129	1.0000			
urbwdi	0.8282	0.0055	-0.4325	0.2650	-0.5866	0.0986	1.0000		
hlpxpuwdi	0.2557	0.0818	-0.2295	0.0245	-0.2386	-0.1737	0.3402	1.0000	
hlxdns	0.2151	0.0981	-0.3426	0.1740	-0.1495	-0.0674	0.2483	0.4546	

Table 2.3: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r

Linear regression

Number of obs = 105
 F(7, 97) = 115.48
 Prob > F = 0.0000
 R-squared = 0.8460
 Root MSE = .32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Table 2.3, Model 3-4: Public Health Spending/GDP (WB-WDI, all cases) and IMR

Model 3-4: IMR predicted by 7 baseline var. and pub hlth sp/GDP (WB-WDI, all cases)

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r

Linear regression

Number of obs = 105
 F(8, 96) = 101.34
 Prob > F = 0.0000
 R-squared = 0.8497
 Root MSE = .3258

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5173432	.0726147	-7.12	0.000	-.6614823	-.3732042
giniavni	.0100715	.0059896	1.68	0.096	-.0018178	.0219607
ethnl	.2011566	.1181155	1.70	0.092	-.0333008	.4356139
musl	.3473362	.1092465	3.18	0.002	.1304836	.5641889
fertwdi	.0825682	.0303003	2.72	0.008	.0224225	.1427139
lpopd	-.0816206	.0307725	-2.65	0.009	-.1427037	-.0205376
urbwdi	-.0039242	.0021762	-1.80	0.074	-.0082439	.0003955
hlxpuwdi	-.0431812	.0357102	-1.21	0.230	-.1140654	.0277029
_cons	7.486696	.6086059	12.30	0.000	6.278623	8.694769

Model 3-4: Means and SDs of pub hlth sp/GDP (WB-WDI, all cases) and infant mortality

. summarize imrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

. summarize limrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	70.13333	45.54712	6	202

```

limrcom |      105    3.985123    .807504   1.791759   5.308268

. summarize u5mrcom

      Variable |       Obs        Mean     Std. Dev.      Min      Max
-----+-----+-----+-----+-----+-----+
      u5mrcom |      105    104.2857    77.10965      7      323

. summarize lu5mrcom

      Variable |       Obs        Mean     Std. Dev.      Min      Max
-----+-----+-----+-----+-----+
      lu5mrcom |      105    4.303227    .9223653   1.94591   5.777652

. summarize hlxpuwdi

      Variable |       Obs        Mean     Std. Dev.      Min      Max
-----+-----+-----+-----+-----+
      hlxpuwdi |      105    2.001905    1.275206      0       7

```

Model 3-4: How much wld IMR fall if pub hlth sp/GDP (WB-WDI, all cases) rose 1 SD?

```
. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi,
> r
```

Linear regression

Number of obs =	105
F(8, 96) =	101.34
Prob > F =	0.0000
R-squared =	0.8497
Root MSE =	.3258

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5173432	.0726147	-7.12	0.000	-.6614823 -.3732042
giniavni	.0100715	.0059896	1.68	0.096	-.0018178 .0219607
ethnl	.2011566	.1181155	1.70	0.092	-.0333008 .4356139
musl	.3473362	.1092465	3.18	0.002	.1304836 .5641889
fertwdi	.0825682	.0303003	2.72	0.008	.0224225 .1427139
lpopd	-.0816206	.0307725	-2.65	0.009	-.1427037 -.0205376
urbwdi	-.0039242	.0021762	-1.80	0.074	-.0082439 .0003955
hlxpuwdi	-.0431812	.0357102	-1.21	0.230	-.1140654 .0277029
_cons	7.486696	.6086059	12.30	0.000	6.278623 8.694769

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10
```

```
. setx mean

. estsimp regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi,
> r
```

Linear regression

Number of obs =	105
F(8, 96) =	115.70

Prob > F = 0.0000
 R-squared = 0.8515
 Root MSE = .37

lu5mrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5451915	.0882932	-6.17	0.000	-.7204521	-.3699308
giniavni	.008237	.0067109	1.23	0.223	-.005084	.0215579
ethnl	.2759885	.1360848	2.03	0.045	.0058624	.5461147
musl	.281959	.1227432	2.30	0.024	.0383157	.5256024
fertwdi	.1237222	.0356386	3.47	0.001	.0529802	.1944642
lpopd	-.0905365	.0352805	-2.57	0.012	-.1605677	-.0205052
urbwdi	-.0040498	.0025393	-1.59	0.114	-.0090903	.0009908
hlxpuwdi	-.0540478	.0392157	-1.38	0.171	-.1318904	.0237948
_cons	7.943246	.7324697	10.84	0.000	6.489305	9.397187

Simulating main parameters. Please wait....
 % of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
 Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(hlxpuwdi 2.001905 4.0039)
```

First Difference: hlxpuwdi 2.001905 4.0039

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(lu5mrcom)]	-7.915216	5.692262	-19.15015 3.674431

Model 3-4: How much wld U5MR fall if pub hlth sp/GDP (WB-WDI, all cases) doubled?

```
. estsimp regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi,
> r
```

Linear regression

Number of obs = 105
 F(8, 96) = 115.70
 Prob > F = 0.0000
 R-squared = 0.8515
 Root MSE = .37

lu5mrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5451915	.0882932	-6.17	0.000	-.7204521	-.3699308
giniavni	.008237	.0067109	1.23	0.223	-.005084	.0215579
ethnl	.2759885	.1360848	2.03	0.045	.0058624	.5461147
musl	.281959	.1227432	2.30	0.024	.0383157	.5256024
fertwdi	.1237222	.0356386	3.47	0.001	.0529802	.1944642
lpopd	-.0905365	.0352805	-2.57	0.012	-.1605677	-.0205052
urbwdi	-.0040498	.0025393	-1.59	0.114	-.0090903	.0009908
hlxpuwdi	-.0540478	.0392157	-1.38	0.171	-.1318904	.0237948
_cons	7.943246	.7324697	10.84	0.000	6.489305	9.397187

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(hlxpuwdi 2.001905 4.0039)
```

First Difference: hlxpuwdi 2.001905 4.0039

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(lu5mrcom)] -7.953675	5.479655	-18.54226	2.83057

Model 3-4: Robustness checks

Model 3-4: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	112.04
Prob > F =	0.0000
R-squared =	0.8397
Root MSE =	.33478

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5906488	.0647242	-9.13	0.000	-.7191083 -.4621892
giniavni	.012297	.0061337	2.00	0.048	.0001232 .0244708
ethnl	.2649786	.1222582	2.17	0.033	.0223299 .5076272
musl	.4759711	.1012122	4.70	0.000	.2750929 .6768493
lpopd	-.0991292	.0304689	-3.25	0.002	-.1596016 -.0386568
urbwdi	-.004914	.0022614	-2.17	0.032	-.0094023 -.0004257
hlxpuwdi	-.0513818	.0368383	-1.39	0.166	-.1244956 .021732
_cons	8.415901	.5008221	16.80	0.000	7.421908 9.409895

Model 3-4: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl fertwdi lpopd urbwdi hlxpuwdi mysfx, r
```

Linear regression

Number of obs =	105
F(9, 95) =	90.37
Prob > F =	0.0000
R-squared =	0.8661
Root MSE =	.30917

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]

lgdph	-.4472139	.0721165	-6.20	0.000	-.5903832	-.3040445
giniavni	.010397	.0058568	1.78	0.079	-.0012302	.0220241
ethnl	.1302762	.1122391	1.16	0.249	-.0925465	.3530989
musl	.2082412	.1092602	1.91	0.060	-.0086678	.4251502
fertwdi	.0238056	.0323193	0.74	0.463	-.0403563	.0879674
lpopd	-.0938763	.0312416	-3.00	0.003	-.1558988	-.0318538
urbwdi	-.0030274	.0021331	-1.42	0.159	-.0072623	.0012074
hlxpuwdi	-.0290536	.0362119	-0.80	0.424	-.1009433	.042836
mysfx	-.0942261	.025728	-3.66	0.000	-.1453027	-.0431495
_cons	7.59765	.6174486	12.30	0.000	6.37186	8.82344

Model 3-4: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi, r
```

Linear regression

Number of obs = 105
 F(9, 95) = 81.87
 Prob > F = 0.0000
 R-squared = 0.8605
 Root MSE = .3156

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4782027	.0688425	-6.95	0.000	-.6148724	-.3415331
giniavni	.0109639	.0059594	1.84	0.069	-.000867	.0227949
ethnl	.1121179	.1126109	1.00	0.322	-.1114431	.3356789
musl	.2228561	.1148618	1.94	0.055	-.0051733	.4508856
fertwdi	.0260984	.0351348	0.74	0.459	-.0436529	.0958498
lpopd	-.0952065	.03134	-3.04	0.003	-.1574244	-.0329887
urbwdi	-.0036371	.0021956	-1.66	0.101	-.0079958	.0007217
hlxpuwdi	-.0273401	.035557	-0.77	0.444	-.0979296	.0432494
litfewdi	-.0060674	.0019933	-3.04	0.003	-.0100246	-.0021102
_cons	7.82655	.6292807	12.44	0.000	6.577269	9.07583

Model 3-4: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi airdist popcrgs latcapab, r
```

Linear regression

Number of obs = 105
 F(11, 93) = 73.98
 Prob > F = 0.0000
 R-squared = 0.8566
 Root MSE = .32331

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5010163	.0723068	-6.93	0.000	-.6446032	-.3574294
giniavni	.0111009	.005595	1.98	0.050	-.9.58e-06	.0222114
ethnl	.2502878	.1127087	2.22	0.029	.0264707	.4741049
musl	.2659807	.1240935	2.14	0.035	.0195556	.5124057
fertwdi	.0969619	.035402	2.74	0.007	.0266606	.1672632
lpopd	-.0686609	.029834	-2.30	0.024	-.1279052	-.0094166
urbwdi	-.0038822	.0021111	-1.84	0.069	-.0080745	.0003101
hlxpuwdi	-.0477894	.0320797	-1.49	0.140	-.1114934	.0159146
airdist	-7.17e-06	.0000178	-0.40	0.688	-.0000425	.0000282

popcrgs	-.0008345	.0011242	-0.74	0.460	-.0030669	.0013979
latcapab	.0065632	.0037689	1.74	0.085	-.0009211	.0140475
_cons	7.163925	.5980996	11.98	0.000	5.976218	8.351632

Model 3-4: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout, r
```

Linear regression

Number of obs = 105
 F(12, 92) = 79.78
 Prob > F = 0.0000
 R-squared = 0.8519
 Root MSE = .33037

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.532407	.0769271	-6.92	0.000	-.6851909	-.3796231
giniavni	.0113485	.0059535	1.91	0.060	-.0004756	.0231726
ethnl	.2197934	.1387156	1.58	0.117	-.0557078	.4952946
musl	.2497782	.0985795	2.53	0.013	.0539908	.4455657
fertwdi	.082363	.0374366	2.20	0.030	.0080106	.1567155
lpopd	-.0844158	.0331323	-2.55	0.012	-.1502193	-.0186122
urbwdi	-.0035302	.0024562	-1.44	0.154	-.0084084	.0013479
hlxpuwdi	-.0427196	.0390011	-1.10	0.276	-.1201792	.03474
afri	-.1549005	.102714	-1.51	0.135	-.3588993	.0490983
lati	-.140837	.1386438	-1.02	0.312	-.4161956	.1345216
east	-.1413734	.1526665	-0.93	0.357	-.4445823	.1618356
sout	-.0174005	.2025069	-0.09	0.932	-.4195968	.3847958
_cons	7.664287	.6378731	12.02	0.000	6.397416	8.931158

Model 3-4: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 105
 F(10, 93) = .
 Prob > F = .
 R-squared = 0.8565
 Root MSE = .32343

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5021339	.0707883	-7.09	0.000	-.6427055	-.3615623
giniavni	.0069639	.0062111	1.12	0.265	-.0053701	.0192978
ethnl	.1776195	.1203664	1.48	0.143	-.0614044	.4166434
musl	.3280815	.1104467	2.97	0.004	.1087562	.5474069
fertwdi	.0992896	.0305273	3.25	0.002	.0386684	.1599109
lpopd	-.0814034	.0292156	-2.79	0.006	-.1394198	-.0233871
urbwdi	-.0031252	.0023757	-1.32	0.192	-.0078428	.0015925
hlxpuwdi	-.0307279	.0365966	-0.84	0.403	-.1034015	.0419456
gdphf	-.1854829	.116633	-1.59	0.115	-.417093	.0461271
giniavnf	-.0238637	.0752152	-0.32	0.752	-.1732262	.1254987
ethnlf	-.3029035	.1807132	-1.68	0.097	-.6617641	.0559571
_cons	7.405453	.5702537	12.99	0.000	6.273042	8.537864

Model 3-4: Robust Check 3.1: Outlier checks: Robust regression

Robust regression						
				Number of obs = 105		
				F(8, 96) = 65.37		
				Prob > F = 0.0000		
limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5120904	.0746678	-6.86	0.000	-.6603049	-.3638759
giniavni	.0126709	.0043626	2.90	0.005	.0040112	.0213306
ethnl	.2166567	.1288097	1.68	0.096	-.0390286	.472342
musl	.3819359	.1101985	3.47	0.001	.1631935	.6006783
fertwdi	.0849046	.0333811	2.54	0.013	.0186435	.1511656
lpopd	-.0632593	.0258619	-2.45	0.016	-.1145948	-.0119239
urbwdi	-.0040927	.0025264	-1.62	0.109	-.0091076	.0009222
hlxpuwdi	-.0630022	.0287615	-2.19	0.031	-.1200932	-.0059112
_cons	7.279256	.6012653	12.11	0.000	6.085754	8.472758

Model 3-4: Robust Check 3.2: Outlier checks: Median regression

Median regression						
				Number of obs = 105		
				Raw sum of deviations 68.21916 (about 4.1271343)		
				Min sum of deviations 25.92577		
limrcom	Coef.	Std. Err.	t	P> t	Pseudo R2 = 0.6200	
lgdph	-.4467158	.0878243	-5.09	0.000	-.6210456	-.2723861
giniavni	.0083209	.0051968	1.60	0.113	-.0019947	.0186365
ethnl	.1852776	.1461178	1.27	0.208	-.1047639	.4753191
musl	.2358701	.1331884	1.77	0.080	-.0285067	.500247
fertwdi	.1011778	.040082	2.52	0.013	.0216156	.18074
lpopd	-.0731796	.0301339	-2.43	0.017	-.132995	-.0133642
urbwdi	-.0056295	.0029638	-1.90	0.061	-.0115126	.0002536
hlxpuwdi	-.0334528	.0314772	-1.06	0.291	-.0959346	.029029
_cons	6.998128	.7206581	9.71	0.000	5.567633	8.428623

Model 3-4: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 (Same as Model 3-5)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" &
  ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(8, 94) = 95.22
 Prob > F = 0.0000
 R-squared = 0.8665
 Root MSE = .3033

	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5384846	.0689592	-7.81	0.000	-.6754047 -.4015644
giniavni	.0126649	.0049759	2.55	0.013	.0027851 .0225447
ethnl	.2279729	.1154207	1.98	0.051	-.0011977 .4571435
musl	.3997838	.0966982	4.13	0.000	.2077873 .5917803
fertwdi	.0779697	.0296297	2.63	0.010	.0191393 .1368001
lpopd	-.0578396	.0250929	-2.31	0.023	-.1076622 -.008017
urbwdi	-.0033461	.0020988	-1.59	0.114	-.0075133 .000821
hlxpuwdi	-.063887	.0267557	-2.39	0.019	-.1170111 -.0107629
_cons	7.455071	.5499523	13.56	0.000	6.363128 8.547014

Model 3-4: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)

```
. correlate hlxpuwdi hlxwdns
(obs=104)
```

	hlxpuwdi	hlxwdns
hlxpuwdi	1.0000	
hlxwdns	0.4546	1.0000

Model 3-4: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcom lgdph giniavni ethnl musl fertwdi (hlxpuwdi = hlxwdns), first
```

First-stage regressions

Source	SS	df	MS	Number of obs	= 104
Model	54.8267397	8	6.85334247	F(8, 95)	= 5.70
Residual	114.28316	95	1.20298063	Prob > F	= 0.0000
Total	169.109899	103	1.64184368	R-squared	= 0.3242
				Adj R-squared	= 0.2673
				Root MSE	= 1.0968

hlxpuwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.0824384	.2457437	-0.34	0.738	-.5703013 .4054244
giniavni	-.0072419	.014765	-0.49	0.625	-.0365542 .0220704
ethnl	-.1170782	.4387543	-0.27	0.790	-.9881156 .7539593
musl	-.4269458	.3660137	-1.17	0.246	-1.153575 .2996832
fertwdi	-.1058152	.1091894	-0.97	0.335	-.3225835 .1109531

lpopd	-.2121211	.0824446	-2.57	0.012	-.3757944	-.0484477
urbwdi	.0139966	.0083172	1.68	0.096	-.0025151	.0305083
hlxwdns	.388364	.0947253	4.10	0.000	.2003106	.5764175
_cons	2.905617	1.960374	1.48	0.142	-.9862171	6.797451

Model 3-4: Robust Check 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlpxuwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	104
Model	54.6983683	8	6.83729603	F(8, 95)	=	63.24
Residual	10.2579979	95	.107978925	Prob > F	=	0.0000
Total	64.9563661	103	.630644331	R-squared	=	0.8421

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
hlpxuwdi	-.0687767	.0730747	-0.94	0.349	-.2138483 .076295
lgdph	-.5222601	.0743113	-7.03	0.000	-.6697866 -.3747335
giniavni	.0099318	.0043518	2.28	0.025	.0012924 .0185712
ethnl	.1884377	.1341791	1.40	0.163	-.0779415 .4548169
musl	.3368178	.1102663	3.05	0.003	.1179114 .5557241
fertwdi	.0793049	.0340745	2.33	0.022	.0116585 .1469513
lpopd	-.0868342	.0300692	-2.89	0.005	-.1465292 -.0271392
urbwdi	-.0033206	.0027661	-1.20	0.233	-.008812 .0021707
_cons	7.598404	.652987	11.64	0.000	6.302061 8.894747

Instrumented: hlpxuwdi

Instruments: lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxwdns

Model 3-4: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store imrhlx
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlpxuwdi
```

Source	SS	df	MS	Number of obs	=	105
Model	57.624489	8	7.20306112	F(8, 96)	=	67.86
Residual	10.1900302	96	.106146147	Prob > F	=	0.0000
Total	67.8145191	104	.652062684	R-squared	=	0.8497

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5173432	.0728934	-7.10	0.000	-.6620354 -.3726511
giniavni	.0100715	.0042589	2.36	0.020	.0016176 .0185254
ethnl	.2011566	.1257486	1.60	0.113	-.0484524 .4507655
musl	.3473362	.1075797	3.23	0.002	.1337923 .5608802
fertwdi	.0825682	.0325878	2.53	0.013	.0178818 .1472545
lpopd	-.0816206	.0252473	-3.23	0.002	-.1317361 -.0315052
urbwdi	-.0039242	.0024664	-1.59	0.115	-.0088199 .0009715
hlpxuwdi	-.0431812	.0280779	-1.54	0.127	-.0989155 .012553
_cons	7.486696	.5869761	12.75	0.000	6.321557 8.651834

```
. hausman imrhlx
```

	Coefficients			
	(b) imrhlx	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
hlxpuwdi	-.0687767	-.0431812	-.0255954	.0674651
lgdph	-.5222601	-.5173432	-.0049168	.0144474
giniavni	.0099318	.0100715	-.0001397	.0008943
ethnl	.1884377	.2011566	-.0127189	.0468116
musl	.3368178	.3473362	-.0105185	.0241927
fertwdi	.0793049	.0825682	-.0032633	.0099551
lpopd	-.0868342	-.0816206	-.0052136	.016332
urbwdi	-.0033206	-.0039242	.0006036	.0012523

b = consistent under Ho and Ha; obtained from ivreg

B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

```
chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          =      0.28
Prob>chi2 =      1.0000
```

Model 3-4: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

```
. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs	=	105
F(8, 96)	=	115.70
Prob > F	=	0.0000
R-squared	=	0.8515
Root MSE	=	.37

lu5mrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5451915	.0882932	-6.17	0.000	-.7204521	-.3699308
giniavni	.008237	.0067109	1.23	0.223	-.005084	.0215579
ethnl	.2759885	.1360848	2.03	0.045	.0058624	.5461147
musl	.281959	.1227432	2.30	0.024	.0383157	.5256024
fertwdi	.1237222	.0356386	3.47	0.001	.0529802	.1944642
lpopd	-.0905365	.0352805	-2.57	0.012	-.1605677	-.0205052
urbwdi	-.0040498	.0025393	-1.59	0.114	-.0090903	.0009908
hlxpuwdi	-.0540478	.0392157	-1.38	0.171	-.1318904	.0237948
_cons	7.943246	.7324697	10.84	0.000	6.489305	9.397187

Model 3-4: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs	=	105
F(8, 96)	=	105.55
Prob > F	=	0.0000
R-squared	=	0.8676
Root MSE	=	.30369

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5135256	.0677856	-7.58	0.000	-.6480789	-.3789724

giniavni	.0115013	.005359	2.15	0.034	.0008637	.0221389
ethnl	.1383647	.1074405	1.29	0.201	-.074903	.3516324
musl	.2789689	.1023179	2.73	0.008	.0758695	.4820683
fertwdi	.1026745	.0293332	3.50	0.001	.0444486	.1609003
lpopd	-.060503	.0247856	-2.44	0.016	-.1097021	-.011304
urbwdi	-.0037204	.002153	-1.73	0.087	-.007994	.0005533
hlxpuwdi	-.0497747	.0309034	-1.61	0.111	-.1111175	.0115681
_cons	7.273784	.5618135	12.95	0.000	6.158593	8.388975

Model 3-4: Robust Ck 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
 (Same as Model 3-6)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs =	105
F(8, 96) =	102.08
Prob > F =	0.0000
R-squared =	0.8487
Root MSE =	.3269

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5095302	.0735944	-6.92	0.000	-.655614	-.3634465
giniavni	.0098831	.0058717	1.68	0.096	-.0017721	.0215384
ethnl	.1988513	.1200938	1.66	0.101	-.0395331	.4372356
musl	.3453122	.1081834	3.19	0.002	.1305697	.5600546
fertwdi	.0899283	.0315137	2.85	0.005	.0273741	.1524825
lpopd	-.0768825	.0315683	-2.44	0.017	-.139545	-.0142199
urbwdi	-.0042461	.0021909	-1.94	0.056	-.008595	.0001028
hlxpuwb	-.0298866	.0246331	-1.21	0.228	-.0787829	.0190097
_cons	7.378843	.6351789	11.62	0.000	6.118023	8.639663

Model 3-4: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to hlxpuwd)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwd, r
```

Linear regression

Number of obs =	104
F(8, 95) =	97.64
Prob > F =	0.0000
R-squared =	0.8494
Root MSE =	.32684

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5231553	.0725644	-7.21	0.000	-.6672139	-.3790967
giniavni	.0107891	.0060961	1.77	0.080	-.0013133	.0228914
ethnl	.2290743	.1208385	1.90	0.061	-.0108204	.468969
musl	.362507	.113508	3.19	0.002	.137165	.5878489
fertwdi	.0807494	.0303205	2.66	0.009	.0205557	.1409431
lpopd	-.0777868	.0325352	-2.39	0.019	-.1423773	-.0131963
urbwdi	-.003633	.0022254	-1.63	0.106	-.008051	.000785
hlxpuwd	-.0872663	.0650299	-1.34	0.183	-.216367	.0418344
_cons	7.42436	.6294999	11.79	0.000	6.174645	8.674076

Model 3-4: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 104
 $F(8, 95) = 95.92$
 Prob > F = 0.0000
 R-squared = 0.8575
 Root MSE = .31879

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5226373	.0738381	-7.08	0.000	-.6692246	-.3760501
giniavni	.0105105	.0048741	2.16	0.034	.0008342	.0201869
ethnl	.1838763	.1143675	1.61	0.111	-.043172	.4109245
musl	.2607845	.1031681	2.53	0.013	.0559699	.4655991
fertwdi	.0657367	.0342602	1.92	0.058	-.0022784	.1337518
lpopd	-.090796	.0261335	-3.47	0.001	-.1426776	-.0389144
urbwdi	-.0051302	.0019804	-2.59	0.011	-.0090618	-.0011985
hlxpuwdi	-.0456305	.0298743	-1.53	0.130	-.1049385	.0136775
_cons	7.723261	.642108	12.03	0.000	6.448516	8.998007

Model 3-4: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf, r
```

Linear regression

Number of obs = 104
 $F(9, 94) = 87.18$
 Prob > F = 0.0000
 R-squared = 0.8575
 Root MSE = .32045

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5211873	.0749925	-6.95	0.000	-.6700866	-.372288
giniavni	.0104339	.0050277	2.08	0.041	.0004512	.0204166
ethnl	.1868745	.1161389	1.61	0.111	-.0437221	.4174711
musl	.2601403	.1041076	2.50	0.014	.0534322	.4668483
fertwdi	.065018	.0352152	1.85	0.068	-.0049026	.1349385
lpopd	-.0913323	.0271049	-3.37	0.001	-.1451498	-.0375149
urbwdi	-.0051822	.0020298	-2.55	0.012	-.0092124	-.001152
hlxpuwdi	-.0453969	.0302643	-1.50	0.137	-.1054873	.0146935
gdpmf	-.0225548	.1352043	-0.17	0.868	-.2910061	.2458966
_cons	7.722675	.6460014	11.95	0.000	6.440024	9.005326

Model 3-4: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi, r
```

Linear regression

Number of obs = 105
 $F(8, 96) = 106.46$
 Prob > F = 0.0000
 R-squared = 0.8492
 Root MSE = .32644

limrcom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5029083	.0775962	-6.48	0.000	-.6569356	-.3488809
giniavni	.0106606	.0059187	1.80	0.075	-.0010878	.0224091
ethnannx	.2236831	.1558236	1.44	0.154	-.0856243	.5329905
musl	.3408666	.1095443	3.11	0.002	.1234229	.5583102
fertwdi	.0899297	.0309546	2.91	0.005	.0284853	.1513742
lpopd	-.0771186	.0304853	-2.53	0.013	-.1376314	-.0166058
urbwdi	-.004479	.0022913	-1.95	0.054	-.0090271	.0000691
hlxpuwudi	-.0427871	.0360009	-1.19	0.238	-.1142484	.0286741
_cons	7.276434	.6666861	10.91	0.000	5.953073	8.599796

Model 3-4: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwudi ethnannf, r
```

Linear regression

Number of obs = 105
 F(9, 95) = 91.17
 Prob > F = 0.0000
 R-squared = 0.8504
 Root MSE = .32679

limrcom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5268767	.0854987	-6.16	0.000	-.696613	-.3571403
giniavni	.0096895	.0060648	1.60	0.113	-.0023507	.0217297
ethnannx	.2084628	.1580092	1.32	0.190	-.1052251	.5221507
musl	.3414022	.1105154	3.09	0.003	.1220014	.5608029
fertwdi	.085278	.0308692	2.76	0.007	.0239949	.1465612
lpopd	-.0784696	.0308573	-2.54	0.013	-.1397291	-.0172101
urbwdi	-.0037181	.0025203	-1.48	0.143	-.0087215	.0012853
hlxpuwudi	-.0450913	.0352387	-1.28	0.204	-.115049	.0248663
ethnannf	-.1220846	.1566328	-0.78	0.438	-.43304	.1888708
_cons	7.517591	.7404932	10.15	0.000	6.047526	8.987656

Table 2.3, Model 3-5: Public Health Spending/GDP (WB-WDI, -2 outl.) and IMR

Excludes the two cases with the highest score on the Cook's-D test.

Model 3-5: IMR predicted by 7 baseline var. and pub health sp/GDP (WB-WDI, - 2 outl.)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwudi if ctry ~= "Mongolia" &
  ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(8, 94) = 95.22
 Prob > F = 0.0000
 R-squared = 0.8665
 Root MSE = .3033

limrcom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5384846	.0689592	-7.81	0.000	-.6754047	-.4015644
giniavni	.0126649	.0049759	2.55	0.013	.0027851	.0225447

ethnl	.2279729	.1154207	1.98	0.051	-.0011977	.4571435
musl	.3997838	.0966982	4.13	0.000	.2077873	.5917803
fertwdi	.0779697	.0296297	2.63	0.010	.0191393	.1368001
lpopd	-.0578396	.0250929	-2.31	0.023	-.1076622	-.008017
urbwdi	-.0033461	.0020988	-1.59	0.114	-.0075133	.000821
hlxpuwdi	-.063887	.0267557	-2.39	0.019	-.1170111	-.0107629
_cons	7.455071	.5499523	13.56	0.000	6.363128	8.547014

Model 3-5: Means and SDs of pub health sp/GDP (WB-WDI, all cases) and IMR

. summarize imrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

. summarize limrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

. summarize u5mrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
u5mrcom	105	104.2857	77.10965	7	323

. summarize lu5mrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
lu5mrcom	105	4.303227	.9223653	1.94591	5.777652

. summarize hlxpuwdi

Variable	Obs	Mean	Std. Dev.	Min	Max
hlxpuwdi	105	2.001905	1.275206	0	7

Model 3-5: How much would IMR fall if pub hlt sp/GDP (WB-WDI, -2 outl.) rose 1 SD?

. estsimp regress limrcom lgdp giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry == "Mongolia" & ctry == "Cuba", r

		Number of obs = 103 F(8, 94) = 95.22 Prob > F = 0.0000 R-squared = 0.8665 Root MSE = .3033				
		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
limrcom						
lgdp	-.5384846	.0689592	-7.81	0.000	-.6754047	-.4015644
giniavni	.0126649	.0049759	2.55	0.013	.0027851	.0225447
ethnl	.2279729	.1154207	1.98	0.051	-.0011977	.4571435
musl	.3997838	.0966982	4.13	0.000	.2077873	.5917803
fertwdi	.0779697	.0296297	2.63	0.010	.0191393	.1368001
lpopd	-.0578396	.0250929	-2.31	0.023	-.1076622	-.008017

urbwdi	-.0033461	.0020988	-1.59	0.114	-.0075133	.000821
hlxpuwdi	-.063887	.0267557	-2.39	0.019	-.1170111	-.0107629
_cons	7.455071	.5499523	13.56	0.000	6.363128	8.547014

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(hlxpuwdi 2.001905 3.277111)
```

First Difference: hlxpuwdi 2.001905 3.277111

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)] -4.446477	1.93157	-8.101107	-.6561165

Model 3-5: How much would U5MR fall if pub hlth sp/GDP (WB-WDI, -2 outl.) doubled?

```
. estsimp regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi
> if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
F(8, 94) = 114.90
Prob > F = 0.0000
R-squared = 0.8668
Root MSE = .34619

lu5mrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5695636	.0846593	-6.73	0.000	-.7376567 -.4014705
giniavni	.0109413	.0056738	1.93	0.057	-.0003242 .0222067
ethnl	.3051037	.1329271	2.30	0.024	.0411738 .5690335
musl	.3381948	.1087472	3.11	0.002	.1222747 .5541148
fertwdi	.1183328	.0347655	3.40	0.001	.0493051 .1873606
lpopd	-.0647831	.029635	-2.19	0.031	-.1236241 -.0059421
urbwdi	-.0033829	.0024635	-1.37	0.173	-.0082742 .0015084
hlxpuwdi	-.0759792	.0291054	-2.61	0.011	-.1337686 -.0181899
_cons	7.924408	.6759809	11.72	0.000	6.582232 9.266584

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
```

```
. simqi, tfunc(exp) fd(ev) changex(hlxpuwdi 2.001905 4.0039)
```

First Difference: hlxpuwdi 2.001905 4.0039

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(lu5mrcom)]	-11.01149	4.076277	-18.14521 -2.709911

Model 3-5: Robustness checks

Model 3-5: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression		Number of obs = 103 F(7, 95) = 105.17 Prob > F = 0.0000 R-squared = 0.8573 Root MSE = .31199			
-------------------	--	---	--	--	--

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.610283	.0617335	-9.89	0.000	-.7328395 -.4877266
giniavni	.0143598	.0051047	2.81	0.006	.0042257 .0244938
ethnl	.2867882	.1201561	2.39	0.019	.0482482 .5253282
musl	.5163722	.0867691	5.95	0.000	.3441139 .6886306
lpopd	-.0749484	.0245625	-3.05	0.003	-.1237111 -.0261856
urbwdi	-.0041726	.0021308	-1.96	0.053	-.0084028 .0000576
hlxpuwdi	-.0694594	.0284567	-2.44	0.017	-.1259531 -.0129657
_cons	8.365744	.4352521	19.22	0.000	7.501659 9.229828

Model 3-5: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mysfx if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression		Number of obs = 103 F(9, 93) = 90.72 Prob > F = 0.0000 R-squared = 0.8867 Root MSE = .28099			
-------------------	--	--	--	--	--

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4629839	.0685008	-6.76	0.000	-.5990129 -.326955
giniavni	.0132739	.0044841	2.96	0.004	.0043694 .0221783
ethnl	.1528887	.1083446	1.41	0.162	-.0622621 .3680396
musl	.2528326	.0983964	2.57	0.012	.0574369 .4482283
fertwdi	.0139716	.0310822	0.45	0.654	-.0477514 .0756946
lpopd	-.0693727	.0253575	-2.74	0.007	-.1197276 -.0190178
urbwdi	-.0023511	.0020647	-1.14	0.258	-.0064511 .0017489
hlxpuwdi	-.0503694	.025112	-2.01	0.048	-.1002368 -.0005019
mysfx	-.1024428	.0247836	-4.13	0.000	-.1516582 -.0532274
_cons	7.56447	.5582621	13.55	0.000	6.455872 8.673068

Model 3-5: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi litfewdi if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(9, 93) = 78.63
 Prob > F = 0.0000
 R-squared = 0.8795
 Root MSE = .28975

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.497178	.0645669	-7.70	0.000	-.6253951	-.3689609
giniavni	.0137195	.0047182	2.91	0.005	.0043501	.023089
ethnl	.1332084	.1088003	1.22	0.224	-.0828474	.3492641
musl	.267846	.104664	2.56	0.012	.0600041	.4756879
fertwdi	.0170713	.0341401	0.50	0.618	-.0507241	.0848668
lpopd	-.0715747	.026046	-2.75	0.007	-.1232968	-.0198526
urbwdi	-.0030159	.0021232	-1.42	0.159	-.0072321	.0012003
hlxpuwdi	-.0476111	.0248714	-1.91	0.059	-.0970009	.0017786
litfewdi	-.0065248	.001932	-3.38	0.001	-.0103614	-.0026883
_cons	7.819456	.5681627	13.76	0.000	6.691198	8.947715

Model 3-5: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi airdist popcrgs latcapab if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(11, 91) = 72.99
 Prob > F = 0.0000
 R-squared = 0.8687
 Root MSE = .30569

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5324237	.069289	-7.68	0.000	-.6700578	-.3947896
giniavni	.0127746	.0050322	2.54	0.013	.0027787	.0227706
ethnl	.2497135	.1130908	2.21	0.030	.0250725	.4743545
musl	.3514888	.105576	3.33	0.001	.1417751	.5612025
fertwdi	.0858283	.0344283	2.49	0.014	.0174408	.1542158
lpopd	-.0522774	.0280321	-1.86	0.065	-.1079597	.003405
urbwdi	-.0032259	.0020505	-1.57	0.119	-.0072989	.0008471
hlxpuwdi	-.0642739	.0266892	-2.41	0.018	-.1172888	-.011259
airdist	-1.40e-08	.0000173	-0.00	0.999	-.0000344	.0000343
popcrgs	-.0004282	.0011047	-0.39	0.699	-.0026226	.0017661
latcapab	.0038036	.0033562	1.13	0.260	-.002863	.0104703
_cons	7.296053	.576966	12.65	0.000	6.149981	8.442125

Model 3-5: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi afri lati east sout if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103

F(12, 90) = 84.41
 Prob > F = 0.0000
 R-squared = 0.8726
 Root MSE = .30285

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5192479	.070748	-7.34	0.000	-.6598012	-.3786946
giniavni	.0116881	.0053449	2.19	0.031	.0010695	.0223067
ethnl	.3099304	.1227086	2.53	0.013	.0661484	.5537124
musl	.3027291	.0990738	3.06	0.003	.1059017	.4995566
fertwdi	.0685007	.0354012	1.93	0.056	-.0018299	.1388313
lpopd	-.0529701	.0250551	-2.11	0.037	-.1027464	-.0031939
urbwdi	-.0045772	.0022276	-2.05	0.043	-.0090027	-.0001516
hlxpuwdi	-.0747869	.0289261	-2.59	0.011	-.1322536	-.0173202
afri	-.1611323	.1012308	-1.59	0.115	-.3622449	.0399803
lati	-.0772862	.1333696	-0.58	0.564	-.3422481	.1876757
east	-.2834379	.1198294	-2.37	0.020	-.5214999	-.0453759
sout	-.1180054	.1796934	-0.66	0.513	-.4749976	.2389868
_cons	7.572295	.5688262	13.31	0.000	6.442223	8.702368

Model 3-5: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdphf giniavnf ethnlf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(10, 91) = .
 Prob > F = .
 R-squared = 0.8682
 Root MSE = .30635

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5283233	.0689439	-7.66	0.000	-.6652718	-.3913748
giniavni	.0111908	.0052958	2.11	0.037	.0006714	.0217102
ethnl	.2178677	.1157797	1.88	0.063	-.0121145	.44785
musl	.3865881	.0987011	3.92	0.000	.1905304	.5826458
fertwdi	.0855609	.029796	2.87	0.005	.0263748	.1447469
lpopd	-.0580615	.0252806	-2.30	0.024	-.1082783	-.0078448
urbwdi	-.0030374	.0023117	-1.31	0.192	-.0076293	.0015545
hlxpuwdi	-.0579435	.0277745	-2.09	0.040	-.1131141	-.0027729
gdphf	-.1880996	.1180667	-1.59	0.115	-.4226247	.0464255
giniavnf	.0020212	.0713492	0.03	0.977	-.1397052	.1437475
ethnlf	-.1489925	.1793344	-0.83	0.408	-.5052182	.2072333
_cons	7.397998	.5503652	13.44	0.000	6.304765	8.491231

Model 3-5: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" & ctry ~= "Cuba"
```

Huber iteration 1: maximum difference in weights = .28327073
 Huber iteration 2: maximum difference in weights = .03590453
 Biweight iteration 3: maximum difference in weights = .15964811
 Biweight iteration 4: maximum difference in weights = .00725239

Robust regression

Number of obs = 103
 F(8, 94) = 65.87
 Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5311567	.0741539	-7.16	0.000	-.6783909 -.3839225
giniavni	.0123652	.0046518	2.66	0.009	.0031291 .0216014
ethnl	.2221185	.126253	1.76	0.082	-.0285597 .4727967
musl	.389418	.1100773	3.54	0.001	.1708569 .6079791
fertwdi	.0799614	.0328528	2.43	0.017	.0147313 .1451914
lpopd	-.05625	.0265703	-2.12	0.037	-.1090061 -.003494
urbwdi	-.0036255	.0024964	-1.45	0.150	-.0085822 .0013312
hlxpuwdi	-.0641482	.0303426	-2.11	0.037	-.1243941 -.0039024
_cons	7.414149	.6142513	12.07	0.000	6.194538 8.633759

Model 3-5: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry == "Mongolia" & ctry
~= "Cuba"
Iteration 1: WLS sum of weighted deviations = 24.825531

Iteration 1: sum of abs. weighted deviations = 24.680866
Iteration 2: sum of abs. weighted deviations = 24.601008
Iteration 3: sum of abs. weighted deviations = 24.428452
Iteration 4: sum of abs. weighted deviations = 24.38628
Iteration 5: sum of abs. weighted deviations = 24.366995
Iteration 6: sum of abs. weighted deviations = 24.350417
Iteration 7: sum of abs. weighted deviations = 24.336912
Iteration 8: sum of abs. weighted deviations = 24.336378
```

Median regression Number of obs = 103
 Raw sum of deviations 65.92571 (about 4.1271343)
 Min sum of deviations 24.33638 Pseudo R2 = 0.6309

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4567688	.1106837	-4.13	0.000	-.6765339 -.2370037
giniavni	.0080773	.0071584	1.13	0.262	-.006136 .0222905
ethnl	.1906535	.1837601	1.04	0.302	-.1742066 .5555136
musl	.3309283	.1635948	2.02	0.046	.0061071 .6557496
fertwdi	.1028371	.0478605	2.15	0.034	.0078088 .1978653
lpopd	-.0676084	.041178	-1.64	0.104	-.1493682 .0141514
urbwdi	-.004977	.0037825	-1.32	0.191	-.0124873 .0025333
hlxpuwdi	-.0339358	.0416543	-0.81	0.417	-.1166414 .0487698
_cons	7.026201	.9314611	7.54	0.000	5.176763 8.875638

Model 3-5: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)

```
. correlate hlxpuwdi hlxwdns
(obs=104)
```

	hlxpuwdi	hlxwdns
hlxpuwdi	1.0000	
hlxwdns	0.4546	1.0000

Model 3-5: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwdi = hlxwdns) if ctry ~= "Mongolia" & ctry ~= "Cuba", first
```

First-stage regressions

Source	SS	df	MS	Number of obs = 102		
Model	47.2430199	8	5.90537749	F(8, 93)	=	5.93
Residual	92.6845239	93	.996607784	Prob > F	=	0.0000
Total	139.927544	101	1.38542123	R-squared	=	0.3376
				Adj R-squared	=	0.2806
				Root MSE	=	.9983

hlxpuwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.0552358	.2279231	0.24	0.809	-.3973742 .5078458
giniavni	.0164781	.0143846	1.15	0.255	-.0120868 .045043
ethnl	.1079186	.4024081	0.27	0.789	-.6911842 .9070214
musl	-.0988818	.3407363	-0.29	0.772	-.7755166 .577753
fertwdi	-.0493725	.1004572	-0.49	0.624	-.2488605 .1501155
lpopd	-.0777862	.0810376	-0.96	0.340	-.2387108 .0831385
urbwdi	.0078536	.0077436	1.01	0.313	-.0075237 .0232309
hlxwdns	.415177	.0864526	4.80	0.000	.2434992 .5868548
_cons	.0266105	1.90282	0.01	0.989	-3.752012 3.805233

Model 3-5: Robust Check 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlxpuwdi

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs = 102		
Model	53.2768115	8	6.65960144	F(8, 93)	=	71.32
Residual	8.62430148	93	.092734425	Prob > F	=	0.0000
Total	61.901113	101	.612882307	R-squared	=	0.8607
				Adj R-squared	=	0.8487
				Root MSE	=	.30452

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
hlxpuwdi	-.0675436	.063519	-1.06	0.290	-.1936796 .0585925
lgdph	-.5403779	.0693154	-7.80	0.000	-.6780246 -.4027313
giniavni	.0123871	.0046673	2.65	0.009	.0031188 .0216555
ethnl	.2301286	.120914	1.90	0.060	-.0099826 .4702397
musl	.3941277	.1034554	3.81	0.000	.1886858 .5995695
fertwdi	.0776051	.0310254	2.50	0.014	.0159949 .1392153
lpopd	-.0575632	.0256157	-2.25	0.027	-.1084308 -.0066956
urbwdi	-.0030703	.0024582	-1.25	0.215	-.0079518 .0018112
_cons	7.479466	.5807141	12.88	0.000	6.326283 8.632649

Instrumented: hlxpuwdi

Instruments: lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxwdns

Model 3-5: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

```
. estimates store imrhlxcooks
```

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry == "Mongolia" & ctry == "Cuba"

Source	SS	df	MS	Number of obs	=	103
Model	56.1415754	8	7.01769693	F(8, 94)	=	76.28
Residual	8.64736325	94	.091993226	Prob > F	=	0.0000
Total	64.7889387	102	.635185673	R-squared	=	0.8665

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5384846	.0689209	-7.81	0.000	-.6753287 -.4016404
giniavni	.0126649	.0043235	2.93	0.004	.0040805 .0212493
ethnl	.2279729	.1173435	1.94	0.055	-.0050153 .4609611
musl	.3997838	.1023093	3.91	0.000	.1966462 .6029214
fertwdi	.0779697	.0305345	2.55	0.012	.0173428 .1385966
lpopd	-.0578396	.0246953	-2.34	0.021	-.1068727 -.0088065
urbwdi	-.0033461	.0023203	-1.44	0.153	-.0079531 .0012608
hlxpuwdi	-.063887	.0282013	-2.27	0.026	-.1198814 -.0078926
_cons	7.455071	.5709045	13.06	0.000	6.321527 8.588615

. hausman imrhlxcooks

	---- Coefficients ----			
	(b) imrhlxcooks	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
hlxpuwdi	-.0675436	-.063887	-.0036566	.0569152
lgdph	-.5403779	-.5384846	-.0018934	.0073846
giniavni	.0123871	.0126649	-.0002778	.0017582
ethnl	.2301286	.2279729	.0021556	.0291667
musl	.3941277	.3997838	-.0056561	.0153562
fertwdi	.0776051	.0779697	-.0003646	.0054972
lpopd	-.0575632	-.0578396	.0002764	.0068047
urbwdi	-.0030703	-.0033461	.0002758	.0008119

b = consistent under H_0 and H_a ; obtained from ivreg
B = inconsistent under H_a , efficient under H_0 ; obtained from regress

Test: H_0 : difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(8) &= (\mathbf{b}-\mathbf{B})'[(V_b-V_B)^{-1}](\mathbf{b}-\mathbf{B}) \\ &= 0.25 \\ \text{Prob}>\text{chi2} &= 1.0000 \end{aligned}$$

Model 3-5: Robust Ck 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry == "Mongolia" & ctry == "Cuba", r

Linear regression						
	Number of obs = 103					
	F(8, 94) = 114.90					
	Prob > F = 0.0000					
	R-squared = 0.8668					
	Root MSE = .34619					

lu5mrcom	Robust	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
----------	--------	-------	-----------	---	------	----------------------

	lgdph	.5695636	.0846593	-6.73	0.000	-.7376567	-.4014705
giniavni	.0109413	.0056738	1.93	0.057	-.0003242	.0222067	
ethnl	.3051037	.1329271	2.30	0.024	.0411738	.5690335	
musl	.3381948	.1087472	3.11	0.002	.1222747	.5541148	
fertwdi	.1183328	.0347655	3.40	0.001	.0493051	.1873606	
lpopd	-.0647831	.029635	-2.19	0.031	-.1236241	-.0059421	
urbwdi	-.0033829	.0024635	-1.37	0.173	-.0082742	.0015084	
hlxpuwdi	-.0759792	.0291054	-2.61	0.011	-.1337686	-.0181899	
_cons	7.924408	.6759809	11.72	0.000	6.582232	9.266584	

Model 3-5: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry == "Mongolia" &
ctry == "Cuba", r
```

Linear regression

Number of obs =	103
F(8, 94) =	100.07
Prob > F =	0.0000
R-squared =	0.8773
Root MSE =	.28922

limrwdi	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5355215	.0643576	-8.32	0.000	-.6633051	-.4077379
giniavni	.0127856	.0048184	2.65	0.009	.0032185	.0223527
ethnl	.1573518	.1055844	1.49	0.139	-.0522885	.366992
musl	.3125973	.0962393	3.25	0.002	.1215118	.5036828
fertwdi	.0974537	.0289649	3.36	0.001	.0399433	.1549641
lpopd	-.0439934	.0211711	-2.08	0.040	-.0860291	-.0019577
urbwdi	-.0031164	.0020807	-1.50	0.138	-.0072476	.0010148
hlxpuwdi	-.0617142	.02598	-2.38	0.020	-.113298	-.0101303
_cons	7.328166	.5176027	14.16	0.000	6.300453	8.355878

Model 3-5: Robust Ck 6.1: IndV: Vary source: WDI to HNP pub sp (hlxpuwdi to hlxpuwb)
(Same as Model 3-7)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" &
ctry == "Cuba", r
```

Linear regression

Number of obs =	103
F(8, 94) =	95.26
Prob > F =	0.0000
R-squared =	0.8634
Root MSE =	.30689

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5295405	.0687095	-7.71	0.000	-.6659649	-.3931162
giniavni	.0118105	.0049874	2.37	0.020	.0019079	.0217131
ethnl	.2256963	.1175787	1.92	0.058	-.0077591	.4591516
musl	.3909433	.0964343	4.05	0.000	.1994707	.5824159
fertwdi	.0873877	.0300125	2.91	0.004	.0277971	.1469782
lpopd	-.0532342	.0247857	-2.15	0.034	-.1024467	-.0040217
urbwdi	-.0037905	.0021098	-1.80	0.076	-.0079795	.0003985
hlxpuwb	-.0379418	.0205077	-1.85	0.067	-.0786604	.0027768

_cons	7.343664	.5467029	13.43	0.000	6.258173	8.429156
-------	----------	----------	-------	-------	----------	----------

Model 3-5: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwdi to hlxpuwd)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwd if ctry ~=
> "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 102
F(8, 93) = 90.48
Prob > F = 0.0000
R-squared = 0.8645
Root MSE = .30623

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5465639	.0677556	-8.07	0.000	-.681113	-.4120148
giniavni	.0128845	.0051167	2.52	0.014	.0027238	.0230453
ethnl	.2644688	.1159515	2.28	0.025	.0342122	.4947254
musl	.412724	.1002932	4.12	0.000	.2135615	.6118864
fertwdi	.0760991	.0292688	2.60	0.011	.0179771	.1342211
lpopd	-.0538095	.0258668	-2.08	0.040	-.1051759	-.0024432
urbwdi	-.0030656	.0021622	-1.42	0.160	-.0073594	.0012281
hlxpuwd	-.1040669	.0586955	-1.77	0.080	-.2206245	.0124907
_cons	7.397658	.5410579	13.67	0.000	6.323225	8.472092

Model 3-5: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" &
ctr
> y ~= "Cuba", r
```

Linear regression

Number of obs = 102
F(8, 93) = 94.31
Prob > F = 0.0000
R-squared = 0.8634
Root MSE = .30833

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5122996	.0717011	-7.14	0.000	-.6546838	-.3699154
giniavni	.0118692	.0044897	2.64	0.010	.0029536	.0207848
ethnl	.2077545	.1123764	1.85	0.068	-.0154028	.4309117
musl	.2858692	.0996908	2.87	0.005	.0879029	.4838354
fertwdi	.0671832	.0340431	1.97	0.051	-.0004196	.1347861
lpopd	-.0745269	.0238643	-3.12	0.002	-.1219167	-.027137
urbwdi	-.0052019	.0019519	-2.67	0.009	-.009078	-.0013258
hlxpuwdi	-.0588145	.0260567	-2.26	0.026	-.110558	-.007071
_cons	7.527808	.5968168	12.61	0.000	6.342648	8.712968

Model 3-5: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi gdpmf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 102
 F(9, 92) = 84.89
 Prob > F = 0.0000
 R-squared = 0.8634
 Root MSE = .31

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	-.5122346	.0730338	-7.01	0.000	-.6572861	-.3671832
giniavni	.0118634	.0046647	2.54	0.013	.002599	.0211279
ethnl	.2079058	.1146741	1.81	0.073	-.0198469	.4356585
musl	.2858141	.1010391	2.83	0.006	.0851417	.4864866
fertwdi	.0671413	.034743	1.93	0.056	-.0018612	.1361438
lpopd	-.0745624	.0246528	-3.02	0.003	-.1235249	-.0255999
urbwdi	-.0052044	.0019936	-2.61	0.011	-.0091638	-.0012449
hlxpuwdi	-.0587915	.026347	-2.23	0.028	-.1111188	-.0064642
gdpmf	-.0011989	.1432684	-0.01	0.993	-.2857422	.2833444
_cons	7.527968	.6008677	12.53	0.000	6.334593	8.721343

Model 3-5: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi if ctry ~= "Mongolia" &
  ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(8, 94) = 101.35
 Prob > F = 0.0000
 R-squared = 0.8646
 Root MSE = .30545

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.525045	.0740667	-7.09	0.000	-.6721063	-.3779838
giniavni	.0133222	.0049162	2.71	0.008	.003561	.0230833
ethnannx	.2204114	.152874	1.44	0.153	-.0831235	.5239464
musl	.3865545	.0994303	3.89	0.000	.1891333	.5839756
fertwdi	.0869047	.0306331	2.84	0.006	.0260819	.1477276
lpopd	-.0543538	.02511	-2.16	0.033	-.1042102	-.0044973
urbwdi	-.0039222	.0022297	-1.76	0.082	-.0083493	.0005049
hlxpuwdi	-.063957	.0273715	-2.34	0.022	-.1183038	-.0096102
_cons	7.261239	.6091447	11.92	0.000	6.051768	8.470711

Model 3-5: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwdi ethnannf if ctry ~= "Mongolia" &
  ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(9, 93) = 89.74
 Prob > F = 0.0000
 R-squared = 0.8647
 Root MSE = .307

	Robust

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5304016	.082995	-6.39	0.000	-.6952133 -.3655899
giniavni	.0131097	.0049935	2.63	0.010	.0031936 .0230257
ethnannx	.2169214	.154883	1.40	0.165	-.0906456 .5244884
musl	.386829	.1001439	3.86	0.000	.1879631 .5856949
fertwdi	.0858962	.0309485	2.78	0.007	.0244387 .1473537
lpopd	-.054754	.0249206	-2.20	0.030	-.1042413 -.0052666
urbwdi	-.0037488	.0024862	-1.51	0.135	-.008686 .0011883
hlxpuwdi	-.0646588	.0273582	-2.36	0.020	-.1189867 -.0103309
ethnannf	-.0308377	.1495267	-0.21	0.837	-.3277682 .2660927
_cons	7.315556	.6771216	10.80	0.000	5.970926 8.660185

Table 2.3, Model 3-6: Public Health Spending/GDP (WB-HNP, all cases) and IMR**Model 3-6: IMR predicted by 7 baseline var. and pub health sp/GDP (WB-HNP, all cases)**

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs = 105
 F(8, 96) = 102.08
 Prob > F = 0.0000
 R-squared = 0.8487
 Root MSE = .3269

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5095302	.0735944	-6.92	0.000	-.655614 -.3634465
giniavni	.0098831	.0058717	1.68	0.096	-.0017721 .0215384
ethnl	.1988513	.1200938	1.66	0.101	-.0395331 .4372356
musl	.3453122	.1081834	3.19	0.002	.1305697 .5600546
fertwdi	.0899283	.0315137	2.85	0.005	.0273741 .1524825
lpopd	-.0768825	.0315683	-2.44	0.017	-.139545 -.0142199
urbwdi	-.0042461	.0021909	-1.94	0.056	-.008595 .0001028
hlxpuwb	-.0298866	.0246331	-1.21	0.228	-.0787829 .0190097
_cons	7.378843	.6351789	11.62	0.000	6.118023 8.639663

Model 3-6: Means and SDs of pub health sp/GDP (WB-HNP, all cases) and infant mort.

```
. summarize imrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

```
. summarize limrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

```
. summarize u5mrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
u5mrcom	105	104.2857	77.10965	7	323
. summarize lu5mrcom					
Variable	Obs	Mean	Std. Dev.	Min	Max
lu5mrcom	105	4.303227	.9223653	1.94591	5.777652
. summarize hlxpuwdi					
Variable	Obs	Mean	Std. Dev.	Min	Max
hlxpuwdi	105	2.001905	1.275206	0	7

Model 3-6: How much wld IMR fall if pub hlth sp/GDP (WB-HNP, all cases) rose 1 SD?

```
. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs =	105
F(8, 96) =	102.08
Prob > F =	0.0000
R-squared =	0.8487
Root MSE =	.3269

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5095302	.0735944	-6.92	0.000	-.655614	-.3634465
giniavni	.0098831	.0058717	1.68	0.096	-.0017721	.0215384
ethnl	.1988513	.1200938	1.66	0.101	-.0395331	.4372356
musl	.3453122	.1081834	3.19	0.002	.1305697	.5600546
fertwdi	.0899283	.0315137	2.85	0.005	.0273741	.1524825
lpopd	-.0768825	.0315683	-2.44	0.017	-.139545	-.0142199
urbwdi	-.0042461	.0021909	-1.94	0.056	-.008595	.0001028
hlxpuwb	-.0298866	.0246331	-1.21	0.228	-.0787829	.0190097
_cons	7.378843	.6351789	11.62	0.000	6.118023	8.639663

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10
```

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(hlxpuwb 2.24381 3.7308)
```

First Difference: hlxpuwb 2.24381 3.7308

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-2.451822	2.268025	-6.934252 2.012781

Model 3-6: How much wld U5MR fall if pub hlth sp/GDP (WB-HNP, all cases) doubled?

```
. estsmp regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb,
> r
```

Linear regression

Number of obs = 105
 $F(8, 96) = 122.82$
 Prob > F = 0.0000
 R-squared = 0.8507
 Root MSE = .37099

lu5mrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5353194	.0885029	-6.05	0.000	-.7109964 -.3596425
giniavni	.0080043	.0065886	1.21	0.227	-.0050741 .0210826
ethnl	.2706733	.1430493	1.89	0.061	-.0132773 .5546239
musl	.2784637	.1220794	2.28	0.025	.0361379 .5207894
fertwdi	.1330614	.0372643	3.57	0.001	.0590924 .2070304
lpopd	-.0850507	.0358609	-2.37	0.020	-.1562341 -.0138672
urbwdi	-.0044226	.0024687	-1.79	0.076	-.0093229 .0004778
hlxpuwb	-.0398042	.0292256	-1.36	0.176	-.0978165 .018208
_cons	7.813651	.7468406	10.46	0.000	6.331184 9.296117

Simulating main parameters. Please wait....

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
 Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(hlxpuwb 2.24381 4.48762)
```

First Difference: hlxpuwb 2.24381 4.48762

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(lu5mrcom)]	-6.833164	4.776968	-15.7506 3.158867

Model 3-6: Robustness checks

Model 3-6: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs = 105
 $F(7, 97) = 112.54$
 Prob > F = 0.0000
 R-squared = 0.8367
 Root MSE = .33793

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5890315	.064691	-9.11	0.000	-.7174252 -.4606377
giniavni	.012286	.0060966	2.02	0.047	.0001859 .0243862

ethnl	.277458	.1243815	2.23	0.028	.0305952	.5243209
musl	.490139	.1021875	4.80	0.000	.287325	.6929529
lpopd	-.0935902	.0303934	-3.08	0.003	-.1539127	-.0332677
urbwdi	-.0055129	.0023199	-2.38	0.019	-.0101172	-.0009086
hlxpuwb	-.0275214	.0273871	-1.00	0.317	-.0818772	.0268345
_cons	8.361078	.509313	16.42	0.000	7.350232	9.371923

Model 3-6: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb mysfx, r
```

Linear regression

Number of obs =	105
F(9, 95) =	91.83
Prob > F =	0.0000
R-squared =	0.8651
Root MSE =	.31028

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4415353	.0730504	-6.04	0.000	-.5865588	-.2965119
giniavni	.0102677	.0057295	1.79	0.076	-.0011067	.0216422
ethnl	.1329248	.1128899	1.18	0.242	-.09119	.3570395
musl	.2075488	.1082879	1.92	0.058	-.0074298	.4225274
fertwdi	.0279564	.0333901	0.84	0.405	-.0383314	.0942442
lpopd	-.0899284	.0323233	-2.78	0.007	-.1540984	-.0257585
urbwdi	-.0032949	.0021583	-1.53	0.130	-.0075797	.0009899
hlxpuwb	-.0152575	.0246209	-0.62	0.537	-.0641362	.0336211
mysfx	-.0950717	.0257805	-3.69	0.000	-.1462525	-.043891
_cons	7.515665	.6470568	11.62	0.000	6.231095	8.800235

Model 3-6: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb litfewdi, r
```

Linear regression

Number of obs =	105
F(9, 95) =	82.11
Prob > F =	0.0000
R-squared =	0.8596
Root MSE =	.3166

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.472785	.0699871	-6.76	0.000	-.611727	-.333843
giniavni	.010856	.0058416	1.86	0.066	-.000741	.0224531
ethnl	.1140458	.1132632	1.01	0.317	-.1108102	.3389017
musl	.2212945	.1136254	1.95	0.054	-.0042804	.4468694
fertwdi	.0294174	.0363794	0.81	0.421	-.0428048	.1016395
lpopd	-.0915717	.0322321	-2.84	0.006	-.1555605	-.0275829
urbwdi	-.0038954	.0022186	-1.76	0.082	-.0083	.0005091
hlxpuwb	-.0137932	.0246085	-0.56	0.576	-.0626472	.0350608
litfewdi	-.0061781	.0020492	-3.01	0.003	-.0102464	-.0021099
_cons	7.754084	.6558911	11.82	0.000	6.451975	9.056192

Model 3-6: Robust Check 1.4: Change specification: Include geographical variables

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb airdist popcrgs latcapab, r

Linear regression

Number of obs = 105
 F(11, 93) = 74.46
 Prob > F = 0.0000
 R-squared = 0.8552
 Root MSE = .32493

limrcom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4961503	.0728629	-6.81	0.000	-.6408414	-.3514591
giniavni	.010728	.0055263	1.94	0.055	-.0002462	.0217021
ethnl	.2416366	.1158833	2.09	0.040	.0115153	.4717578
musl	.2727004	.1209169	2.26	0.026	.0325835	.5128174
fertwdi	.1027261	.0358129	2.87	0.005	.0316087	.1738434
lpopd	-.0625512	.0300943	-2.08	0.040	-.1223125	-.00279
urbwdi	-.0041383	.0021352	-1.94	0.056	-.0083785	.0001018
hlxpuwb	-.0320736	.0235043	-1.36	0.176	-.0787485	.0146013
airdist	-3.49e-06	.0000184	-0.19	0.850	-.00004	.000033
popcrgs	-.0008913	.0011125	-0.80	0.425	-.0031005	.0013178
latcapab	.0062052	.0037219	1.67	0.099	-.0011857	.0135962
_cons	7.073348	.6106901	11.58	0.000	5.860638	8.286058

Model 3-6: Robust Check 1.5: Change specification: Include regional dummy variables

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb afri lati east sout, r

Linear regression

Number of obs = 105
 F(12, 92) = 81.28
 Prob > F = 0.0000
 R-squared = 0.8510
 Root MSE = .33146

limrcom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5265867	.078499	-6.71	0.000	-.6824926	-.3706809
giniavni	.0113585	.0060138	1.89	0.062	-.0005854	.0233024
ethnl	.2072482	.1389446	1.49	0.139	-.0687078	.4832042
musl	.2485026	.0939145	2.65	0.010	.0619803	.4350249
fertwdi	.0888345	.0380654	2.33	0.022	.0132334	.1644355
lpopd	-.0803729	.0340182	-2.36	0.020	-.147936	-.0128098
urbwdi	-.0037031	.0025235	-1.47	0.146	-.0087149	.0013087
hlxpuwb	-.0295066	.0260714	-1.13	0.261	-.0812866	.0222734
afri	-.1450602	.101046	-1.44	0.155	-.3457463	.0556259
lati	-.1473451	.1381541	-1.07	0.289	-.4217311	.1270409
east	-.1345122	.144296	-0.93	0.354	-.4210964	.1520721
sout	-.0009364	.1926154	-0.00	0.996	-.3834873	.3816145
_cons	7.562588	.6659788	11.36	0.000	6.239896	8.885279

Model 3-6: Robust Check 2.1: Imputation check: Include missing data flags

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdphf giniavnf ethnlf, r

Linear regression

Number of obs = 105
 F(10, 93) = .

Prob > F = .
 R-squared = 0.8558
 Root MSE = .32423

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4961249	.0708153	-7.01	0.000	-.6367499	-.3554998
giniavni	.0068244	.0060577	1.13	0.263	-.0052051	.0188538
ethnl	.1764708	.121299	1.45	0.149	-.064405	.4173466
musl	.3266317	.1090383	3.00	0.004	.1101033	.5431601
fertwdi	.1033473	.0302881	3.41	0.001	.0432011	.1634935
lpopd	-.0777361	.0297835	-2.61	0.011	-.1368802	-.0185919
urbwdi	-.0034547	.0023881	-1.45	0.151	-.0081969	.0012875
hlxpuwb	-.0192412	.0257887	-0.75	0.457	-.0704524	.0319701
gdphf	-.1944008	.1172498	-1.66	0.101	-.4272357	.0384341
giniavnf	-.0091363	.0784073	-0.12	0.907	-.1648378	.1465651
ethnlf	-.3202305	.1728907	-1.85	0.067	-.6635571	.0230961
_cons	7.327188	.5844698	12.54	0.000	6.166547	8.48783

Model 3-6: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb
```

```
Huber iteration 1: maximum difference in weights = .50188805
Huber iteration 2: maximum difference in weights = .06443493
Huber iteration 3: maximum difference in weights = .0440578
Biweight iteration 4: maximum difference in weights = .15720668
Biweight iteration 5: maximum difference in weights = .03974586
Biweight iteration 6: maximum difference in weights = .01909129
Biweight iteration 7: maximum difference in weights = .00284379
```

Robust regression

Number of obs = 105
 F(8, 96) = 61.16
 Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5017699	.0769069	-6.52	0.000	-.654429	-.3491109
giniavni	.0119779	.0044985	2.66	0.009	.0030486	.0209073
ethnl	.212875	.1337522	1.59	0.115	-.052621	.478371
musl	.3728651	.1139008	3.27	0.001	.1467739	.5989564
fertwdi	.0952222	.0342346	2.78	0.007	.027267	.1631773
lpopd	-.0572725	.0261161	-2.19	0.031	-.1091126	-.0054325
urbwdi	-.0046185	.00258	-1.79	0.077	-.0097397	.0005028
hlxpuwb	-.0382952	.0241239	-1.59	0.116	-.0861808	.0095903
_cons	7.147018	.6109724	11.70	0.000	5.934247	8.359788

Model 3-6: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb
Iteration 1: WLS sum of weighted deviations = 26.56151
```

```
Iteration 1: sum of abs. weighted deviations = 26.182392
Iteration 2: sum of abs. weighted deviations = 26.164448
```

```
Iteration 3: sum of abs. weighted deviations = 26.155227
```

```
Iteration 4: sum of abs. weighted deviations = 26.09817
```

note: alternate solutions exist

Iteration 5: sum of abs. weighted deviations = 26.075676
 Iteration 6: sum of abs. weighted deviations = 26.062219
 Iteration 7: sum of abs. weighted deviations = 26.053735
 Iteration 8: sum of abs. weighted deviations = 26.051046
 Iteration 9: sum of abs. weighted deviations = 26.051043

Median regression Number of obs = 105
 Raw sum of deviations 68.21916 (about 4.1271343)
 Min sum of deviations 26.05104 Pseudo R2 = 0.6181

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4327884	.0984805	-4.39	0.000	-.6282706 -.2373062
giniavni	.008059	.0059107	1.36	0.176	-.0036736 .0197916
ethnl	.1767561	.171265	1.03	0.305	-.1632021 .5167144
musl	.3114048	.1500659	2.08	0.041	.0135263 .6092833
fertwdi	.1071529	.0445884	2.40	0.018	.0186456 .1956602
lpopd	-.0726759	.0333122	-2.18	0.032	-.1388002 -.0065517
urbwdi	-.0056565	.0032742	-1.73	0.087	-.0121559 .0008428
hlxpuwb	-.0344956	.0296701	-1.16	0.248	-.0933903 .0243991
_cons	6.879609	.7924544	8.68	0.000	5.3066 8.452619

Model 3-6: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
 (Same as Model 3-7)

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" & ctry == "Cuba", r

Linear regression Number of obs = 103
 F(8, 94) = 95.26
 Prob > F = 0.0000
 R-squared = 0.8634
 Root MSE = .30689

limrcom	Coef.	Std. Err.	t	P> t	Robust [95% Conf. Interval]
lgdph	-.5295405	.0687095	-7.71	0.000	-.6659649 -.3931162
giniavni	.0118105	.0049874	2.37	0.020	.0019079 .0217131
ethnl	.2256963	.1175787	1.92	0.058	-.0077591 .4591516
musl	.3909433	.0964343	4.05	0.000	.1994707 .5824159
fertwdi	.0873877	.0300125	2.91	0.004	.0277971 .1469782
lpopd	-.0532342	.0247857	-2.15	0.034	-.1024467 -.0040217
urbwdi	-.0037905	.0021098	-1.80	0.076	-.0079795 .0003985
hlxpuwb	-.0379418	.0205077	-1.85	0.067	-.0786604 .0027768
_cons	7.343664	.5467029	13.43	0.000	6.258173 8.429156

Model 3-6: Robust Ck 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r

Linear regression Number of obs = 105
 F(8, 96) = 122.82
 Prob > F = 0.0000
 R-squared = 0.8507
 Root MSE = .37099

lu5mrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5353194	.0885029	-6.05	0.000	-.7109964	-.3596425
giniavni	.0080043	.0065886	1.21	0.227	-.0050741	.0210826
ethnl	.2706733	.1430493	1.89	0.061	-.0132773	.5546239
musl	.2784637	.1220794	2.28	0.025	.0361379	.5207894
fertwdi	.1330614	.0372643	3.57	0.001	.0590924	.2070304
lpopd	-.0850507	.0358609	-2.37	0.020	-.1562341	-.0138672
urbwdi	-.0044226	.0024687	-1.79	0.076	-.0093229	.0004778
hlxpuwb	-.0398042	.0292256	-1.36	0.176	-.0978165	.018208
_cons	7.813651	.7468406	10.46	0.000	6.331184	9.296117

Model 3-6: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs =	105
F(8, 96) =	104.24
Prob > F =	0.0000
R-squared =	0.8656
Root MSE =	.30591

limrwdi	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5046303	.0686906	-7.35	0.000	-.64098	-.3682806
giniavni	.0112806	.0052671	2.14	0.035	.0008255	.0217357
ethnl	.1386005	.1095335	1.27	0.209	-.0788218	.3560229
musl	.2777811	.1014727	2.74	0.007	.0763595	.4792028
fertwdi	.1110072	.0302307	3.67	0.000	.0509997	.1710147
lpopd	-.0545119	.0247553	-2.20	0.030	-.1036507	-.0053731
urbwdi	-.0041273	.0021788	-1.89	0.061	-.0084521	.0001975
hlxpuwb	-.0315963	.0220577	-1.43	0.155	-.0753805	.012188
_cons	7.143034	.5812381	12.29	0.000	5.989285	8.296783

Model 3-6: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwb to hlxpuwb)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

Number of obs =	104
F(8, 95) =	99.09
Prob > F =	0.0000
R-squared =	0.8491
Root MSE =	.32716

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5188029	.0726912	-7.14	0.000	-.6631132	-.3744926
giniavni	.01069	.00604	1.77	0.080	-.001301	.022681
ethnl	.2237989	.1213733	1.84	0.068	-.0171576	.4647554
musl	.3624926	.1125018	3.22	0.002	.1391484	.5858369
fertwdi	.0854489	.0306938	2.78	0.006	.0245139	.1463839
lpopd	-.0754341	.0326207	-2.31	0.023	-.1401945	-.0106738
urbwdi	-.0038376	.0022082	-1.74	0.085	-.0082215	.0005463
hlxpuwb	-.0758503	.0541723	-1.40	0.165	-.1833959	.0316952
_cons	7.376662	.6357766	11.60	0.000	6.114486	8.638838

Model 3-6: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

					Number of obs = 104
					F(8, 95) = 94.27
					Prob > F = 0.0000
					R-squared = 0.8552
					Root MSE = .32127

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.5140489	.0744596	-6.90	0.000	-.6618698 -.3662279
giniavni	.0103503	.0048171	2.15	0.034	.0007871 .0199136
ethnl	.1888052	.1165878	1.62	0.109	-.0426508 .4202611
musl	.2629997	.1029354	2.55	0.012	.0586472 .4673523
fertwdi	.0736831	.0347229	2.12	0.036	.0047493 .1426168
lpopd	-.0841515	.0257048	-3.27	0.001	-.1351819 -.0331211
urbwdi	-.0055023	.0020115	-2.74	0.007	-.0094956 -.001509
hlxpuwb	-.0254563	.0227816	-1.12	0.267	-.0706834 .0197709
_cons	7.581317	.6520862	11.63	0.000	6.286762 8.875871

Model 3-6: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdpmf, r
```

Linear regression

					Number of obs = 104
					F(9, 94) = 87.05
					Prob > F = 0.0000
					R-squared = 0.8552
					Root MSE = .32296

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.5128635	.0757046	-6.77	0.000	-.6631768 -.3625501
giniavni	.0102855	.0049696	2.07	0.041	.0004183 .0201527
ethnl	.1914872	.1192631	1.61	0.112	-.0453126 .428287
musl	.2625078	.1038199	2.53	0.013	.056371 .4686447
fertwdi	.0730323	.0359218	2.03	0.045	.0017087 .1443558
lpopd	-.0846038	.0267265	-3.17	0.002	-.13767 -.0315376
urbwdi	-.0055473	.0020652	-2.69	0.009	-.0096477 -.0014468
hlxpuwb	-.0251704	.0231436	-1.09	0.280	-.0711226 .0207819
gdpmf	-.019043	.1247232	-0.15	0.879	-.2666838 .2285977
_cons	7.581066	.6557117	11.56	0.000	6.279135 8.882997

Model 3-6: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb, r
```

Linear regression

					Number of obs = 105
					F(8, 96) = 106.32
					Prob > F = 0.0000
					R-squared = 0.8480

Root MSE = .3277

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4958466	.0781819	-6.34	0.000	-.6510364	-.3406569
giniavni	.0104755	.0057965	1.81	0.074	-.0010305	.0219815
ethnannx	.2170033	.1587874	1.37	0.175	-.0981871	.5321938
musl	.3385229	.1082451	3.13	0.002	.1236581	.5533878
fertwdi	.0972228	.0320176	3.04	0.003	.0336684	.1607772
lpopd	-.0724261	.0309865	-2.34	0.021	-.1339338	-.0109185
urbwdi	-.0047953	.002292	-2.09	0.039	-.0093448	-.0002457
hlxpuwb	-.0288298	.0250634	-1.15	0.253	-.0785803	.0209206
_cons	7.175733	.6831808	10.50	0.000	5.81963	8.531836

Model 3-6: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb ethnannf, r

Linear regression

Number of obs = 105
F(9, 95) = 91.29
Prob > F = 0.0000
R-squared = 0.8487
Root MSE = .32863

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.513616	.0871793	-5.89	0.000	-.6866888	-.3405432
giniavni	.0097319	.0059945	1.62	0.108	-.0021687	.0216325
ethnannx	.2083843	.1595487	1.31	0.195	-.10836	.5251285
musl	.3397237	.1089259	3.12	0.002	.1234784	.5559689
fertwdi	.093934	.0322772	2.91	0.004	.0298557	.1580124
lpopd	-.072809	.031093	-2.34	0.021	-.1345365	-.0110815
urbwdi	-.004263	.0025283	-1.69	0.095	-.0092824	.0007563
hlxpuwb	-.0279313	.0253634	-1.10	0.274	-.0782841	.0224214
ethnannf	-.0928259	.1617482	-0.57	0.567	-.4139366	.2282848
_cons	7.346977	.764055	9.62	0.000	5.830136	8.863818

Table 2.3, Model 3-7: Public Health Spending/GDP (WB-HNP, -2 outliers) and IMR

Model 3-7: IMR pred. by 7 baseline var plus pub health sp/GDP (WB-HNP, -2 outl.)

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" & ctry == "Cuba", r

Linear regression

Number of obs = 103
F(8, 94) = 95.26
Prob > F = 0.0000
R-squared = 0.8634
Root MSE = .30689

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5295405	.0687095	-7.71	0.000	-.6659649	-.3931162
giniavni	.0118105	.0049874	2.37	0.020	.0019079	.0217131

ethnl	.2256963	.1175787	1.92	0.058	-.0077591	.4591516
musl	.3909433	.0964343	4.05	0.000	.1994707	.5824159
fertwdi	.0873877	.0300125	2.91	0.004	.0277971	.1469782
lpopd	-.0532342	.0247857	-2.15	0.034	-.1024467	-.0040217
urbwdi	-.0037905	.0021098	-1.80	0.076	-.0079795	.0003985
hlxpuwb	-.0379418	.0205077	-1.85	0.067	-.0786604	.0027768
_cons	7.343664	.5467029	13.43	0.000	6.258173	8.429156

Model 3-7: Means and SDs of pub health sp/GDP (WB-HNP, all cases) and IMR

. summarize imrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

. summarize limrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

. summarize u5mrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
u5mrcom	105	104.2857	77.10965	7	323

. summarize lu5mrcom

Variable	Obs	Mean	Std. Dev.	Min	Max
lu5mrcom	105	4.303227	.9223653	1.94591	5.777652

. summarize hlxpuwb

Variable	Obs	Mean	Std. Dev.	Min	Max
hlxpuwb	105	2.24381	1.48699	0	6.7

Model 3-7: How much wld IMR fall if pub hlth sp/GDP (WB-HNP, -2 outl.) rose 1 SD?

. estsimp regress limrcom lgdp giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" & ctry == "Cuba", r

Linear regression

Number of obs =	103
F(8, 94) =	95.26
Prob > F =	0.0000
R-squared =	0.8634
Root MSE =	.30689

limrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdp	-.5295405	.0687095	-7.71	0.000	-.6659649 -.3931162
giniavni	.0118105	.0049874	2.37	0.020	.0019079 .0217131
ethnl	.2256963	.1175787	1.92	0.058	-.0077591 .4591516
musl	.3909433	.0964343	4.05	0.000	.1994707 .5824159
fertwdi	.0873877	.0300125	2.91	0.004	.0277971 .1469782
lpopd	-.0532342	.0247857	-2.15	0.034	-.1024467 -.0040217

urbwdi	-.0037905	.0021098	-1.80	0.076	-.0079795	.0003985
hlxpuwb	-.0379418	.0205077	-1.85	0.067	-.0786604	.0027768
_cons	7.343664	.5467029	13.43	0.000	6.258173	8.429156

Simulating main parameters. Please wait....

Note: Clarify is expanding your dataset from 105 observations to 1000 observations in order to accommodate the simulations. This will append missing values to the bottom of your original dataset.

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(hlxpuwb 2.24381 3.7308)
```

First Difference: hlxpuwb 2.24381 3.7308

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-3.067465	1.880241	-6.662155 .6796551

Model 3-7: How much would IMR fall if pub health sp/GDP (WB-HNP) doubled?

```
. estsimp regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb
> if ctry == "Mongolia" & ctry == "Cuba", r
```

Linear regression

Number of obs = 103
F(8, 94) = 121.80
Prob > F = 0.0000
R-squared = 0.8640
Root MSE = .34984

lu5mrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5584097	.0834588	-6.69	0.000	-.7241191 -.3927002
giniavni	.0099956	.0057774	1.73	0.087	-.0014756 .0214668
ethnl	.2998848	.1396898	2.15	0.034	.0225273 .5772422
musl	.3273662	.1102907	2.97	0.004	.1083815 .5463509
fertwdi	.1298558	.0355453	3.65	0.000	.0592798 .2004317
lpopd	-.0595018	.0293551	-2.03	0.045	-.1177869 -.0012167
urbwdi	-.0038896	.0024018	-1.62	0.109	-.0086584 .0008791
hlxpuwb	-.0481318	.0260943	-1.84	0.068	-.0999426 .003679
_cons	7.790705	.6585894	11.83	0.000	6.48306 9.09835

Simulating main parameters. Please wait....

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

```

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

. setx mean

. simqi, tfunc(exp) fd(ev) changex(hlxpuwb 2.24381 4.48762)

First Difference: hlxpuwb 2.24381 4.48762

      Quantity of Interest |      Mean       Std. Err.    [95% Conf. Interval]
-----+-----+-----+-----+
dE[exp(lu5mrcom)] | -7.80431     4.439404   -15.86585    .9631348

```

Model 3-7: Robustness checks

Model 3-7: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi hlxpuwb if ctry ~= "Mongoli
> a" & ctry ~= "Cuba", r
```

Linear regression

	Number of obs = 103 F(7, 95) = 109.24 Prob > F = 0.0000 R-squared = 0.8517 Root MSE = .318
--	---

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6106222	.0607818	-10.05	0.000	-.7312894	-.489955
giniavni	.0134227	.0052014	2.58	0.011	.0030966	.0237487
ethnl	.2986498	.1221511	2.44	0.016	.0561493	.5411504
musl	.5216433	.0857726	6.08	0.000	.3513631	.6919234
lpopd	-.0713902	.0245473	-2.91	0.005	-.1201227	-.0226577
urbwdi	-.0048228	.0021367	-2.26	0.026	-.0090646	-.000581
hlxpuwb	-.0329465	.0247218	-1.33	0.186	-.0820255	.0161326
_cons	8.356807	.4331359	19.29	0.000	7.496923	9.21669

Model 3-7: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb mysfx if ct
> ry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

	Number of obs = 103 F(9, 93) = 90.74 Prob > F = 0.0000 R-squared = 0.8837 Root MSE = .28469
--	--

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4562439	.0679965	-6.71	0.000	-.5912715	-.3212164
giniavni	.0124478	.0044538	2.79	0.006	.0036035	.0212921
ethnl	.1559803	.1097245	1.42	0.158	-.0619109	.3738715
musl	.2448569	.0979013	2.50	0.014	.0504442	.4392696
fertwdi	.0198686	.0316453	0.63	0.532	-.0429728	.08271
lpopd	-.0654405	.0250645	-2.61	0.011	-.1152136	-.0156673
urbwdi	-.0027383	.0020901	-1.31	0.193	-.0068889	.0014123

hlxpuwb	-.0228985	.0198957	-1.15	0.253	-.0624075	.0166104
mysfx	-.1036642	.0248222	-4.18	0.000	-.1529562	-.0543722
_cons	7.481003	.5540819	13.50	0.000	6.380706	8.5813

Model 3-7: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb litfewdi if
> ctry == "Mongolia" & ctry == "Cuba", r
```

Linear regression

Number of obs =	103
F(9, 93) =	77.48
Prob > F =	0.0000
R-squared =	0.8767
Root MSE =	.29303

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4906021	.0644459	-7.61	0.000	-.6185789	-.3626253
giniavni	.0129518	.0047162	2.75	0.007	.0035865	.0223172
ethnl	.13475	.1100243	1.22	0.224	-.0837364	.3532364
musl	.2581986	.1040464	2.48	0.015	.0515832	.4648141
fertwdi	.0214583	.0344799	0.62	0.535	-.0470119	.0899285
lpopd	-.0681124	.0257328	-2.65	0.010	-.1192127	-.0170121
urbwdi	-.0033858	.0021357	-1.59	0.116	-.0076269	.0008553
hlxpuwb	-.0207955	.0200062	-1.04	0.301	-.0605239	.0189329
litfewdi	-.0067166	.0019721	-3.41	0.001	-.0106329	-.0028004
_cons	7.75087	.5623352	13.78	0.000	6.634183	8.867556

Model 3-7: Robust Check 1.4: Change specification: Include geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb airdist pop
> crgs latcapab if ctry == "Mongolia" & ctry == "Cuba", r
```

Linear regression

Number of obs =	103
F(11, 91) =	71.70
Prob > F =	0.0000
R-squared =	0.8657
Root MSE =	.30926

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5268289	.069168	-7.62	0.000	-.6642227	-.3894351
giniavni	.0118278	.0050702	2.33	0.022	.0017564	.0218991
ethnl	.2401979	.1158074	2.07	0.041	.0101608	.470235
musl	.3512467	.1026239	3.42	0.001	.1473969	.5550965
fertwdi	.09309	.0346058	2.69	0.009	.0243498	.1618302
lpopd	-.0462342	.0278259	-1.66	0.100	-.1015069	.0090386
urbwdi	-.0035499	.0020668	-1.72	0.089	-.0076553	.0005555
hlxpuwb	-.0390968	.0206311	-1.90	0.061	-.0800781	.0018844
airdist	3.87e-06	.0000177	0.22	0.827	-.0000312	.000039
popcrgs	-.0005228	.0010963	-0.48	0.635	-.0027005	.0016548
latcapab	.0035306	.0032931	1.07	0.286	-.0030107	.0100719
_cons	7.206604	.5724297	12.59	0.000	6.069543	8.343665

Model 3-7: Robust Check 1.5: Change specification: Include regional dummy variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb afri lati e
> ast sout if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(12, 90) = 85.90
 Prob > F = 0.0000
 R-squared = 0.8682
 Root MSE = .30808

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5146586	.0710219	-7.25	0.000	-.6557559	-.3735613
giniavni	.0111732	.0054945	2.03	0.045	.0002575	.022089
ethnl	.2855749	.1281012	2.23	0.028	.0310795	.5400703
musl	.2963472	.0895858	3.31	0.001	.1183694	.4743249
fertwdi	.0792602	.0359331	2.21	0.030	.0078728	.1506476
lpopd	-.0495307	.0252312	-1.96	0.053	-.0996568	.0005954
urbwdi	-.0047239	.0023085	-2.05	0.044	-.0093102	-.0001377
hlxpuwb	-.0427195	.0217211	-1.97	0.052	-.0858722	.0004332
afri	-.1412655	.0979515	-1.44	0.153	-.3358632	.0533323
lati	-.0887116	.1332849	-0.67	0.507	-.3535053	.176082
east	-.2538423	.1162489	-2.18	0.032	-.484791	-.0228936
sout	-.0802828	.1732675	-0.46	0.644	-.424509	.2639434
_cons	7.449216	.5669969	13.14	0.000	6.322778	8.575655

Model 3-7: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdphf ginia
> vnf ethnlf if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
 F(10, 91) = .
 Prob > F = .
 R-squared = 0.8657
 Root MSE = .30927

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5188773	.0682807	-7.60	0.000	-.6545085	-.3832461
giniavni	.0104052	.0052786	1.97	0.052	-.0000801	.0208906
ethnl	.213409	.1176398	1.81	0.073	-.0202679	.447086
musl	.3772485	.0982064	3.84	0.000	.1821737	.5723234
fertwdi	.0924335	.0297223	3.11	0.002	.0333938	.1514732
lpopd	-.0538434	.0248136	-2.17	0.033	-.1031325	-.0045543
urbwdi	-.003574	.0023172	-1.54	0.126	-.0081769	.0010288
hlxpuwb	-.0340374	.0221914	-1.53	0.129	-.0781178	.010043
gdphf	-.2101226	.1185684	-1.77	0.080	-.4456441	.025399
giniavnf	.0279256	.0720341	0.39	0.699	-.1151614	.1710125
ethnlf	-.1825603	.1749934	-1.04	0.300	-.5301631	.1650425
_cons	7.296972	.5447069	13.40	0.000	6.214978	8.378965

Model 3-7: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mo
```

```
> ngolia" & ctry ~= "Cuba"

    Huber iteration 1: maximum difference in weights = .29501385
    Huber iteration 2: maximum difference in weights = .02800167
Biweight iteration 3: maximum difference in weights = .14760568
Biweight iteration 4: maximum difference in weights = .01337827
Biweight iteration 5: maximum difference in weights = .00158169
```

Robust regression

					Number of obs = 103
					F(8, 94) = 62.83
					Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5232465	.0759705	-6.89	0.000	-.6740876 -.3724054
giniavni	.0114338	.0047181	2.42	0.017	.0020658 .0208018
ethnl	.2191882	.1299952	1.69	0.095	-.0389203 .4772968
musl	.3792097	.1126179	3.37	0.001	.1556042 .6028151
fertwdi	.0894316	.0336121	2.66	0.009	.022694 .1561691
lpopd	-.0507686	.0270116	-1.88	0.063	-.1044007 .0028635
urbwdi	-.0041241	.0025362	-1.63	0.107	-.0091598 .0009116
hlxpuwb	-.036563	.0245508	-1.49	0.140	-.0853092 .0121831
_cons	7.309721	.6267419	11.66	0.000	6.06531 8.554132

Model 3-7: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~= "Mo
> ngolia" & ctry ~= "Cuba"
Iteration 1: WLS sum of weighted deviations = 24.930055

Iteration 1: sum of abs. weighted deviations = 24.740289
Iteration 2: sum of abs. weighted deviations = 24.55703
Iteration 3: sum of abs. weighted deviations = 24.516726
Iteration 4: sum of abs. weighted deviations = 24.504717
Iteration 5: sum of abs. weighted deviations = 24.493742
Iteration 6: sum of abs. weighted deviations = 24.490227
Iteration 7: sum of abs. weighted deviations = 24.48829
Iteration 8: sum of abs. weighted deviations = 24.487485
```

Median regression

				Number of obs = 103
				Raw sum of deviations 65.92571 (about 4.1271343)
				Min sum of deviations 24.48749 Pseudo R2 = 0.6286

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4567538	.11044	-4.14	0.000	-.6760351 -.2374725
giniavni	.0079445	.0071087	1.12	0.267	-.0061699 .022059
ethnl	.1902638	.1893165	1.01	0.317	-.1856285 .5661561
musl	.3153437	.1684891	1.87	0.064	-.0191953 .6498827
fertwdi	.1037314	.0488107	2.13	0.036	.0068167 .2006461
lpopd	-.0663865	.0411801	-1.61	0.110	-.1481506 .0153776
urbwdi	-.0048621	.003755	-1.29	0.199	-.0123176 .0025935
hlxpuwb	-.035711	.0350665	-1.02	0.311	-.1053365 .0339144
_cons	7.02059	.9239109	7.60	0.000	5.186143 8.855036

Model 3-7: Robust Ck 4.1: Endog ck: Corr cand. inst (hlxwdns) & hyp endg reg (hlxpuwdi)

```
. correlate hlxpuwb hlxwdns
```

(obs=104)

	hlxpuwb	hlxwdns
hlxpuwb	1.0000	
hlxwdns	0.3117	1.0000

Model 3-7: Robust Ck 4.2: Endog ck: Does CI predict HER in presence of exog regressors?

```
. ivreg limrcm lgdph giniavni ethnl musl fertwdi lpopd urbwdi (hlxpuwb = hlxwdns) i
> f ctry ~= "Mongolia" & ctry ~= "Cuba", first
```

First-stage regressions

Source	SS	df	MS	Number of obs	=	102
Model	33.2896603	8	4.16120754	F(8, 93)	=	2.25
Residual	171.808474	93	1.84740295	Prob > F	=	0.0302
Total	205.098135	101	2.0306746	R-squared	=	0.1623
				Adj R-squared	=	0.0903
				Root MSE	=	1.3592

hlxpuwb	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.2422969	.310318	0.78	0.437	-.3739332 .8585269
giniavni	.0152683	.0195846	0.78	0.438	-.0236229 .0541596
ethnl	-.4059517	.54788	-0.74	0.461	-1.493933 .6820293
musl	-.2366246	.4639136	-0.51	0.611	-1.157865 .6846159
fertwdi	.1331346	.1367728	0.97	0.333	-.138469 .4047382
lpopd	-.0402293	.110333	-0.36	0.716	-.2593288 .1788701
urbwdi	.0046404	.010543	0.44	0.661	-.0162959 .0255766
hlxwdns	.3135285	.1177055	2.66	0.009	.0797886 .5472684
_cons	-1.519313	2.590695	-0.59	0.559	-6.66392 3.625294

Model 3-7: Robust Check 4.3: Endog ck: 2SLS using hlxwdns as instrument for hlxpuwdi**Instrumental variables (2SLS) regression**

Source	SS	df	MS	Number of obs	=	102
Model	52.5818168	8	6.5727271	F(8, 93)	=	66.00
Residual	9.31929617	93	.100207486	Prob > F	=	0.0000
Total	61.901113	101	.612882307	R-squared	=	0.8494
				Adj R-squared	=	0.8365
				Root MSE	=	.31656

limrcm	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
hlxpuwb	-.0894417	.0874358	-1.02	0.309	-.2630719 .0841884
lgdph	-.5224373	.073563	-7.10	0.000	-.6685188 -.3763558
giniavni	.0126397	.0049487	2.55	0.012	.0028126 .0224669
ethnl	.1865303	.1421417	1.31	0.193	-.0957349 .4687955
musl	.3796424	.1078129	3.52	0.001	.1655473 .5937374
fertwdi	.0928477	.0331256	2.80	0.006	.0270667 .1586286
lpopd	-.0559075	.0262295	-2.13	0.036	-.1079941 -.0038208
urbwdi	-.0031857	.0025249	-1.26	0.210	-.0081997 .0018282
_cons	7.341778	.5964608	12.31	0.000	6.157325 8.526231

Instrumented: hlxpuwb

Instruments: lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxwdns

Model 3-7: Robust Check 4.4: Endog ck: Hausman test for diff btw coeff of OLS & of 2SLS

. estimates store hlxhnpcooksds

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" & ctry == "Cuba"

Source	SS	df	MS	Number of obs	=	103
Model	55.9356687	8	6.99195859	F(8, 94)	=	74.24
Residual	8.85326993	94	.094183723	Prob > F	=	0.0000
Total	64.7889387	102	.635185673	R-squared	=	0.8634
				Adj R-squared	=	0.8517
				Root MSE	=	.30689

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5295405	.0698361	-7.58	0.000	-.6682017 -.3908794
giniavni	.0118105	.0043372	2.72	0.008	.003199 .020422
ethnl	.2256963	.1194985	1.89	0.062	-.0115708 .4629633
musl	.3909433	.1035243	3.78	0.000	.1853934 .5964933
fertwdi	.0873877	.030898	2.83	0.006	.026039 .1487363
lpopd	-.0532342	.0248305	-2.14	0.035	-.1025356 -.0039327
urbwdi	-.0037905	.0023314	-1.63	0.107	-.0084195 .0008386
hlxpuwb	-.0379418	.0225684	-1.68	0.096	-.0827519 .0068683
_cons	7.343664	.5761343	12.75	0.000	6.199736 8.487592

. hausman hlxhnpcooksds, constant

---- Coefficients -----				
	(b) hlxhnpcooksds	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
hlxpuwb	-.0894417	-.0379418	-.0514999	.084473
lgdph	-.5224373	-.5295405	.0071032	.0231178
giniavni	.0126397	.0118105	.0008292	.002383
ethnl	.1865303	.2256963	-.0391659	.0769699
musl	.3796424	.3909433	-.011301	.0301054
fertwdi	.0928477	.0873877	.00546	.0119424
lpopd	-.0559075	-.0532342	-.0026733	.0084521
urbwdi	-.0031857	-.0037905	.0006047	.0009693
_cons	7.341778	7.343664	-.0018859	.154385

b = consistent under Ho and Ha; obtained from ivreg

B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(9) &= (\text{b-B})'[(\text{V}_b-\text{V}_B)^{-1}](\text{b-B}) \\ &= 0.54 \\ \text{Prob}>\text{chi2} &= 1.0000 \end{aligned}$$

Model 3-7: Robust Ck 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" & ctry == "Cuba", r

Linear regression

Number of obs = 103

F(8, 94) = 121.80
 Prob > F = 0.0000
 R-squared = 0.8640
 Root MSE = .34984

lu5mrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5584097	.0834588	-6.69	0.000	-.7241191	-.3927002
giniavni	.0099956	.0057774	1.73	0.087	-.0014756	.0214668
ethnl	.2998848	.1396898	2.15	0.034	.0225273	.5772422
musl	.3273662	.1102907	2.97	0.004	.1083815	.5463509
fertwdi	.1298558	.0355453	3.65	0.000	.0592798	.2004317
lpopd	-.0595018	.0293551	-2.03	0.045	-.1177869	-.0012167
urbwdi	-.0038896	.0024018	-1.62	0.109	-.0086584	.0008791
hlxpuwb	-.0481318	.0260943	-1.84	0.068	-.0999426	.003679
_cons	7.790705	.6585894	11.83	0.000	6.48306	9.09835

Model 3-7: Robust Ck 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" &
  ctry == "Cuba", r
```

Linear regression

Number of obs = 103
 F(8, 94) = 97.37
 Prob > F = 0.0000
 R-squared = 0.8738
 Root MSE = .29331

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5272972	.0638092	-8.26	0.000	-.653992	-.4006025
giniavni	.0119037	.004792	2.48	0.015	.0023891	.0214183
ethnl	.157171	.1081127	1.45	0.149	-.0574893	.3718312
musl	.3043106	.0965559	3.15	0.002	.1125966	.4960245
fertwdi	.1062923	.0290738	3.66	0.000	.0485655	.164019
lpopd	-.0393872	.0208031	-1.89	0.061	-.0806922	.0019178
urbwdi	-.003563	.0020993	-1.70	0.093	-.0077313	.0006052
hlxpuwb	-.0342333	.0198817	-1.72	0.088	-.073709	.0052423
_cons	7.22152	.5124472	14.09	0.000	6.204044	8.238996

Model 3-7: Robust Ck 6.2: IndV: Transform: WDI to ln WDI pub sp (hlxpuwb to hlxpuwb)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry == "Mongolia" &
  ctry == "Cuba", r
```

Linear regression

Number of obs = 102
 F(8, 93) = 92.84
 Prob > F = 0.0000
 R-squared = 0.8636
 Root MSE = .30719

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5415757	.0675153	-8.02	0.000	-.6756476	-.4075038

giniavni	.0126281	.0050712	2.49	0.015	.0025577	.0226986
ethnl	.2580664	.1168977	2.21	0.030	.0259308	.490202
musl	.4113291	.0984212	4.18	0.000	.2158841	.6067741
fertwdi	.0815597	.0293232	2.78	0.007	.0233297	.1397896
lpopd	-.0513653	.0254764	-2.02	0.047	-.1019563	-.0007743
urbwdi	-.0033292	.002139	-1.56	0.123	-.0075767	.0009184
hlxpuwb	-.0853452	.0482038	-1.77	0.080	-.1810683	.010378
_cons	7.348763	.5373656	13.68	0.000	6.281661	8.415864

Model 3-7: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb if ctry ~=
> "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs =	102
F(8, 93) =	91.02
Prob > F =	0.0000
R-squared =	0.8597
Root MSE =	.31244

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5062266	.0716281	-7.07	0.000	-.6484658	-.3639873
giniavni	.0110745	.0044616	2.48	0.015	.0022146	.0199345
ethnl	.2107728	.114956	1.83	0.070	-.0175069	.4390526
musl	.2811296	.0997843	2.82	0.006	.0829778	.4792814
fertwdi	.075466	.0341042	2.21	0.029	.0077417	.1431902
lpopd	-.0692231	.023189	-2.99	0.004	-.1152719	-.0231744
urbwdi	-.0055651	.001976	-2.82	0.006	-.009489	-.0016412
hlxpuwb	-.0302043	.0213694	-1.41	0.161	-.0726398	.0122311
_cons	7.424169	.5972748	12.43	0.000	6.2381	8.610238

Model 3-7: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwb gdpmf if c
> try ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs =	102
F(9, 92) =	83.45
Prob > F =	0.0000
R-squared =	0.8597
Root MSE =	.31413

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5059522	.0731371	-6.92	0.000	-.6512089	-.3606955
giniavni	.0110476	.0046299	2.39	0.019	.0018521	.0202431
ethnl	.2115122	.1181196	1.79	0.077	-.0230836	.446108
musl	.2808869	.1009358	2.78	0.007	.0804197	.4813541
fertwdi	.0752502	.0350889	2.14	0.035	.0055606	.1449399
lpopd	-.0693934	.0240882	-2.88	0.005	-.1172347	-.0215521
urbwdi	-.0055765	.0020313	-2.75	0.007	-.0096108	-.0015421
hlxpuwb	-.0300853	.0215982	-1.39	0.167	-.0729813	.0128106
gdpmf	-.0055065	.1277996	-0.04	0.966	-.2593276	.2483146
_cons	7.425163	.6014478	12.35	0.000	6.230636	8.619691

Model 3-7: Robust Check 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb if ctry
> ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
F(8, 94) = 100.11
Prob > F = 0.0000
R-squared = 0.8613
Root MSE = .30916

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5168667	.0737298	-7.01	0.000	-.663259	-.3704743
giniavni	.0124524	.0049269	2.53	0.013	.0026699	.0222349
ethnannx	.2134311	.1552375	1.37	0.172	-.0947966	.5216588
musl	.3770766	.0988871	3.81	0.000	.1807339	.5734193
fertwdi	.0962917	.0308234	3.12	0.002	.0350911	.1574922
lpopd	-.0498955	.0246088	-2.03	0.045	-.0987569	-.0010341
urbwdi	-.0043547	.0022175	-1.96	0.053	-.0087575	.0000482
hlxpuwb	-.0375845	.0209804	-1.79	0.076	-.0792416	.0040726
_cons	7.158775	.6014498	11.90	0.000	5.964582	8.352967

Model 3-7: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi hlxpuwb ethnannf
> if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 103
F(9, 93) = 89.09
Prob > F = 0.0000
R-squared = 0.8613
Root MSE = .3108

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5149218	.0835316	-6.16	0.000	-.6807991	-.3490445
giniavni	.012539	.0050323	2.49	0.014	.0025458	.0225321
ethnannx	.2144062	.1562972	1.37	0.173	-.0959691	.5247815
musl	.37698	.0993398	3.79	0.000	.1797109	.5742492
fertwdi	.0966439	.0314287	3.08	0.003	.0342328	.159055
lpopd	-.0497899	.0242039	-2.06	0.042	-.097854	-.0017259
urbwdi	-.0044139	.0024689	-1.79	0.077	-.0093166	.0004888
hlxpuwb	-.0376815	.021408	-1.76	0.082	-.0801935	.0048305
ethnannf	.0112986	.1520418	0.07	0.941	-.2906264	.3132235
_cons	7.139549	.6763854	10.56	0.000	5.796381	8.482716

Table 2.3, Model 3-8: Does trained att. at birth mediate spending and survival?

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi delivcom if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 101
F(9, 91) = 76.86

Prob > F = 0.0000
 R-squared = 0.8810
 Root MSE = .28447

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4805153	.0629853	-7.63	0.000	-.6056279	-.3554028
giniavni	.0104214	.004861	2.14	0.035	.0007655	.0200772
ethnl	.2585104	.1058735	2.44	0.017	.0482057	.468815
musl	.3338356	.0971142	3.44	0.001	.1409302	.526741
fertwdi	.0415253	.0288399	1.44	0.153	-.0157615	.0988122
lpopd	-.068748	.0263919	-2.60	0.011	-.1211724	-.0163237
urbwdi	-.0007552	.0020461	-0.37	0.713	-.0048196	.0033091
hlxpuwdi	-.0393529	.0258296	-1.52	0.131	-.0906602	.0119544
delivcom	-.0068374	.001661	-4.12	0.000	-.0101368	-.003538
_cons	7.580416	.5280021	14.36	0.000	6.531605	8.629227

Table 2.3, Model 3-9: Does DTP3 immz. mediate spending and survival?

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi dtp3con if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 96
F(9, 86) = 61.05
Prob > F = 0.0000
R-squared = 0.8606
Root MSE = .29086

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4839161	.0669097	-7.23	0.000	-.6169283	-.3509039
giniavni	.0138006	.0051608	2.67	0.009	.0035413	.0240598
ethnl	.1845366	.1104172	1.67	0.098	-.0349656	.4040388
musl	.4332148	.1038354	4.17	0.000	.2267968	.6396327
fertwdi	.0579193	.0297706	1.95	0.055	-.0012626	.1171012
lpopd	-.051201	.0284422	-1.80	0.075	-.1077423	.0053403
urbwdi	-.0045254	.0020671	-2.19	0.031	-.0086347	-.0004161
hlxpuwdi	-.044548	.0273819	-1.63	0.107	-.0989815	.0098855
dtp3con	-.0051532	.0013553	-3.80	0.000	-.0078474	-.002459
_cons	7.46427	.5603584	13.32	0.000	6.350314	8.578226

Table 2.3, Model 3-10: Does measles immz. mediate spending and survival?

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi hlxpuwdi mcvcon if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

Linear regression

Number of obs = 96
F(9, 86) = 61.32
Prob > F = 0.0000
R-squared = 0.8523
Root MSE = .29932

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	

	lgdph	.5099285	.0697657	-7.31	0.000	-.6486182	-.3712388
giniavni		.0138528	.0053287	2.60	0.011	.0032596	.0244459
ethnl		.1851371	.1127343	1.64	0.104	-.0389713	.4092454
musl		.415958	.1025023	4.06	0.000	.2121902	.6197258
fertwdi		.063712	.0292857	2.18	0.032	.0054939	.1219301
lpopd		-.0557535	.0278258	-2.00	0.048	-.1110694	-.0004375
urbwdi		-.0038704	.0021645	-1.79	0.077	-.0081733	.0004326
hlxpuwudi		-.0472313	.0292652	-1.61	0.110	-.1054086	.0109461
mvcvcon		-.0038062	.0014907	-2.55	0.012	-.0067697	-.0008427
_cons		7.528854	.5609388	13.42	0.000	6.413744	8.643963

Table 2.4: Long-Term Democracy, Pub Health Sp, Service Utilization, and IMR**Table 2.4: Summary of Robustness checks for Models 4-1, 4-2, 4-4, 4-6 to 4-10**

This table gives the t-score of the association between long-term democratic experience (or in Model 4-8, family planning effort) and the outcomes indicated at the top of each column, in the context of 16 checks for robustness. The statistical output follows the table. In each check for robustness the 7 socioeconomic "baseline" variables (Model 2-3) are controlled for, just as in the models in Table 2.4.

	Model 4-1	Model 4-2	Model 4-4	Model 4-6	Model 4-7	Model 4-8	Model 4-9	Modl 4-10
Dependent variable	Public health spending	Birth attendance	Female schooling	Family planning	Fertility	Fertility	Safe water	Infant mortality
Independent variable	Democ 1900-90	Democ 1900-90	Democ 1900-90	Democ 1900-90	Democ 1900-90	Family planning	Democ 1900-90	Democ 1900-90
Basic Model	1.36	1.29	1.36	*2.10	***-4.04	***-4.87	**2.99	*-2.30
1.1. Specif: Excl fertility		*2.34	**2.87				***4.30	**-2.99
1.1a. Specif: Excl fert, -2 outliers		**2.69	*2.56					**-2.79
1.1b: Specif: Include fertility					0.54			
1.2. Specif: Incl fem sch	0.83	0.96		*2.61	***-3.32	***-4.34	**2.93	†-1.86
1.3. Specif: Incl fem lit	0.88	1.10		1.65	***-5.21	***-4.65	**2.95	*-2.27
1.4. Specif: Incl geogr	1.43	1.12	1.26	*2.02	***-3.76	***-4.37	**3.09	*-1.99
1.5. Specif: Incl reg dum	1.34	*2.30	1.35	1.44	***-3.33	***-5.36	**2.71	*-2.22
1.6. Specif: Incl fam planning						*-2.38		
2.1. Imput: msg data flags	1.36	1.37	1.19	1.37	***-3.52	***-4.55	*2.49	*-2.24
3.1. Outliers: rreg	0.93	1.32	1.04	*2.10	***-3.69	***-6.77	***3.56	†-1.89
3.2. Outliers: qreg	1.28	1.03	0.98	0.78	***-3.80	***-7.49	***4.62	-0.93
3.3. Outliers: cooksd	0.78	*2.01	1.54	*2.15	***-4.35	***-4.66	**2.80	*-2.11
4.3. Endog: 2SLS								*-2.00
4.3a. Endog: 2SLS, -2 outliers								†-1.75
5.1. DV: lu5mrcom								**-2.76
5.2. DV: limrwdi								*-2.29
6.3. IV: pavg7090	0.98	0.45	0.15	**3.21	***-4.12	***-4.41	***3.36	-0.33

6.3a. IV: pavg7090, -2 outliers		0.81						
6.4. IV: free7290	-1.08	†1.79	0.38	**-3.21	***-3.23	***-4.54	**-2.84	-0.47
6.4a. IV: free7290, - 2 outliers		†1.74						
6.5. IV: pol90								
6.5a. IV: pol90, - 2 outliers								
6.6. IV: free8090								
6.6a. IV: free8090, - 2 outliers								
6.7. IV: free90								
6.7a. IV: free90, - 2 outliers								
7.1. IV: lgdpmx	1.41	1.04	0.77	1.62	**-2.96	***-4.41	*2.43	-1.51
7.2. IV: lgdpmx, mdf	1.13	0.30	0.48	†1.67	**-2.62	***-4.54	**2.63	-1.43
7.3. IV: ethnannx		1.44	0.86	*2.03	***-3.54	***-4.73	**2.94	†-1.86
7.4. IV: ethnannx, mdf		1.29	0.86	*2.00	***-3.51	***-4.58	**2.88	†-1.85
Basic model clarify								-4.94

Table 2.4, Alternative Measures of Long-Term Democracy in Models 4-2 to 4-6 & 4-9

DV = 7 different social services

IV = Alternative measures of long-term democratic experience

Tscores of long-term democratic experience variable by social service predicted

With fertility	deliv	dtp3	mcv	mysf	rtot	wate	sani
pavg0090	1.29	0.98	-0.73	1.36		**2.99	0.46
pavg7090	0.45	-0.24	-1.29	0.15		***3.36	0.25
free7290	1.79	0.08	0.57	0.38		**-2.84	-0.60
Without fertility	deliv	dtp3	mcv	mysf	rtot	wate	sani
pavg0090	*2.34	†1.76	-0.06	**2.87	*2.10	***4.30	1.21
pavg7090	†1.76	0.54	-0.66	†1.82	**3.21	***4.80	1.10
free7290	0.54	-0.50	0.03	-1.28	**-3.21	***-3.72	-1.19

Table 2.4, Model 4-1: Long-Term Democracy and Public Health Sp/GDP**Model 4-1: Bivariate correlations among independent variables**

```
. correlate hlxpuwdi lgdph giniavni age65 lpopd urbwdi pavg0090
(obs=100)
```

	hlxpuwdi	lgdph	giniavni	age65	lpopd	urbwdi	pavg0090
hlxpuwdi	1.0000						
lgdph	0.2589	1.0000					
giniavni	0.0579	-0.0330	1.0000				
age65	0.1690	0.2672	-0.1229	1.0000			

lpopd	-0.1611	0.1540	-0.3091	0.1494	1.0000	
urbwdi	0.3421	0.8159	-0.0345	0.3814	0.0539	1.0000
pavg0090	0.1379	0.2232	0.1523	0.3362	0.2045	0.0782 1.0000

Model 4-1: 5 Socioeconomic variables and public health spending/GDP

. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65, r

Linear regression

Number of obs = 104
 F(5, 98) = 4.51
 Prob > F = 0.0010
 R-squared = 0.1625
 Root MSE = 1.2022

hlxpuwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	.0001187	.2319224	0.00	1.000	-.4601239	.4603612
giniavni	.0031006	.0174605	0.18	0.859	-.0315492	.0377503
lpopd	-.1783791	.1034438	-1.72	0.088	-.3836601	.0269018
urbwdi	.0179372	.0091102	1.97	0.052	-.0001417	.0360162
age65	.0525015	.0994139	0.53	0.599	-.1447821	.2497852
_cons	1.546655	1.637154	0.94	0.347	-1.702223	4.795534

Model 4-1: 5 socioeconomic variables, long-term democ, and public health spending/GDP

. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090, r

Linear regression

Number of obs = 100
 F(6, 93) = 3.51
 Prob > F = 0.0036
 R-squared = 0.1742
 Root MSE = 1.2141

hlxpuwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.0987077	.227104	-0.43	0.665	-.5496912	.3522758
giniavni	-.0030174	.0184731	-0.16	0.871	-.0397014	.0336665
lpopd	-.1879341	.1155681	-1.63	0.107	-.4174295	.0415614
urbwdi	.0217944	.0093715	2.33	0.022	.0031845	.0404043
age65	.0104127	.1078626	0.10	0.923	-.2037809	.2246064
pavg0090	.0404492	.0297168	1.36	0.177	-.0185625	.0994609
_cons	2.731553	1.763117	1.55	0.125	-.7696475	6.232754

Model 4-1: Robustness checks

Model 4-1: Robust Check 1.2: Change specification: Include female schooling

. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 mysfx, r

Linear regression

Number of obs = 100
 F(7, 92) = 3.52
 Prob > F = 0.0021
 R-squared = 0.2179
 Root MSE = 1.1879

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3133258	.2636041	-1.19	0.238	-.8368663	.2102146
giniavni	-.0054262	.0169756	-0.32	0.750	-.0391411	.0282887
lpopd	-.1909207	.1027529	-1.86	0.066	-.3949969	.0131556
urbwdi	.0193925	.0090966	2.13	0.036	.0013258	.0374591
age65	-.0705303	.103016	-0.68	0.495	-.275129	.1340684
pavg0090	.0263187	.0316314	0.83	0.408	-.036504	.0891414
mysfx	.1995379	.092589	2.16	0.034	.0156482	.3834275
_cons	4.118377	1.886575	2.18	0.032	.3714759	7.865278

Model 4-1: Robust Check 1.3: Change specification: Include female literacy

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 litfewdi, r
```

Linear regression

Number of obs =	100
F(7, 92) =	3.68
Prob > F =	0.0015
R-squared =	0.2352
Root MSE =	1.1747

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.2979921	.2588678	-1.15	0.253	-.8121259	.2161417
giniavni	-.0074161	.0167787	-0.44	0.660	-.0407399	.0259078
lpopd	-.2003857	.100456	-1.99	0.049	-.3999	-.0008714
urbwdi	.019216	.0091088	2.11	0.038	.0011252	.0373069
age65	-.0739579	.1038694	-0.71	0.478	-.2802516	.1323358
pavg0090	.0257414	.029174	0.88	0.380	-.0322007	.0836834
litfewdi	.0165933	.0061274	2.71	0.008	.0044237	.0287628
_cons	3.933997	1.852917	2.12	0.036	.2539432	7.614051

Model 4-1: Robust Check 1.4: Change specification: Incl geographical var

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 airdist popcrags latcap  
> ab, r
```

Linear regression

Number of obs =	100
F(9, 90) =	2.41
Prob > F =	0.0168
R-squared =	0.2004
Root MSE =	1.2145

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.1997697	.2427833	-0.82	0.413	-.682101	.2825616
giniavni	.0050687	.0178821	0.28	0.777	-.0304572	.0405946
lpopd	-.2053244	.1135277	-1.81	0.074	-.430867	.0202182
urbwdi	.0203193	.0087987	2.31	0.023	.0028391	.0377994
age65	-.0101647	.1075671	-0.09	0.925	-.2238654	.203536
pavg0090	.0438832	.0307906	1.43	0.158	-.0172876	.1050541
airdist	-.000029	.0000718	-0.40	0.687	-.0001716	.0001137
popcrags	.0029347	.0045131	0.65	0.517	-.0060314	.0119008
latcapab	.0181815	.0115427	1.58	0.119	-.0047502	.0411131

_cons	3.028648	1.756358	1.72	0.088	-.4606641	6.517961
-------	----------	----------	------	-------	-----------	----------

Model 4-1: Robust Check 1.5: Change specification: Include regional dummies

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 afri lati east sout, r
```

Linear regression

					Number of obs = 100
					F(10, 89) = 3.36
					Prob > F = 0.0009
					R-squared = 0.2018
					Root MSE = 1.2202

hlxpuwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.018736	.2653232	-0.07	0.944	-.5459276 .5084555
giniavni	-.0136711	.0207487	-0.66	0.512	-.0548983 .027556
lpopd	-.1821173	.1251722	-1.46	0.149	-.4308917 .0665371
urbwdi	.0136853	.0111777	1.22	0.224	-.0085245 .0358951
age65	-.0297818	.1256066	-0.24	0.813	-.2793594 .2197957
pavg0090	.0381605	.0285524	1.34	0.185	-.0185725 .0948935
afri	-.1210598	.4155084	-0.29	0.771	-.9466661 .7045466
lati	.4747048	.5614074	0.85	0.400	-.6407997 1.590209
east	-.1881625	.617014	-0.30	0.761	-1.414156 1.037831
sout	-.5685425	.5330292	-1.07	0.289	-1.62766 .4905751
_cons	3.075032	1.998015	1.54	0.127	-.8949803 7.045044

Model 4-1: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 gdphf, r
```

Linear regression

					Number of obs = 100
					F(6, 93) = 3.51
					Prob > F = 0.0036
					R-squared = 0.1742
					Root MSE = 1.2141

hlxpuwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.0987077	.227104	-0.43	0.665	-.5496912 .3522758
giniavni	-.0030174	.0184731	-0.16	0.871	-.0397014 .0336665
lpopd	-.1879341	.1155681	-1.63	0.107	-.4174295 .0415614
urbwdi	.0217944	.0093715	2.33	0.022	.0031845 .0404043
age65	.0104127	.1078626	0.10	0.923	-.2037809 .2246064
pavg0090	.0404492	.0297168	1.36	0.177	-.0185625 .0994609
gdphf	(dropped)				
_cons	2.731553	1.763117	1.55	0.125	-.7696475 6.232754

Model 4-1: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090
```

```
Huber iteration 1: maximum difference in weights = .72258176
Huber iteration 2: maximum difference in weights = .19461918
Huber iteration 3: maximum difference in weights = .07849564
```

Huber iteration 4: maximum difference in weights = .04290017
 Biweight iteration 5: maximum difference in weights = .28371575
 Biweight iteration 6: maximum difference in weights = .04033861
 Biweight iteration 7: maximum difference in weights = .01002993
 Biweight iteration 8: maximum difference in weights = .00488891

Robust regression

Number of obs = 100
 $F(6, 93) = 2.41$
 Prob > F = 0.0329

hlxpuwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.0345545	.2084564	0.17	0.869	-.3793986 .4485075
giniavni	.0082423	.0123605	0.67	0.507	-.0163032 .0327878
lpopd	-.0906626	.0748308	-1.21	0.229	-.2392617 .0579364
urbwdi	.0121928	.0082304	1.48	0.142	-.0041511 .0285366
age65	.0278571	.08068	0.35	0.731	-.1323573 .1880715
pavg0090	.0206734	.0221772	0.93	0.354	-.0233661 .0647128
_cons	.9513487	1.574829	0.60	0.547	-2.17595 4.078648

Model 4-1: Robust Check 3.2: Outlier checks: Median regression

. qreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090
 Iteration 1: WLS sum of weighted deviations = 87.726433

Iteration 1: sum of abs. weighted deviations = 88.607253
 Iteration 2: sum of abs. weighted deviations = 83.562366
 Iteration 3: sum of abs. weighted deviations = 83.406246
 Iteration 4: sum of abs. weighted deviations = 83.369795
 Iteration 5: sum of abs. weighted deviations = 83.337165
 Iteration 6: sum of abs. weighted deviations = 83.234208
 Iteration 7: sum of abs. weighted deviations = 83.016062
 Iteration 8: sum of abs. weighted deviations = 82.978771
 Iteration 9: sum of abs. weighted deviations = 82.611731
 Iteration 10: sum of abs. weighted deviations = 82.369943
 Iteration 11: sum of abs. weighted deviations = 82.321791
 Iteration 12: sum of abs. weighted deviations = 82.313801
 Iteration 13: sum of abs. weighted deviations = 82.239265

Median regression

Number of obs = 100

Raw sum of deviations 90 (about 1.7)

Min sum of deviations 82.23926

Pseudo R2 = 0.0862

hlxpuwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.0429216	.2085929	0.21	0.837	-.3713026 .4571458
giniavni	.0094851	.013317	0.71	0.478	-.0169598 .0359299
lpopd	-.1431489	.0793248	-1.80	0.074	-.3006722 .0143744
urbwdi	.0115436	.0083272	1.39	0.169	-.0049927 .0280799
age65	.0798544	.0877926	0.91	0.365	-.0944842 .254193
pavg0090	.0300096	.0235002	1.28	0.205	-.0166571 .0766763
_cons	.7916667	1.661554	0.48	0.635	-2.50785 4.091183

Model 4-1: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg0090 if ctry ~= "Mongolia" & ctry ~= "Costa Rica", r

Linear regression

Number of obs = 98
 F(6, 91) = 3.47
 Prob > F = 0.0039
 R-squared = 0.1599
 Root MSE = 1.0675

hlxpuwdi	Coef.	Robust				[95% Conf. Interval]
		Std. Err.	t	P> t		
lgdph	-.113502	.2197395	-0.52	0.607	-.5499876	.3229836
giniavni	.0107583	.0158008	0.68	0.498	-.020628	.0421446
lpopd	-.0839632	.0833778	-1.01	0.317	-.249583	.0816565
urbwdi	.0201374	.0090572	2.22	0.029	.0021464	.0381283
age65	.0306389	.1030512	0.30	0.767	-.1740596	.2353374
pavg0090	.0157907	.0202155	0.78	0.437	-.0243648	.0559462
_cons	1.688733	1.510975	1.12	0.267	-1.312632	4.690099

Model 4-1: Robust Check 6.3: Vary data source: IV: pavg0090 to pavg7090

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg7090, r
```

Linear regression

Number of obs = 100
 F(6, 93) = 3.43
 Prob > F = 0.0042
 R-squared = 0.1649
 Root MSE = 1.2209

hlxpuwdi	Coef.	Robust				[95% Conf. Interval]
		Std. Err.	t	P> t		
lgdph	-.0596263	.2323168	-0.26	0.798	-.5209614	.4017088
giniavni	-.0020482	.0186861	-0.11	0.913	-.0391549	.0350586
lpopd	-.1830767	.1161189	-1.58	0.118	-.4136658	.0475125
urbwdi	.0197582	.009516	2.08	0.041	.0008613	.0386552
age65	.0355681	.1080502	0.33	0.743	-.1789982	.2501344
pavg7090	.0268589	.0275288	0.98	0.332	-.0278079	.0815257
_cons	2.339607	1.831311	1.28	0.205	-1.297015	5.976228

Model 4-1: Robust Check 6.4: Vary data source: IV: pavg0090 to free7290

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 free7290, r
```

Linear regression

Number of obs = 103
 F(6, 96) = 3.95
 Prob > F = 0.0014
 R-squared = 0.1801
 Root MSE = 1.2012

hlxpuwdi	Coef.	Robust				[95% Conf. Interval]
		Std. Err.	t	P> t		
lgdph	-.1073386	.2324913	-0.46	0.645	-.5688302	.3541531
giniavni	-.0025652	.0179065	-0.14	0.886	-.0381094	.032979
lpopd	-.1922464	.1112245	-1.73	0.087	-.4130253	.0285325
urbwdi	.0204049	.0091056	2.24	0.027	.0023305	.0384794
age65	.0406905	.1040431	0.39	0.697	-.1658335	.2472144
free7290	-.0629359	.0584993	-1.08	0.285	-.1790561	.0531842

_cons	3.232114	2.099294	1.54	0.127	-.9349513	7.399179
-------	----------	----------	------	-------	-----------	----------

Model 4-1: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg0090, r
```

Linear regression

Number of obs = 99
 F(6, 92) = 3.48
 Prob > F = 0.0038
 R-squared = 0.1758
 Root MSE = 1.2191

hlxpuwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.1410317	.25268	-0.56	0.578	-.642876 .3608126
giniavni	-.0020163	.0186771	-0.11	0.914	-.0391107 .0350781
lpopd	-.1843387	.1143956	-1.61	0.111	-.4115383 .0428608
urbwdi	.0230848	.0100326	2.30	0.024	.0031592 .0430104
age65	.0134836	.1102517	0.12	0.903	-.2054857 .2324529
pavg0090	.0441006	.0313834	1.41	0.163	-.0182296 .1064308
_cons	2.936544	2.043759	1.44	0.154	-1.122538 6.995625

Model 4-1: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg0090 gdpmf, r
```

Linear regression

Number of obs = 99
 F(7, 91) = 3.95
 Prob > F = 0.0008
 R-squared = 0.1798
 Root MSE = 1.2228

hlxpuwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpmx	-.1674737	.257104	-0.65	0.516	-.6781791 .3432317
giniavni	-.000639	.0192084	-0.03	0.974	-.0387941 .0375161
lpopd	-.1686121	.1222487	-1.38	0.171	-.4114441 .0742199
urbwdi	.0241809	.010129	2.39	0.019	.0040609 .0443009
age65	.0203115	.1112882	0.18	0.856	-.2007488 .2413718
pavg0090	.0388112	.034385	1.13	0.262	-.0294904 .1071129
gdpmf	.523305	.5282186	0.99	0.324	-.5259363 1.572546
_cons	2.913845	2.061807	1.41	0.161	-1.181682 7.009372

Table 2.4, Model 4-2: Long-Term Democracy and Trained Attendance at Birth**Model 4-2: Bivariate correlations among independent variables**

```
. correlate delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 (obs=99)
```

	delivcom	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	pavg0090
delivcom	1.0000								
lgdph	0.7086	1.0000							
giniavni	-0.0705	-0.0341	1.0000						

ethnl	-0.4133	-0.5146	0.2151	1.0000				
musl	0.0726	0.3178	-0.2960	-0.2871	1.0000			
fertwdi	-0.6757	-0.6468	0.1591	0.4781	0.0943	1.0000		
lpopd	0.0932	0.1576	-0.3058	-0.1670	-0.1031	-0.3786	1.0000	
urbwdi	0.7121	0.8161	-0.0373	-0.4982	0.3062	-0.5756	0.0605	1.0000
pavg0090	0.2924	0.2251	0.1559	0.0295	-0.2981	-0.4325	0.1992	0.0817

Model 4-2: Trained attendance at birth predicted by 7 baseline var only

. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi

Source	SS	df	MS	Number of obs	=	103
Model	51477.8811	7	7353.98302	F(7, 95)	=	25.02
Residual	27921.3227	95	293.90866	Prob > F	=	0.0000
Total	79399.2039	102	778.423567	R-squared	=	0.6483
				Adj R-squared	=	0.6224
				Root MSE	=	17.144

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.711868	3.846366	2.00	0.048	.0758649 15.34787
giniavni	-.234277	.2269607	-1.03	0.305	-.684851 .2162971
ethnl	.9348624	6.572201	0.14	0.887	-12.11261 13.98233
musl	-8.358008	5.744649	-1.45	0.149	-19.76258 3.046562
fertwdi	-6.312923	1.733646	-3.64	0.000	-9.754646 -2.871199
lpopd	-2.495193	1.288191	-1.94	0.056	-5.052575 .0621895
urbwdi	.3812785	.1301847	2.93	0.004	.1228292 .6397277
_cons	35.74748	30.51346	1.17	0.244	-24.8294 96.32436

Model 4-2: Trained attendance at birth predicted by 7 baseline var. and long-term democ.

. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r

Linear regression	Number of obs	=	99
	F(8, 90)	=	29.74
	Prob > F	=	0.0000
	R-squared	=	0.6492
	Root MSE	=	16.939

delivcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.713633	4.232684	1.82	0.072	-.6953337 16.1226
giniavni	-.2757311	.2100193	-1.31	0.193	-.6929711 .141509
ethnl	.242575	6.26684	0.04	0.969	-12.2076 12.69275
musl	-7.441788	5.461009	-1.36	0.176	-18.29103 3.407459
fertwdi	-4.880269	2.022933	-2.41	0.018	-8.89918 -.8613593
lpopd	-2.489255	1.313374	-1.90	0.061	-5.098503 .1199923
urbwdi	.4384493	.125431	3.50	0.001	.1892588 .6876398
pavg0090	.4626902	.3589995	1.29	0.201	-.2505249 1.175905
_cons	29.56521	35.89207	0.82	0.412	-41.74064 100.8711

Model 4-2: Robustness checks

Model 4-2: Robust Check 1.1: Change specification: Exclude fertility

. regress delivcom lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r

Linear regression

Number of obs = 99
 F(7, 91) = 30.82
 Prob > F = 0.0000
 R-squared = 0.6233
 Root MSE = 17.455

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	10.88077	3.740704	2.91	0.005	3.450321	18.31122
giniavni	-.4352082	.2167723	-2.01	0.048	-.8657998	-.0046165
ethnl	-4.947207	6.221903	-0.80	0.429	-17.30625	7.411839
musl	-13.52936	4.773259	-2.83	0.006	-23.01085	-4.047869
lpopd	-1.760655	1.380786	-1.28	0.206	-4.503416	.982106
urbwdi	.5178366	.1337478	3.87	0.000	.2521631	.7835101
pavg0090	.8289072	.3543253	2.34	0.022	.1250836	1.532731
_cons	-12.48648	27.85948	-0.45	0.655	-67.82591	42.85296

Model 4-2: Robust Check 1.1a: Change specification: Exclude fertility, -2 highest cooks

```
. regress delivcom lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Bangladesh" & ctry ~= "Papua N.G."
```

Source	SS	df	MS	Number of obs = 97
Model	44181.8574	7	6311.69391	F(7, 89) = 22.36
Residual	25122.1839	89	282.271729	Prob > F = 0.0000
Total	69304.0412	96	721.917096	R-squared = 0.6375 Adj R-squared = 0.6090 Root MSE = 16.801

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	11.21977	3.688563	3.04	0.003	3.890677 18.54887
giniavni	-.4589194	.2194544	-2.09	0.039	-.8949705 -.0228682
ethnl	-6.527674	6.742841	-0.97	0.336	-19.92555 6.870207
musl	-13.28865	5.245817	-2.53	0.013	-23.71198 -2.865327
lpopd	-1.693861	1.340697	-1.26	0.210	-4.357796 .9700752
urbwdi	.4539485	.132068	3.44	0.001	.1915322 .7163649
pavg0090	1.022189	.3801453	2.69	0.009	.2668488 1.77753
_cons	-9.518778	26.27345	-0.36	0.718	-61.72356 42.686

Model 4-2: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 mysfx, r
```

delivcom	Coef.	Std. Err.	t	P> t	Number of obs = 99
lgdph	5.166265	4.27129	1.21	0.230	F(9, 89) = 29.34
giniavni	-.2820209	.1957742	-1.44	0.153	Prob > F = 0.0000
					R-squared = 0.6737
					Root MSE = 16.427

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.166265	4.27129	1.21	0.230	-3.320697 13.65323
giniavni	-.2820209	.1957742	-1.44	0.153	-.6710201 .1069783

ethnl	4.10672	5.809513	0.71	0.481	-7.436658	15.6501
musl	-2.071232	5.225184	-0.40	0.693	-12.45356	8.311097
fertwdi	-2.576388	2.367533	-1.09	0.279	-7.280625	2.127849
lpopd	-1.752658	1.238887	-1.41	0.161	-4.2143	.7089827
urbwdi	.3864923	.1127036	3.43	0.001	.1625526	.6104319
pavg0090	.3330587	.3465985	0.96	0.339	-.3556252	1.021743
mysfx	3.900424	1.497007	2.61	0.011	.9259021	6.874945
_cons	20.65984	37.07217	0.56	0.579	-53.00177	94.32146

Model 4-2: Robust Check 1.3: Change specification: Include female literacy

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 litfewdi, r
```

Linear regression

					Number of obs =	99
					F(9, 89) =	31.83
					Prob > F =	0.0000
					R-squared =	0.6947
					Root MSE =	15.89

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.295391	3.991688	1.33	0.188	-2.636008	13.22679
giniavni	-.3384964	.1960159	-1.73	0.088	-.7279759	.0509831
ethnl	6.920016	5.882504	1.18	0.243	-4.768393	18.60843
musl	1.091133	5.17785	0.21	0.834	-9.197145	11.37941
fertwdi	-1.091128	2.03781	-0.54	0.594	-5.140212	2.957956
lpopd	-1.449275	1.151547	-1.26	0.211	-3.737375	.8388242
urbwdi	.3853057	.1150451	3.35	0.001	.1567135	.613898
pavg0090	.387023	.3505627	1.10	0.273	-.3095376	1.083584
litfewdi	.4123259	.1147529	3.59	0.001	.1843143	.6403374
_cons	3.386154	32.55608	0.10	0.917	-61.30209	68.07439

Model 4-2: Robust Ck 1.4: Change specification: Incl geographical variables

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 airdist popcrgs latcapab,  
> r
```

Linear regression

					Number of obs =	99
					F(11, 87) =	24.73
					Prob > F =	0.0000
					R-squared =	0.6570
					Root MSE =	17.036

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.613512	4.468327	1.48	0.142	-2.267773	15.4948
giniavni	-.3114819	.2152385	-1.45	0.151	-.7392917	.116328
ethnl	.0217591	6.383059	0.00	0.997	-12.66526	12.70878
musl	-7.857265	6.227575	-1.26	0.210	-20.23524	4.520714
fertwdi	-4.780693	2.333986	-2.05	0.044	-9.419743	-.1416422
lpopd	-2.293541	1.478487	-1.55	0.124	-5.232194	.6451119
urbwdi	.4696437	.1325584	3.54	0.001	.2061695	.7331179
pavg0090	.4041798	.3619969	1.12	0.267	-.3153282	1.123688
airdist	.0012464	.0009855	1.26	0.209	-.0007125	.0032052
popcrgs	.0187154	.0690396	0.27	0.787	-.1185081	.155939
latcapab	.1337694	.1994971	0.67	0.504	-.2627526	.5302915

_cons	27.22456	39.72424	0.69	0.495	-51.73167	106.1808
-------	----------	----------	------	-------	-----------	----------

Model 4-2: Robust Check 1.5: Change specification: Include regional dummies

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati east sout, r
```

Linear regression

Number of obs = 99
F(12, 86) = 28.89
Prob > F = 0.0000
R-squared = 0.7220
Root MSE = 15.426

delivcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	4.936891	4.677477	1.06	0.294	-4.361626	14.23541
giniavni	-.2097655	.2135221	-0.98	0.329	-.6342334	.2147024
ethnl	-13.78615	7.276361	-1.89	0.061	-28.25108	.6787769
musl	-14.89535	7.295072	-2.04	0.044	-29.39747	-.3932258
fertwdi	-7.170572	2.309094	-3.11	0.003	-11.7609	-2.580245
lpopd	-2.821856	1.176098	-2.40	0.019	-5.159862	-.4838491
urbwdi	.5195487	.1379598	3.77	0.000	.2452937	.7938036
pavg0090	.8199395	.3559219	2.30	0.024	.1123902	1.527489
afri	2.531834	8.597672	0.29	0.769	-14.55977	19.62344
lati	-23.18276	8.441241	-2.75	0.007	-39.96339	-6.402132
east	-7.450846	9.345744	-0.80	0.428	-26.02957	11.12788
sout	-17.0391	12.7714	-1.33	0.186	-42.42779	8.349599
_cons	70.99162	40.54339	1.75	0.084	-9.605961	151.5892

Model 4-2: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf giniavnf ethnl, r
```

Linear regression

Number of obs = 99
F(10, 88) = 29.10
Prob > F = 0.0000
R-squared = 0.6739
Root MSE = 16.514

delivcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	7.001086	3.708589	1.89	0.062	-.3689554	14.37113
giniavni	-.1227314	.2255234	-0.54	0.588	-.5709118	.3254489
ethnl	2.060574	6.544347	0.31	0.754	-10.94494	15.06609
musl	-6.999375	5.604389	-1.25	0.215	-18.13692	4.13817
fertwdi	-6.342606	1.931347	-3.28	0.001	-10.18075	-2.504459
lpopd	-2.454248	1.367178	-1.80	0.076	-5.171227	.2627304
urbwdi	.3653155	.1311055	2.79	0.007	.1047708	.6258602
pavg0090	.5070554	.3688442	1.37	0.173	-.2259451	1.240056
gdphf	(dropped)					
giniavnf	9.326048	4.920478	1.90	0.061	-.4523673	19.10446
ethnlf	7.535447	5.379353	1.40	0.165	-3.154886	18.22578
_cons	34.82588	31.81366	1.09	0.277	-28.39709	98.04885

Model 4-2: Robust Check 3.1: Outlier checks: Robust regression

. rreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090	
Huber iteration 1: maximum difference in weights = .54763638	
Huber iteration 2: maximum difference in weights = .1353925	
Huber iteration 3: maximum difference in weights = .0493432	
Biweight iteration 4: maximum difference in weights = .17354263	
Biweight iteration 5: maximum difference in weights = .01730967	
Biweight iteration 6: maximum difference in weights = .02005843	
Biweight iteration 7: maximum difference in weights = .00777934	
Robust regression	Number of obs = 99 F(8, 90) = 18.74 Prob > F = 0.0000
-----	-----
delivcom Coef. Std. Err. t P> t [95% Conf. Interval]	
-----	-----
lgdph 9.95252 4.195739 2.37 0.020 1.616952 18.28809	
giniavni -.3372919 .2481839 -1.36 0.178 -.8303525 .1557688	
ethnl .6385528 7.521876 0.08 0.933 -14.30497 15.58207	
musl -8.616652 6.254044 -1.38 0.172 -21.0414 3.808097	
fertwdi -4.454548 2.048727 -2.17 0.032 -8.524702 -.384394	
lpopd -2.73452 1.453219 -1.88 0.063 -5.621594 .1525543	
urbwdi .4017 .1455355 2.76 0.007 .1125683 .6908317	
pavg0090 .566774 .4298615 1.32 0.191 -.2872208 1.420769	
_cons 16.86981 33.4905 0.50 0.616 -49.66492 83.40454	
-----	-----

Model 4-2: Robust Check 3.2: Outlier checks: Median regression

. qreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
Iteration 1: WLS sum of weighted deviations = 1271.1127

Iteration 1: sum of abs. weighted deviations = 5525.6165
Iteration 2: sum of abs. weighted deviations = 1292.5979
Iteration 3: sum of abs. weighted deviations = 1256.633
Iteration 4: sum of abs. weighted deviations = 1246.0581
Iteration 5: sum of abs. weighted deviations = 1238.9658
Iteration 6: sum of abs. weighted deviations = 1236.4656
Iteration 7: sum of abs. weighted deviations = 1234.8993
Iteration 8: sum of abs. weighted deviations = 1230.335
Iteration 9: sum of abs. weighted deviations = 1230.3337
Iteration 10: sum of abs. weighted deviations = 1229.7224
Iteration 11: sum of abs. weighted deviations = 1229.5068
Iteration 12: sum of abs. weighted deviations = 1228.8072
Iteration 13: sum of abs. weighted deviations = 1228.7593
Iteration 14: sum of abs. weighted deviations = 1228.725

Median regression Number of obs = 99
Raw sum of deviations 2305 (about 61)
Min sum of deviations 1228.725 Pseudo R2 = 0.4669

-----	-----
delivcom Coef. Std. Err. t P> t [95% Conf. Interval]	
-----	-----
lgdph 11.65935 3.856168 3.02 0.003 3.998402 19.3203	
giniavni -.2924791 .2313544 -1.26 0.209 -.7521049 .1671467	
ethnl .6164634 7.200121 0.09 0.932 -13.68783 14.92076	
musl -7.998411 5.93055 -1.35 0.181 -19.78048 3.783663	
fertwdi -5.155092 1.928566 -2.67 0.009 -8.986526 -1.323659	
lpopd -3.642697 1.393308 -2.61 0.010 -6.410747 -.8746483	
urbwdi .3440664 .1298617 2.65 0.010 .0860735 .6020593	

pavg0090	.4112864	.3985355	1.03	0.305	-.3804741	1.203047
_cons	10.8309	31.56982	0.34	0.732	-51.88807	73.54986

**Model 4-2: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd
(Same as Model 4-3)**

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry == "Oman" & ctry
~= "Papua N.G.", r
```

Linear regression

Number of obs =	97
F(8, 88) =	29.73
Prob > F =	0.0000
R-squared =	0.6623
Root MSE =	16.521

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.678217	4.251467	1.57	0.120	-1.770681	15.12712
giniavni	-.2326314	.2077944	-1.12	0.266	-.6455791	.1803163
ethnl	2.41543	6.241852	0.39	0.700	-9.98894	14.8198
musl	-6.598154	5.543846	-1.19	0.237	-17.61538	4.419075
fertwdi	-5.65467	2.031526	-2.78	0.007	-9.691902	-1.617439
lpopd	-2.596187	1.312119	-1.98	0.051	-5.203748	.0113746
urbwdi	.4194477	.1209381	3.47	0.001	.1791087	.6597867
pavg0090	.629448	.3125404	2.01	0.047	.0083396	1.250556
_cons	39.95987	36.46732	1.10	0.276	-32.51127	112.431

Model 4-2: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
```

Linear regression

Number of obs =	99
F(8, 90) =	29.32
Prob > F =	0.0000
R-squared =	0.6445
Root MSE =	17.05

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.258918	4.241893	1.95	0.055	-.1683421	16.68618
giniavni	-.2524403	.21716	-1.16	0.248	-.6838666	.178986
ethnl	1.464663	6.368401	0.23	0.819	-11.18728	14.1166
musl	-8.006854	5.349084	-1.50	0.138	-18.63374	2.620034
fertwdi	-5.389337	2.138333	-2.52	0.013	-9.63751	-1.141165
lpopd	-2.441793	1.295297	-1.89	0.063	-5.015127	.13154
urbwdi	.4157197	.1284466	3.24	0.002	.1605381	.6709012
pavg7090	.1514105	.3388427	0.45	0.656	-.5217597	.8245807
_cons	26.38947	35.45132	0.74	0.459	-44.04077	96.8197

Model 4-2: Robust Ck 6.3a: IndV: Vary source: pavg0090 to pavg7090, - 2 highst cooksd

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg7090 if ctry == "Oman" & ctry
~= "Myanmar", r
```

Linear regression

Number of obs = 97
 F(8, 88) = 29.77
 Prob > F = 0.0000
 R-squared = 0.6737
 Root MSE = 16.275

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.098579	3.766986	2.15	0.034	.6124864	15.58467
giniavni	-.2582017	.20648	-1.25	0.214	-.6685373	.152134
ethnl	3.09654	6.352293	0.49	0.627	-9.527306	15.72039
musl	-8.459718	5.110398	-1.66	0.101	-18.61556	1.696123
fertwdi	-5.180432	1.82761	-2.83	0.006	-8.812422	-1.548441
lpopd	-2.275269	1.323254	-1.72	0.089	-4.904959	.3544209
urbwdi	.4453166	.12838	3.47	0.001	.1901884	.7004448
pavg7090	.262346	.3237252	0.81	0.420	-.3809899	.9056818
_cons	24.02917	32.03481	0.75	0.455	-39.63329	87.69162

Model 4-2: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
```

Linear regression

Number of obs = 102
 F(8, 93) = 33.92
 Prob > F = 0.0000
 R-squared = 0.6543
 Root MSE = 17

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	9.451282	4.143775	2.28	0.025	1.222566	17.68
giniavni	-.1021917	.21831	-0.47	0.641	-.5357121	.3313286
ethnl	2.475545	6.147649	0.40	0.688	-9.732468	14.68356
musl	-9.08922	5.252176	-1.73	0.087	-19.519	1.340561
fertwdi	-7.299376	1.982547	-3.68	0.000	-11.23632	-3.362432
lpopd	-1.917155	1.308576	-1.47	0.146	-4.515728	.6814186
urbwdi	.3514604	.1231275	2.85	0.005	.1069537	.5959671
free7290	1.353607	.7553977	1.79	0.076	-.1464628	2.853678
_cons	6.882199	35.13222	0.20	0.845	-62.88342	76.64782

Model 4-2: Robust Ck 6.4a: IndV: Vary source: pavg0090 to free7290, - 2 higst cooks

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free7290 if ctry == "Oman" & ctry == "Bangladesh", r
```

Linear regression

Number of obs = 100
 F(8, 91) = 34.24
 Prob > F = 0.0000
 R-squared = 0.6712
 Root MSE = 16.37

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.927499	3.981308	1.49	0.140	-1.98088	13.83588

giniavni	-.0486148	.2169668	-0.22	0.823	-.4795927	.3823631
ethnl	1.574197	5.810416	0.27	0.787	-9.96748	13.11587
musl	-8.036713	5.435607	-1.48	0.143	-18.83388	2.760453
fertwdi	-8.534575	1.911394	-4.47	0.000	-12.33132	-4.737826
lpopd	-1.150832	1.294974	-0.89	0.377	-3.723139	1.421475
urbwdi	.3667379	.1190293	3.08	0.003	.1303008	.603175
free7290	1.25799	.7214929	1.74	0.085	-.1751669	2.691147
_cons	34.78516	33.94144	1.02	0.308	-32.63534	102.2057

Model 4-2: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs =	98
F(8, 89) =	28.25
Prob > F =	0.0000
R-squared =	0.6354
Root MSE =	17.106

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	5.77676	4.291155	1.35	0.182	-2.749674	14.30319
giniavni	-.2846267	.2129892	-1.34	0.185	-.7078318	.1385784
ethnl	-.4115366	6.47794	-0.06	0.949	-13.28307	12.45999
musl	-5.956116	5.353203	-1.11	0.269	-16.59282	4.680586
fertwdi	-5.242939	2.087979	-2.51	0.014	-9.391707	-1.09417
lpopd	-2.513651	1.358423	-1.85	0.068	-5.212807	.1855062
urbwdi	.4689594	.1185077	3.96	0.000	.2334872	.7044316
pavg0090	.3785348	.3632624	1.04	0.300	-.3432598	1.100329
_cons	44.93867	37.41558	1.20	0.233	-29.40529	119.2826

Model 4-2: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress delivcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r
```

Linear regression

Number of obs =	98
F(9, 88) =	25.33
Prob > F =	0.0000
R-squared =	0.6361
Root MSE =	17.186

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	5.604185	4.271596	1.31	0.193	-2.884714	14.09308
giniavni	-.2765264	.2157606	-1.28	0.203	-.7053053	.1522525
ethnl	-.7693292	6.480035	-0.12	0.906	-13.64704	12.10838
musl	-6.052271	5.34875	-1.13	0.261	-16.68179	4.577246
fertwdi	-5.104076	2.168009	-2.35	0.021	-9.412539	-.7956126
lpopd	-2.351763	1.384003	-1.70	0.093	-5.102177	.3986516
urbwdi	.4814665	.1165463	4.13	0.000	.2498553	.7130778
pavg0090	.3502642	.3562015	0.98	0.328	-.3576115	1.05814
gdpmf	4.599777	15.46024	0.30	0.767	-26.12421	35.32376
_cons	44.02366	38.11301	1.16	0.251	-31.71795	119.7653

Model 4-2: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress delivcom lgdph giniavni ethnann musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 93
 $F(8, 84) = 26.97$
 Prob > F = 0.0000
 R-squared = 0.6338
 Root MSE = 16.878

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.72359	4.883819	2.20	0.031	1.011577 20.4356
giniavni	-.1297008	.2315611	-0.56	0.577	-.5901855 .3307839
ethnann	3.5674	7.081066	0.50	0.616	-10.51408 17.64888
musl	-4.253934	5.619228	-0.76	0.451	-15.42839 6.920517
fertwdi	-4.457735	2.085588	-2.14	0.035	-8.605156 -.3103142
lpopd	-2.265174	1.48812	-1.52	0.132	-5.224464 .6941154
urbwdi	.3257617	.1345898	2.42	0.018	.0581151 .5934083
pavg0090	.5239202	.363777	1.44	0.154	-.1994903 1.247331
_cons	-.8178063	44.77242	-0.02	0.985	-89.85268 88.21707

Model 4-2: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnannf, r
```

Linear regression

Number of obs = 99
 $F(9, 89) = 31.37$
 Prob > F = 0.0000
 R-squared = 0.6568
 Root MSE = 16.846

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	9.849288	4.684303	2.10	0.038	.5416775 19.1569
giniavni	-.2031944	.2271639	-0.89	0.373	-.6545642 .2481754
ethnannx	3.036013	7.12303	0.43	0.671	-11.1173 17.18932
musl	-7.557675	5.599319	-1.35	0.181	-18.6834 3.568053
fertwdi	-4.648482	2.013454	-2.31	0.023	-8.649172 -.6477911
lpopd	-2.326831	1.360983	-1.71	0.091	-5.031074 .3774131
urbwdi	.374477	.1335411	2.80	0.006	.1091337 .6398202
pavg0090	.4572046	.3550122	1.29	0.201	-.2481971 1.162606
ethnannf	11.10808	8.248156	1.35	0.181	-5.280833 27.49699
_cons	8.922226	42.4552	0.21	0.834	-75.43535 93.2798

Table 2.4, Model 4-3: Long-Term Democ. & Trained Att. at Birth (Excl. Outliers)
 (Same as Model 4-2, Robustness Check 3.3)

Model 4-3: Means and SDs of trained attendance at birth and long term democracy

```
. summarize delivcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
delivcom	103	59.42718	27.90024	7	100

```
. summarize pavg0090
```

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg0090	100	-3.0848	5.295036	-10	10

Model 4-3: How much would trained att. at birth rise if long-term democ rose one SD?

```
. estsmp regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
> if ctry ~= "Oman" & ctry ~= "Papua"
```

Source	SS	df	MS	Number of obs =	97
Model	47095.0463	8	5886.88079	F(8, 88) =	21.57
Residual	24018.0671	88	272.93258	Prob > F =	0.0000
Total	71113.1134	96	740.761598	R-squared =	0.6623
				Adj R-squared =	0.6316
				Root MSE =	16.521

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.678217	4.064371	1.64	0.104	-1.398866 14.7553
giniavni	-.2326314	.227936	-1.02	0.310	-.6856064 .2203435
ethnl	2.41543	6.871444	0.35	0.726	-11.24012 16.07098
musl	-6.598154	5.663942	-1.16	0.247	-17.85405 4.65774
fertwdi	-5.65467	1.985612	-2.85	0.005	-9.600656 -1.708684
lpopd	-2.596187	1.332297	-1.95	0.055	-5.243848 .0514739
urbwdi	.4194477	.1335339	3.14	0.002	.1540771 .6848183
pavg0090	.629448	.4025843	1.56	0.122	-.1706037 1.4295
_cons	39.95987	31.93406	1.25	0.214	-23.50236 103.4221

Simulating main parameters. Please wait....
% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10
```

```
. setx mean
. simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)
```

First Difference: pavg0090 -3.0848 2.2102

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(delivcom)	3.285345	2.120021	-.8942623 7.459036

Table 2.4, Model 4-4: Long-Term Democracy and Female Schooling

Model 4-4: Bivariate correlations among independent variables

```
. correlate mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
(obs=100)
```

	mysfx	lgdph	giniavni	ethnl	musl	fertwdi	lpopd
mysfx	1.0000						
lgdph	0.6707	1.0000					
giniavni	0.0199	-0.0330	1.0000				
ethnl	-0.4664	-0.5107	0.2183	1.0000			
musl	-0.1381	0.3163	-0.2978	-0.2898	1.0000		
fertwdi	-0.7718	-0.6396	0.1637	0.4830	0.0878	1.0000	
lpopd	0.1491	0.1540	-0.3091	-0.1750	-0.0967	-0.3870	1.0000
urbwdi	0.6176	0.8159	-0.0345	-0.4912	0.3028	-0.5647	0.0539
pavg0090	0.3906	0.2232	0.1523	0.0241	-0.2942	-0.4359	0.2045
		urbwdi	pavg0090				
urbwdi		1.0000					
pavg0090		0.0782	1.0000				

Model 4-4: Female schooling predicted by 7 baseline variables only

. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r

Linear regression

Number of obs =	105
F(7, 97) =	45.30
Prob > F =	0.0000
R-squared =	0.7479
Root MSE =	1.1486

mysfx	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.7211628	.2190056	3.29	0.001	.2864973 1.155828
giniavni	.0042383	.0147551	0.29	0.775	-.0250466 .0335232
ethnl	-.8494354	.4832254	-1.76	0.082	-1.808504 .1096333
musl	-1.510806	.3488769	-4.33	0.000	-2.20323 -.8183819
fertwdi	-.6436932	.0976878	-6.59	0.000	-.8375764 -.4498101
lpopd	-.1657724	.0853429	-1.94	0.055	-.3351544 .0036097
urbwdi	.0119389	.0078403	1.52	0.131	-.0036219 .0274998
_cons	1.785791	1.722436	1.04	0.302	-1.632768 5.204351

Model 4-4: Female schooling predicted by 7 baseline var. and long-term democracy

. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r

Linear regression

Number of obs =	100
F(8, 91) =	34.07
Prob > F =	0.0000
R-squared =	0.7317
Root MSE =	1.1528

mysfx	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.6850309	.2205766	3.11	0.003	.2468826 1.123179
giniavni	.0003175	.015715	0.02	0.984	-.0308985 .0315335
ethnl	-.957702	.5079228	-1.89	0.063	-1.966628 .0512244
musl	-1.453651	.3504383	-4.15	0.000	-2.149753 -.7575484
fertwdi	-.5634572	.107122	-5.26	0.000	-.7762418 -.3506725
lpopd	-.1957196	.0913862	-2.14	0.035	-.3772472 -.0141921

urbwdi	.01437	.0083417	1.72	0.088	-.0021997	.0309397
pavg0090	.0324924	.0238853	1.36	0.177	-.0149528	.0799375
_cons	1.961094	1.740935	1.13	0.263	-1.497061	5.419248

Model 4-4: Robustness checks

Model 4-4: Robust Check 1.1: Change specification: Exclude fertility (Same as Model 4-5)

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
F(7, 92) = 31.04
Prob > F = 0.0000
R-squared = 0.6739
Root MSE = 1.264

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.042445	.2827902	3.69	0.000	.4807989	1.60409
giniavni	-.0178605	.0162292	-1.10	0.274	-.050093	.014372
ethnl	-1.592719	.5184027	-3.07	0.003	-2.622311	-.5631262
musl	-2.131754	.3467471	-6.15	0.000	-2.820423	-1.443084
lpopd	-.1052752	.108484	-0.97	0.334	-.3207338	.1101834
urbwdi	.0231851	.0101342	2.29	0.024	.0030576	.0433125
pavg0090	.0763853	.0265929	2.87	0.005	.0235696	.129201
_cons	-2.843389	1.957358	-1.45	0.150	-6.730871	1.044092

Model 4-4: Robust Ck 1.1a: Change specification: Excl fertility, disc 2 cases hi cooksdi

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Singapore" & ctry ~= "Oman", r
```

Linear regression

Number of obs = 98
F(7, 90) = 33.64
Prob > F = 0.0000
R-squared = 0.6925
Root MSE = 1.2338

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.197694	.2723936	4.40	0.000	.656537	1.738852
giniavni	-.0196562	.0161048	-1.22	0.225	-.0516511	.0123387
ethnl	-1.495045	.5185907	-2.88	0.005	-2.525315	-.4647736
musl	-2.13755	.3389371	-6.31	0.000	-2.810908	-1.464193
lpopd	-.0848794	.1089188	-0.78	0.438	-.3012655	.1315068
urbwdi	.022321	.0097248	2.30	0.024	.003001	.0416411
pavg0090	.0676842	.0264074	2.56	0.012	.0152213	.1201472
_cons	-3.992695	1.898583	-2.10	0.038	-7.764561	-.2208287

Model 4-4: Robust Check 1.4: Change specification: Incl geographical variables

```
. regress mysfx lgdph giniavni ethnl fertwdi lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
```

Linear regression

Number of obs = 100
 F(11, 88) = 27.01
 Prob > F = 0.0000
 R-squared = 0.7498
 Root MSE = 1.1321

mysfx	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	.5696583	.2194064	2.60	0.011	.1336342	1.005682
giniavni	-.0038323	.0145699	-0.26	0.793	-.032787	.0251223
ethnl	-1.050246	.5471072	-1.92	0.058	-2.137507	.0370144
musl	-1.438797	.3783529	-3.80	0.000	-2.190694	-.6868999
fertwdi	-.5767503	.1197727	-4.82	0.000	-.8147734	-.3387273
lpopd	-.1463282	.0985587	-1.48	0.141	-.3421929	.0495365
urbwdi	.0185168	.0078069	2.37	0.020	.0030022	.0340314
pavg0090	.0283273	.0225348	1.26	0.212	-.0164558	.0731105
airdist	.0001432	.0000791	1.81	0.074	-.0000139	.0003003
popcrgs	-.0012432	.0047115	-0.26	0.792	-.0106062	.0081198
latcapab	.0112116	.0132767	0.84	0.401	-.015173	.0375963
_cons	1.873239	1.765811	1.06	0.292	-1.635938	5.382417

Model 4-4: Robust Check 1.5: Change specification: Include regional dummies

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati east sout, r
```

Linear regression

Number of obs = 100
 F(12, 87) = 24.38
 Prob > F = 0.0000
 R-squared = 0.7448
 Root MSE = 1.1499

mysfx	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	.6546454	.2608377	2.51	0.014	.1362022	1.173089
giniavni	.0001455	.0168743	0.01	0.993	-.0333939	.0336849
ethnl	-1.20491	.623282	-1.93	0.056	-2.443751	.0339303
musl	-.9149494	.369439	-2.48	0.015	-1.649249	-.1806494
fertwdi	-.5249383	.122576	-4.28	0.000	-.7685714	-.2813053
lpopd	-.1738087	.0972588	-1.79	0.077	-.3671211	.0195038
urbwdi	.0182519	.0113501	1.61	0.111	-.0043077	.0408115
pavg0090	.036831	.0272205	1.35	0.180	-.0172727	.0909347
afri	.8333076	.5098631	1.63	0.106	-.1801005	1.846716
lati	.6229467	.4767595	1.31	0.195	-.3246645	1.570558
east	1.181378	.6184619	1.91	0.059	-.0478817	2.410638
sout	.358046	.710634	0.50	0.616	-1.054416	1.770508
_cons	1.112583	2.164867	0.51	0.609	-3.190324	5.41549

Model 4-4: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 100
 F(10, 89) = 28.13
 Prob > F = 0.0000
 R-squared = 0.7326

Root MSE = 1.1637

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.6913302	.2186382	3.16	0.002	.2569008	1.12576
giniavni	-.0006405	.01714	-0.04	0.970	-.0346973	.0334163
ethnl	-.9570707	.5172448	-1.85	0.068	-1.984825	.0706838
musl	-1.454992	.3540317	-4.11	0.000	-2.158446	-.7515384
fertwdi	-.5468223	.1245469	-4.39	0.000	-.7942944	-.2993501
lpopd	-.1950067	.0921182	-2.12	0.037	-.3780437	-.0119697
urbwdi	.0152806	.0091738	1.67	0.099	-.0029476	.0335087
pavg0090	.0303195	.0254008	1.19	0.236	-.0201514	.0807904
gdphf (dropped)						
giniavnf	-.1729238	.3033	-0.57	0.570	-.7755744	.4297269
ethnlif	.0642865	.4354101	0.15	0.883	-.8008641	.9294371
_cons	1.866249	1.733734	1.08	0.285	-1.578643	5.311141

Model 4-4: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
```

```
Huber iteration 1: maximum difference in weights = .6169149
Huber iteration 2: maximum difference in weights = .11181148
Huber iteration 3: maximum difference in weights = .02053246
Biweight iteration 4: maximum difference in weights = .20786925
Biweight iteration 5: maximum difference in weights = .00993254
```

Robust regression

Number of obs = 100
F(8, 91) = 28.38
Prob > F = 0.0000

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.6702831	.2745475	2.44	0.017	.1249283	1.215638
giniavni	.0011004	.0162785	0.07	0.946	-.031235	.0334357
ethnl	-1.041473	.4936692	-2.11	0.038	-2.022087	-.06086
musl	-1.444441	.4062767	-3.56	0.001	-2.251459	-.6374217
fertwdi	-.5791517	.1328174	-4.36	0.000	-.8429772	-.3153262
lpopd	-.238982	.0953536	-2.51	0.014	-.4283902	-.0495738
urbwdi	.0136435	.0095275	1.43	0.156	-.0052817	.0325687
pavg0090	.0294489	.0282477	1.04	0.300	-.0266617	.0855594
_cons	2.253594	2.185551	1.03	0.305	-2.087735	6.594923

Model 4-4: Robust Check 3.2: Outlier checks: Median regression

```
. qreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
Iteration 1: WLS sum of weighted deviations = 87.733394
```

```
Iteration 1: sum of abs. weighted deviations = 186.01745
Iteration 2: sum of abs. weighted deviations = 86.548857
Iteration 3: sum of abs. weighted deviations = 86.174345
Iteration 4: sum of abs. weighted deviations = 85.950911
Iteration 5: sum of abs. weighted deviations = 85.861841
Iteration 6: sum of abs. weighted deviations = 85.758363
```

Median regression

Number of obs = 100
Raw sum of deviations 179.08 (about 3.2690001)

Min sum of deviations 85.75836 Pseudo R2 = 0.5211

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.5301947	.4316094	1.23	0.222	-.3271444 1.387534
giniavni	-.0070471	.0264126	-0.27	0.790	-.0595125 .0454183
ethnl	-.5279904	.7972052	-0.66	0.509	-2.111541 1.05556
musl	-1.304493	.6274664	-2.08	0.040	-2.550878 -.0581083
fertwdi	-.6628324	.2081046	-3.19	0.002	-1.076207 -.2494581
lpopd	-.3217261	.1547361	-2.08	0.040	-.6290904 -.0143617
urbwdi	.0162917	.0155482	1.05	0.297	-.0145929 .0471763
pavg0090	.0454804	.0465282	0.98	0.331	-.0469422 .137903
_cons	4.035557	3.274011	1.23	0.221	-2.467862 10.53898

Model 4-4: Robust Ck 3.3: Outlier checks: Discard 2 cases hi cooks'd (same as Model 4-3)

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~= "Singapore" & ctry ~= "Swaziland", r
```

Linear regression

Number of obs = 98
F(8, 89) = 36.23
Prob > F = 0.0000
R-squared = 0.7432
Root MSE = 1.1305

mysfx	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.6491055	.2107341	3.08	0.003	.2303814 1.06783
giniavni	-.0064649	.0157823	-0.41	0.683	-.037824 .0248942
ethnl	-.6802199	.5175454	-1.31	0.192	-1.708572 .3481317
musl	-1.485821	.3461863	-4.29	0.000	-2.173685 -.7979559
fertwdi	-.5505263	.1057435	-5.21	0.000	-.7606364 -.3404162
lpopd	-.1579307	.0931233	-1.70	0.093	-.3429647 .0271033
urbwdi	.0205506	.0082102	2.50	0.014	.004237 .0368642
pavg0090	.0374038	.0242906	1.54	0.127	-.0108612 .0856688
_cons	1.971957	1.628994	1.21	0.229	-1.264819 5.208734

Model 4-4: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
```

Linear regression

Number of obs = 100
F(8, 91) = 32.29
Prob > F = 0.0000
R-squared = 0.7275
Root MSE = 1.1617

mysfx	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.7328526	.2201549	3.33	0.001	.2955418 1.170163
giniavni	.0030095	.0163576	0.18	0.854	-.0294829 .035502
ethnl	-.8550764	.5241218	-1.63	0.106	-1.89618 .1860272
musl	-1.503927	.3613687	-4.16	0.000	-2.221741 -.7861121
fertwdi	-.6122432	.1163861	-5.26	0.000	-.8434299 -.3810566
lpopd	-.1906902	.0930878	-2.05	0.043	-.3755976 -.0057828

urbwdi	.0123681	.0083502	1.48	0.142	-.0042186	.0289548
pavg7090	.003826	.0251633	0.15	0.879	-.0461577	.0538098
_cons	1.66443	1.738111	0.96	0.341	-1.788114	5.116974

Model 4-4: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
```

Linear regression

Number of obs = 104
 F(8, 95) = 37.09
 Prob > F = 0.0000
 R-squared = 0.7376
 Root MSE = 1.156

mysfx	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	.733731	.2284694	3.21	0.002	.280162	1.1873
giniavni	.0052749	.0156537	0.34	0.737	-.0258016	.0363515
ethnl	-.8604201	.4867425	-1.77	0.080	-1.826726	.1058858
musl	-1.50381	.3520466	-4.27	0.000	-2.202711	-.8049095
fertwdi	-.6629634	.1101513	-6.02	0.000	-.8816415	-.4442854
lpopd	-.1821687	.0915516	-1.99	0.049	-.3639217	-.0004158
urbwdi	.0104821	.008157	1.29	0.202	-.0057115	.0266757
free7290	.018144	.0482417	0.38	0.708	-.077628	.1139159
_cons	1.675371	1.956088	0.86	0.394	-2.207954	5.558696

Model 4-4: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress mysfx lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 99
 F(8, 90) = 34.72
 Prob > F = 0.0000
 R-squared = 0.7355
 Root MSE = 1.1458

mysfx	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	.8190756	.2336621	3.51	0.001	.3548652	1.283286
giniavni	-.0026774	.0155777	-0.17	0.864	-.0336253	.0282705
ethnl	-.9286944	.5162779	-1.80	0.075	-1.954371	.0969819
musl	-1.407539	.351706	-4.00	0.000	-2.106264	-.7088133
fertwdi	-.5357358	.1106261	-4.84	0.000	-.7555138	-.3159578
lpopd	-.1890078	.0946933	-2.00	0.049	-.3771325	-.0008831
urbwdi	.0124245	.0077292	1.61	0.111	-.0029309	.0277798
pavg0090	.0192041	.0248386	0.77	0.441	-.0301422	.0685504
_cons	.9312121	1.992327	0.47	0.641	-3.026894	4.889318

Model 4-4: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress mysfx lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r
```

Linear regression

Number of obs = 99
 F(9, 89) = 31.64

Prob > F = 0.0000
 R-squared = 0.7367
 Root MSE = 1.1496

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	.8012103	.2293465	3.49	0.001	.3455038	1.256917
giniavni	-.0018392	.0157165	-0.12	0.907	-.0330677	.0293892
ethnl	-.9656786	.5009395	-1.93	0.057	-1.961035	.0296775
musl	-1.417371	.351029	-4.04	0.000	-2.114858	-.7198836
fertwdi	-.5214357	.1160903	-4.49	0.000	-.7521047	-.2907666
lpopd	-.1722855	.100903	-1.71	0.091	-.3727776	.0282065
urbwdi	.0137145	.0077126	1.78	0.079	-.0016103	.0290392
pavg0090	.016287	.0239865	0.68	0.499	-.0313737	.0639477
gdpmf	.4748988	.9869957	0.48	0.632	-1.486241	2.436038
_cons	.8372129	2.066055	0.41	0.686	-3.267993	4.942419

Model 4-4: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress mysfx lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 F(8, 91) = 31.20
 Prob > F = 0.0000
 R-squared = 0.7209
 Root MSE = 1.1758

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.6999183	.2191436	3.19	0.002	.2646163	1.13522
giniavni	-.001333	.0161987	-0.08	0.935	-.0335097	.0308437
ethnannx	-.3558139	.5647063	-0.63	0.530	-1.477534	.7659058
musl	-1.357087	.3683152	-3.68	0.000	-2.0887	-.6254737
fertwdi	-.6314524	.107853	-5.85	0.000	-.8456891	-.4172157
lpopd	-.1979108	.0970385	-2.04	0.044	-.3906658	-.0051558
urbwdi	.0159258	.0085197	1.87	0.065	-.0009975	.032849
pavg0090	.0223392	.0258945	0.86	0.391	-.029097	.0737755
_cons	1.957276	1.868	1.05	0.298	-1.753276	5.667827

Model 4-4: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress mysfx lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnannf,  

> r
```

Linear regression

Number of obs = 100
 F(9, 90) = 27.44
 Prob > F = 0.0000
 R-squared = 0.7209
 Root MSE = 1.1823

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.7127898	.2584706	2.76	0.007	.1992929	1.226287
giniavni	-.0008601	.0169112	-0.05	0.960	-.034457	.0327369

ethnannx	-.3481323	.5657516	-0.62	0.540	-1.472097	.775832
musl	-1.359177	.3708796	-3.66	0.000	-2.095994	-.6223596
fertwdi	-.6296998	.108992	-5.78	0.000	-.8462315	-.4131682
lpopd	-.1971065	.0975574	-2.02	0.046	-.3909213	-.0032918
urbwdi	.0155226	.0096468	1.61	0.111	-.0036424	.0346876
pavg0090	.0223084	.0259966	0.86	0.393	-.0293385	.0739552
ethnannf	.072723	.4861199	0.15	0.881	-.8930391	1.038485
_cons	1.836411	2.197173	0.84	0.405	-2.528657	6.201478

Table 2.4, Model 4-5: Long-Term Democracy and Female Schooling, Excl. Fertility**Model 4-5: Female schooling predicted by 6 baseline variables excluding fertility**

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(6, 98) =	34.11
Prob > F =	0.0000
R-squared =	0.6652
Root MSE =	1.3169

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.290357	.2726067	4.73	0.000	.749378	1.831336
giniavni	-.0130063	.0165241	-0.79	0.433	-.0457979	.0197853
ethnl	-1.395689	.5300826	-2.63	0.010	-2.44762	-.343757
musl	-2.542096	.3397031	-7.48	0.000	-3.216226	-1.867967
lpopd	-.0428688	.1060032	-0.40	0.687	-.2532286	.167491
urbwdi	.020806	.0092118	2.26	0.026	.0025255	.0390866
_cons	-5.292901	1.818562	-2.91	0.004	-8.901778	-1.684023

Model 4-5: Female schooling pred. by 6 baseline var. (excl. fert.) and long-term democracy
(Same as Model 3-4, robustness check 1.1)

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs =	100
F(7, 92) =	31.04
Prob > F =	0.0000
R-squared =	0.6739
Root MSE =	1.264

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.042445	.2827902	3.69	0.000	.4807989	1.60409
giniavni	-.0178605	.0162292	-1.10	0.274	-.050093	.014372
ethnl	-1.592719	.5184027	-3.07	0.003	-2.622311	-.5631262
musl	-2.131754	.3467471	-6.15	0.000	-2.820423	-1.443084
lpopd	-.1052752	.108484	-0.97	0.334	-.3207338	.1101834
urbwdi	.0231851	.0101342	2.29	0.024	.0030576	.0433125
pavg0090	.0763853	.0265929	2.87	0.005	.0235696	.129201
_cons	-2.843389	1.957358	-1.45	0.150	-6.730871	1.044092

Model 4-5: Means and SDs of mean years of female schooling and long-term democracy

. summarize mysfx

Variable	Obs	Mean	Std. Dev.	Min	Max
mysfx	105	3.64511	2.209273	.1377345	9.045

. summarize pavg0090

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg0090	100	-3.0848	5.295036	-10	10

Model 4-5: How much would female schooling rise if long-term democracy rose 1 SD?

. estsimp regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r

Linear regression

Number of obs =	100
F(7, 92) =	31.04
Prob > F =	0.0000
R-squared =	0.6739
Root MSE =	1.264

mysfx	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.042445	.2827902	3.69	0.000	.4807989 1.60409
giniavni	-.0178605	.0162292	-1.10	0.274	-.050093 .014372
ethnl	-1.592719	.5184027	-3.07	0.003	-2.622311 -.5631262
musl	-2.131754	.3467471	-6.15	0.000	-2.820423 -1.443084
lpopd	-.1052752	.108484	-0.97	0.334	-.3207338 .1101834
urbwdi	.0231851	.0101342	2.29	0.024	.0030576 .0433125
pavg0090	.0763853	.0265929	2.87	0.005	.0235696 .129201
_cons	-2.843389	1.957358	-1.45	0.150	-6.730871 1.044092

Simulating main parameters. Please wait....

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

. setx mean
. simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)

First Difference: pavg0090 -3.0848 2.2102

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(mysfx)	.4003669	.1379543	.1173649 .6715686

Model 4-5: Robustness checks

Model 4-5: Robust Check 1.4: Change specification: Include geographical variables

. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 airdist popcrs latcapab, r

Linear regression

Number of obs = 100
 F(10, 89) = 26.76
 Prob > F = 0.0000
 R-squared = 0.6967
 Root MSE = 1.2395

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.9159039	.2957455	3.10	0.003	.328264	1.503544
giniavni	-.0178454	.0149406	-1.19	0.235	-.0475321	.0118413
ethnl	-1.394012	.5640035	-2.47	0.015	-2.514675	-.273349
musl	-2.298516	.358678	-6.41	0.000	-3.011202	-1.585831
lpopd	-.0804349	.1145122	-0.70	0.484	-.3079681	.1470983
urbwdi	.0259027	.0102208	2.53	0.013	.0055943	.0462112
pavg0090	.0682969	.0250971	2.72	0.008	.0184295	.1181643
airdist	.0001115	.0000803	1.39	0.169	-.0000481	.0002711
popcrgs	.0020711	.0052329	0.40	0.693	-.0083265	.0124687
latcapab	.0284119	.0134166	2.12	0.037	.0017534	.0550704
_cons	-3.350296	1.870542	-1.79	0.077	-7.067024	.3664317

Model 4-5: Robust Check 1.5: Change specification: Include regional dummies

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 afri lati east sout,
> r
```

Linear regression

Number of obs = 100
 F(11, 88) = 22.11
 Prob > F = 0.0000
 R-squared = 0.7027
 Root MSE = 1.234

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.8956539	.2893432	3.10	0.003	.3206452	1.470663
giniavni	-.0108557	.0180195	-0.60	0.548	-.0466657	.0249542
ethnl	-1.494919	.6557804	-2.28	0.025	-2.798145	-.1916933
musl	-1.248268	.356887	-3.50	0.001	-1.957506	-.5390299
lpopd	-.0923921	.1090472	-0.85	0.399	-.3091004	.1243163
urbwdi	.0272872	.0123375	2.21	0.030	.0027691	.0518054
pavg0090	.0696575	.0291873	2.39	0.019	.0116539	.1276612
afri	.7210597	.5455271	1.32	0.190	-.3630607	1.80518
lati	1.001913	.4840842	2.07	0.041	.0398969	1.963928
east	1.724662	.6099802	2.83	0.006	.5124541	2.936869
sout	.6457158	.6764653	0.95	0.342	-.6986168	1.990048
_cons	-3.296418	2.117364	-1.56	0.123	-7.504234	.9113978

Model 4-5: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 gdphf giniavnf ethnlrf, r
```

Linear regression

Number of obs = 100
 F(9, 90) = 25.41
 Prob > F = 0.0000
 R-squared = 0.6835
 Root MSE = 1.2589

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.03389	.2714847	3.81	0.000	.4945385	1.573242
giniavni	-.0227013	.0165523	-1.37	0.174	-.0555853	.0101827
ethnl	-1.591276	.5118099	-3.11	0.003	-2.608076	-.5744762
musl	-2.075249	.3350748	-6.19	0.000	-2.740933	-1.409564
lpopd	-.1188107	.1042635	-1.14	0.258	-.3259483	.0883269
urbwdi	.0255812	.0103007	2.48	0.015	.0051171	.0460453
pavg0090	.0685798	.0289907	2.37	0.020	.0109846	.126175
gdphf (dropped)						
giniavnf	-.4381556	.313853	-1.40	0.166	-1.061679	.1853681
ethnlf	-.33075	.6825924	-0.48	0.629	-1.686839	1.025339
_cons	-2.524307	1.977019	-1.28	0.205	-6.452	1.403385

Model 4-5: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090
```

```
Huber iteration 1: maximum difference in weights = .49853886
Huber iteration 2: maximum difference in weights = .07311224
Huber iteration 3: maximum difference in weights = .0180958
Biweight iteration 4: maximum difference in weights = .15084981
Biweight iteration 5: maximum difference in weights = .00959909
```

Robust regression

Number of obs =	100
F(7, 92) =	23.37
Prob > F =	0.0000

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.050967	.2921282	3.60	0.001	.4707752 1.631159
giniavni	-.0200545	.0175572	-1.14	0.256	-.0549246 .0148156
ethnl	-1.644466	.5259276	-3.13	0.002	-2.689004 -.5999288
musl	-2.067991	.4175771	-4.95	0.000	-2.897335 -1.238646
lpopd	-.138032	.1039042	-1.33	0.187	-.3443947 .0683307
urbwdi	.0219657	.0103951	2.11	0.037	.0013202 .0426112
pavg0090	.0748633	.0293856	2.55	0.013	.016501 .1332256
_cons	-2.682734	2.089763	-1.28	0.202	-6.833184 1.467716

Model 4-5: Robust Check 3.2: Outlier checks: Median regression

```
. qreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090
```

```
Iteration 1: WLS sum of weighted deviations = 99.736993
Iteration 1: sum of abs. weighted deviations = 101.60194
Iteration 2: sum of abs. weighted deviations = 97.549535
Iteration 3: sum of abs. weighted deviations = 97.155441
Iteration 4: sum of abs. weighted deviations = 97.085051
Iteration 5: sum of abs. weighted deviations = 97.005859
Iteration 6: sum of abs. weighted deviations = 96.767022
Iteration 7: sum of abs. weighted deviations = 96.750093
Iteration 8: sum of abs. weighted deviations = 96.744498
Iteration 9: sum of abs. weighted deviations = 96.691205
Iteration 10: sum of abs. weighted deviations = 96.679637
Iteration 11: sum of abs. weighted deviations = 96.672829
Iteration 12: sum of abs. weighted deviations = 96.672518
```

Median regression
 Raw sum of deviations 179.08 (about 3.2690001)
 Min sum of deviations 96.67252
 Number of obs = 100
 Pseudo R2 = 0.4602

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.004988	.3111978	3.23	0.002	.386922 1.623053
giniavni	-.042718	.0186803	-2.29	0.025	-.0798186 -.0056173
ethnl	-1.018123	.5739075	-1.77	0.079	-2.157953 .1217069
musl	-2.131419	.4447943	-4.79	0.000	-3.014819 -1.248019
lpopd	-.2099231	.1093241	-1.92	0.058	-.4270502 .0072041
urbwdi	.0384718	.0112989	3.40	0.001	.0160312 .0609123
pavg0090	.0574465	.0319562	1.80	0.076	-.0060213 .1209143
_cons	-2.205016	2.193846	-1.01	0.317	-6.562184 2.152151

Model 4-5: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks'd

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Singapore" & ctry ~= "Oman", r
```

Linear regression
 Number of obs = 98
 F(7, 90) = 33.64
 Prob > F = 0.0000
 R-squared = 0.6925
 Root MSE = 1.2338

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.197694	.2723936	4.40	0.000	.656537	1.738852
giniavni	-.0196562	.0161048	-1.22	0.225	-.0516511	.0123387
ethnl	-1.495045	.5185907	-2.88	0.005	-2.525315	-.4647736
musl	-2.13755	.3389371	-6.31	0.000	-2.810908	-1.464193
lpopd	-.0848794	.1089188	-0.78	0.438	-.3012655	.1315068
urbwdi	.022321	.0097248	2.30	0.024	.003001	.0416411
pavg0090	.0676842	.0264074	2.56	0.012	.0152213	.1201472
_cons	-3.992695	1.898583	-2.10	0.038	-7.764561	-.2208287

Model 4-5: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg7090, r
```

Linear regression
 Number of obs = 100
 F(7, 92) = 27.01
 Prob > F = 0.0000
 R-squared = 0.6596
 Root MSE = 1.2914

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.131883	.279354	4.05	0.000	.5770623	1.686705
giniavni	-.0187867	.0168786	-1.11	0.269	-.0523091	.0147356
ethnl	-1.491345	.5371414	-2.78	0.007	-2.558154	-.4245354
musl	-2.244517	.3560183	-6.30	0.000	-2.9516	-1.537434
lpopd	-.0950399	.1115193	-0.85	0.396	-.316527	.1264471

urbwdi	.0212751	.0098683	2.16	0.034	.0016759	.0408744
pavg0090	.0490544	.0270176	1.82	0.073	-.0046049	.1027137
_cons	-3.516562	2.039857	-1.72	0.088	-7.567894	.5347702

Model 4-5: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi free7290, r
```

Linear regression

Number of obs = 104
 F(7, 96) = 29.44
 Prob > F = 0.0000
 R-squared = 0.6558
 Root MSE = 1.3171

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.150129	.2898932	3.97	0.000	.574696	1.725563
giniavni	-.0190987	.0170478	-1.12	0.265	-.0529383	.014741
ethnl	-1.427728	.5311492	-2.69	0.008	-2.482051	-.3734053
musl	-2.426489	.3482383	-6.97	0.000	-3.117737	-1.735242
lpopd	-.0858695	.1139303	-0.75	0.453	-.3120194	.1402805
urbwdi	.0218554	.0094413	2.31	0.023	.0031145	.0405963
free7290	-.0718811	.0559759	-1.28	0.202	-.1829924	.0392302
_cons	-3.149684	2.435416	-1.29	0.199	-7.983945	1.684578

Model 4-5: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 99
 F(7, 91) = 32.05
 Prob > F = 0.0000
 R-squared = 0.6843
 Root MSE = 1.2449

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	1.209181	.2775092	4.36	0.000	.6579425	1.760419
giniavni	-.0203931	.0163657	-1.25	0.216	-.0529014	.0121153
ethnl	-1.493128	.5320334	-2.81	0.006	-2.549947	-.4363089
musl	-2.002818	.3452299	-5.80	0.000	-2.688575	-1.317061
lpopd	-.0986571	.1115036	-0.88	0.379	-.3201454	.1228312
urbwdi	.0201306	.0093103	2.16	0.033	.0016367	.0386244
pavg0090	.0544402	.0288849	1.88	0.063	-.0029361	.1118166
_cons	-4.040725	2.055018	-1.97	0.052	-8.122765	.0413151

Model 4-5: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090 gdpmf, r
```

Linear regression

Number of obs = 99
 F(8, 90) = 28.90
 Prob > F = 0.0000
 R-squared = 0.6896

Root MSE = 1.2412

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	1.150392	.2716105	4.24	0.000	.6107906	1.689994
giniavni	-.0176676	.0165215	-1.07	0.288	-.0504904	.0151552
ethnl	-1.538694	.5120497	-3.00	0.003	-2.55597	-.5214179
musl	-1.990225	.3471949	-5.73	0.000	-2.679988	-1.300462
lpopd	-.0689065	.1137792	-0.61	0.546	-.2949487	.1571357
urbwdi	.0223848	.0093911	2.38	0.019	.0037277	.0410419
pavg0090	.0464205	.0271855	1.71	0.091	-.0075882	.1004292
gdpmf	.9872787	1.153638	0.86	0.394	-1.304625	3.279182
_cons	-3.960241	2.061407	-1.92	0.058	-8.055586	.135105

Model 4-5: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

. regress mysfx lgdph giniavni ethnannx musl lpopd urbwdi pavg0090, r

Linear regression

Number of obs = 100
F(7, 92) = 27.32
Prob > F = 0.0000
R-squared = 0.6422
Root MSE = 1.324

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.138523	.2841872	4.01	0.000	.5741024	1.702943
giniavni	-.024722	.0173556	-1.42	0.158	-.0591918	.0097478
ethnannx	-.7159131	.6224255	-1.15	0.253	-1.952104	.5202776
musl	-2.11118	.3720521	-5.68	0.000	-2.850727	-1.372872
lpopd	-.0914614	.1224153	-0.75	0.457	-.3345888	.1516661
urbwdi	.0279598	.0106481	2.63	0.010	.0068119	.0491078
pavg0090	.0675965	.0296896	2.28	0.025	.0086303	.1265627
_cons	-3.787092	2.082959	-1.82	0.072	-7.924029	.3498442

Model 4-5: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

. regress mysfx lgdph giniavni ethnannx musl lpopd urbwdi pavg0090 ethnannf, r

Linear regression

Number of obs = 100
F(8, 91) = 23.73
Prob > F = 0.0000
R-squared = 0.6436
Root MSE = 1.3287

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.198138	.3115487	3.85	0.000	.5792844	1.816991
giniavni	-.0219707	.0182231	-1.21	0.231	-.0581687	.0142272
ethnannx	-.671507	.615024	-1.09	0.278	-1.893177	.5501627
musl	-2.111777	.3739307	-5.65	0.000	-2.854544	-1.369009
lpopd	-.0888583	.1252409	-0.71	0.480	-.337634	.1599174
urbwdi	.0257267	.0117446	2.19	0.031	.0023975	.0490559
pavg0090	.0667962	.0296366	2.25	0.027	.0079267	.1256656

ethnannf	.3720017	.61201	0.61	0.545	-.8436809	1.587684
_cons	-4.323802	2.323317	-1.86	0.066	-8.938785	.2911811

Table 2.4, Model 4-6: Long-Term Democracy and Family Planning, Excl. Fertility***Model 4-6: Bivariate correlations among independent variables***

```
. correlate rtot lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
(obs=86)
```

	rtot	lgdph	giniavni	ethnl	musl	fertwdi	lpopd
rtot	1.0000						
lgdph	0.1591	1.0000					
giniavni	-0.0709	-0.0049	1.0000				
ethnl	-0.1376	-0.5301	0.2274	1.0000			
musl	-0.2480	0.3329	-0.2998	-0.2512	1.0000		
fertwdi	-0.5853	-0.6209	0.1386	0.5170	0.0715	1.0000	
lpopd	0.4596	0.1476	-0.4102	-0.2019	-0.1271	-0.4060	1.0000
urbwdi	0.0405	0.8154	-0.0009	-0.5257	0.3099	-0.5623	0.0631
pavg0090	0.3889	0.2562	0.1651	-0.0294	-0.3035	-0.4540	0.1681
		urbwdi	pavg0090				
urbwdi		1.0000					
pavg0090		0.1202	1.0000				

Model 4-6: Family planning effort predicted by six baseline variables excluding fertility

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi, r
```

Linear regression

Number of obs =	88
F(6, 81) =	7.87
Prob > F =	0.0000
R-squared =	0.3014
Root MSE =	21.895

rtot	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	8.625587	5.000478	1.72	0.088	-1.323795 18.57497
giniavni	.0952713	.3219923	0.30	0.768	-.5453923 .735935
ethnl	-5.887607	8.551977	-0.69	0.493	-22.90336 11.12814
musl	-16.76848	8.490191	-1.98	0.052	-33.66129 .1243384
lpopd	7.168345	2.222191	3.23	0.002	2.746883 11.58981
urbwdi	-.2102159	.1816032	-1.16	0.250	-.5715492 .1511174
_cons	-28.16287	29.7166	-0.95	0.346	-87.28958 30.96385

Model 4-6: Family planning effort predicted by 6 baseline var and long-term democracy

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs =	86
F(7, 78) =	11.21
Prob > F =	0.0000

R-squared = 0.3368
Root MSE = 21.514

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.629478	5.691518	0.81	0.418	-6.701464	15.96042
giniavni	.044403	.3157479	0.14	0.889	-.5842028	.6730088
ethnl	-7.063543	8.428656	-0.84	0.405	-23.84371	9.716622
musl	-9.978826	8.606782	-1.16	0.250	-27.11361	7.15596
lpopd	6.640414	2.059533	3.22	0.002	2.540199	10.74063
urbwdi	-.1565379	.198206	-0.79	0.432	-.5511357	.2380599
pavg0090	1.223882	.5840023	2.10	0.039	.0612222	2.386541
_cons	6.644863	36.0837	0.18	0.854	-65.19227	78.48199

Model 4-6: Means and SDs of family planning effort and long-term democracy

. summarize rtot

Variable	Obs	Mean	Std. Dev.	Min	Max
rtot	88	53.85	25.27719	0	104

. summarize pavg0090

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg0090	100	-3.0848	5.295036	-10	10

Model 4-6: How much would family planning rise if long-term democracy rose 1 SD?

. estsimp regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r

Linear regression

Number of obs = 86
F(7, 78) = 11.21
Prob > F = 0.0000
R-squared = 0.3368
Root MSE = 21.514

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.629478	5.691518	0.81	0.418	-6.701464	15.96042
giniavni	.044403	.3157479	0.14	0.889	-.5842028	.6730088
ethnl	-7.063543	8.428656	-0.84	0.405	-23.84371	9.716622
musl	-9.978826	8.606782	-1.16	0.250	-27.11361	7.15596
lpopd	6.640414	2.059533	3.22	0.002	2.540199	10.74063
urbwdi	-.1565379	.198206	-0.79	0.432	-.5511357	.2380599
pavg0090	1.223882	.5840023	2.10	0.039	.0612222	2.386541
_cons	6.644863	36.0837	0.18	0.854	-65.19227	78.48199

Simulating main parameters. Please wait....

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
 Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

```
. setx mean
. simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)
```

First Difference: pavg0090 -3.0848 2.2102

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(rtot)	6.471276	3.177181	.2872276 12.86457

Model 4-6: Robustness checks

Model 4-6: Robust Check 1.1b: Change specification: Include fertility

```
. regress rtot lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs =	86
F(8, 77) =	21.35
Prob > F =	0.0000
R-squared =	0.5147
Root MSE =	18.524

rtot	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-1.517431	4.709663	-0.32	0.748	-10.89557	7.860707
giniavni	.3060573	.2737682	1.12	0.267	-.2390849	.8511994
ethnl	6.128111	7.29561	0.84	0.404	-8.399304	20.65553
musl	1.198649	7.219411	0.17	0.869	-13.17703	15.57433
fertwdi	-11.14341	1.961483	-5.68	0.000	-15.04922	-7.237598
lpopd	4.385131	1.705927	2.57	0.012	.9881975	7.782065
urbwdi	-.3395442	.1402032	-2.42	0.018	-.6187245	-.0603638
pavg0090	.3000824	.5527935	0.54	0.589	-.8006701	1.400835
_cons	100.9519	36.74505	2.75	0.007	27.78318	174.1207

Model 4-6: Robust Check 1.2: Change specification: Include mean yrs of female schooling

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 mysfx, r
```

Linear regression

Number of obs =	86
F(8, 77) =	12.66
Prob > F =	0.0000
R-squared =	0.3758
Root MSE =	21.008

rtot	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.075865	5.110238	0.21	0.834	-9.09992	11.25165
giniavni	.1082917	.314729	0.34	0.732	-.5184138	.7349971
ethnl	-1.171669	8.669614	-0.14	0.893	-18.43508	16.09174
musl	-1.98425	8.639847	-0.23	0.819	-19.18838	15.21988
lpopd	7.028795	1.954128	3.60	0.001	3.137628	10.91996
urbwdi	-.2816842	.1936517	-1.45	0.150	-.6672939	.1039256
pavg0090	.8805265	.5892747	1.49	0.139	-.2928693	2.053922

mysfx	4.127169	1.579018	2.61	0.011	.9829422	7.271396
_cons	14.9509	32.52503	0.46	0.647	-49.81471	79.71651

Model 4-6: Robust Check 1.3: Change specification: Include female literacy

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 litfewdi, r
```

Linear regression

Number of obs = 86
 F(8, 77) = 10.56
 Prob > F = 0.0000
 R-squared = 0.3569
 Root MSE = 21.324

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	2.101522	5.654612	0.37	0.711	-9.15825	13.36129
giniavni	.043133	.3031899	0.14	0.887	-.5605952	.6468612
ethnl	-1.355865	9.096111	-0.15	0.882	-19.46854	16.75681
musl	-3.50477	9.350632	-0.37	0.709	-22.12426	15.11472
lpopd	6.810037	2.010535	3.39	0.001	2.806551	10.81352
urbwdi	-.2163825	.1889894	-1.14	0.256	-.5927085	.1599435
pavg0090	.9912785	.6011508	1.65	0.103	-.2057657	2.188323
litfewdi	.2215905	.1321372	1.68	0.098	-.0415284	.4847094
_cons	11.18168	34.40446	0.33	0.746	-57.32636	79.68972

Model 4-6: Robust Check 1.4: Change specification: Include geographical variables

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 airdist popcrgs latcapab, r
```

Linear regression

Number of obs = 86
 F(10, 75) = 8.47
 Prob > F = 0.0000
 R-squared = 0.3773
 Root MSE = 21.261

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.410202	5.758036	1.11	0.269	-5.060395	17.8808
giniavni	.0983877	.3141741	0.31	0.755	-.5274792	.7242546
ethnl	2.270798	9.182862	0.25	0.805	-16.0224	20.564
musl	-17.08132	8.772401	-1.95	0.055	-34.455684	.394198
lpopd	5.439667	2.190533	2.48	0.015	1.075901	9.803432
urbwdi	-.2212496	.2069205	-1.07	0.288	-.6334564	.1909572
pavg0090	1.241478	.6132087	2.02	0.046	.019904	2.463053
airdist	-.0024964	.0012466	-2.00	0.049	-.0049797	-.000013
popcrgs	.0248017	.0934989	0.27	0.792	-.1614577	.211061
latcapab	.336132	.2132316	1.58	0.119	-.0886471	.7609111
_cons	1.000769	34.50968	0.03	0.977	-67.74603	69.74757

Model 4-6: Robust Check 1.5: Change specification: Include regional dummies

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 afri lati east sout,  

> r
```

Linear regression

Number of obs = 86
 F(11, 74) = 13.39
 Prob > F = 0.0000
 R-squared = 0.3602
 Root MSE = 21.695

rtot	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	6.474515	5.866961	1.10	0.273	-5.21566	18.16469
giniavni	.009269	.3225056	0.03	0.977	-.6333373	.6518754
ethnl	-2.192588	11.20365	-0.20	0.845	-24.51635	20.13118
musl	-4.360696	6.530278	-0.67	0.506	-17.37256	8.651167
lpopd	6.609219	2.182655	3.03	0.003	2.260185	10.95825
urbwdi	-.2068907	.1932425	-1.07	0.288	-.5919347	.1781534
pavg0090	.9071028	.6303495	1.44	0.154	-.3488961	2.163102
afri	5.665735	9.884761	0.57	0.568	-14.03008	25.36155
lati	13.87196	7.925678	1.75	0.084	-1.920294	29.66422
east	4.771012	10.93667	0.44	0.664	-17.02077	26.5628
sout	15.41887	10.93571	1.41	0.163	-6.371008	37.20875
_cons	-14.58029	41.41566	-0.35	0.726	-97.1028	67.94222

Model 4-6: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 gdphf giniavnf ethnlf
>, r
```

Linear regression

Number of obs = 86
 F(9, 76) = 11.31
 Prob > F = 0.0000
 R-squared = 0.4555
 Root MSE = 19.751

rtot	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	4.575183	4.800635	0.95	0.344	-4.986111	14.13648
giniavni	-.1581808	.3376168	-0.47	0.641	-.8306029	.5142413
ethnl	-9.36996	8.615474	-1.09	0.280	-26.52916	7.789243
musl	-10.92549	7.719022	-1.42	0.161	-26.29925	4.448279
lpopd	6.153037	2.077173	2.96	0.004	2.015987	10.29009
urbwdi	-.0459033	.1964258	-0.23	0.816	-.4371191	.3453125
pavg0090	.7750918	.5677833	1.37	0.176	-.3557466	1.90593
gdphf	(dropped)					
giniavnf	-24.32819	6.113629	-3.98	0.000	-36.50454	-12.15184
ethnlf	-2.366193	10.13818	-0.23	0.816	-22.55813	17.82574
_cons	17.2761	33.77766	0.51	0.611	-49.99793	84.55014

Model 4-6: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090
```

```
Huber iteration 1: maximum difference in weights = .48642157
Huber iteration 2: maximum difference in weights = .07457928
Huber iteration 3: maximum difference in weights = .01808915
Biweight iteration 4: maximum difference in weights = .14172906
Biweight iteration 5: maximum difference in weights = .01213342
Biweight iteration 6: maximum difference in weights = .00329368
```

Robust regression

Number of obs = 86
 F(7, 78) = 4.52
 Prob > F = 0.0003

	rtot	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	4.393444	5.606055	0.78	0.436	-6.767354	15.55424
giniavni	.0497926	.3560521	0.14	0.889	-.6590527	.7586378
ethnl	-7.939219	10.23948	-0.78	0.440	-28.32446	12.44602
musl	-8.194941	8.491041	-0.97	0.337	-25.09931	8.709423
lpopd	6.558351	2.150848	3.05	0.003	2.276341	10.84036
urbwdi	-.1531262	.1956395	-0.78	0.436	-.5426145	.236362
pavg0090	1.189187	.5656721	2.10	0.039	.06302	2.315353
_cons	8.883075	40.0279	0.22	0.825	-70.80635	88.5725

Model 4-6: Robust Check 3.2: Outlier checks: Median regression

```
. qreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090
```

```
Iteration 1: WLS sum of weighted deviations = 1427.1582
Iteration 1: sum of abs. weighted deviations = 1636.4744
Iteration 2: sum of abs. weighted deviations = 1428.4288
Iteration 3: sum of abs. weighted deviations = 1427.0251
Iteration 4: sum of abs. weighted deviations = 1426.0644
Iteration 5: sum of abs. weighted deviations = 1420.0328
Iteration 6: sum of abs. weighted deviations = 1418.3551
Iteration 7: sum of abs. weighted deviations = 1408.9293
Iteration 8: sum of abs. weighted deviations = 1407.8195
Iteration 9: sum of abs. weighted deviations = 1407.3911
Iteration 10: sum of abs. weighted deviations = 1407.1829
Iteration 11: sum of abs. weighted deviations = 1406.4416
```

Median regression

Number of obs = 86

Raw sum of deviations 1758.3 (about 54.200001)

Min sum of deviations 1406.442

Pseudo R2 = 0.2001

	rtot	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	9.488229	8.478269	1.12	0.267	-7.390708	26.36717
giniavni	-.1878604	.5405899	-0.35	0.729	-1.264092	.8883714
ethnl	-11.33104	15.7692	-0.72	0.475	-42.7251	20.06302
musl	-14.11056	11.66839	-1.21	0.230	-37.34054	9.119431
lpopd	4.663838	3.238605	1.44	0.154	-1.783728	11.1114
urbwdi	-.37004	.3011173	-1.23	0.223	-.9695185	.2294386
pavg0090	.6641524	.850913	0.78	0.437	-1.029885	2.35819
_cons	1.012776	59.59129	0.02	0.986	-117.6244	119.6499

Model 4-6: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Kuwait" &
> ctry ~= "Namibia", r
```

Linear regression

Number of obs = 84
 F(7, 76) = 10.95
 Prob > F = 0.0000
 R-squared = 0.3558
 Root MSE = 20.542

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.635278	5.810126	0.97	0.335	-5.936592	17.20715
giniavni	.1910593	.3106656	0.62	0.540	-.4276848	.8098035
ethnl	-6.409667	8.321342	-0.77	0.444	-22.98306	10.16372
musl	-6.388204	8.211733	-0.78	0.439	-22.74329	9.96688
lpopd	6.674753	2.07023	3.22	0.002	2.551532	10.79797
urbwdi	-.1575689	.1994719	-0.79	0.432	-.5548515	.2397138
pavg0090	1.262394	.5884561	2.15	0.035	.0903826	2.434406
_cons	-7.286414	35.53701	-0.21	0.838	-78.06451	63.49168

Model 4-6: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg7090, r
```

Linear regression

Number of obs =	86
F(7, 78) =	12.92
Prob > F =	0.0000
R-squared =	0.3659
Root MSE =	21.038

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.176886	5.00106	0.84	0.406	-5.779459	14.13323
giniavni	-.0789247	.3132903	-0.25	0.802	-.7026377	.5447883
ethnl	-5.084072	8.278045	-0.61	0.541	-21.56439	11.39625
musl	-9.490148	8.397154	-1.13	0.262	-26.2076	7.227302
lpopd	6.237453	1.946976	3.20	0.002	2.361321	10.11358
urbwdi	-.1614276	.1882468	-0.86	0.394	-.5361982	.2133429
pavg7090	1.430619	.445627	3.21	0.002	.5434438	2.317794
_cons	17.62329	32.41562	0.54	0.588	-46.91124	82.15783

Model 4-6: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi free7290, r
```

Linear regression

Number of obs =	88
F(7, 80) =	12.13
Prob > F =	0.0000
R-squared =	0.3818
Root MSE =	20.725

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	3.404923	4.968213	0.69	0.495	-6.482137	13.29198
giniavni	-.132438	.3159039	-0.42	0.676	-.7611068	.4962309
ethnl	-4.7035	7.92823	-0.59	0.555	-20.48118	11.07418
musl	-12.29356	7.7963	-1.58	0.119	-27.80869	3.22157
lpopd	6.154319	1.938893	3.17	0.002	2.295798	10.01284
urbwdi	-.1657199	.1813459	-0.91	0.364	-.5266097	.1951698
free7290	-2.944337	.9173489	-3.21	0.002	-4.76992	-1.118755
_cons	50.87194	37.45487	1.36	0.178	-23.66563	125.4095

Model 4-6: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 86
 F(7, 78) = 10.90
 Prob > F = 0.0000
 R-squared = 0.3544
 Root MSE = 21.227

rtot	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	9.042793	5.395751	1.68	0.098	-1.699323	19.78491
giniavni	.0198268	.3103052	0.06	0.949	-.5979434	.6375969
ethnl	-4.878057	8.609586	-0.57	0.573	-22.01843	12.26231
musl	-10.71568	8.199813	-1.31	0.195	-27.04026	5.608893
lpopd	6.580485	2.058449	3.20	0.002	2.482428	10.67854
urbwdi	-.2642563	.1985741	-1.33	0.187	-.6595869	.1310744
pavg0090	.9495559	.5859953	1.62	0.109	-.2170711	2.116183
_cons	-22.76502	35.9748	-0.63	0.529	-94.38535	48.85531

Model 4-6: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090 gdpmf, r
```

Linear regression

Number of obs = 86
 F(8, 77) = 9.52
 Prob > F = 0.0000
 R-squared = 0.3554
 Root MSE = 21.348

rtot	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	9.284399	5.476661	1.70	0.094	-1.621027	20.18983
giniavni	.001938	.313684	0.01	0.995	-.6226866	.6265626
ethnl	-4.942511	8.690323	-0.57	0.571	-22.24715	12.36213
musl	-10.88448	8.307187	-1.31	0.194	-27.4262	5.657244
lpopd	6.363431	2.211807	2.88	0.005	1.959161	10.7677
urbwdi	-.2765115	.2042479	-1.35	0.180	-.6832209	.1301979
pavg0090	.9860183	.5895444	1.67	0.098	-.1879145	2.159951
gdpmf	-5.838151	23.25331	-0.25	0.802	-52.1414	40.4651
_cons	-22.17997	36.16831	-0.61	0.542	-94.20028	49.84035

Model 4-6: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress rtot lgdph giniavni ethnannx musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 86
 F(7, 78) = 10.51
 Prob > F = 0.0000
 R-squared = 0.3346
 Root MSE = 21.55

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.780845	6.125689	0.78	0.437	-7.414465	16.97615
giniavni	.0082363	.3134422	0.03	0.979	-.6157793	.6322519
ethnannx	-5.801531	11.15315	-0.52	0.604	-28.00575	16.40269
musl	-10.45487	8.57768	-1.22	0.227	-27.53172	6.621981
lpopd	6.58139	2.170207	3.03	0.003	2.26084	10.90194
urbwdi	-.1325306	.1898646	-0.70	0.487	-.5105219	.2454608
pavg0090	1.191729	.587156	2.03	0.046	.0227908	2.360666
_cons	6.762103	43.46415	0.16	0.877	-79.76838	93.29258

Model 4-6: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress rtot lgdph giniavni ethnannx musl lpopd urbwdi pavg0090 ethnannf, r

Linear regression
Number of obs = 86
F( 8, 77) = 9.07
Prob > F = 0.0000
R-squared = 0.3355
Root MSE = 21.675
```

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.362813	6.510511	0.82	0.413	-7.60127	18.3269
giniavni	.043339	.3349307	0.13	0.897	-.6235933	.7102713
ethnannx	-5.29376	11.41122	-0.46	0.644	-28.01641	17.42889
musl	-9.906781	8.760227	-1.13	0.262	-27.35062	7.537059
lpopd	6.569064	2.180772	3.01	0.004	2.226593	10.91154
urbwdi	-.1599365	.2143212	-0.75	0.458	-.5867044	.2668315
pavg0090	1.180291	.5892015	2.00	0.049	.0070411	2.353541
ethnannf	4.875301	11.12572	0.44	0.662	-17.27884	27.02945
_cons	1.44091	46.89762	0.03	0.976	-91.94418	94.826

Table 2.4, Model 4-7: Long-Term Democracy and Fertility**Model 4-7: Bivariate correlations among independent variables**

```
. correlate fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090
(obs=100)
```

	fertwdi	lgdph	giniavni	ethnl	musl	lpopd	urbwdi
fertwdi	1.0000						
lgdph	-0.6396	1.0000					
giniavni	0.1637	-0.0330	1.0000				
ethnl	0.4830	-0.5107	0.2183	1.0000			
musl	0.0878	0.3163	-0.2978	-0.2898	1.0000		
lpopd	-0.3870	0.1540	-0.3091	-0.1750	-0.0967	1.0000	
urbwdi	-0.5647	0.8159	-0.0345	-0.4912	0.3028	0.0539	1.0000
pavg0090	-0.4359	0.2232	0.1523	0.0241	-0.2942	0.2045	0.0782

Model 4-7: Fertility predicted by 6 baseline variables

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi, r
```

Linear regression

Number of obs = 105
 F(6, 98) = 55.85
 Prob > F = 0.0000
 R-squared = 0.6525
 Root MSE = 1.0167

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.8842633	.2458682	-3.60	0.001	-1.372181	-.3963459
giniavni	.0267901	.0119369	2.24	0.027	.0031016	.0504785
ethnl	.8486236	.3501207	2.42	0.017	.1538205	1.543427
musl	1.602146	.30901	5.18	0.000	.9889256	2.215366
lpopd	-.190935	.0812749	-2.35	0.021	-.3522224	-.0296476
urbwdi	-.0137753	.0079538	-1.73	0.086	-.0295594	.0020087
_cons	10.997	1.455255	7.56	0.000	8.10909	13.8849

Model 4-7: Fertility predicted by 6 baseline variables and long-term democracy

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 F(7, 92) = 60.55
 Prob > F = 0.0000
 R-squared = 0.6811
 Root MSE = .9446

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.6343229	.2798616	-2.27	0.026	-1.190152	-.0784937
giniavni	.0322615	.0106816	3.02	0.003	.011047	.053476
ethnl	1.127001	.3363524	3.35	0.001	.458976	1.795026
musl	1.203468	.3020272	3.98	0.000	.6036161	1.80332
lpopd	-.160517	.0777752	-2.06	0.042	-.3149852	-.0060488
urbwdi	-.0156445	.0090192	-1.73	0.086	-.0335575	.0022685
pavg0090	-.0778993	.0192851	-4.04	0.000	-.1162011	-.0395975
_cons	8.526794	1.691798	5.04	0.000	5.166738	11.88685

Model 4-7: Means and SDs of fertility and long-term democracy

```
. summarize fertwdi
```

Variable	Obs	Mean	Std. Dev.	Min	Max
fertwdi	105	4.795238	1.674089	1.3	7.6

```
. summarize pavg0090
```

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg0090	100	-3.0848	5.295036	-10	10

Model 4-7: How much would fertility rise if long-term democracy rose one SD?

```
. estsimp regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 F(7, 92) = 60.55
 Prob > F = 0.0000
 R-squared = 0.6811
 Root MSE = .9446

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.6343229	.2798616	-2.27	0.026	-1.190152	-.0784937
giniavni	.0322615	.0106816	3.02	0.003	.011047	.053476
ethnl	1.127001	.3363524	3.35	0.001	.458976	1.795026
musl	1.203468	.3020272	3.98	0.000	.6036161	1.80332
lpopd	-.160517	.0777752	-2.06	0.042	-.3149852	-.0060488
urbwdi	-.0156445	.0090192	-1.73	0.086	-.0335575	.0022685
pavg0090	-.0778993	.0192851	-4.04	0.000	-.1162011	-.0395975
_cons	8.526794	1.691798	5.04	0.000	5.166738	11.88685

Simulating main parameters. Please wait....

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
 Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

```
. setx mean
. simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)
```

First Difference: pavg0090 -3.0848 2.2102

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(fertwdi)	-.4084959	.1033295	-.6137877 -.2129865

Model 4-7: Robustness checks

Model 4-7: Robust Check 1.2: Change specification: Include mean years female schooling

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 mysfx, r
```

Linear regression

Number of obs = 100
 F(8, 91) = 77.16
 Prob > F = 0.0000
 R-squared = 0.7377
 Root MSE = .86147

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.3063004	.2588564	-1.18	0.240	-.8204867	.207886
giniavni	.0266414	.0096861	2.75	0.007	.0074012	.0458816
ethnl	.6258255	.3617267	1.73	0.087	-.0927001	1.344351
musl	.5326764	.3025469	1.76	0.082	-.0682959	1.133649
lpopd	-.1936436	.0661203	-2.93	0.004	-.3249834	-.0623038
urbwdi	-.008349	.0076952	-1.08	0.281	-.0236345	.0069366

pavg0090	-.0538634	.0162259	-3.32	0.001	-.0860942	-.0216326
mysfx	-.3146666	.0764938	-4.11	0.000	-.4666123	-.162721
_cons	7.632074	1.499658	5.09	0.000	4.653188	10.61096

Model 4-7: Robust Check 1.3: Change specification: Include female literacy

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 litfewdi, r
```

Linear regression

Number of obs = 100
 F(8, 91) = 74.83
 Prob > F = 0.0000
 R-squared = 0.7606
 Root MSE = .82293

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3057716	.2290027	-1.34	0.185	-.7606572	.149114
giniavni	.0281544	.0090816	3.10	0.003	.010115	.0461938
ethnl	.4033499	.347786	1.16	0.249	-.2874844	1.094184
musl	.3103653	.2858735	1.09	0.280	-.2574873	.878218
lpopd	-.1922212	.062569	-3.07	0.003	-.3165069	-.0679355
urbwdi	-.0079194	.0071754	-1.10	0.273	-.0221723	.0063336
pavg0090	-.0535494	.015184	-3.53	0.001	-.0837106	-.0233883
litfewdi	-.0278068	.0053371	-5.21	0.000	-.0384083	-.0172053
_cons	8.092663	1.340704	6.04	0.000	5.42952	10.75581

Model 4-7: Robust Check 1.4: Change specification: Include geographical variables

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 airdist popcrags la  
> tcapab, r
```

Linear regression

Number of obs = 100
 F(10, 89) = 46.28
 Prob > F = 0.0000
 R-squared = 0.7203
 Root MSE = .89942

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.600339	.2974111	-2.02	0.047	-1.191288	-.0093895
giniavni	.0242965	.0116511	2.09	0.040	.001146	.0474471
ethnl	.596039	.3681058	1.62	0.109	-.1353793	1.327457
musl	1.490626	.2693609	5.53	0.000	.9554119	2.025841
lpopd	-.1142492	.0846869	-1.35	0.181	-.2825204	.0540219
urbwdi	-.0128061	.0093607	-1.37	0.175	-.0314055	.0057934
pavg0090	-.0693013	.0184406	-3.76	0.000	-.1059424	-.0326602
airdist	.0000549	.0000501	1.10	0.275	-.0000445	.0001544
popcrags	-.0057466	.0035439	-1.62	0.108	-.0127882	.001295
latcapab	-.0298227	.0101906	-2.93	0.004	-.0500713	-.0095741
_cons	9.05684	1.728738	5.24	0.000	5.621874	12.49181

Model 4-7: Robust Check 1.5: Change specification: Include regional dummies

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 afri lati east sou
```

> t, r

Linear regression

Number of obs = 100
 F(11, 88) = 45.56
 Prob > F = 0.0000
 R-squared = 0.7326
 Root MSE = .88441

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4591178	.2632149	-1.74	0.085	-.9822022	.0639666
giniavni	.0209572	.0138394	1.51	0.134	-.0065457	.0484601
ethnl	.5524625	.346453	1.59	0.114	-.1360401	1.240965
musl	.6349669	.346091	1.83	0.070	-.0528162	1.32275
lpopd	-.1550975	.0748244	-2.07	0.041	-.3037953	-.0063997
urbwdi	-.0172122	.0096159	-1.79	0.077	-.0363216	.0018973
pavg0090	-.062534	.0187682	-3.33	0.001	-.0998319	-.0252362
afri	.2138305	.4405225	0.49	0.629	-.6616155	1.089276
lati	-.7219247	.4185182	-1.72	0.088	-1.553642	.1097924
east	-1.034947	.4942166	-2.09	0.039	-2.017098	-.052795
sout	-.5480068	.5584077	-0.98	0.329	-1.657725	.5617112
_cons	8.399085	1.559168	5.39	0.000	5.300567	11.4976

Model 4-7: Robust Check 1.6: Change specification: Include family planning effort

. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 rtot, r

Linear regression

Number of obs = 86
 F(8, 77) = 57.31
 Prob > F = 0.0000
 R-squared = 0.7485
 Root MSE = .86088

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4401926	.2634035	-1.67	0.099	-.964696	.0843109
giniavni	.0245494	.0122823	2.00	0.049	.0000922	.0490065
ethnl	1.013797	.3750148	2.70	0.008	.2670473	1.760547
musl	.7628792	.2703869	2.82	0.006	.2244701	1.301288
lpopd	-.0425606	.108496	-0.39	0.696	-.2586037	.1734824
urbwdi	-.0201905	.0081887	-2.47	0.016	-.0364962	-.0038848
pavg0090	-.0534436	.0224895	-2.38	0.020	-.0982259	-.0086614
rtot	-.0240688	.0059141	-4.07	0.000	-.0358453	-.0122922
_cons	8.62297	1.641803	5.25	0.000	5.353721	11.89222

Model 4-7: Robust Check 2.1: Imputation check: Include missing data flags

. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 gdphf giniavnf eth > nlf, r

Linear regression

Number of obs = 100
 F(9, 90) = 48.24
 Prob > F = 0.0000
 R-squared = 0.7125
 Root MSE = .90684

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6264561	.2583274	-2.43	0.017	-1.139668	-.1132437
giniavni	.0403436	.0107147	3.77	0.000	.019057	.0616302
ethnl	1.159801	.3462349	3.35	0.001	.4719454	1.847657
musl	1.134293	.2830129	4.01	0.000	.5720385	1.696547
lpopd	-.1393434	.0663943	-2.10	0.039	-.2712471	-.0074396
urbwdi	-.0188372	.0088712	-2.12	0.036	-.0364615	-.001213
pavg0090	-.0699684	.0198999	-3.52	0.001	-.1095029	-.0304339
gdphf (dropped)						
giniavnf	.4850422	.229219	2.12	0.037	.0296587	.9404257
ethnlf	.722422	.6508783	1.11	0.270	-.5706613	2.015505
_cons	8.02922	1.751251	4.58	0.000	4.550054	11.50838

Model 4-7: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090
```

```
Huber iteration 1: maximum difference in weights = .63463824
Huber iteration 2: maximum difference in weights = .07115858
Huber iteration 3: maximum difference in weights = .03864253
Biweight iteration 4: maximum difference in weights = .25924739
Biweight iteration 5: maximum difference in weights = .04107449
Biweight iteration 6: maximum difference in weights = .0195625
Biweight iteration 7: maximum difference in weights = .00926132
```

Robust regression

Number of obs =	100
F(7, 92) =	33.69
Prob > F =	0.0000

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.7960229	.1912074	-4.16	0.000	-1.175777	-.4162685
giniavni	.036062	.0114918	3.14	0.002	.0132383	.0588856
ethnl	1.188269	.3442368	3.45	0.001	.5045854	1.871953
musl	1.06302	.2733178	3.89	0.000	.5201875	1.605853
lpopd	-.1033272	.0680087	-1.52	0.132	-.2383984	.0317439
urbwdi	-.0127429	.0068039	-1.87	0.064	-.0262561	.0007703
pavg0090	-.0710163	.0192338	-3.69	0.000	-.1092164	-.0328163
_cons	9.248645	1.367818	6.76	0.000	6.53204	11.96525

Model 4-7: Robust Check 3.2: Outlier checks: Median regression

```
. qreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090
Iteration 1: WLS sum of weighted deviations = 68.609331
```

```
Iteration 1: sum of abs. weighted deviations = 69.427454
Iteration 2: sum of abs. weighted deviations = 68.229574
Iteration 3: sum of abs. weighted deviations = 68.114858
Iteration 4: sum of abs. weighted deviations = 67.987316
Iteration 5: sum of abs. weighted deviations = 67.63691
Iteration 6: sum of abs. weighted deviations = 67.562861
Iteration 7: sum of abs. weighted deviations = 67.555317
Iteration 8: sum of abs. weighted deviations = 67.549544
Iteration 9: sum of abs. weighted deviations = 67.549524
Iteration 10: sum of abs. weighted deviations = 67.549514
```

Median regression
 Number of obs = 100
 Raw sum of deviations 139.3 (about 5.0999999)
 Min sum of deviations 67.54951 Pseudo R2 = 0.5151

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.6114323	.2257969	-2.71	0.008	-1.059884 -.1629802
giniavni	.0419635	.012967	3.24	0.002	.0162098 .0677172
ethnl	1.426178	.3980513	3.58	0.001	.6356141 2.216743
musl	1.487766	.3176589	4.68	0.000	.8568679 2.118664
lpopd	-.1018253	.0753656	-1.35	0.180	-.251508 .0478573
urbwdi	-.0181574	.0077615	-2.34	0.021	-.0335725 -.0027424
pavg0090	-.0856783	.0225382	-3.80	0.000	-.1304411 -.0409155
_cons	7.648147	1.573443	4.86	0.000	4.523153 10.77314

Model 4-7: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Oman" & ctry ~= "Thailand", r
```

Linear regression
 Number of obs = 98
 F(7, 90) = 66.75
 Prob > F = 0.0000
 R-squared = 0.7227
 Root MSE = .86774

fertwdi	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.6304866	.2319341	-2.72	0.008	-1.091264 -.1697091
giniavni	.0353247	.0101936	3.47	0.001	.0150734 .0555761
ethnl	1.177964	.3297211	3.57	0.001	.5229153 1.833012
musl	1.065574	.2834817	3.76	0.000	.5023877 1.628759
lpopd	-.1121714	.0676449	-1.66	0.101	-.2465598 .022217
urbwdi	-.0169577	.0072981	-2.32	0.022	-.0314566 -.0024587
pavg0090	-.0809979	.0186109	-4.35	0.000	-.1179716 -.0440241
_cons	8.23071	1.416274	5.81	0.000	5.417034 11.04439

Model 4-7: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg7090, r
```

Linear regression
 Number of obs = 100
 F(7, 92) = 53.59
 Prob > F = 0.0000
 R-squared = 0.6827
 Root MSE = .94225

fertwdi	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.6517522	.2507402	-2.60	0.011	-1.149744 -.1537606
giniavni	.0356007	.0110687	3.22	0.002	.0136173 .0575841
ethnl	1.039241	.3352883	3.10	0.003	.3733297 1.705153
musl	1.209635	.2886035	4.19	0.000	.6364435 1.782826
lpopd	-.1562292	.0751238	-2.08	0.040	-.3054316 -.0070269
urbwdi	-.0145482	.0082504	-1.76	0.081	-.0309341 .0018378

pavg7090	-.0738732	.0179411	-4.12	0.000	-.1095057	-.0382407
_cons	8.46231	1.544095	5.48	0.000	5.395603	11.52902

Model 4-7: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi free7290, r
```

Linear regression

Number of obs = 104
 F(7, 96) = 58.41
 Prob > F = 0.0000
 R-squared = 0.6773
 Root MSE = .96868

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6280865	.2650959	-2.37	0.020	-1.154298	-.1018754
giniavni	.0367646	.0116702	3.15	0.002	.0135995	.0599298
ethnl	.8557156	.334262	2.56	0.012	.1922108	1.51922
musl	1.391749	.2908167	4.79	0.000	.8144828	1.969016
lpopd	-.1452558	.0760431	-1.91	0.059	-.2962002	.0056886
urbwdi	-.0171552	.0080576	-2.13	0.036	-.0331494	-.001161
free7290	.1357919	.0420114	3.23	0.002	.0524	.2191839
_cons	7.27801	2.015339	3.61	0.000	3.277593	11.27843

Model 4-7: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 99
 F(7, 91) = 63.09
 Prob > F = 0.0000
 R-squared = 0.6890
 Root MSE = .93589

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.7281666	.2788416	-2.61	0.011	-1.282051	-.1742821
giniavni	.033068	.0113255	2.92	0.004	.0105712	.0555647
ethnl	1.053567	.3379108	3.12	0.002	.3823486	1.724785
musl	1.111143	.2908277	3.82	0.000	.5334497	1.688837
lpopd	-.1686478	.0765194	-2.20	0.030	-.3206442	-.0166514
urbwdi	-.0143842	.0091246	-1.58	0.118	-.0325091	.0037407
pavg0090	-.0657715	.0222271	-2.96	0.004	-.1099228	-.0216201
_cons	9.280576	1.690206	5.49	0.000	5.923189	12.63796

Model 4-7: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg0090 gdpmf, r
```

Linear regression

Number of obs = 99
 F(8, 90) = 55.84
 Prob > F = 0.0000
 R-squared = 0.6982
 Root MSE = .92704

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.669655	.2902302	-2.31	0.023	-1.246248	-.093062
giniavni	.0303553	.011129	2.73	0.008	.0082456	.0524651
ethnl	1.098918	.3332613	3.30	0.001	.4368367	1.761
musl	1.09861	.2866272	3.83	0.000	.5291747	1.668045
lpopd	-.1982584	.0688866	-2.88	0.005	-.3351137	-.0614031
urbwdi	-.0166278	.0095242	-1.75	0.084	-.0355494	.0022937
pavg0090	-.0577895	.0220459	-2.62	0.010	-.1015875	-.0139914
gdpmf	-.982633	.7305127	-1.35	0.182	-2.433924	.468658
_cons	9.200471	1.734964	5.30	0.000	5.753663	12.64728

Model 4-7: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 F(7, 92) = 53.92
 Prob > F = 0.0000
 R-squared = 0.6545
 Root MSE = .98319

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6945963	.2867381	-2.42	0.017	-1.264083	-.1251096
giniavni	.03704	.011577	3.20	0.002	.0140471	.060033
ethnannx	.5702714	.4310725	1.32	0.189	-.2858757	1.426419
musl	1.195202	.3029844	3.94	0.000	.5934489	1.796955
lpopd	-.1685788	.086746	-1.94	0.055	-.3408638	.0037063
urbwdi	-.0190577	.0090633	-2.10	0.038	-.0370582	-.0010573
pavg0090	-.0716717	.0202328	-3.54	0.001	-.1118558	-.0314875
_cons	9.097072	1.821915	4.99	0.000	5.478592	12.71555

Model 4-7: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg0090 ethnannf, r
```

Linear regression

Number of obs = 100
 F(8, 91) = 52.16
 Prob > F = 0.0000
 R-squared = 0.6585
 Root MSE = .9829

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.7707608	.2967236	-2.60	0.011	-1.360166	-.1813559
giniavni	.033525	.0117385	2.86	0.005	.0102079	.0568421
ethnannx	.5135379	.4379065	1.17	0.244	-.3563096	1.383385
musl	1.195172	.3031789	3.94	0.000	.5929447	1.7974
lpopd	-.1719045	.089185	-1.93	0.057	-.3490596	.0052506
urbwdi	-.0162047	.0092818	-1.75	0.084	-.0346419	.0022325
pavg0090	-.0706492	.0201542	-3.51	0.001	-.110683	-.0306154
ethnannf	-.4752721	.339747	-1.40	0.165	-1.150138	.1995935

_cons	9.782777	1.950964	5.01	0.000	5.907426	13.65813
-------	----------	----------	------	-------	----------	----------

Table 2.4, Model 4-8: Family Planning Effort and Fertility

Model 4-8: Bivariate correlations among independent variables

```
. correlate fertwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi rtot
(obs=88)
```

	fertwdi	lgdph	giniavni	ethnl	musl	fertwdi	lpopd
fertwdi	1.0000						
lgdph	-0.6072	1.0000					
giniavni	0.1177	0.0065	1.0000				
ethnl	0.4830	-0.5103	0.2484	1.0000			
musl	0.1129	0.3196	-0.3123	-0.2666	1.0000		
fertwdi	1.0000	-0.6072	0.1177	0.4830	0.1129	1.0000	
lpopd	-0.4124	0.1386	-0.4069	-0.2024	-0.1395	-0.4124	1.0000
urbwdi	-0.5552	0.8151	0.0227	-0.4898	0.2816	-0.5552	0.0537
rtot	-0.5919	0.1510	-0.0697	-0.1341	-0.2636	-0.5919	0.4690
		urbwdi	rtot				
urbwdi		1.0000					
rtot		0.0354	1.0000				

Model 4-8: Fertility predicted by 6 baseline variables

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(6, 98) =	55.85
Prob > F =	0.0000
R-squared =	0.6525
Root MSE =	1.0167

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.8842633	.2458682	-3.60	0.001	-1.372181	-.3963459
giniavni	.0267901	.0119369	2.24	0.027	.0031016	.0504785
ethnl	.8486236	.3501207	2.42	0.017	.1538205	1.543427
musl	1.602146	.30901	5.18	0.000	.9889256	2.215366
lpopd	-.190935	.0812749	-2.35	0.021	-.3522224	-.0296476
urbwdi	-.0137753	.0079538	-1.73	0.086	-.0295594	.0020087
_cons	10.997	1.455255	7.56	0.000	8.10909	13.8849

Model 4-8: Fertility predicted by 6 baseline variables and family planning

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot, r
```

Linear regression

Number of obs =	88
F(7, 80) =	42.14
Prob > F =	0.0000

R-squared = 0.7296
Root MSE = .89286

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5815431	.2300479	-2.53	0.013	-1.039353	-.1237332
giniavni	.0221777	.0137139	1.62	0.110	-.0051138	.0494692
ethnl	.8551493	.3622585	2.36	0.021	.1342318	1.576067
musl	1.082753	.2694091	4.02	0.000	.5466122	1.618895
lpopd	-.0479323	.1082069	-0.44	0.659	-.2632709	.1674063
urbwdi	-.0201957	.0075703	-2.67	0.009	-.035261	-.0051303
rtot	-.0272891	.0056027	-4.87	0.000	-.0384388	-.0161394
_cons	10.15988	1.425506	7.13	0.000	7.323032	12.99673

Model 4-8: Means and SDs of fertility and family planning

. summarize fertwdi

Variable	Obs	Mean	Std. Dev.	Min	Max
fertwdi	105	4.795238	1.674089	1.3	7.6

. summarize rtot

Variable	Obs	Mean	Std. Dev.	Min	Max
rtot	88	53.85	25.27719	0	104

Model 4-8: How much would fertility fall if family planning rose one SD?

. estsimp regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot, r

Linear regression

Number of obs = 88
F(7, 80) = 42.14
Prob > F = 0.0000
R-squared = 0.7296
Root MSE = .89286

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5815431	.2300479	-2.53	0.013	-1.039353	-.1237332
giniavni	.0221777	.0137139	1.62	0.110	-.0051138	.0494692
ethnl	.8551493	.3622585	2.36	0.021	.1342318	1.576067
musl	1.082753	.2694091	4.02	0.000	.5466122	1.618895
lpopd	-.0479323	.1082069	-0.44	0.659	-.2632709	.1674063
urbwdi	-.0201957	.0075703	-2.67	0.009	-.035261	-.0051303
rtot	-.0272891	.0056027	-4.87	0.000	-.0384388	-.0161394
_cons	10.15988	1.425506	7.13	0.000	7.323032	12.99673

Simulating main parameters. Please wait....

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

```

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

. setx mean
. simqi, fd(ev) changex(rtот 53.85 79.12719)

First Difference: rtот 53.85 79.12719

      Quantity of Interest |      Mean      Std. Err.    [95% Conf. Interval]
-----+-----+-----+-----+
      dE(fertwdi) |   -.689232     .1400952   -.9869496   -.4253714

```

Model 4-8: Robustness checks

Model 4-8: Robust Check 1.2: Change specification: Include mean years female schooling

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtот mysfx, r
```

Linear regression

	Number of obs = 88
	F(8, 79) = 50.28
	Prob > F = 0.0000
	R-squared = 0.7720
	Root MSE = .82507

fertwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.315707	.2345508	-1.35	0.182	-.7825688 .1511548
giniavni	.018219	.0118549	1.54	0.128	-.0053777 .0418156
ethnl	.4959512	.3771485	1.32	0.192	-.2547442 1.246647
musl	.4882038	.310888	1.57	0.120	-.1306033 1.107011
lpopd	-.0971585	.0963422	-1.01	0.316	-.2889229 .0946059
urbwdi	-.0118724	.006433	-1.85	0.069	-.0246771 .0009322
rtот	-.0221239	.0050981	-4.34	0.000	-.0322713 -.0119764
mysfx	-.2761882	.0720927	-3.83	0.000	-.4196852 -.1326912
_cons	9.125927	1.377146	6.63	0.000	6.384787 11.86707

Model 4-8: Robust Check 1.3: Change specification: Include female literacy

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtот litfewdi, r
```

Linear regression

	Number of obs = 88
	F(8, 79) = 77.38
	Prob > F = 0.0000
	R-squared = 0.8014
	Root MSE = .76995

fertwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.2341438	.227849	-1.03	0.307	-.6876659 .2193782
giniavni	.0228699	.0109542	2.09	0.040	.0010661 .0446737
ethnl	.2135572	.3651483	0.58	0.560	-.5132524 .9403667
musl	.2097478	.3082494	0.68	0.498	-.4038074 .8233029
lpopd	-.0888846	.0833605	-1.07	0.290	-.2548096 .0770403
urbwdi	-.0131494	.0063581	-2.07	0.042	-.0258049 -.000494
rtот	-.0220847	.0047474	-4.65	0.000	-.0315342 -.0126352
litfewdi	-.0266511	.0056743	-4.70	0.000	-.0379455 -.0153567

_cons	8.990158	1.293021	6.95	0.000	6.416464	11.56385
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Model 4-8: Robust Check 1.4: Change specification: Include geographical variables

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot airdist popcrgs latcap
> ab, r
```

		Linear regression					Number of obs = 88
							F(10, 77) = 42.76
							Prob > F = 0.0000
							R-squared = 0.7659
							Root MSE = .84687

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5213431	.2494467	-2.09	0.040	-1.018055	-.0246313
giniavni	.0209151	.013241	1.58	0.118	-.0054511	.0472813
ethnl	.4133215	.3793624	1.09	0.279	-.3420855	1.168729
musl	1.369324	.2957827	4.63	0.000	.7803458	1.958303
lpopd	.0281653	.1099292	0.26	0.798	-.1907316	.2470623
urbwdi	-.0168194	.0075213	-2.24	0.028	-.0317963	-.0018425
rtot	-.0244211	.0055887	-4.37	0.000	-.0355496	-.0132926
airdist	-7.44e-06	.0000525	-0.14	0.888	-.000112	.0000971
popcrgs	-.0084802	.0032455	-2.61	0.011	-.0149428	-.0020177
latcapab	-.0286579	.0100765	-2.84	0.006	-.0487228	-.008593
_cons	10.25958	1.445485	7.10	0.000	7.381247	13.1379

Model 4-8: Robust Check 1.5: Change specification: Include regional dummies

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot afri lati east sout, r
```

		Linear regression					Number of obs = 88
							F(11, 76) = 34.66
							Prob > F = 0.0000
							R-squared = 0.7793
							Root MSE = .82757

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3550115	.2813303	-1.26	0.211	-.9153293	.2053064
giniavni	.0138458	.0167087	0.83	0.410	-.0194326	.0471241
ethnl	.3838246	.3434135	1.12	0.267	-.3001425	1.067792
musl	.4908242	.3508125	1.40	0.166	-.2078795	1.189528
lpopd	-.0184944	.1010402	-0.18	0.855	-.2197334	.1827445
urbwdi	-.0239553	.0085715	-2.79	0.007	-.041027	-.0068836
rtot	-.0256193	.0047795	-5.36	0.000	-.0351385	-.0161001
afri	.1165705	.4392407	0.27	0.791	-.7582531	.9913941
lati	-.6731789	.3934111	-1.71	0.091	-1.456725	.1103672
east	-1.16431	.4465356	-2.61	0.011	-2.053662	-.2749569
sout	-.6269099	.5380328	-1.17	0.248	-1.698495	.4446753
_cons	9.396368	1.78318	5.27	0.000	5.844858	12.94788

Model 4-8: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot gdphf giniavnf ethnlf,
> r
```

Linear regression

Number of obs = 88
F(9, 78) = 30.41
Prob > F = 0.0000
R-squared = 0.7362
Root MSE = .89314

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.59226	.218129	-2.72	0.008	-1.026521	-.1579986
giniavni	.0273465	.013808	1.98	0.051	-.0001431	.054836
ethnl	.9220556	.3745825	2.46	0.016	.176319	1.667792
musl	1.12065	.2608748	4.30	0.000	.6012879	1.640012
lpopd	-.0511035	.1060086	-0.48	0.631	-.2621504	.1599435
urbwdi	-.0218498	.0078759	-2.77	0.007	-.0375294	-.0061701
rtot	-.0244707	.0053812	-4.55	0.000	-.0351838	-.0137576
gdphf	(dropped)					
giniavnf	.2884283	.4026307	0.72	0.476	-.5131479	1.090005
ethnlf	.3122749	.554165	0.56	0.575	-.790983	1.415533
_cons	9.841185	1.522905	6.46	0.000	6.809314	12.87306

Model 4-8: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot
```

Huber iteration 1: maximum difference in weights = .64575314
Huber iteration 2: maximum difference in weights = .14346943
Huber iteration 3: maximum difference in weights = .03548036
Biweight iteration 4: maximum difference in weights = .28832831
Biweight iteration 5: maximum difference in weights = .06047189
Biweight iteration 6: maximum difference in weights = .02100553
Biweight iteration 7: maximum difference in weights = .04241621
Biweight iteration 8: maximum difference in weights = .04144891
Biweight iteration 9: maximum difference in weights = .01528755
Biweight iteration 10: maximum difference in weights = .01151151
Biweight iteration 11: maximum difference in weights = .00239903

Robust regression

Number of obs = 88
F(7, 80) = 44.79
Prob > F = 0.0000

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.9585751	.179283	-5.35	0.000	-.31536 -.6017907
giniavni	.0373838	.0118349	3.16	0.002	.0138316 .060936
ethnl	.9496201	.3326222	2.85	0.005	.2876809 1.611559
musl	1.068004	.2689554	3.97	0.000	.5327654 1.603242
lpopd	.0803571	.076548	1.05	0.297	-.0719782 .2326925
urbwdi	-.0118754	.0064031	-1.85	0.067	-.024618 .0008672
rtot	-.0266954	.0039404	-6.77	0.000	-.0345371 -.0188537
_cons	11.38006	1.217463	9.35	0.000	8.957235 13.80289

Model 4-8: Robust Check 3.2: Outlier checks: Median regression

```
. qreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot
```

Iteration 1: WLS sum of weighted deviations = 57.664434

Iteration 1: sum of abs. weighted deviations = 209.64577
 Iteration 2: sum of abs. weighted deviations = 56.918103
 Iteration 3: sum of abs. weighted deviations = 56.046899
 Iteration 4: sum of abs. weighted deviations = 55.882839
 Iteration 5: sum of abs. weighted deviations = 55.201229
 Iteration 6: sum of abs. weighted deviations = 54.782417
 Iteration 7: sum of abs. weighted deviations = 54.733333
 Iteration 8: sum of abs. weighted deviations = 54.495252
 Iteration 9: sum of abs. weighted deviations = 54.375147
 Iteration 10: sum of abs. weighted deviations = 54.255412
 Iteration 11: sum of abs. weighted deviations = 54.121715
 Iteration 12: sum of abs. weighted deviations = 54.100231
 Iteration 13: sum of abs. weighted deviations = 54.08183

Median regression Number of obs = 88
 Raw sum of deviations 127.3 (about 4.9000001)
 Min sum of deviations 54.08183 Pseudo R2 = 0.5752

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.7246173	.1626132	-4.46	0.000	-1.048228 -.4010068
giniavni	.0295291	.0107166	2.76	0.007	.0082023 .0508559
ethnl	1.391738	.2942235	4.73	0.000	.8062145 1.977261
musl	.9844085	.2318334	4.25	0.000	.5230455 1.445772
lpopd	.0952554	.0687322	1.39	0.170	-.041526 .2320369
urbwdi	-.0167022	.0056869	-2.94	0.004	-.0280195 -.0053849
rtot	-.0255567	.0034137	-7.49	0.000	-.0323502 -.0187631
_cons	9.916007	1.109643	8.94	0.000	7.707747 12.12427

Model 4-8: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks'd

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi rtot if ctry ~= "Oman" & ct
> ry ~= "Myanmar", r
```

Linear regression Number of obs = 87
 F(7, 79) = 44.65
 Prob > F = 0.0000
 R-squared = 0.7461
 Root MSE = .8573

fertwdi	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.7306788	.2102405	-3.48	0.001	-1.149152 -.3122055
giniavni	.0262024	.0130322	2.01	0.048	.0002625 .0521423
ethnl	.925073	.3592982	2.57	0.012	.2099079 1.640238
musl	1.058347	.2621596	4.04	0.000	.5365317 1.580163
lpopd	-.0110232	.1037024	-0.11	0.916	-.2174377 .1953914
urbwdi	-.0163309	.007032	-2.32	0.023	-.0303277 -.0023342
rtot	-.0252624	.0054171	-4.66	0.000	-.0360449 -.0144798
_cons	10.64658	1.347425	7.90	0.000	7.964595 13.32856

Model 4-8: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi rtot, r
```

Linear regression Number of obs = 88

F(7, 80) = 46.08
 Prob > F = 0.0000
 R-squared = 0.7336
 Root MSE = .88627

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.6176138	.206097	-3.00	0.004	-1.02776	-.2074676
giniavni	.0217063	.0125059	1.74	0.086	-.0031812	.0465938
ethnl	.8042703	.361311	2.23	0.029	.0852386	1.523302
musl	1.01222	.2729675	3.71	0.000	.4689978	1.555443
lpopd	-.0709611	.1030362	-0.69	0.493	-.2760097	.1340874
urbwdi	-.0192781	.0080489	-2.40	0.019	-.0352959	-.0032604
rtot	-.0256086	.0058097	-4.41	0.000	-.0371703	-.0140469
_cons	10.47251	1.365865	7.67	0.000	7.754347	13.19066

Model 4-8: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi rtot gdpmf, r
```

Linear regression

Number of obs = 88
 F(8, 79) = 39.01
 Prob > F = 0.0000
 R-squared = 0.7486
 Root MSE = .86631

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5211657	.2273062	-2.29	0.025	-.9736074	-.0687241
giniavni	.0176827	.0122215	1.45	0.152	-.0066436	.0420089
ethnl	.8148415	.3577943	2.28	0.025	.1026698	1.527013
musl	.9217548	.2636605	3.50	0.001	.3969518	1.446558
lpopd	-.1209097	.0920678	-1.31	0.193	-.304166	.0623466
urbwdi	-.0227098	.0087459	-2.60	0.011	-.0401182	-.0053015
rtot	-.025605	.0056426	-4.54	0.000	-.0368364	-.0143737
gdpmf	-1.439366	.5758412	-2.50	0.015	-2.585549	-.2931822
_cons	10.29393	1.427371	7.21	0.000	7.45282	13.13504

Model 4-8: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi rtot, r
```

Linear regression

Number of obs = 88
 F(7, 80) = 33.07
 Prob > F = 0.0000
 R-squared = 0.7135
 Root MSE = .91902

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6401433	.2266328	-2.82	0.006	-1.091157	-.1891296
giniavni	.0280518	.0141836	1.98	0.051	-.0001745	.0562781
ethnannx	.2131912	.4138384	0.52	0.608	-.6103735	1.036756
musl	1.060166	.2761444	3.84	0.000	.5106207	1.609711

lpopd	-.0507224	.1152658	-0.44	0.661	-.2801086	.1786638
urbwdi	-.023111	.0071702	-3.22	0.002	-.03738	-.0088419
rtot	-.0278492	.0058893	-4.73	0.000	-.0395692	-.0161291
_cons	10.73173	1.534184	7.00	0.000	7.678605	13.78485

Model 4-8: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi rtot ethnannf, r
```

Linear regression

Number of obs =	88
F(8, 79) =	35.31
Prob > F =	0.0000
R-squared =	0.7214
Root MSE =	.91195

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.7373504	.2432649	-3.03	0.003	-1.221557	-.2531438
giniavni	.0216478	.0145764	1.49	0.141	-.0073658	.0506613
ethnannx	.096866	.4179019	0.23	0.817	-.7349469	.9286789
musl	.9594663	.2916939	3.29	0.002	.3788641	1.540068
lpopd	-.0480658	.1171832	-0.41	0.683	-.2813131	.1851815
urbwdi	-.018962	.0077073	-2.46	0.016	-.0343029	-.003621
rtot	-.0272932	.0059627	-4.58	0.000	-.0391616	-.0154249
ethnannf	-.815159	.3596381	-2.27	0.026	-1.531001	-.0993174
_cons	11.65395	1.683536	6.92	0.000	8.302954	15.00494

Table 2.4, Model 4-9: Long-Term Democracy and Access to Improved Water**Model 4-9: Bivariate correlations among independent variables**

```
. correlate watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090  
(obs=100)
```

	watecom	lgdph	giniavni	ethnl	musl	fertwdi	lpopd
watecom	1.0000						
lgdph	0.7406	1.0000					
giniavni	-0.1585	-0.0330	1.0000				
ethnl	-0.4861	-0.5107	0.2183	1.0000			
musl	0.2518	0.3163	-0.2978	-0.2898	1.0000		
fertwdi	-0.7065	-0.6396	0.1637	0.4830	0.0878	1.0000	
lpopd	0.2985	0.1540	-0.3091	-0.1750	-0.0967	-0.3870	1.0000
urbwdi	0.6954	0.8159	-0.0345	-0.4912	0.3028	-0.5647	0.0539
pavg0090	0.3680	0.2232	0.1523	0.0241	-0.2942	-0.4359	0.2045
			urbwdi	pavg0090			
urbwdi			1.0000				
pavg0090			0.0782	1.0000			

Model 4-9: Safe water predicted by 7 baseline variables only

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

		Number of obs =	105
		F(7, 97) =	39.61
		Prob > F =	0.0000
		R-squared =	0.6630
		Root MSE =	14.112

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.747359	3.154281	2.14	0.035	.4869837 13.00773
giniavni	-.0095592	.1924176	-0.05	0.960	-.3914549 .3723365
ethnl	-4.22441	5.694025	-0.74	0.460	-15.52547 7.076654
musl	9.860655	6.411555	1.54	0.127	-2.864507 22.58582
fertwdi	-5.317322	1.289151	-4.12	0.000	-7.875931 -2.758714
lpopd	1.416057	1.017448	1.39	0.167	-.6032962 3.43541
urbwdi	.1548265	.1077148	1.44	0.154	-.0589575 .3686105
_cons	30.53144	23.48419	1.30	0.197	-16.07818 77.14106

Model 4-9: Safe water predicted by 7 baseline variables and long-term demoracy

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

		Number of obs =	100
		F(8, 91) =	44.21
		Prob > F =	0.0000
		R-squared =	0.7176
		Root MSE =	13.184

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	4.608663	3.186741	1.45	0.152	-1.721406 10.93873
giniavni	-.0912738	.1724705	-0.53	0.598	-.4338653 .2513176
ethnl	-3.259726	5.411549	-0.60	0.548	-14.0091 7.489651
musl	11.25157	6.45745	1.74	0.085	-1.575358 24.0785
fertwdi	-4.211252	1.510959	-2.79	0.006	-7.212586 -1.209918
lpopd	1.61531	1.00157	1.61	0.110	-.3741858 3.604805
urbwdi	.2984447	.1155662	2.58	0.011	.0688866 .5280027
pavg0090	1.0008	.3350131	2.99	0.004	.3353378 1.666263
_cons	40.50417	23.89907	1.69	0.094	-6.968391 87.97673

Model 4-9: Means and SDs of access to improved water and long-term democracy

```
. summarize watecom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
watecom	105	68.07619	23.47613	4	100

```
. summarize pavg0090
```

Variable	Obs	Mean	Std. Dev.	Min	Max

```
pavg0090 |      100     -3.0848    5.295036      -10       10
```

Model 4-9: How much would access to water rise if long-term democracy rose 1 SD?

```
. estsimp regress watecom lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs =	100
F(7, 92) =	48.03
Prob > F =	0.0000
R-squared =	0.6916
Root MSE =	13.702

watecom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.279956	3.459768	2.10	0.038	.4085586 14.15135
giniavni	-.2271351	.1676293	-1.35	0.179	-.5600614 .1057912
ethnl	-8.005811	5.320725	-1.50	0.136	-18.57323 2.561608
musl	6.183466	5.872239	1.05	0.295	-5.479308 17.84624
lpopd	2.291287	1.077299	2.13	0.036	.1516783 4.430896
urbwdi	.3643278	.1234605	2.95	0.004	.1191245 .609531
pavg0090	1.328854	.3093899	4.30	0.000	.7143787 1.943329
_cons	4.595695	23.93201	0.19	0.848	-42.93534 52.12673

Simulating main parameters. Please wait....

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

```
Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9
```

```
. setx mean
. simqi, fd(ev) changex(pavg0090 -3.0848 2.2102)
```

First Difference: pavg0090 -3.0848 2.2102

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(watecom)	7.073123	1.641853	3.894695 10.37193

Model 4-9: Robustness checks

Model 4-9: Robust Check 1.1: Change specification: Exclude fertility

```
. regress watecom lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs =	100
F(7, 92) =	48.03
Prob > F =	0.0000
R-squared =	0.6916
Root MSE =	13.702

| Robust

watecom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.279956	3.459768	2.10	0.038	.4085586 14.15135
giniavni	-.2271351	.1676293	-1.35	0.179	-.5600614 .1057912
ethnl	-8.005811	5.320725	-1.50	0.136	-18.57323 2.561608
musl	6.183466	5.872239	1.05	0.295	-5.479308 17.84624
lpopd	2.291287	1.077299	2.13	0.036	.1516783 4.430896
urbwdi	.3643278	.1234605	2.95	0.004	.1191245 .609531
pavg0090	1.328854	.3093899	4.30	0.000	.7143787 1.943329
_cons	4.595695	23.93201	0.19	0.848	-42.93534 52.12673

Model 4-9: Robust Check 1.2: Change specification: Include mean years female schooling

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 mysfx, r
```

Linear regression

Number of obs =	100
F(9, 90) =	38.73
Prob > F =	0.0000
R-squared =	0.7183
Root MSE =	13.24

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.003753	3.308237	1.51	0.134	-1.568638 11.57614
giniavni	-.0910907	.17138	-0.53	0.596	-.431567 .2493856
ethnl	-3.812078	5.323966	-0.72	0.476	-14.38907 6.764909
musl	10.41318	6.664685	1.56	0.122	-2.827377 23.65374
fertwdi	-4.536224	1.662935	-2.73	0.008	-7.839935 -1.232513
lpopd	1.502429	1.067526	1.41	0.163	-.6183983 3.623256
urbwdi	.3067326	.1167441	2.63	0.010	.0748 .5386651
pavg0090	1.01954	.3477289	2.93	0.004	.3287158 1.710364
mysfx	-.5767473	1.211309	-0.48	0.635	-2.983223 1.829729
_cons	41.63523	24.0811	1.73	0.087	-6.20608 89.47653

Model 4-9: Robust Check 1.3: Change specification: Include female literacy

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 litfewdi, > r
```

Linear regression

Number of obs =	100
F(9, 90) =	38.84
Prob > F =	0.0000
R-squared =	0.7176
Root MSE =	13.257

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	4.623626	3.24116	1.43	0.157	-1.815504 11.06276
giniavni	-.0909284	.1718288	-0.53	0.598	-.4322962 .2504395
ethnl	-3.298596	5.448589	-0.61	0.546	-14.12317 7.525977
musl	11.1995	6.715183	1.67	0.099	-2.141383 24.54038
fertwdi	-4.233136	1.652395	-2.56	0.012	-7.515907 -.9503655
lpopd	1.609013	1.045601	1.54	0.127	-.4682566 3.686283
urbwdi	.2987805	.1170217	2.55	0.012	.0662965 .5312646
pavg0090	1.001233	.3396461	2.95	0.004	.3264668 1.675999
litfewdi	-.0024413	.0785068	-0.03	0.975	-.1584088 .1535262

_cons	40.65266	24.72225	1.64	0.104	-8.4624	89.76772
-------	----------	----------	------	-------	---------	----------

Model 4-9: Robust Check 1.4: Change specification: Include geographical variables

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 airdist po
> pcrgs latcapab, r
```

Linear regression

Number of obs = 100
 F(11, 88) = 30.66
 Prob > F = 0.0000
 R-squared = 0.7204
 Root MSE = 13.338

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	4.915804	3.411032	1.44	0.153	-1.862904 11.69451
giniavni	-.0873341	.1665417	-0.52	0.601	-.4183008 .2436325
ethnl	-4.238575	6.137767	-0.69	0.492	-16.4361 7.958948
musl	12.56765	7.034993	1.79	0.077	-1.412918 26.54822
fertwdi	-4.59166	1.53411	-2.99	0.004	-7.64038 -1.542939
lpopd	1.659266	1.217829	1.36	0.177	-.7609141 4.079446
urbwdi	.2899716	.1136631	2.55	0.012	.06409 .5158531
pavg0090	1.024822	.3318993	3.09	0.003	.3652423 1.684403
airdist	-.0003242	.0007517	-0.43	0.667	-.0018181 .0011696
popcrgs	-.0266913	.0487067	-0.55	0.585	-.1234855 .070103
latcapab	-.1265599	.1688866	-0.75	0.456	-.4621866 .2090668
_cons	45.50896	26.04897	1.75	0.084	-6.257905 97.27582

Model 4-9: Robust Check 1.5: Change specification: Include regional dummies

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati
> east sout, r
```

Linear regression

Number of obs = 100
 F(12, 87) = 32.34
 Prob > F = 0.0000
 R-squared = 0.7219
 Root MSE = 13.381

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.693126	3.354959	1.70	0.093	-.9752186 12.36147
giniavni	-.1451319	.1775291	-0.82	0.416	-.4979901 .2077264
ethnl	-2.709305	7.823387	-0.35	0.730	-18.25913 12.84052
musl	10.76615	8.066994	1.33	0.185	-5.267869 26.80018
fertwdi	-4.696778	1.64329	-2.86	0.005	-7.962995 -1.430562
lpopd	1.56624	.982935	1.59	0.115	-.3874496 3.51993
urbwdi	.2565526	.1392162	1.84	0.069	-.0201546 .5332598
pavg0090	.9396166	.3470318	2.71	0.008	.2498532 1.62938
afri	1.184414	11.00568	0.11	0.915	-20.69057 23.0594
lati	.9053685	7.536872	0.12	0.905	-14.07498 15.88572
east	-4.365372	9.684518	-0.45	0.653	-23.6144 14.88366
sout	.5589238	10.50334	0.05	0.958	-20.3176 21.43545
_cons	38.61214	26.51412	1.46	0.149	-14.08755 91.31183

Model 4-9: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf gini
> avnf ethnlf, r
```

Linear regression

Number of obs = 100
 F(10, 89) = 37.88
 Prob > F = 0.0000
 R-squared = 0.7238
 Root MSE = 13.184

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.41313	3.232207	1.37	0.176	-2.009195	10.83546
giniavni	-.0373138	.1934654	-0.19	0.847	-.4217254	.3470979
ethnl	-2.059134	5.806245	-0.35	0.724	-13.59602	9.477752
musl	11.601	6.475735	1.79	0.077	-1.266149	24.46815
fertwdi	-4.354165	1.582046	-2.75	0.007	-7.497656	-1.210673
lpopd	1.687691	.9986226	1.69	0.095	-.2965506	3.671933
urbwdi	.2959696	.1209313	2.45	0.016	.0556817	.5362576
pavg0090	.9165054	.3674778	2.49	0.014	.1863349	1.646676
gdphf (dropped)						
giniavnf	-2.913724	4.107408	-0.71	0.480	-11.07506	5.247608
ethnlf	8.468212	5.333925	1.59	0.116	-2.130183	19.06661
_cons	39.5226	24.20803	1.63	0.106	-8.578232	87.62343

Model 4-9: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
```

Huber iteration 1: maximum difference in weights = .71748228
 Huber iteration 2: maximum difference in weights = .0996565
 Huber iteration 3: maximum difference in weights = .04402986
 Biweight iteration 4: maximum difference in weights = .25988008
 Biweight iteration 5: maximum difference in weights = .06568939
 Biweight iteration 6: maximum difference in weights = .02802098
 Biweight iteration 7: maximum difference in weights = .01304898
 Biweight iteration 8: maximum difference in weights = .00526062

Robust regression

Number of obs = 100
 F(8, 91) = 27.95
 Prob > F = 0.0000

watecom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	3.821274	2.953066	1.29	0.199	-2.044629	9.687176
giniavni	-.1042301	.1750939	-0.60	0.553	-.4520327	.2435726
ethnl	-3.384399	5.309966	-0.64	0.525	-13.93199	7.163195
musl	14.21685	4.369961	3.25	0.002	5.536457	22.89724
fertwdi	-3.531839	1.4286	-2.47	0.015	-6.369578	-.6940999
lpopd	1.261828	1.025635	1.23	0.222	-.7754699	3.299125
urbwdi	.3178859	.1024788	3.10	0.003	.1143243	.5214476
pavg0090	1.08022	.3038356	3.56	0.001	.4766875	1.683752
_cons	44.94173	23.50805	1.91	0.059	-1.754131	91.63759

Model 4-9: Robust Check 3.2: Outlier checks: Median regression

```
. qreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
Iteration 1: WLS sum of weighted deviations = 958.43484
```

```
Iteration 1: sum of abs. weighted deviations = 975.53428
Iteration 2: sum of abs. weighted deviations = 941.83476
Iteration 3: sum of abs. weighted deviations = 939.73524
Iteration 4: sum of abs. weighted deviations = 937.9074
Iteration 5: sum of abs. weighted deviations = 933.77426
Iteration 6: sum of abs. weighted deviations = 933.10026
Iteration 7: sum of abs. weighted deviations = 933.07803
Iteration 8: sum of abs. weighted deviations = 931.53485
Iteration 9: sum of abs. weighted deviations = 931.37581
Iteration 10: sum of abs. weighted deviations = 931.07613
Iteration 11: sum of abs. weighted deviations = 931.00797
Iteration 12: sum of abs. weighted deviations = 930.28166
Iteration 13: sum of abs. weighted deviations = 930.25449
Iteration 14: sum of abs. weighted deviations = 929.53077
Iteration 15: sum of abs. weighted deviations = 929.13736
Iteration 16: sum of abs. weighted deviations = 929.11661
Iteration 17: sum of abs. weighted deviations = 929.03345
Iteration 18: sum of abs. weighted deviations = 928.97209
```

Median regression
 Number of obs = 100
 Raw sum of deviations 1981 (about 72)
 Min sum of deviations 928.9721
 Pseudo R2 = 0.5311

watecom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.574081	1.970093	3.34	0.001	2.660733 10.48743
giniavni	-.369599	.1192223	-3.10	0.003	-.6064194 -.1327785
ethnl	1.999001	3.725674	0.54	0.593	-5.401592 9.399594
musl	8.311327	3.089566	2.69	0.008	2.174282 14.44837
fertwdi	-3.064	.9358243	-3.27	0.001	-4.9229 -1.2051
lpopd	.4245553	.7031828	0.60	0.548	-.9722309 1.821342
urbwdi	.3339991	.0720053	4.64	0.000	.1909694 .4770288
pavg0090	.9635843	.2087519	4.62	0.000	.5489243 1.378244
_cons	33.70551	15.57756	2.16	0.033	2.762592 64.64843

Model 4-9: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks'd

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~=
> "Afghanistan" & ctry ~= "Somalia", r
```

Linear regression
 Number of obs = 98
 F(8, 89) = 45.58
 Prob > F = 0.0000
 R-squared = 0.7557
 Root MSE = 11.901

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	4.29188	2.978225	1.44	0.153	-1.625789 10.20955
giniavni	-.0719279	.1612503	-0.45	0.657	-.3923288 .2484729
ethnl	-1.108497	5.045492	-0.22	0.827	-11.13378 8.916789
musl	13.21356	4.861244	2.72	0.008	3.554376 22.87275
fertwdi	-4.680051	1.487406	-3.15	0.002	-7.635496 -1.724607
lpopd	1.796529	1.000365	1.80	0.076	-.1911755 3.784234
urbwdi	.2833044	.1114662	2.54	0.013	.0618233 .5047855

pavg0090	.9030825	.3228641	2.80	0.006	.2615584	1.544607
_cons	42.94969	23.25961	1.85	0.068	-3.266656	89.16603

Model 4-9: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
```

Linear regression

Number of obs = 100
 F(8, 91) = 42.71
 Prob > F = 0.0000
 R-squared = 0.7144
 Root MSE = 13.258

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	4.967628	3.072809	1.62	0.109	-1.136129 11.07139
giniavni	-.1265801	.1705146	-0.74	0.460	-.4652864 .2121262
ethnl	-2.037046	5.40165	-0.38	0.707	-12.76676 8.692668
musl	10.98719	6.756712	1.63	0.107	-2.434184 24.40857
fertwdi	-4.267826	1.401	-3.05	0.003	-7.05074 -1.484912
lpopd	1.585697	.9886302	1.60	0.112	-.3780956 3.54949
urbwdi	.2815524	.1020663	2.76	0.007	.0788103 .4842945
pavg7090	.8893319	.2643858	3.36	0.001	.3641619 1.414502
_cons	40.06149	24.0773	1.66	0.100	-7.765108 87.88808

Model 4-9: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
```

Linear regression

Number of obs = 104
 F(8, 95) = 40.80
 Prob > F = 0.0000
 R-squared = 0.6844
 Root MSE = 13.674

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.041497	3.141552	1.60	0.112	-1.195272 11.27827
giniavni	-.1491731	.1947858	-0.77	0.446	-.5358719 .2375257
ethnl	-5.069455	5.423758	-0.93	0.352	-15.83698 5.698066
musl	10.09246	6.386651	1.58	0.117	-2.586646 22.77156
fertwdi	-3.988907	1.33788	-2.98	0.004	-6.644935 -1.332879
lpopd	1.387449	.9904599	1.40	0.165	-.5788628 3.35376
urbwdi	.2214254	.1063017	2.08	0.040	.0103898 .432461
free7290	-1.55838	.5480706	-2.84	0.005	-2.646438 -.4703227
_cons	56.35822	25.42154	2.22	0.029	5.890084 106.8264

Model 4-9: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 99
 F(8, 90) = 41.25
 Prob > F = 0.0000

R-squared = 0.7187
Root MSE = 13.094

watecom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	6.706975	3.279183	2.05	0.044	.192305	13.22164
giniavni	-.1271847	.1737269	-0.73	0.466	-.4723236	.2179542
ethnl	-2.866997	5.257016	-0.55	0.587	-13.31098	7.576983
musl	11.12378	6.028651	1.85	0.068	-.8531846	23.10075
fertwdi	-3.840575	1.472607	-2.61	0.011	-6.766165	-.9149851
lpopd	1.638816	.9918991	1.65	0.102	-.3317642	3.609397
urbwdi	.2602162	.1130491	2.30	0.024	.0356244	.4848079
pavg0090	.8729527	.3591611	2.43	0.017	.1594165	1.586489
_cons	25.37233	25.49115	1.00	0.322	-25.27029	76.01495

Model 4-9: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

. regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r

Linear regression

Number of obs =	99
F(9, 89) =	35.99
Prob > F =	0.0000
R-squared =	0.7209
Root MSE =	13.117

watecom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	6.97403	3.249976	2.15	0.035	.5163975	13.43166
giniavni	-.1397132	.1750802	-0.80	0.427	-.4875938	.2081673
ethnl	-2.314149	5.291466	-0.44	0.663	-12.82818	8.199882
musl	11.27076	6.086794	1.85	0.067	-.8235743	23.36509
fertwdi	-4.054337	1.530598	-2.65	0.010	-7.095604	-1.013071
lpopd	1.388848	1.001202	1.39	0.169	-.6005191	3.378215
urbwdi	.2409327	.112016	2.15	0.034	.0183593	.4635061
pavg0090	.916558	.3482877	2.63	0.010	.2245178	1.608598
gdpmf	-7.098905	9.881846	-0.72	0.474	-26.73392	12.53611
_cons	26.77745	26.06009	1.03	0.307	-25.00339	78.55829

Model 4-9: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

. regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090, r

Linear regression

Number of obs =	100
F(8, 91) =	41.75
Prob > F =	0.0000
R-squared =	0.7174
Root MSE =	13.188

watecom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.43797	3.165064	1.40	0.164	-1.849041	10.72498
giniavni	-.0966032	.1706576	-0.57	0.573	-.4355936	.2423872
ethnannx	-3.439835	6.296946	-0.55	0.586	-15.94795	9.068276
musl	11.30292	6.624734	1.71	0.091	-1.856298	24.46214

fertwdi	-4.379233	1.494648	-2.93	0.004	-7.348168	-1.410297
lpopd	1.559588	1.002459	1.56	0.123	-.4316749	3.55085
urbwdi	.30614	.1139568	2.69	0.009	.0797789	.5325011
pavg0090	.9704902	.3300579	2.94	0.004	.3148707	1.62611
_cons	43.26957	23.78233	1.82	0.072	-3.971098	90.51024

Model 4-9: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnann
> f, r
```

Linear regression

Number of obs =	100
F(9, 90) =	36.24
Prob > F =	0.0000
R-squared =	0.7237
Root MSE =	13.112

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	2.858673	3.423844	0.83	0.406	-3.943391	9.660737
giniavni	-.1546305	.1951776	-0.79	0.430	-.5423848	.2331238
ethnannx	-4.38234	6.404194	-0.68	0.496	-17.10539	8.34071
musl	11.55937	6.128668	1.89	0.063	-.6162958	23.73504
fertwdi	-4.594266	1.504601	-3.05	0.003	-7.583419	-1.605113
lpopd	1.4609	1.010172	1.45	0.152	-.5459839	3.467783
urbwdi	.3556057	.1399015	2.54	0.013	.0776671	.6335444
pavg0090	.9742748	.3379295	2.88	0.005	.3029188	1.645631
ethnannf	-8.922901	10.35526	-0.86	0.391	-29.49542	11.64962
_cons	58.09937	27.28119	2.13	0.036	3.900517	112.2982

Table 2.4, Model 4-10: Long-Term Democracy and Infant Mortality**Model 4-10: Bivariate correlations among independent variables**

```
. correlate limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 (obs=100)
```

	limrcom	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	pavg0090
limrcom	1.0000								
lgdph	-0.8319	1.0000							
giniavni	0.1681	-0.0330	1.0000						
ethnl	0.5409	-0.5107	0.2183	1.0000					
musl	-0.0796	0.3163	-0.2978	-0.2898	1.0000				
fertwdi	0.7614	-0.6396	0.1637	0.4830	0.0878	1.0000			
lpopd	-0.3615	0.1540	-0.3091	-0.1750	-0.0967	-0.3870	1.0000		
urbwdi	-0.7234	0.8159	-0.0345	-0.4912	0.3028	-0.5647	0.0539	1.0000	
pavg0090	-0.3546	0.2232	0.1523	0.0241	-0.2942	-0.4359	0.2045	0.0782	

Model 4-10: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs = 105
 F(7, 97) = 115.48
 Prob > F = 0.0000
 R-squared = 0.8460
 Root MSE = .32809

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922

Model 4-10: Infant Mortality predicted by 7 baseline variables and long-term democracy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 F(8, 91) = 68.95
 Prob > F = 0.0000
 R-squared = 0.8360
 Root MSE = .32655

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4867714	.072605	-6.70	0.000	-.6309924	-.3425504
giniavni	.0112383	.0057496	1.95	0.054	-.0001826	.0226591
ethnl	.2793156	.1224574	2.28	0.025	.036069	.5225622
musl	.3270487	.1148103	2.85	0.005	.0989922	.5551053
fertwdi	.056079	.0317691	1.77	0.081	-.0070265	.1191845
lpopd	-.0636556	.0333372	-1.91	0.059	-.1298758	.0025647
urbwdi	-.0057896	.0023196	-2.50	0.014	-.0103973	-.0011819
pavg0090	-.0165231	.0071948	-2.30	0.024	-.0308147	-.0022315
_cons	7.187911	.6541755	10.99	0.000	5.888472	8.48735

Model 4-10: Means and SDs of infant mortality and long-term democracy

```
. summarize imrcom
```

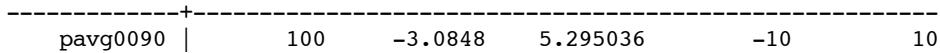
Variable	Obs	Mean	Std. Dev.	Min	Max
imrcom	105	70.13333	45.54712	6	202

```
. summarize limrcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
limrcom	105	3.985123	.807504	1.791759	5.308268

```
. summarize pavg0090
```

Variable	Obs	Mean	Std. Dev.	Min	Max



Model 4-10: How much would infant mortality fall if long-term democracy rose one SD?

```
. estsimp regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 $F(8, 91) = 68.95$
 Prob > F = 0.0000
 R-squared = 0.8360
 Root MSE = .32655

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4867714	.072605	-6.70	0.000	-.6309924	-.3425504
giniavni	.0112383	.0057496	1.95	0.054	-.0001826	.0226591
ethnl	.2793156	.1224574	2.28	0.025	.036069	.5225622
musl	.3270487	.1148103	2.85	0.005	.0989922	.5551053
fertwdi	.056079	.0317691	1.77	0.081	-.0070265	.1191845
lpopd	-.0636556	.0333372	-1.91	0.059	-.1298758	.0025647
urbwdi	-.0057896	.0023196	-2.50	0.014	-.0103973	-.0011819
pavg0090	-.0165231	.0071948	-2.30	0.024	-.0308147	-.0022315
_cons	7.187911	.6541755	10.99	0.000	5.888472	8.48735

Simulating main parameters. Please wait....

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
 Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, tfunc(exp) fd(ev) changex(pavg0090 -3.0848 2.210236)
```

First Difference: pavg0090 -3.0848 2.210236

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE[exp(limrcom)]	-4.941598	2.206439	-9.210365 -.5361042

Model 4-10: Robustness checks

Model 4-10: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 $F(7, 92) = 80.37$

Prob > F = 0.0000
 R-squared = 0.8316
 Root MSE = .32906

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5223436	.0671313	-7.78	0.000	-.6556722	-.3890149
giniavni	.0130475	.0057818	2.26	0.026	.0015644	.0245305
ethnl	.3425167	.1204285	2.84	0.005	.1033353	.581698
musl	.394538	.1117015	3.53	0.001	.1726892	.6163869
lpopd	-.0726572	.0317757	-2.29	0.025	-.1357664	-.009548
urbwdi	-.0066667	.0024515	-2.72	0.008	-.0115359	-.001798
pavg0090	-.0208916	.0069883	-2.99	0.004	-.0347711	-.0070122
_cons	7.666085	.5540477	13.84	0.000	6.565699	8.766472

Model 4-10: Robust Ck 1.1a: Change specif.: Excl fertility & 2 Cook's D Outliers

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi pavg0090 if ctry ~= "Mongol"
> ia" & ctry ~= "Cuba"
```

Source	SS	df	MS	Number of obs	=	98
Model	47.4350421	7	6.77643459	F(7, 90)	=	70.54
Residual	8.64529974	90	.096058886	Prob > F	=	0.0000
Total	56.0803418	97	.578147854	R-squared	=	0.8458

Adj R-squared = 0.8339
 Root MSE = .30993

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.551829	.0682269	-8.09	0.000	-.6873737	-.4162843
giniavni	.0133502	.0044193	3.02	0.003	.0045705	.02213
ethnl	.3631719	.1225142	2.96	0.004	.119776	.6065678
musl	.4204343	.1001325	4.20	0.000	.2215037	.6193649
lpopd	-.0515564	.0257097	-2.01	0.048	-.1026331	-.0004796
urbwdi	-.0056248	.0024584	-2.29	0.024	-.0105088	-.0007408
pavg0090	-.0189825	.0067934	-2.79	0.006	-.0324788	-.0054863
_cons	7.745745	.5087402	15.23	0.000	6.735044	8.756446

Model 4-10: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl fertwdi lpopd urbwdi pavg0090 mysfx, r
```

Linear regression Number of obs = 100
 F(9, 90) = 64.61
 Prob > F = 0.0000
 R-squared = 0.8518
 Root MSE = .31214

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4265493	.0740883	-5.76	0.000	-.5737386	-.2793599
giniavni	.0112662	.00567	1.99	0.050	1.64e-06	.0225307
ethnl	.1951225	.1243758	1.57	0.120	-.0519718	.4422168
musl	.1992561	.1132231	1.76	0.082	-.0256814	.4241936
fertwdi	.0065446	.033829	0.19	0.847	-.0606627	.0737519

lpopd	-.0808616	.0346807	-2.33	0.022	-.1497608	-.0119623
urbwdi	-.0045263	.0023211	-1.95	0.054	-.0091376	.0000849
pavg0090	-.0136667	.0073594	-1.86	0.067	-.0282873	.000954
mysfx	-.0879115	.0275981	-3.19	0.002	-.14274	-.033083
_cons	7.360314	.6736401	10.93	0.000	6.02201	8.698618

Model 4-10: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 litfewdi, r
```

Linear regression

Number of obs = 100
 F(9, 90) = 60.39
 Prob > F = 0.0000
 R-squared = 0.8486
 Root MSE = .31543

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4491426	.0700496	-6.41	0.000	-.5883083	-.3099769
giniavni	.012107	.0058012	2.09	0.040	.000582	.023632
ethnl	.1815698	.1174675	1.55	0.126	-.0517999	.4149395
musl	.1960992	.1171183	1.67	0.098	-.0365767	.4287751
fertwdi	.0010444	.0377972	0.03	0.978	-.0740464	.0761352
lpopd	-.0794893	.0340983	-2.33	0.022	-.1472314	-.0117472
urbwdi	-.004945	.002353	-2.10	0.038	-.0096196	-.0002705
pavg0090	-.0154342	.0068028	-2.27	0.026	-.0289493	-.0019192
litfewdi	-.0061393	.0020908	-2.94	0.004	-.0102931	-.0019855
_cons	7.561331	.6614835	11.43	0.000	6.247179	8.875484

Model 4-10: Robust Check 1.4: Change specification: Incl geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 airdist popcrgs latcapab,  

> r
```

Linear regression

Number of obs = 100
 F(11, 88) = 51.10
 Prob > F = 0.0000
 R-squared = 0.8418
 Root MSE = .32612

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4792422	.072097	-6.65	0.000	-.6225199	-.3359646
giniavni	.0119698	.0054697	2.19	0.031	.0010999	.0228397
ethnl	.3350044	.1201434	2.79	0.006	.0962446	.5737641
musl	.2539141	.1268693	2.00	0.048	.0017879	.5060402
fertwdi	.0721321	.0352639	2.05	0.044	.0020524	.1422118
lpopd	-.0521884	.0328363	-1.59	0.116	-.1174437	.0130669
urbwdi	-.0054544	.0023364	-2.33	0.022	-.0100975	-.0008113
pavg0090	-.0151893	.0076247	-1.99	0.049	-.0303418	-.0000369
airdist	-3.49e-06	.0000183	-0.19	0.849	-.0000398	.0000328
popcrgs	-.0004454	.001185	-0.38	0.708	-.0028004	.0019096
latcapab	.0061535	.0037865	1.63	0.108	-.0013714	.0136784
_cons	6.889243	.6237377	11.05	0.000	5.649696	8.128791

Model 4-10: Robust Check 1.5: Change specification: Include regional dummies

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 afri lati east sout, r
```

Linear regression

Number of obs = 100
 F(12, 87) = 51.11
 Prob > F = 0.0000
 R-squared = 0.8385
 Root MSE = .33141

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.503975	.0772518	-6.52	0.000	-.6575213	-.3504286
giniavni	.0130229	.0059628	2.18	0.032	.0011712	.0248746
ethnl	.3039527	.141339	2.15	0.034	.0230261	.5848793
musl	.2681298	.1008221	2.66	0.009	.067735	.4685247
fertwdi	.0618691	.0382498	1.62	0.109	-.0141565	.1378947
lpopd	-.0675648	.034583	-1.95	0.054	-.1363021	.0011726
urbwdi	-.0049994	.0027142	-1.84	0.069	-.0103941	.0003953
pavg0090	-.0168447	.0075847	-2.22	0.029	-.0319202	-.0017692
afri	-.1198378	.1194716	-1.00	0.319	-.3573005	.117625
lati	-.0847863	.1465514	-0.58	0.564	-.376073	.2065003
east	-.0623005	.1557346	-0.40	0.690	-.3718398	.2472388
sout	.068822	.2172373	0.32	0.752	-.3629607	.5006048
_cons	7.262648	.6995098	10.38	0.000	5.872297	8.653

Model 4-10: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 100
 F(10, 89) = 54.67
 Prob > F = 0.0000
 R-squared = 0.8447
 Root MSE = .32129

limrcom	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4717849	.069113	-6.83	0.000	-.609111	-.3344588
giniavni	.0078931	.0056451	1.40	0.166	-.0033235	.0191098
ethnl	.2271222	.125301	1.81	0.073	-.0218482	.4760926
musl	.3103134	.1132715	2.74	0.007	.0852452	.5353815
fertwdi	.079221	.0312439	2.54	0.013	.0171401	.141302
lpopd	-.0661185	.0318327	-2.08	0.041	-.1293695	-.0028676
urbwdi	-.0047582	.0023334	-2.04	0.044	-.0093947	-.0001217
pavg0090	-.0150151	.0067092	-2.24	0.028	-.0283462	-.0016839
gdphf (dropped)						
giniavnf	-.0469706	.0801899	-0.59	0.560	-.2063061	.1123649
ethnlf	-.3075205	.1582787	-1.94	0.055	-.6220169	.0069759
_cons	7.135017	.5831598	12.24	0.000	5.976291	8.293743

Model 4-10: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
```

Huber iteration 1: maximum difference in weights = .49567902
 Huber iteration 2: maximum difference in weights = .0439988
 Biweight iteration 3: maximum difference in weights = .15500428
 Biweight iteration 4: maximum difference in weights = .02521086
 Biweight iteration 5: maximum difference in weights = .00482238

Robust regression

Number of obs = 100
 $F(8, 91) = 49.46$
 Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4847177	.0807556	-6.00	0.000	-.6451287 -.3243066
giniavni	.0117637	.0047882	2.46	0.016	.0022526 .0212748
ethnl	.2882849	.1452082	1.99	0.050	-.0001534 .5767231
musl	.3277516	.1195025	2.74	0.007	.0903745 .5651286
fertwdi	.0619908	.039067	1.59	0.116	-.015611 .1395926
lpopd	-.0507803	.0280474	-1.81	0.074	-.1064929 .0049324
urbwdi	-.0058447	.0028024	-2.09	0.040	-.0114114 -.0002781
pavg0090	-.0156753	.0083088	-1.89	0.062	-.0321797 .0008291
_cons	7.071096	.6428596	11.00	0.000	5.794135 8.348058

Model 4-10: Robust Check 3.2: Outlier checks: Median regression

. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
 Iteration 1: WLS sum of weighted deviations = 25.578183

Iteration 1: sum of abs. weighted deviations = 26.898331
 Iteration 2: sum of abs. weighted deviations = 25.847426
 Iteration 3: sum of abs. weighted deviations = 25.133546
 Iteration 4: sum of abs. weighted deviations = 24.99836
 Iteration 5: sum of abs. weighted deviations = 24.969113
 Iteration 6: sum of abs. weighted deviations = 24.964539
 Iteration 7: sum of abs. weighted deviations = 24.951437
 Iteration 8: sum of abs. weighted deviations = 24.948308

Median regression
 Number of obs = 100
 Raw sum of deviations 62.56597 (about 4.1271343)
 Min sum of deviations 24.94831 Pseudo R2 = 0.6012

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.411241	.0857345	-4.80	0.000	-.5815421 -.2409399
giniavni	.0093076	.00523	1.78	0.078	-.0010812 .0196965
ethnl	.2355762	.1574409	1.50	0.138	-.0771609 .5483133
musl	.2537386	.1278845	1.98	0.050	-.0002882 .5077654
fertwdi	.1066579	.0397748	2.68	0.009	.0276502 .1856656
lpopd	-.0672025	.0304846	-2.20	0.030	-.1277565 -.0066485
urbwdi	-.006564	.0028621	-2.29	0.024	-.0122492 -.0008788
pavg0090	-.0078948	.0084511	-0.93	0.353	-.024682 .0088923
_cons	6.587478	.7038409	9.36	0.000	5.189385 7.985572

Model 4-10: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~ "Mongolia" & ctry ~ "Cuba", r

Linear regression Number of obs = 98

F(8, 89) = 64.69
 Prob > F = 0.0000
 R-squared = 0.8499
 Root MSE = .30751

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5161132	.0656729	-7.86	0.000	-.6466039	-.3856225
giniavni	.0119774	.0049519	2.42	0.018	.0021381	.0218168
ethnl	.3062627	.1196158	2.56	0.012	.0685886	.5439368
musl	.3612784	.1035012	3.49	0.001	.1556238	.5669331
fertwdi	.0532885	.0295734	1.80	0.075	-.0054733	.1120503
lpopd	-.0417948	.0274498	-1.52	0.131	-.0963369	.0127474
urbwdi	-.0048982	.0021298	-2.30	0.024	-.00913	-.0006664
pavg0090	-.0149006	.00705	-2.11	0.037	-.0289089	-.0008924
_cons	7.258305	.533492	13.61	0.000	6.198268	8.318343

Model 4-10: Robust Check 4.1: Endog ck: Corr cand. inst (fertwdin) & hyp endg reg (fertwdi)

```
. correlate fertwdi fertwdin
(obs=105)
```

	fertwdi	fertwdin
fertwdi	1.0000	
fertwdin	0.6135	1.0000

Model 4-10: Robust Check 4.2: Endog.: Assoc. Betw. Cand. Inst. & Hypth. Endog. Rgrssr.

```
. ivreg limrcom lgdph giniavni ethnl musl (fertwdi = fertwdin) lpopd urbwdi pavg0090, first
```

First-stage regressions

Source	SS	df	MS	Number of obs = 100
Model	185.605923	8	23.2007404	F(8, 91) = 29.40
Residual	71.8215788	91	.789248119	Prob > F = 0.0000
Total	257.427502	99	2.6002778	R-squared = 0.7210 Adj R-squared = 0.6965 Root MSE = .8884

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4456846	.1998726	-2.23	0.028	-.8427069	-.0486623
giniavni	.0281041	.0116512	2.41	0.018	.0049605	.0512477
ethnl	.6386088	.3727631	1.71	0.090	-.1018393	1.379057
musl	.8688487	.2909379	2.99	0.004	.2909364	1.446761
lpopd	-.1918141	.0691602	-2.77	0.007	-.3291923	-.0544358
urbwdi	-.0202577	.0069826	-2.90	0.005	-.0341278	-.0063876
pavg0090	-.056906	.0202591	-2.81	0.006	-.0971481	-.0166638
fertwdin	.2563807	.0710827	3.61	0.001	.1151836	.3975777
_cons	6.789762	1.461609	4.65	0.000	3.886454	9.693069

Model 4-10: Robust Check 4.3: Endog.: 2SLS Instrumenting for Hypoth. Endog. Regressor

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs = 100		
Model	49.0885368	8	6.1360671	F(8, 91) =	55.55	
Residual	10.0765878	91	.110731734	Prob > F =	0.0000	
Total	59.1651246	99	.597627521	R-squared =	0.8297	
				Adj R-squared =	0.8147	
				Root MSE =	.33276	

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	-.0113385	.1038503	-0.11	0.913	-.2176245 .1949474
lgdph	-.5295359	.0977781	-5.42	0.000	-.7237601 -.3353117
giniavni	.0134133	.0054849	2.45	0.016	.0025182 .0243083
ethnl	.3552952	.174988	2.03	0.045	.0077031 .7028873
musl	.4081836	.1621365	2.52	0.014	.0861193 .7302479
lpopd	-.0744772	.0306332	-2.43	0.017	-.1353263 -.0136282
urbwdi	-.0068443	.0030415	-2.25	0.027	-.0128859 -.0008028
pavg0090	-.0217749	.0108755	-2.00	0.048	-.0433777 -.0001721
_cons	7.762767	1.025335	7.57	0.000	5.726065 9.799468

Instrumented: fertwdi
 Instruments: lgdph giniavni ethnl musl lpopd urbwdi pavg0090 fertwdin

Model 4-10: Robust Check 4.4: Endog.: Hausman Test for Diff Betw. OLS & 2SLS Coeff.

```
. estimates store ivregfertns
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090
```

Source	SS	df	MS	Number of obs = 100		
Model	49.461641	8	6.18270513	F(8, 91) =	57.98	
Residual	9.70348354	91	.106631687	Prob > F =	0.0000	
Total	59.1651246	99	.597627521	R-squared =	0.8360	
				Adj R-squared =	0.8216	
				Root MSE =	.32655	

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4867714	.0745012	-6.53	0.000	-.6347589 -.3387839
giniavni	.0112383	.0044173	2.54	0.013	.0024637 .0200128
ethnl	.2793156	.1339621	2.09	0.040	.0132163 .5454149
musl	.3270487	.1102473	2.97	0.004	.1080561 .5460414
fertwdi	.056079	.0360413	1.56	0.123	-.0155127 .1276707
lpopd	-.0636556	.0258752	-2.46	0.016	-.1150534 -.0122577
urbwdi	-.0057896	.0025854	-2.24	0.028	-.0109252 -.0006541
pavg0090	-.0165231	.0076653	-2.16	0.034	-.0317493 -.001297
_cons	7.187911	.5930713	12.12	0.000	6.009848 8.365974

```
. hausman ivregfertns
```

	----- Coefficients -----			
	(b) ivregfertns	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	-.0113385	.056079	-.0674175	.0973957
lgdph	-.5295359	-.4867714	-.0427645	.0633256
giniavni	.0134133	.0112383	.002175	.0032514
ethnl	.3552952	.2793156	.0759796	.1125831
musl	.4081836	.3270487	.0811349	.1188856

lpopd	-.0744772	-.0636556	-.0108217	.0163972
urbwdi	-.0068443	-.0057896	-.0010547	.001602
pavg0090	-.0217749	-.0165231	-.0052518	.0077149

b = consistent under Ho and Ha; obtained from ivreg
 B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(8) &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 0.48 \\ \text{Prob>chi2} &= 0.9999 \end{aligned}$$

Model 4-10: Robust Check 4.2a: Endog: Assoc. Betw. Cand. Inst. & Hypth. Endog. Rgrssr

. ivreg limrcm lgdp fertwdi lpopd urbwdi pavg0090 if ctry == "Mongolia" & ctry == "Cuba", first

First-stage regressions

Source	SS	df	MS	Number of obs	=	98
Model	175.972422	8	21.9965528	F(8, 89)	=	27.63
Residual	70.8496209	89	.796063156	Prob > F	=	0.0000
Total	246.822043	97	2.54455715	R-squared	=	0.7130

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdp	-.4826495	.203513	-2.37	0.020	-.8870255 -.0782736
giniavni	.0234178	.0127396	1.84	0.069	-.0018955 .0487312
ethnl	.6066413	.3762598	1.61	0.110	-.1409789 1.354262
musl	.8108511	.3005376	2.70	0.008	.2136894 1.408013
lpopd	-.2025743	.0742168	-2.73	0.008	-.3500415 -.0551072
urbwdi	-.0184295	.007207	-2.56	0.012	-.0327496 -.0041095
pavg0090	-.0557026	.0204382	-2.73	0.008	-.0963128 -.0150924
fertwdin	.2530702	.0719102	3.52	0.001	.1101861 .3959544
_cons	7.293686	1.556362	4.69	0.000	4.201228 10.38614

Model 4-10: Robust Ck 4.3a: Endog ck: 2SLS using CI as instr for HER, disc 2 hi cooksd

Instrumental variables (2SLS) regression

Source	SS	df	MS	Number of obs	=	98
Model	47.5529442	8	5.94411802	F(8, 89)	=	61.89
Residual	8.52739768	89	.095813457	Prob > F	=	0.0000
Total	56.0803418	97	.578147854	R-squared	=	0.8479

limrcm	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
fertwdi	.0161559	.0985801	0.16	0.870	-.1797206 .2120324
lgdp	-.5410008	.0949131	-5.70	0.000	-.729591 -.3524105
giniavni	.012934	.0050922	2.54	0.013	.002816 .0230521
ethnl	.3459183	.1614153	2.14	0.035	.0251895 .6666471
musl	.4024996	.1482456	2.72	0.008	.1079386 .6970605

lpopd	-.0485969	.0313911	-1.55	0.125	-.1109702	.0137765
urbwdi	-.0054045	.0027991	-1.93	0.057	-.0109664	.0001573
pavg0090	-.017745	.0101515	-1.75	0.084	-.0379159	.0024259
_cons	7.597964	1.035023	7.34	0.000	5.541395	9.654534

Instrumented: fertwdi
 Instruments: lgdph giniavni ethnl musl lpopd urbwdi pavg0090 fertwdin

Model 4-10: Robust Check 4.4a: Endog ck: Hausman test, disc 2 hi cooks

```
. estimates store fertpavgcooks

. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 if ctry ~=
> "Mongolia" & ctry ~= "Cuba"
```

Source	SS	df	MS	Number of obs	=	98
Model	47.6642281	8	5.95802851	F(8, 89)	=	63.01
Residual	8.41611374	89	.094563076	Prob > F	=	0.0000
Total	56.0803418	97	.578147854	R-squared	=	0.8499
				Adj R-squared	=	0.8364
				Root MSE	=	.30751

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5161132	.0714755	-7.22	0.000	-.6581336 -.3740929
giniavni	.0119774	.0044726	2.68	0.009	.0030905 .0208644
ethnl	.3062627	.1269342	2.41	0.018	.0540471 .5584783
musl	.3612784	.1063685	3.40	0.001	.1499266 .5726303
fertwdi	.0532885	.0342294	1.56	0.123	-.0147247 .1213016
lpopd	-.0417948	.0262681	-1.59	0.115	-.0939889 .0103993
urbwdi	-.0048982	.0024834	-1.97	0.052	-.0098327 .0000363
pavg0090	-.0149006	.0072323	-2.06	0.042	-.0292711 -.0005302
_cons	7.258305	.5939865	12.22	0.000	6.078067 8.438544

. hausman fertpavgcooks

	---- Coefficients ----			
	(b) fertpavgcooks	(B) . .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fertwdi	.0161559	.0532885	-.0371326	.0924466
lgdph	-.5410008	-.5161132	-.0248875	.0624479
giniavni	.012934	.0119774	.0009566	.0024344
ethnl	.3459183	.3062627	.0396557	.0997127
musl	.4024996	.3612784	.0412211	.1032595
lpopd	-.0485969	-.0417948	-.0068021	.0171868
urbwdi	-.0054045	-.0048982	-.0005063	.0012914
pavg0090	-.017745	-.0149006	-.0028444	.0071237

b = consistent under Ho and Ha; obtained from ivreg
 B = inconsistent under Ha, efficient under Ho; obtained from regress

Test: Ho: difference in coefficients not systematic

```
chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          =      0.16
  Prob>chi2 =     1.0000
```

Model 4-10: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

```
. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 $F(8, 91) = 75.51$
 Prob > F = 0.0000
 R-squared = 0.8424
 Root MSE = .36901

lu5mrcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5015725	.0883809	-5.68	0.000	-.6771303 -.3260146
giniavni	.0101864	.0062772	1.62	0.108	-.0022825 .0226554
ethnl	.3802363	.1497365	2.54	0.013	.0828031 .6776695
musl	.2630106	.1299437	2.02	0.046	.0048933 .5211278
fertwdi	.087186	.0373654	2.33	0.022	.0129642 .1614079
lpopd	-.0728668	.0363631	-2.00	0.048	-.1450976 -.0006361
urbwdi	-.006788	.0026343	-2.58	0.012	-.0120208 -.0015552
pavg0090	-.0228395	.0082716	-2.76	0.007	-.0392701 -.006409
_cons	7.543587	.7801584	9.67	0.000	5.993898 9.093276

Model 4-10: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 $F(8, 91) = 74.86$
 Prob > F = 0.0000
 R-squared = 0.8538
 Root MSE = .30524

limrwdi	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4839027	.0683187	-7.08	0.000	-.6196093 -.348196
giniavni	.0126498	.0051723	2.45	0.016	.0023757 .0229238
ethnl	.228057	.1080903	2.11	0.038	.0133488 .4427652
musl	.2581117	.1090922	2.37	0.020	.0414134 .4748099
fertwdi	.0780943	.029298	2.67	0.009	.0198973 .1362913
lpopd	-.0387498	.0254856	-1.52	0.132	-.0893738 .0118742
urbwdi	-.0054019	.0023108	-2.34	0.022	-.0099921 -.0008118
pavg0090	-.0156331	.006817	-2.29	0.024	-.0291743 -.0020919
_cons	6.937208	.6036286	11.49	0.000	5.738174 8.136242

Model 4-10: Robust Check 6.3: IndV: Vary source: pavg0090 to pavg7090

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg7090, r
```

Linear regression

Number of obs = 99
 $F(8, 90) = 61.44$
 Prob > F = 0.0000
 R-squared = 0.8384
 Root MSE = .32577

	Robust
--	--------

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5290723	.0768429	-6.89	0.000	-.6817341	-.3764105
giniavni	.0109561	.005088	2.15	0.034	.0008479	.0210642
ethnl	.2223035	.1243942	1.79	0.077	-.0248273	.4694343
musl	.2692508	.1117172	2.41	0.018	.0473051	.4911966
fertwdi	.0549004	.0356836	1.54	0.127	-.0159914	.1257921
lpopd	-.0779222	.0274216	-2.84	0.006	-.1324001	-.0234443
urbwdi	-.0060248	.0020896	-2.88	0.005	-.0101761	-.0018735
pavg0090	-.002637	.0079278	-0.33	0.740	-.018387	.013113
_cons	7.681189	.6830409	11.25	0.000	6.324209	9.038169

Model 4-10: Robust Check 6.4: IndV: Vary source: pavg0090 to free7290

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi free7290, r
```

Linear regression

Number of obs =	103
F(8, 94) =	78.75
Prob > F =	0.0000
R-squared =	0.8424
Root MSE =	.32466

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5253519	.0765954	-6.86	0.000	-.6774338	-.3732699
giniavni	.0095945	.0049039	1.96	0.053	-.0001422	.0193313
ethnl	.2076797	.1204919	1.72	0.088	-.0315598	.4469191
musl	.2730244	.1048528	2.60	0.011	.0648367	.4812121
fertwdi	.077304	.0349021	2.21	0.029	.008005	.1466031
lpopd	-.0812623	.0273329	-2.97	0.004	-.1355324	-.0269923
urbwdi	-.0055939	.0020872	-2.68	0.009	-.009738	-.0014498
free7290	-.0071436	.015189	-0.47	0.639	-.0373016	.0230144
_cons	7.682059	.7264905	10.57	0.000	6.239595	9.124523

Model 4-10: Robust Check 7.1: CtrlV: Vary source: GDP/cap at PPP (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs =	99
F(8, 90) =	60.56
Prob > F =	0.0000
R-squared =	0.8420
Root MSE =	.32213

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5019397	.0761769	-6.59	0.000	-.6532785	-.3506009
giniavni	.0114217	.0049525	2.31	0.023	.0015828	.0212607
ethnl	.2550003	.1211722	2.10	0.038	.0142707	.49573
musl	.2513139	.1106348	2.27	0.025	.0315185	.4711093
fertwdi	.0430129	.0351706	1.22	0.225	-.0268596	.1128855
lpopd	-.0768658	.0273309	-2.81	0.006	-.1311634	-.0225681
urbwdi	-.0069042	.0021056	-3.28	0.001	-.0110873	-.002721
pavg0090	-.0115757	.0076672	-1.51	0.135	-.026808	.0036566
_cons	7.510387	.6747808	11.13	0.000	6.169817	8.850957

Model 4-10: Robust Check 7.2: CtrlV: Vary source: lgdph to lgdpmx, msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg0090 gdpmf, r
```

Linear regression

Number of obs = 99
 F(9, 89) = 53.55
 Prob > F = 0.0000
 R-squared = 0.8420
 Root MSE = .32391

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5010151	.0767482	-6.53	0.000	-.6535122	-.3485181
giniavni	.0113784	.005035	2.26	0.026	.0013739	.0213828
ethnl	.2569144	.1219352	2.11	0.038	.0146317	.499197
musl	.2518227	.1109953	2.27	0.026	.0312774	.4723681
fertwdi	.0422729	.0365693	1.16	0.251	-.0303895	.1149352
lpopd	-.0777312	.0293578	-2.65	0.010	-.1360644	-.0193979
urbwdi	-.0069709	.0022155	-3.15	0.002	-.011373	-.0025689
pavg0090	-.0114247	.007972	-1.43	0.155	-.0272649	.0044155
gdpmf	-.0245773	.178789	-0.14	0.891	-.3798272	.3306726
_cons	7.515251	.685738	10.96	0.000	6.152705	8.877798

Model 4-10: Robust Check 7.3: CtrlV: Vary source: ethnic fragment (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090, r
```

Linear regression

Number of obs = 100
 F(8, 91) = 73.22
 Prob > F = 0.0000
 R-squared = 0.8332
 Root MSE = .32932

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4756842	.0777452	-6.12	0.000	-.6301156	-.3212528
giniavni	.0116995	.005693	2.06	0.043	.0003911	.023008
ethnannx	.2591176	.1597907	1.62	0.108	-.0582869	.5765222
musl	.3182152	.1162123	2.74	0.007	.0873736	.5490567
fertwdi	.0714872	.032155	2.22	0.029	.0076152	.1353592
lpopd	-.0596525	.0329902	-1.81	0.074	-.1251835	.0058785
urbwdi	-.0064106	.0024371	-2.63	0.010	-.0112516	-.0015697
pavg0090	-.013858	.0074637	-1.86	0.067	-.0286838	.0009678
_cons	6.995371	.7068534	9.90	0.000	5.591293	8.399448

Model 4-10: Robust Check 7.4: CtrlV: Vary source: ethnl to ethnannx, msg flags

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg0090 ethnannf, r
```

Linear regression

Number of obs = 100
 F(9, 90) = 64.93
 Prob > F = 0.0000
 R-squared = 0.8332
 Root MSE = .3311

limrcom	Coef.	Robust				
		Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4799381	.0854265	-5.62	0.000	-.6496527	-.3102235
giniavni	.0115432	.0056954	2.03	0.046	.0002284	.0228581
ethnannx	.256579	.1627516	1.58	0.118	-.0667555	.5799135
musl	.3189059	.1168592	2.73	0.008	.0867446	.5510672
fertwdi	.070908	.0326157	2.17	0.032	.0061112	.1357048
lpopd	-.0599183	.0329251	-1.82	0.072	-.1253299	.0054932
urbwdi	-.0062774	.0025387	-2.47	0.015	-.0113209	-.0012339
pavg0090	-.0138479	.0074976	-1.85	0.068	-.0287432	.0010475
ethnannf	-.0240342	.1920181	-0.13	0.901	-.4055118	.3574433
_cons	7.035315	.7654262	9.19	0.000	5.514663	8.555968

Table 2.5: Short-Term Democracy, Pub Health Sp, Service Utilization, and IMR**Table 2.5: Summary of Robustness checks for Models 4-1, 4-2, 5-4, 5-6, 5-7, 5-9, and 5-10**

This table gives the t-score of the association between short-term democratic practice and the outcomes indicated at the top of each column, in the context of 16 checks for robustness. The statistical output follows the table. In each check for robustness the 7 socioeconomic "baseline" variables (Model 2-3) are controlled for, just as in the models in Table 2.5.

	Model 5-1	Model 5-2	Model 5-4	Model 5-6	Model 5-7	Model 5-9	Modl 4-10
Dependent variable	Public health spending	Attended births	Female schooling	Family planning	Fertility	Safe water	Infant mortality
Independent variable	Democ 1980-90	Democ 1980-90	Democ 1980-90	Democ 1980-90	Democ 1980-90	Democ 1980-90	Democ 1980-90
Basic Model	0.84	-0.81	0.33	**3.16	***-4.20	**3.20	-0.74
1.1. Specif: Excl fertility		0.34	*2.06			***4.54	-1.56
1.1. Specif: Excl fert, -2 outliers							†-1.75
1.1. Specif: Incl fertility				1.32			
1.2. Specif: Incl fem sch	0.35	-0.90		**2.68	***-4.46	**3.16	-0.64
1.3. Specif: Incl fem lit	0.23	-0.86		**2.64	***-3.78	**3.16	-0.69
1.4. Specif: Incl geogr	1.01	-0.81	0.45	**3.17	***-4.17	**2.98	-0.40
1.5. Specif: Incl reg dum	0.36	0.87	0.41	*2.01	**-2.73	*2.51	-0.49
1.6. Specif: Incl fam plan					†-1.97		
2.1. Imput: msg data flags	0.84	-0.31	0.12	1.22	**-3.24	*2.57	-0.95
3.1. Outliers: rreg	0.05	-0.52	0.44	*2.42	***-3.61	**2.95	-0.65
3.2. Outliers: qreg	0.43	0.25	0.47	**2.85	***-4.11	**2.77	-0.31
3.3. Outliers: cooksd	0.90	-0.51	0.53	**3.20	***-3.77	**3.24	-0.93
4.3. Endog: 2SLS							
4.3a. Endog: 2SLS, -2 outliers							
5.1. DV: lu5mrcom							-1.24

5.2. DV: limrwdi							-0.49
6.3. IV: pavg7090							
6.3a. IV: pavg7090, -2 outliers							
6.4. IV: free7290							
6.4a. IV: free7290, - 2 outliers							
6.5. IV: pol90	1.37	†-1.86	0.69	*2.50	***-3.98	**2.92	0.09
6.5a. IV: pol90, - 2 outliers		*-2.00					
6.6. IV: free8090	-0.88	*2.24	0.10	**-3.28	***3.46	**-3.23	0.32
6.6a. IV: free8090, - 2 outliers		†1.98					
6.7. IV: free90	-0.30	**2.75	-0.18	**-3.05	**2.94	**-2.80	-0.04
6.7a. IV: free90, - 2 outliers		*2.52					
7.1. IV: lgdpmx	0.86	-1.08	-0.18	**2.80	**-3.14	*2.52	0.06
7.2. IV: lgdpmx, mdf	0.82	-1.05	-0.12	**2.80	**-3.24	*2.48	0.04
7.3. IV: ethnannx		-0.83	0.21	**3.15	***-4.24	**3.22	-0.74
7.4. IV: ethnannx, mdf		-0.69	0.35	**3.16	***-4.40	**2.89	-0.28
Basic model clarify							

Table 2.5, Alternative Measures of Short-Term Democracy in Models 5-2 to 5-7

DV = 7 different social services

IV = Alternative measures of short-term democratic practice

Tscores of short-term democratic practice variable by social service predicted

With fertility	deliv	dtp3	mcv	mysf	rtot	wate	sani
pavg8090	-0.81	-1.09	-1.45	0.33		**3.20	-0.28
free8090	*2.24	0.30	0.65	0.10		**-3.23	-0.26
pol90	†-1.86	-1.45	†-1.94	0.69		**2.92	-0.66
free90	**2.75	0.72	0.53	-0.18		**-2.80	-0.10

Without fertility	deliv	dtp3	mcv	mysf	rtot	wate	sani
pavg8090	0.34	-0.32	-0.88	*2.06	**3.16	***4.54	0.48
free8090	1.00	-0.31	0.09	-1.58	**-3.28	***-4.04	-0.88
pol90	-0.50	-0.76	-1.34	*2.33	*2.50	***4.05	0.02
free90	1.59	0.14	0.04	-1.54	**-3.05	***-3.62	-0.69

Table 2.5, Model 5-1: Short-Term Democracy and Public Health Sp/GDP**Model 5-1: Bivariate correlations among independent variables**

```
. correlate hlxpuwdi lgdph giniavni age65 lpopd urbwdi pavg8090
```

(obs=98)

	hlxpuwdi	lgdph	giniavni	age65	lpopd	urbwdi	pavg8090
hlxpuwdi	1.0000						
lgdph	0.2527	1.0000					
giniavni	0.0521	-0.0349	1.0000				
age65	0.1621	0.2636	-0.1197	1.0000			
lpopd	-0.1620	0.1550	-0.3009	0.1383	1.0000		
urbwdi	0.3338	0.8263	-0.0281	0.3669	0.0310	1.0000	
pavg8090	0.1255	0.2748	0.2211	0.3051	0.1758	0.1718	1.0000

Model 5-1: 5 Socioeconomic variables and public health spending/GDP

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65, r
```

Linear regression

Number of obs = 104
 F(5, 98) = 4.51
 Prob > F = 0.0010
 R-squared = 0.1625
 Root MSE = 1.2022

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.0001187	.2319224	0.00	1.000	-.4601239	.4603612
giniavni	.0031006	.0174605	0.18	0.859	-.0315492	.0377503
lpopd	-.1783791	.1034438	-1.72	0.088	-.3836601	.0269018
urbwdi	.0179372	.0091102	1.97	0.052	-.0001417	.0360162
age65	.0525015	.0994139	0.53	0.599	-.1447821	.2497852
_cons	1.546655	1.637154	0.94	0.347	-1.702223	4.795534

Model 5-1: 5 socioeconomic variables, short-term democ, and public health spending/GDP

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090, r
```

Linear regression

Number of obs = 98
 F(6, 91) = 3.17
 Prob > F = 0.0072
 R-squared = 0.1536
 Root MSE = 1.2298

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.044529	.2560632	-0.17	0.862	-.5531672	.4641092
giniavni	-.0023457	.0183555	-0.13	0.899	-.0388066	.0341152
lpopd	-.1728893	.1171897	-1.48	0.144	-.4056722	.0598937
urbwdi	.0187736	.0105751	1.78	0.079	-.0022325	.0397798
age65	.0371421	.1098539	0.34	0.736	-.1810692	.2553535
pavg8090	.0215951	.025591	0.84	0.401	-.0292383	.0724284
_cons	2.226504	1.919317	1.16	0.249	-1.585983	6.038991

Model 5-1: Robustness checks**Model 5-1: Robust Check 1.2: Change specification: Include female schooling**

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 mysfx, r
```

Linear regression

Number of obs = 98
 $F(7, 90) = 3.40$
 Prob > F = 0.0028
 R-squared = 0.2074
 Root MSE = 1.1966

hlxpuwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.288231	.2909684	-0.99	0.325	-.8662905	.2898286
giniavni	-.004755	.0166355	-0.29	0.776	-.0378044	.0282945
lpopd	-.1764564	.102911	-1.71	0.090	-.3809071	.0279942
urbwdi	.016717	.0103307	1.62	0.109	-.0038068	.0372407
age65	-.0574179	.1033721	-0.56	0.580	-.2627847	.1479489
pavg8090	.0090874	.0258379	0.35	0.726	-.0422442	.060419
mysfx	.2189277	.090046	2.43	0.017	.0400356	.3978199
_cons	3.809034	2.040808	1.87	0.065	-.2453875	7.863456

Model 5-1: Robust Check 1.3: Change specification: Include female literacy

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 litfewdi, r
```

Linear regression

Number of obs = 98
 $F(7, 90) = 3.57$
 Prob > F = 0.0020
 R-squared = 0.2243
 Root MSE = 1.1839

hlxpuwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.2597415	.2846284	-0.91	0.364	-.8252054	.3057225
giniavni	-.0061427	.0164669	-0.37	0.710	-.0388571	.0265718
lpopd	-.1841081	.1004905	-1.83	0.070	-.38375	.0155337
urbwdi	.016429	.0103469	1.59	0.116	-.0041269	.0369849
age65	-.055357	.1034316	-0.54	0.594	-.2608419	.1501278
pavg8090	.0057214	.0244485	0.23	0.816	-.0428498	.0542925
litfewdi	.0178329	.0061175	2.92	0.004	.0056795	.0299863
_cons	3.467954	1.984464	1.75	0.084	-.4745312	7.410438

Model 5-1: Robust Check 1.4: Change specification: Incl geographical var

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 airdist popcrgrs latcap
> ab, r
```

Linear regression

Number of obs = 98
 $F(9, 88) = 2.12$
 Prob > F = 0.0357
 R-squared = 0.1836
 Root MSE = 1.2282

hlxpuwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.1936786	.2784483	-0.70	0.489	-.7470361	.359679

giniavni	.0045584	.0177833	0.26	0.798	-.0307822	.039899
lpopd	-.199692	.1148581	-1.74	0.086	-.4279484	.0285644
urbwdi	.0183181	.0100807	1.82	0.073	-.0017153	.0383514
age65	.0077994	.1122789	0.07	0.945	-.2153312	.2309301
pavg8090	.0252643	.0249087	1.01	0.313	-.0242366	.0747651
airdist	-.0000146	.0000666	-0.22	0.826	-.000147	.0001177
popcrgs	.0045226	.0045199	1.00	0.320	-.0044598	.0135049
latcapab	.019193	.0119274	1.61	0.111	-.0045101	.0428961
_cons	2.79829	1.932301	1.45	0.151	-1.041753	6.638332

Model 5-1: Robust Check 1.5: Change specification: Include regional dummies

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 afri lati east sout, r
```

Linear regression

					Number of obs =	98
					F(10, 87) =	3.87
					Prob > F =	0.0002
					R-squared =	0.1803
					Root MSE =	1.2377

hlxpuwdi	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.0625732	.3108358	0.20	0.841	-.5552465 .6803929
giniavni	-.0109022	.0212212	-0.51	0.609	-.0530816 .0312771
lpopd	-.1698586	.1267575	-1.34	0.184	-.4218029 .0820857
urbwdi	.009999	.0122913	0.81	0.418	-.0144312 .0344293
age65	-.0042552	.1252098	-0.03	0.973	-.2531234 .2446129
pavg8090	.0096766	.02666008	0.36	0.717	-.0431953 .0625486
afri	-.0901388	.4506189	-0.20	0.842	-.9857927 .8055151
lati	.5580645	.6476556	0.86	0.391	-.729221 1.84535
east	-.0293935	.6276205	-0.05	0.963	-1.276857 1.21807
sout	-.4869436	.5116597	-0.95	0.344	-1.503923 .5300354
_cons	2.22429	2.237843	0.99	0.323	-2.223665 6.672245

Model 5-1: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 gdphf, r
```

Linear regression

					Number of obs =	98
					F(6, 91) =	3.17
					Prob > F =	0.0072
					R-squared =	0.1536
					Root MSE =	1.2298

hlxpuwdi	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.044529	.2560632	-0.17	0.862	-.5531672 .4641092
giniavni	-.0023457	.0183555	-0.13	0.899	-.0388066 .0341152
lpopd	-.1728893	.1171897	-1.48	0.144	-.4056722 .0598937
urbwdi	.0187736	.0105751	1.78	0.079	-.0022325 .0397798
age65	.0371421	.1098539	0.34	0.736	-.1810692 .2553535
pavg8090	.0215951	.025591	0.84	0.401	-.0292383 .0724284
gdphf	(dropped)				
_cons	2.226504	1.919317	1.16	0.249	-1.585983 6.038991

Model 5-1: Robust Check 3.1: Outlier checks: Robust regression

. rreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090	Huber iteration 1: maximum difference in weights = .73435493
	Huber iteration 2: maximum difference in weights = .18744406
	Huber iteration 3: maximum difference in weights = .10170959
	Huber iteration 4: maximum difference in weights = .02451339
	Biweight iteration 5: maximum difference in weights = .28389388
	Biweight iteration 6: maximum difference in weights = .03811621
	Biweight iteration 7: maximum difference in weights = .01789785
	Biweight iteration 8: maximum difference in weights = .00741461
Robust regression	Number of obs = 98
	F(6, 91) = 2.00
	Prob > F = 0.0733
-----	-----
hlxpuwdi Coef. Std. Err. t P> t [95% Conf. Interval]	-----
lgdph .1133537 .2155904 0.53 0.600 -.3148902 .5415976	-----
giniavni .0094053 .012784 0.74 0.464 -.0159885 .0347991	-----
lpopd -.0783364 .0770679 -1.02 0.312 -.2314224 .0747497	-----
urbwdi .0091218 .0085613 1.07 0.289 -.0078842 .0261278	-----
age65 .0479418 .0795686 0.60 0.548 -.1101115 .205995	-----
pavg8090 .0010579 .0194208 0.05 0.957 -.0375191 .039635	-----
_cons .2695327 1.601664 0.17 0.867 -2.911977 3.451042	-----

Model 5-1: Robust Check 3.2: Outlier checks: Median regression

. qreg hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090	Iteration 1: WLS sum of weighted deviations = 86.893729
	Iteration 1: sum of abs. weighted deviations = 159.1117
	Iteration 2: sum of abs. weighted deviations = 85.492554
	Iteration 3: sum of abs. weighted deviations = 83.331953
	Iteration 4: sum of abs. weighted deviations = 82.725568
	Iteration 5: sum of abs. weighted deviations = 82.167993
	Iteration 6: sum of abs. weighted deviations = 81.741041
	Iteration 7: sum of abs. weighted deviations = 81.737696
	Iteration 8: sum of abs. weighted deviations = 81.736664
	Iteration 9: sum of abs. weighted deviations = 81.731174
	Iteration 10: sum of abs. weighted deviations = 81.707722
	Iteration 11: sum of abs. weighted deviations = 81.698392
	Iteration 12: sum of abs. weighted deviations = 81.66782
	Iteration 13: sum of abs. weighted deviations = 81.560354
	Iteration 14: sum of abs. weighted deviations = 81.558538
Median regression	Number of obs = 98
Raw sum of deviations 88.1 (about 1.7)	
Min sum of deviations 81.55854	Pseudo R2 = 0.0743
-----	-----
hlxpuwdi Coef. Std. Err. t P> t [95% Conf. Interval]	-----
lgdph .2807596 .1893275 1.48 0.142 -.0953161 .6568354	-----
giniavni .0095522 .011475 0.83 0.407 -.0132414 .0323458	-----
lpopd -.1500619 .0695788 -2.16 0.034 -.2882716 -.0118522	-----
urbwdi .0031281 .0075611 0.41 0.680 -.0118912 .0181474	-----
age65 .0689822 .0730555 0.94 0.348 -.0761335 .214098	-----
pavg8090 .0076041 .0175104 0.43 0.665 -.0271782 .0423864	-----

_cons	-.6280308	1.388653	-0.45	0.652	-3.386418	2.130357
-------	-----------	----------	-------	-------	-----------	----------

Model 5-1: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pavg8090 if ctry ~= "Mongolia" & ctry ~= "Cuba", r
```

		Linear regression				
		Number of obs = 96 F(6, 89) = 3.12 Prob > F = 0.0080 R-squared = 0.1468 Root MSE = 1.1341				
hlxpuwdi		Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.0586574	.2447327	0.24	0.811	-.4276214	.5449361
giniavni	.0179158	.0138126	1.30	0.198	-.0095294	.0453611
lpopd	-.0745465	.0844495	-0.88	0.380	-.2423459	.0932528
urbwdi	.0139234	.0101251	1.38	0.173	-.006195	.0340417
age65	-.0282759	.0927554	-0.30	0.761	-.2125789	.156027
pavg8090	.0219311	.024464	0.90	0.372	-.0266783	.0705404
_cons	.5632649	1.551867	0.36	0.717	-2.520262	3.646792

Model 5-1: Robust Check 6.5: Vary data source: IV: pavg8090 to pol90

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 pol90, r
```

		Linear regression				
		Number of obs = 101 F(6, 94) = 3.53 Prob > F = 0.0034 R-squared = 0.1811 Root MSE = 1.2013				
hlxpuwdi		Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.090496	.2589425	-0.35	0.728	-.6046324	.4236404
giniavni	-.005136	.0177147	-0.29	0.773	-.040309	.030037
lpopd	-.1782962	.1116742	-1.60	0.114	-.400028	.0434355
urbwdi	.0197008	.0103917	1.90	0.061	-.0009322	.0403338
age65	.0039295	.1159426	0.03	0.973	-.2262773	.2341363
pol90	.0334189	.0244057	1.37	0.174	-.0150392	.0818769
_cons	2.779153	2.058157	1.35	0.180	-1.307366	6.865672

Model 5-1: Robust Check 6.6: Vary data source: IV: pavg8090 to free8090

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 free8090, r
```

		Linear regression				
		Number of obs = 103 F(6, 96) = 3.87 Prob > F = 0.0017 R-squared = 0.1751 Root MSE = 1.2048				
hlxpuwdi		Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.090496	.2589425	-0.35	0.728	-.6046324	.4236404
giniavni	-.005136	.0177147	-0.29	0.773	-.040309	.030037
lpopd	-.1782962	.1116742	-1.60	0.114	-.400028	.0434355
urbwdi	.0197008	.0103917	1.90	0.061	-.0009322	.0403338
age65	.0039295	.1159426	0.03	0.973	-.2262773	.2341363
free8090	.0334189	.0244057	1.37	0.174	-.0150392	.0818769
_cons	2.779153	2.058157	1.35	0.180	-1.307366	6.865672

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.0798614	.2283283	-0.35	0.727	-.5330894	.3733666
giniavni	-.0008902	.0178076	-0.05	0.960	-.0362381	.0344577
lpopd	-.1838466	.1112816	-1.65	0.102	-.4047387	.0370456
urbwdi	.0195495	.009032	2.16	0.033	.0016212	.0374778
age65	.0432443	.1052226	0.41	0.682	-.165621	.2521096
free8090	-.0480627	.0546636	-0.88	0.381	-.1565691	.0604437
_cons	2.794521	1.976555	1.41	0.161	-1.12891	6.717953

Model 5-1: Robust Check 6.7: Vary data source: IV: pavg8090 to free90

```
. regress hlxpuwdi lgdph giniavni lpopd urbwdi age65 free90, r
```

Linear regression

Number of obs =	103
F(6, 96) =	3.76
Prob > F =	0.0021
R-squared =	0.1671
Root MSE =	1.2107

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.0203339	.2253783	-0.09	0.928	-.4677063	.4270386
giniavni	.0025084	.0176833	0.14	0.887	-.0325926	.0376094
lpopd	-.1674122	.1113446	-1.50	0.136	-.3884294	.0536051
urbwdi	.0185797	.0090033	2.06	0.042	.0007082	.0364511
age65	.0552707	.1095711	0.50	0.615	-.1622262	.2727676
free90	-.0140546	.0476043	-0.30	0.768	-.1085483	.0804392
_cons	1.793869	1.870899	0.96	0.340	-1.919837	5.507575

Model 5-1: Robust Check 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg8090, r
```

Linear regression

Number of obs =	97
F(6, 90) =	3.20
Prob > F =	0.0068
R-squared =	0.1539
Root MSE =	1.2359

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.0867604	.2934125	-0.30	0.768	-.6696755	.4961548
giniavni	-.0018155	.0185925	-0.10	0.922	-.0387528	.0351217
lpopd	-.1689137	.1154923	-1.46	0.147	-.3983594	.060532
urbwdi	.0200474	.0112677	1.78	0.079	-.0023379	.0424327
age65	.0392516	.1107518	0.35	0.724	-.1807763	.2592794
pavg8090	.0234944	.0272446	0.86	0.391	-.0306318	.0776207
_cons	2.450877	2.259653	1.08	0.281	-2.038317	6.940072

Model 5-1: Robust Check 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress hlxpuwdi lgdpmx giniavni lpopd urbwdi age65 pavg8090 gdpmf, r
```

Linear regression

Number of obs = 97
 $F(7, 89) = 3.50$
 Prob > F = 0.0023
 R-squared = 0.1635
 Root MSE = 1.2357

hlxpuwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.1583885	.2997231	-0.53	0.599	-.7539319	.4371548
giniavni	-.0004555	.0189753	-0.02	0.981	-.038159	.037248
lpopd	-.1472429	.1216319	-1.21	0.229	-.3889228	.094437
urbwdi	.0228887	.0114668	2.00	0.049	.0001043	.0456731
age65	.0419482	.1102737	0.38	0.705	-.1771633	.2610596
pavg8090	.0224727	.0275446	0.82	0.417	-.0322578	.0772033
gdpmf	.776802	.4878888	1.59	0.115	-.1926227	1.746227
_cons	2.695819	2.269219	1.19	0.238	-1.81307	7.204708

Table 2.5, Model 5-2: Short-Term Democracy and Trained Attendance at Birth

Model 5-2: Bivariate correlations among independent variables

```
. correlate delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090  

(obs=97)
```

	delivcom	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	pavg8090
delivcom	1.0000								
lgdph	0.7105	1.0000							
giniavni	-0.0672	-0.0360	1.0000						
ethnl	-0.4199	-0.5240	0.2062	1.0000					
musl	0.0747	0.3170	-0.3042	-0.2994	1.0000				
fertwdi	-0.6711	-0.6473	0.1553	0.4799	0.0925	1.0000			
lpopd	0.0784	0.1585	-0.2976	-0.1534	-0.0957	-0.3710	1.0000		
urbwdi	0.7028	0.8266	-0.0309	-0.5101	0.3170	-0.5688	0.0375	1.0000	
pavg8090	0.2471	0.2775	0.2262	-0.0590	-0.2907	-0.4697	0.1680	0.1772	

Model 5-2: Trained attendance at birth predicted by 7 baseline var only

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi
```

Source	SS	df	MS	Number of obs = 103
Model	51477.8811	7	7353.98302	$F(7, 95) = 25.02$
Residual	27921.3227	95	293.90866	Prob > F = 0.0000
Total	79399.2039	102	778.423567	R-squared = 0.6483 Adj R-squared = 0.6224 Root MSE = 17.144

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.711868	3.846366	2.00	0.048	.0758649 15.34787
giniavni	-.234277	.2269607	-1.03	0.305	-.684851 .2162971
ethnl	.9348624	6.572201	0.14	0.887	-12.11261 13.98233
musl	-8.358008	5.744649	-1.45	0.149	-19.76258 3.046562
fertwdi	-6.312923	1.733646	-3.64	0.000	-9.754646 -2.871199
lpopd	-2.495193	1.288191	-1.94	0.056	-5.052575 .0621895
urbwdi	.3812785	.1301847	2.93	0.004	.1228292 .6397277

_cons	35.74748	30.51346	1.17	0.244	-24.8294	96.32436
-------	----------	----------	------	-------	----------	----------

Model 5-2: Trained attendance at birth predicted by 7 baseline var. and short-term democ.

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	97
F(8, 88) =	29.36
Prob > F =	0.0000
R-squared =	0.6394
Root MSE =	17.136

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	9.487938	4.378062	2.17	0.033	.7874607 18.18842
giniavni	-.1788285	.2249228	-0.80	0.429	-.6258153 .2681583
ethnl	2.078078	6.670037	0.31	0.756	-11.17722 15.33338
musl	-8.879308	5.380572	-1.65	0.102	-19.57206 1.813448
fertwdi	-6.206583	2.126444	-2.92	0.004	-10.43244 -1.980723
lpopd	-2.492514	1.299569	-1.92	0.058	-5.075134 .0901062
urbwdi	.3605062	.1391683	2.59	0.011	.0839385 .6370739
pavg8090	-.296606	.3643896	-0.81	0.418	-1.020754 .4275417
_cons	18.79472	34.82103	0.54	0.591	-50.40476 87.99421

Model 5-2: Robustness checks

Model 5-2: Robust Check 1.1: Change specification: Exclude fertility

```
. regress delivcom lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	97
F(7, 89) =	26.93
Prob > F =	0.0000
R-squared =	0.5966
Root MSE =	18.023

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	13.74868	3.89886	3.53	0.001	6.001731 21.49563
giniavni	-.4076472	.2318324	-1.76	0.082	-.8682932 .0529989
ethnl	-4.063432	6.620533	-0.61	0.541	-17.21829 9.091425
musl	-16.68023	4.666718	-3.57	0.001	-25.9529 -7.407556
lpopd	-1.530946	1.410447	-1.09	0.281	-4.333473 1.271582
urbwdi	.4458228	.1467065	3.04	0.003	.1543201 .7373254
pavg8090	.1115355	.3294875	0.34	0.736	-.5431491 .7662201
_cons	-35.04968	27.94609	-1.25	0.213	-90.57797 20.47862

Model 5-2: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 mysfx, r
```

Linear regression

Number of obs =	97
F(9, 87) =	29.60
Prob > F =	0.0000
R-squared =	0.6690

Root MSE = 16.513

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.681606	4.347886	1.54	0.128	-1.960289	15.3235
giniavni	-.1931298	.2144897	-0.90	0.370	-.6194514	.2331918
ethnl	5.757942	5.963945	0.97	0.337	-6.096044	17.61193
musl	-2.92416	5.138555	-0.57	0.571	-13.13759	7.289274
fertwdi	-3.556324	2.521275	-1.41	0.162	-8.567632	1.454983
lpopd	-1.743985	1.189884	-1.47	0.146	-4.109007	.6210381
urbwdi	.3060443	.1228674	2.49	0.015	.0618321	.5502565
pavg8090	-.3341238	.370949	-0.90	0.370	-1.071425	.4031775
mysfx	4.196973	1.470049	2.85	0.005	1.275091	7.118856
_cons	9.783117	35.78809	0.27	0.785	-61.34958	80.91582

Model 5-2: Robust Check 1.3: Change specification: Include female literacy

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 litfewdi, r
```

Linear regression

Number of obs =	97
F(9, 87) =	32.32
Prob > F =	0.0000
R-squared =	0.6894
Root MSE =	15.996

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.036601	4.051881	1.74	0.086	-1.016951	15.09015
giniavni	-.2449186	.2113314	-1.16	0.250	-.6649626	.1751254
ethnl	8.795772	6.143264	1.43	0.156	-3.41463	21.00617
musl	.066868	5.04242	0.01	0.989	-9.955488	10.08922
fertwdi	-2.224167	2.069175	-1.07	0.285	-6.336876	1.888542
lpopd	-1.460916	1.113254	-1.31	0.193	-3.673629	.7517963
urbwdi	.3026299	.1269034	2.38	0.019	.0503956	.5548642
pavg8090	-.3285479	.3803575	-0.86	0.390	-1.08455	.4274539
litfewdi	.426059	.1171972	3.64	0.000	.1931168	.6590012
_cons	-8.431968	32.00366	-0.26	0.793	-72.0427	55.17876

Model 5-2: Robust Check 1.4: Change specification: Incl geographical variables

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
```

Linear regression

Number of obs =	97
F(11, 85) =	23.65
Prob > F =	0.0000
R-squared =	0.6481
Root MSE =	17.225

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	7.903426	4.540214	1.74	0.085	-1.123735	16.93059
giniavni	-.2368601	.2343243	-1.01	0.315	-.7027594	.2290393
ethnl	.9941119	6.661139	0.15	0.882	-12.25002	14.23824

musl	-8.463365	6.198475	-1.37	0.176	-20.78759	3.860864
fertwdi	-6.100811	2.448678	-2.49	0.015	-10.96944	-1.232185
lpopd	-2.452378	1.479031	-1.66	0.101	-5.393089	.4883324
urbwdi	.4021579	.1437964	2.80	0.006	.1162522	.6880636
pavg8090	-.3011965	.3723551	-0.81	0.421	-1.041538	.4391451
airdist	.0014441	.0009607	1.50	0.136	-.0004659	.0033541
popcrgs	.0323843	.0714677	0.45	0.652	-.1097126	.1744811
latcapab	.0815715	.2017662	0.40	0.687	-.3195937	.4827367
_cons	20.82473	38.0072	0.55	0.585	-54.74376	96.39322

Model 5-2: Robust Check 1.5: Change specification: Include regional dummies

```
. regress delivcom lgdpf giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati east sout, r
```

Linear regression

Number of obs = 97
 F(12, 84) = 27.23
 Prob > F = 0.0000
 R-squared = 0.7025
 Root MSE = 15.933

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpf	5.295262	5.314289	1.00	0.322	-5.272784 15.86331
giniavni	-.1711253	.2277936	-0.75	0.455	-.6241179 .2818672
ethnl	-12.58931	7.697787	-1.64	0.106	-27.8972 2.718588
musl	-17.10664	8.012163	-2.14	0.036	-33.0397 -1.173575
fertwdi	-7.903362	2.46647	-3.20	0.002	-12.80821 -2.998516
lpopd	-2.64811	1.182095	-2.24	0.028	-4.998836 -.2973844
urbwdi	.4998334	.1591317	3.14	0.002	.1833827 .8162842
pavg8090	.3147804	.3604982	0.87	0.385	-.4021099 1.031671
afri	1.213623	9.318198	0.13	0.897	-17.31664 19.74388
lati	-24.93689	11.14395	-2.24	0.028	-47.09786 -2.775913
east	-8.391321	10.51461	-0.80	0.427	-29.30078 12.51814
sout	-17.2238	14.28616	-1.21	0.231	-45.6334 11.1858
_cons	69.96475	45.04697	1.55	0.124	-19.61609 159.5456

Model 5-2: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress delivcom lgdpf giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
```

Linear regression

Number of obs = 97
 F(10, 86) = 27.37
 Prob > F = 0.0000
 R-squared = 0.6602
 Root MSE = 16.827

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpf	8.342504	3.958529	2.11	0.038	.4732095 16.2118
giniavni	-.0504416	.2356084	-0.21	0.831	-.5188157 .4179325
ethnl	3.882999	6.854012	0.57	0.573	-.742325 17.50832
musl	-7.953942	5.524671	-1.44	0.154	-18.93662 3.02874
fertwdi	-7.289499	1.997973	-3.65	0.000	-11.26134 -3.317659
lpopd	-2.417676	1.354251	-1.79	0.078	-5.109839 .2744865
urbwdi	.3091891	.1424784	2.17	0.033	.0259515 .5924267
pavg8090	-.1100846	.3597407	-0.31	0.760	-.8252253 .6050562

gdphf	(dropped)					
giniavnf	7.647577	5.295365	1.44	0.152	-2.879259	18.17441
ethnlf	9.671626	5.135091	1.88	0.063	-.5365971	19.87985
_cons	26.13918	32.1083	0.81	0.418	-37.69	89.96837

Model 5-2: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
Huber iteration 1: maximum difference in weights = .49275005
Huber iteration 2: maximum difference in weights = .06942038
Huber iteration 3: maximum difference in weights = .04776574
Biweight iteration 4: maximum difference in weights = .15831064
Biweight iteration 5: maximum difference in weights = .0210404
Biweight iteration 6: maximum difference in weights = .0062135

Robust regression
Number of obs = 97
F( 8, 88) = 17.36
Prob > F = 0.0000
```

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.83778	4.289634	2.53	0.013	2.313032 19.36252
giniavni	-.2420362	.2545878	-0.95	0.344	-.7479759 .2639034
ethnl	1.931389	7.57556	0.25	0.799	-13.12344 16.98622
musl	-9.494007	6.325604	-1.50	0.137	-22.06482 3.076803
fertwdi	-5.876962	2.060976	-2.85	0.005	-9.972719 -1.781205
lpopd	-2.534856	1.477337	-1.72	0.090	-5.470753 .4010415
urbwdi	.3302358	.1526119	2.16	0.033	.0269516 .6335199
pavg8090	-.1991118	.3820793	-0.52	0.604	-.958414 .5601905
_cons	12.26399	33.87863	0.36	0.718	-55.06267 79.59066

Model 5-2: Robust Check 3.2: Outlier checks: Median regression

```
. qreg delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
Iteration 1: WLS sum of weighted deviations = 1267.2664

Iteration 1: sum of abs. weighted deviations = 1250.3876
Iteration 2: sum of abs. weighted deviations = 1244.7952
Iteration 3: sum of abs. weighted deviations = 1234.8299
Iteration 4: sum of abs. weighted deviations = 1227.7493
Iteration 5: sum of abs. weighted deviations = 1226.2955
Iteration 6: sum of abs. weighted deviations = 1226.198
Iteration 7: sum of abs. weighted deviations = 1226.1856
Iteration 8: sum of abs. weighted deviations = 1225.8541
Iteration 9: sum of abs. weighted deviations = 1225.804
Iteration 10: sum of abs. weighted deviations = 1225.6361
Iteration 11: sum of abs. weighted deviations = 1225.2593
Iteration 12: sum of abs. weighted deviations = 1225.2548
```

```
Median regression
Number of obs = 97
Raw sum of deviations 2243 (about 61)
Min sum of deviations 1225.255
Pseudo R2 = 0.4537
```

delivcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	10.90491	4.726652	2.31	0.023	1.511684 20.29814
giniavni	-.3310151	.28487	-1.16	0.248	-.8971344 .2351042

ethnl	-.2529939	8.357133	-0.03	0.976	-16.86104	16.35505
musl	-8.285492	6.749325	-1.23	0.223	-21.69836	5.127374
fertwdi	-5.866495	2.248195	-2.61	0.011	-10.33431	-1.39868
lpopd	-3.723847	1.59909	-2.33	0.022	-6.901703	-.5459915
urbwdi	.2963646	.1697762	1.75	0.084	-.0410299	.6337592
pavg8090	.1003085	.4043293	0.25	0.805	-.703211	.903828
_cons	24.4296	37.48725	0.65	0.516	-50.06843	98.92763

Model 5-2: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry == "Oman" & ctry
~= "Myanmar", r
```

Linear regression

Number of obs = 95
F(8, 86) = 29.45
Prob > F = 0.0000
R-squared = 0.6656
Root MSE = 16.438

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	9.225436	3.947293	2.34	0.022	1.378476	17.0724
giniavni	-.1847457	.2154604	-0.86	0.394	-.6130667	.2435754
ethnl	3.824271	6.655702	0.57	0.567	-9.406827	17.05537
musl	-9.168614	5.191271	-1.77	0.081	-19.48852	1.151291
fertwdi	-6.033115	1.855144	-3.25	0.002	-9.721053	-2.345247
lpopd	-2.315702	1.331822	-1.74	0.086	-4.963277	.3318739
urbwdi	.3908782	.139891	2.79	0.006	.112784	.6689724
pavg8090	-.1819486	.3545516	-0.51	0.609	-.8867739	.5228767
_cons	17.20979	31.50633	0.55	0.586	-45.42272	79.8423

Model 5-2: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
```

Linear regression

Number of obs = 100
F(8, 91) = 32.42
Prob > F = 0.0000
R-squared = 0.6483
Root MSE = 17.116

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.885029	4.285265	2.07	0.041	.3728761	17.39718
giniavni	-.1076134	.2227663	-0.48	0.630	-.5501114	.3348845
ethnl	1.076919	6.23556	0.17	0.863	-11.30926	13.46309
musl	-9.786274	5.559826	-1.76	0.082	-20.83019	1.257638
fertwdi	-7.444659	2.060387	-3.61	0.000	-11.53737	-3.351954
lpopd	-2.377928	1.301591	-1.83	0.071	-4.963379	.2075238
urbwdi	.350498	.131447	2.67	0.009	.0893947	.6116013
pol90	-.5717053	.3074487	-1.86	0.066	-1.182414	.0390036
_cons	27.02874	33.87398	0.80	0.427	-40.25775	94.31524

Model 5-2: Robust Ck 6.5a: IndV: Vary source: pavg8090 to pol90, disc 2 hghst cooksds

. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90 if ctry == "Oman" & ctry == "Bangladesh", r

Linear regression

Number of obs = 98
 F(8, 89) = 32.37
 Prob > F = 0.0000
 R-squared = 0.6682
 Root MSE = 16.41

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.356492	4.123879	1.30	0.197	-2.837567 13.55055
giniavni	-.0441928	.2263185	-0.20	0.846	-.4938829 .4054972
ethnl	-.0993243	5.785725	-0.02	0.986	-11.59544 11.39679
musl	-8.991848	5.75786	-1.56	0.122	-20.43259 2.448897
fertwdi	-8.768573	2.006824	-4.37	0.000	-12.75609 -4.781056
lpopd	-1.503897	1.288519	-1.17	0.246	-4.064156 1.056363
urbwdi	.3688475	.1287791	2.86	0.005	.1129661 .6247288
pol90	-.6013814	.3001658	-2.00	0.048	-1.197804 -.0049584
_cons	53.69549	32.50057	1.65	0.102	-10.88246 118.2734

Model 5-2: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090

. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r

Linear regression

Number of obs = 102
 F(8, 93) = 35.52
 Prob > F = 0.0000
 R-squared = 0.6626
 Root MSE = 16.792

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	9.765679	4.114634	2.37	0.020	1.594831 17.93653
giniavni	-.0821479	.2178631	-0.38	0.707	-.5147808 .3504851
ethnl	2.916046	6.234581	0.47	0.641	-9.464596 15.29669
musl	-9.512671	5.239754	-1.82	0.073	-19.91778 .8924417
fertwdi	-7.595529	1.967473	-3.86	0.000	-11.50254 -3.688518ddd
lpopd	-1.897593	1.27334	-1.49	0.140	-4.426194 .6310087
urbwdi	.358417	.1198503	2.99	0.004	.120418 .596416
free8090	1.66682	.7451324	2.24	0.028	.1871344 3.146505
_cons	1.644578	34.54008	0.05	0.962	-66.94517 70.23433

Model 5-2: Robust Ck 6.6a: IndV: Vary source: pavg8090 to free8090, - 2 higst cooksd

. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090 if ctry == "Oman" & ctry == "Myanmar", r

Linear regression

Number of obs = 100
 F(8, 91) = 35.53
 Prob > F = 0.0000
 R-squared = 0.6828
 Root MSE = 16.225

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.764798	3.694607	2.37	0.020	1.425916	16.10368
giniavni	-.07911	.2064449	-0.38	0.702	-.4891875	.3309675
ethnl	4.306073	6.167613	0.70	0.487	-7.945132	16.55728
musl	-9.576064	5.090271	-1.88	0.063	-19.68726	.5351341
fertwdi	-7.691235	1.718499	-4.48	0.000	-11.10482	-4.277648
lpopd	-1.703448	1.302483	-1.31	0.194	-4.290671	.8837748
urbwdi	.3851703	.118837	3.24	0.002	.1491152	.6212254
free8090	1.422841	.7189345	1.98	0.051	-.0052344	2.850916
_cons	8.869735	32.3331	0.27	0.784	-55.35599	73.09546

Model 5-2: Robust Check 6.7: IndV: Vary source: pavg8090 to free90

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
```

Linear regression

Number of obs = 102
 F(8, 93) = 33.93
 Prob > F = 0.0000
 R-squared = 0.6705
 Root MSE = 16.596

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	9.319689	4.007977	2.33	0.022	1.360641	17.27874
giniavni	-.0443747	.2117794	-0.21	0.834	-.4649268	.3761773
ethnl	2.540852	6.163883	0.41	0.681	-9.699398	14.7811
musl	-8.738945	5.29871	-1.65	0.102	-19.26113	1.783242
fertwdi	-7.674228	1.942223	-3.95	0.000	-11.5311	-3.817358
lpopd	-1.842929	1.244081	-1.48	0.142	-4.313428	.6275699
urbwdi	.3798942	.1154408	3.29	0.001	.1506516	.6091369
free90	1.648433	.5987814	2.75	0.007	.4593714	2.837494
_cons	3.024597	33.02241	0.09	0.927	-62.55137	68.60057

Model 5-2: Robust Ck 6.7a: IndV: Vary source: pavg8090 to free90, disc 2 highest cooksd

```
. regress delivcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90 if ctry == "Oman" & ctry == "Myanmar", r
```

Linear regression

Number of obs = 100
 F(8, 91) = 34.23
 Prob > F = 0.0000
 R-squared = 0.6899
 Root MSE = 16.042

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.383285	3.552004	2.36	0.020	1.327665	15.43891
giniavni	-.0409187	.2000934	-0.20	0.838	-.4383796	.3565423
ethnl	4.011298	6.116853	0.66	0.514	-8.139079	16.16168
musl	-8.890945	5.141974	-1.73	0.087	-19.10484	1.322954
fertwdi	-7.816379	1.7017	-4.59	0.000	-11.1966	-4.436161
lpopd	-1.644843	1.272243	-1.29	0.199	-4.171999	.8823121
urbwdi	.4031708	.1146867	3.52	0.001	.1753599	.6309818
free90	1.451834	.5764639	2.52	0.014	.3067596	2.596909

_cons	9.604206	30.51034	0.31	0.754	-51.00083	70.20925
-------	----------	----------	------	-------	-----------	----------

Model 5-2: Robust Check 7.1: CtrlV: Vary source: GDP/cap at PPP (lgdph to lgdpnx)

```
. regress delivcom lgdpnx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 96
 F(8, 87) = 28.31
 Prob > F = 0.0000
 R-squared = 0.6290
 Root MSE = 17.214

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpnx	8.608286	4.478649	1.92	0.058	-.2935141 17.51009
giniavni	-.2033526	.2225254	-0.91	0.363	-.6456459 .2389407
ethnl	1.455551	6.802329	0.21	0.831	-12.06481 14.97592
musl	-7.527917	5.154824	-1.46	0.148	-17.77369 2.717853
fertwdi	-6.340346	2.111616	-3.00	0.003	-10.53741 -2.143282
lpopd	-2.552635	1.349917	-1.89	0.062	-5.235741 .1304702
urbwdi	.3733298	.1347404	2.77	0.007	.1055186 .6411409
pavg8090	-.4009975	.3716803	-1.08	0.284	-1.139752 .3377574
_cons	26.56069	36.95508	0.72	0.474	-46.89153 100.0129

Model 5-2: Robust Check 7.2: CtrlV: Vary source: lgdph to lgdpnx, msg flags

```
. regress delivcom lgdpnx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
```

Linear regression

Number of obs = 96
 F(9, 86) = 25.45
 Prob > F = 0.0000
 R-squared = 0.6297
 Root MSE = 17.297

delivcom	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdpnx	8.281187	4.421949	1.87	0.065	-.5093565 17.07173
giniavni	-.1988394	.2252152	-0.88	0.380	-.6465524 .2488736
ethnl	.973788	6.752023	0.14	0.886	-12.44879 14.39637
musl	-7.558589	5.162456	-1.46	0.147	-17.82121 2.704033
fertwdi	-6.147602	2.212297	-2.78	0.007	-10.5455 -1.749701
lpopd	-2.387257	1.397341	-1.71	0.091	-5.165079 .3905645
urbwdi	.3910866	.1343134	2.91	0.005	.1240804 .6580927
pavg8090	-.3899552	.3731358	-1.05	0.299	-1.131725 .3518141
gdpmf	4.586995	15.15097	0.30	0.763	-25.53214 34.70613
_cons	26.64124	37.45981	0.71	0.479	-47.82639 101.1089

Model 5-2: Robust Check 7.3: CtrlV: Vary source: ethnic fragment (ethnl to ethnannx)

```
. regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 97
 F(8, 88) = 29.53
 Prob > F = 0.0000

R-squared = 0.6399
Root MSE = 17.124

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	9.835356	4.48928	2.19	0.031	.9138553	18.75686
giniavni	-.1736234	.2258811	-0.77	0.444	-.6225146	.2752677
ethnannx	3.789342	7.222425	0.52	0.601	-10.56371	18.14239
musl	-8.780584	5.260717	-1.67	0.099	-19.23515	1.673984
fertwdi	-6.180925	2.037567	-3.03	0.003	-10.23016	-2.131688
lpopd	-2.423061	1.278822	-1.89	0.061	-4.964451	.1183284
urbwdi	.3496861	.138146	2.53	0.013	.07515	.6242222
pavg8090	-.303937	.3646694	-0.83	0.407	-1.028641	.4207668
_cons	14.65624	36.52552	0.40	0.689	-57.93055	87.24303

Model 5-2: Robust Check 7.4: CtrlV: Vary source: ethnl to ethnannx, msg flags

```
. regress delivcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnannx  

> nf, r
```

Linear regression

Number of obs = 97
F(9, 87) = 29.44
Prob > F = 0.0000
R-squared = 0.6455
Root MSE = 17.089

delivcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	11.1729	4.694973	2.38	0.020	1.841136	20.50467
giniavni	-.1209891	.2379922	-0.51	0.612	-.5940244	.3520461
ethnannx	4.491166	7.171785	0.63	0.533	-9.763533	18.74586
musl	-9.142075	5.446909	-1.68	0.097	-19.9684	1.684246
fertwdi	-5.821786	2.154333	-2.70	0.008	-10.10376	-1.539816
lpopd	-2.232575	1.34589	-1.66	0.101	-4.907677	.4425272
urbwdi	.3143506	.1408594	2.23	0.028	.0343774	.5943239
pavg8090	-.2539759	.3705447	-0.69	0.495	-.9904737	.4825218
ethnannf	10.14294	8.790141	1.15	0.252	-7.328421	27.61429
_cons	.5833441	40.68796	0.01	0.989	-80.28838	81.45507

Table 2.5, Model 5-3: Short-Term Democ. & Trained Att. at Birth (Excl. Outliers)
(Same as Model 5-2, Robustness Check 3.3)

Table 2.5, Model 5-4: Short-Term Democracy and Female Schooling

Model 5-4: Bivariate correlations among independent variables

```
. correlate mysfx lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090  

(obs=98)
```

	mysfx	lgdph	giniavni	ethnannx	musl	fertwdi	lpopd
mysfx	1.0000						
lgdph	0.6710	1.0000					
giniavni	0.0236	-0.0349	1.0000				

ethnl	-0.4677	-0.5203	0.2094	1.0000			
musl	-0.1369	0.3155	-0.3059	-0.3021	1.0000		
fertwdi	-0.7711	-0.6401	0.1598	0.4848	0.0859	1.0000	
lpopd	0.1423	0.1550	-0.3009	-0.1614	-0.0893	-0.3794	1.0000
urbwdi	0.6205	0.8263	-0.0281	-0.5030	0.3134	-0.5576	0.0310
pavg8090	0.4104	0.2748	0.2211	-0.0655	-0.2853	-0.4745	0.1758
				urbwdi	pavg8090		
urbwdi				1.0000			
pavg8090				0.1718	1.0000		

Model 5-4: Female schooling predicted by 7 baseline variables only

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs = 105
 F(7, 97) = 45.30
 Prob > F = 0.0000
 R-squared = 0.7479
 Root MSE = 1.1486

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.7211628	.2190056	3.29	0.001	.2864973	1.155828
giniavni	.0042383	.0147551	0.29	0.775	-.0250466	.0335232
ethnl	-.8494354	.4832254	-1.76	0.082	-1.808504	.1096333
musl	-1.510806	.3488769	-4.33	0.000	-2.20323	-.8183819
fertwdi	-.6436932	.0976878	-6.59	0.000	-.8375764	-.4498101
lpopd	-.1657724	.0853429	-1.94	0.055	-.3351544	.0036097
urbwdi	.0119389	.0078403	1.52	0.131	-.0036219	.0274998
_cons	1.785791	1.722436	1.04	0.302	-1.632768	5.204351

Model 5-4: Female schooling predicted by 7 baseline var. and short-term democracy

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 98
 F(8, 89) = 31.62
 Prob > F = 0.0000
 R-squared = 0.7274
 Root MSE = 1.1726

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.6999611	.2310969	3.03	0.003	.2407765	1.159146
giniavni	.0023205	.0165747	0.14	0.889	-.0306132	.0352541
ethnl	-.8432276	.5396323	-1.56	0.122	-1.915466	.2290103
musl	-1.49712	.364235	-4.11	0.000	-2.220847	-.773393
fertwdi	-.6063477	.1127476	-5.38	0.000	-.8303748	-.3823206
lpopd	-.1847869	.0954586	-1.94	0.056	-.3744611	.0048872
urbwdi	.0140488	.0093757	1.50	0.138	-.0045806	.0326781
pavg8090	.0073595	.0222281	0.33	0.741	-.0368072	.0515262
_cons	1.825578	1.771865	1.03	0.306	-1.69508	5.346236

Model 5-4: Robustness checks

Model 5-4: Robust Check 1.1: Change specification: Exclude fertility Same as Model 5-6

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

		Number of obs =	98
		F(7, 90) =	27.73
		Prob > F =	0.0000
		R-squared =	0.6606
		Root MSE =	1.3011

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.108003	.2895879	3.83	0.000	.5326862	1.68332
giniavni	-.0199399	.017287	-1.15	0.252	-.0542836	.0144039
ethnl	-1.477326	.5616921	-2.63	0.010	-2.593226	-.3614268
musl	-2.232	.3576052	-6.24	0.000	-2.942445	-1.521555
lpopd	-.0848166	.113217	-0.75	0.456	-.3097419	.1401086
urbwdi	.0219593	.0109118	2.01	0.047	.0002811	.0436375
pavg8090	.0491194	.0238947	2.06	0.043	.0016484	.0965904
_cons	-3.374195	2.028423	-1.66	0.100	-7.404012	.6556216

Model 5-4: Robust Check 1.4: Change specification: Include geographical variables

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist popc  
> rgs latcapab, r
```

Linear regression

		Number of obs =	98
		F(11, 86) =	25.39
		Prob > F =	0.0000
		R-squared =	0.7479
		Root MSE =	1.1471

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.5461558	.2197393	2.49	0.015	.1093286	.982983
giniavni	-.003054	.0157415	-0.19	0.847	-.0343472	.0282391
ethnl	-.9327436	.5730099	-1.63	0.107	-2.07185	.2063623
musl	-1.488793	.3869479	-3.85	0.000	-2.25802	-.7195661
fertwdi	-.6001574	.1274452	-4.71	0.000	-.8535101	-.3468046
lpopd	-.136318	.1026641	-1.33	0.188	-.3404075	.0677716
urbwdi	.0197243	.0083185	2.37	0.020	.0031877	.0362608
pavg8090	.0097928	.0216987	0.45	0.653	-.0333427	.0529284
airdist	.0001547	.0000773	2.00	0.049	1.02e-06	.0003084
popcrgs	-.0004551	.0047627	-0.10	0.924	-.009923	.0090127
latcapab	.0135613	.014072	0.96	0.338	-.014413	.0415355
_cons	1.806837	1.758955	1.03	0.307	-1.689849	5.303523

Model 5-4: Robust Check 1.5: Change specification: Include regional dummies

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati ea  
> st sout, r
```

Linear regression

		Number of obs =	98
--	--	-----------------	----

F(12, 85) = 21.58
 Prob > F = 0.0000
 R-squared = 0.7393
 Root MSE = 1.1733

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.7241546	.3217296	2.25	0.027	.0844699	1.363839
giniavni	.0013489	.0176556	0.08	0.939	-.0337551	.0364529
ethnl	-1.094872	.6616397	-1.65	0.102	-2.410389	.2206452
musl	-.900412	.4332057	-2.08	0.041	-1.761741	-.039083
fertwdi	-.5611681	.1247009	-4.50	0.000	-.8091069	-.3132294
lpopd	-.1710444	.1001727	-1.71	0.091	-.3702146	.0281258
urbwdi	.0156391	.0135943	1.15	0.253	-.0113901	.0426683
pavg8090	.0116955	.0283649	0.41	0.681	-.0447015	.0680925
afri	.9088044	.5666596	1.60	0.112	-.2178667	2.035476
lati	.7239105	.7131014	1.02	0.313	-.6939261	2.141747
east	1.240187	.669971	1.85	0.068	-.0918954	2.572268
sout	.4668929	.7747308	0.60	0.548	-1.073479	2.007265
_cons	.6159886	2.619005	0.24	0.815	-4.591296	5.823273

Model 5-4: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf giniav
> nf ethnlf, r
```

Linear regression

	Number of obs = 98				
	F(10, 87) = 27.64				
	Prob > F = 0.0000				
	R-squared = 0.7285				
	Root MSE = 1.1837				

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.712253	.2260812	3.15	0.002	.2628921	1.161614
giniavni	.0024912	.017698	0.14	0.888	-.0326855	.0376679
ethnl	-.8303999	.5512311	-1.51	0.136	-1.926031	.2652316
musl	-1.495727	.3720674	-4.02	0.000	-2.235251	-.7562022
fertwdi	-.5959902	.1257598	-4.74	0.000	-.8459515	-.3460289
lpopd	-.185108	.0955399	-1.94	0.056	-.3750039	.0047879
urbwdi	.014495	.010054	1.44	0.153	-.0054884	.0344784
pavg8090	.0029783	.0247671	0.12	0.905	-.0462491	.0522056
gdphf	(dropped)					
giniavnf	-.1917296	.3381807	-0.57	0.572	-.8639004	.4804412
ethnlf	.145621	.395093	0.37	0.713	-.6396692	.9309112
_cons	1.675586	1.759958	0.95	0.344	-1.822521	5.173693

Model 5-4: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
```

Huber iteration 1: maximum difference in weights = .54488417
 Huber iteration 2: maximum difference in weights = .11336654
 Huber iteration 3: maximum difference in weights = .0209069
 Biweight iteration 4: maximum difference in weights = .16477713
 Biweight iteration 5: maximum difference in weights = .00798088

Robust regression

Number of obs = 98
 F(8, 89) = 27.75
 Prob > F = 0.0000

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.67052	.2828272	2.37	0.020	.1085483 1.232492
giniavni	.0024085	.0168327	0.14	0.887	-.0310378 .0358548
ethnl	-.9514247	.5008219	-1.90	0.061	-1.946547 .0436979
musl	-1.483832	.4137213	-3.59	0.001	-2.305887 -.6617762
fertwdi	-.6087434	.1348435	-4.51	0.000	-.8766746 -.3408121
lpopd	-.2252001	.0976721	-2.31	0.023	-.4192725 -.0311278
urbwdi	.0143169	.0100653	1.42	0.158	-.0056826 .0343163
pavg8090	.0111296	.0252644	0.44	0.661	-.0390703 .0613295
_cons	2.181405	2.227103	0.98	0.330	-2.243801 6.606611

Model 5-4: Robust Check 3.2: Outlier checks: Median regression

```
. qreg mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
Iteration 1: WLS sum of weighted deviations = 87.012833
```

```
Iteration 1: sum of abs. weighted deviations = 87.112652
Iteration 2: sum of abs. weighted deviations = 86.654305
Iteration 3: sum of abs. weighted deviations = 85.683837
Iteration 4: sum of abs. weighted deviations = 85.670854
Iteration 5: sum of abs. weighted deviations = 85.600891
Iteration 6: sum of abs. weighted deviations = 85.496022
Iteration 7: sum of abs. weighted deviations = 85.243714
Iteration 8: sum of abs. weighted deviations = 85.166678
Iteration 9: sum of abs. weighted deviations = 85.120942
Iteration 10: sum of abs. weighted deviations = 85.09844
Iteration 11: sum of abs. weighted deviations = 85.043819
Iteration 12: sum of abs. weighted deviations = 85.030341
Iteration 13: sum of abs. weighted deviations = 84.992735
Iteration 14: sum of abs. weighted deviations = 84.877515
Iteration 15: sum of abs. weighted deviations = 84.877022
```

Median regression Number of obs = 98
 Raw sum of deviations 177.3172 (about 3.2690001)
 Min sum of deviations 84.87702 Pseudo R2 = 0.5213

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.4922551	.3786887	1.30	0.197	-.2601913 1.244702
giniavni	-.0064946	.022205	-0.29	0.771	-.0506154 .0376261
ethnl	-.66971	.6820973	-0.98	0.329	-2.025023 .6856028
musl	-1.346279	.5573507	-2.42	0.018	-2.453723 -.2388356
fertwdi	-.6734124	.174985	-3.85	0.000	-1.021104 -.3257209
lpopd	-.3480465	.1309123	-2.66	0.009	-.6081664 -.0879266
urbwdi	.0194175	.0135562	1.43	0.156	-.0075184 .0463534
pavg8090	.0162519	.0344757	0.47	0.639	-.0522507 .0847544
_cons	4.283272	2.841575	1.51	0.135	-1.362876 9.92942

Model 5-4: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry ~= "
> Singapore" & ctry ~= "Swaziland", r
```

Linear regression

Number of obs = 96
 F(8, 87) = 33.90
 Prob > F = 0.0000
 R-squared = 0.7393
 Root MSE = 1.1496

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.6522742	.215104	3.03	0.003	.2247318	1.079817
giniavni	-.0046835	.0169654	-0.28	0.783	-.0384041	.0290372
ethnl	-.5448182	.553061	-0.99	0.327	-1.644087	.5544504
musl	-1.537448	.3612399	-4.26	0.000	-2.255452	-.8194451
fertwdi	-.5909335	.1118735	-5.28	0.000	-.8132942	-.3685729
lpopd	-.1377571	.0967473	-1.42	0.158	-.3300528	.0545387
urbwdi	.0212842	.0090265	2.36	0.021	.003343	.0392255
pavg8090	.0120024	.0225783	0.53	0.596	-.0328743	.0568792
_cons	1.839797	1.629092	1.13	0.262	-1.3982	5.077793

Model 5-4: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
```

Linear regression

Number of obs = 101
 F(8, 92) = 34.14
 Prob > F = 0.0000
 R-squared = 0.7322
 Root MSE = 1.1706

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.6706266	.2300962	2.91	0.004	.2136357	1.127618
giniavni	.0001835	.0162633	0.01	0.991	-.0321169	.0324838
ethnl	-.8711456	.5047461	-1.73	0.088	-1.873615	.1313238
musl	-1.471773	.3521521	-4.18	0.000	-2.171177	-.7723682
fertwdi	-.6160518	.106251	-5.80	0.000	-.8270756	-.4050281
lpopd	-.1812358	.0912149	-1.99	0.050	-.3623965	-.000075
urbwdi	.0128889	.0092819	1.39	0.168	-.0055457	.0313236
pol90	.0150253	.0217895	0.69	0.492	-.0282505	.0583011
_cons	2.249285	1.7644	1.27	0.206	-1.254966	5.753535

Model 5-4: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
```

Linear regression

Number of obs = 104
 F(8, 95) = 36.85
 Prob > F = 0.0000
 R-squared = 0.7373
 Root MSE = 1.1567

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.7169232	.228715	3.13	0.002	.2628665	1.17098

giniavni	.0038997	.0153282	0.25	0.800	-.0265306	.0343301
ethnl	-.8717592	.4856402	-1.80	0.076	-1.835877	.0923585
musl	-1.500404	.3520462	-4.26	0.000	-2.199304	-.8015036
fertwdi	-.6521338	.1076906	-6.06	0.000	-.8659267	-.438341
lpopd	-.1859195	.0901685	-2.06	0.042	-.3649266	-.0069123
urbwdi	.0109755	.0081059	1.35	0.179	-.0051167	.0270676
free8090	.0043199	.0450859	0.10	0.924	-.0851869	.0938267
_cons	1.945207	1.936673	1.00	0.318	-1.899575	5.789989

Model 5-4: Robust Check 6.7: IndV: Vary source: pavg8090 to free90

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
```

Linear regression

		Number of obs = 104
	F(8, 95) = 37.39	
	Prob > F = 0.0000	
	R-squared = 0.7374	
	Root MSE = 1.1566	

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	.704944	.2279783	3.09	0.003	.2523498	1.157538
giniavni	.0025885	.0157597	0.16	0.870	-.0286983	.0338754
ethnl	-.8817587	.4865216	-1.81	0.073	-1.847626	.0841087
musl	-1.498328	.3484655	-4.30	0.000	-2.19012	-.8065368
fertwdi	-.6413487	.1118412	-5.73	0.000	-.8633816	-.4193159
lpopd	-.1890662	.0873406	-2.16	0.033	-.3624591	-.0156732
urbwdi	.0111454	.0080253	1.39	0.168	-.0047869	.0270777
free90	-.0079757	.0445046	-0.18	0.858	-.0963284	.080377
_cons	2.169306	1.907534	1.14	0.258	-1.617627	5.956238

Model 5-4: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress mysfx lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

	Number of obs = 97
	F(8, 88) = 33.09
	Prob > F = 0.0000
	R-squared = 0.7338
	Root MSE = 1.16

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	.8730542	.2504588	3.49	0.001	.3753199	1.370789
giniavni	-.0004689	.0161604	-0.03	0.977	-.0325842	.0316464
ethnl	-.8171085	.5455999	-1.50	0.138	-1.901374	.2671567
musl	-1.448734	.3617314	-4.00	0.000	-2.167599	-.7298688
fertwdi	-.5717816	.116039	-4.93	0.000	-.8023846	-.3411785
lpopd	-.1831335	.0985435	-1.86	0.066	-.3789679	.0127009
urbwdi	.0113261	.0089227	1.27	0.208	-.0064058	.029058
pavg8090	-.0041016	.0227142	-0.18	0.857	-.0492414	.0410381
_cons	.5111319	2.083433	0.25	0.807	-3.629254	4.651518

Model 5-4: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress mysfx lgdpmax giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
```

Linear regression

Number of obs =	97
F(9, 87) =	29.74
Prob > F =	0.0000
R-squared =	0.7355
Root MSE =	1.163

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmax	.8332169	.2460923	3.39	0.001	.3440818	1.322352
giniavni	.0000779	.0163416	0.00	0.996	-.0324029	.0325587
ethnl	-.8758733	.5222735	-1.68	0.097	-1.913948	.1622018
musl	-1.452814	.3600251	-4.04	0.000	-2.168403	-.7372252
fertwdi	-.5480941	.1215235	-4.51	0.000	-.7896353	-.3065529
lpopd	-.1629355	.106017	-1.54	0.128	-.3736558	.0477848
urbwdi	.013502	.0091008	1.48	0.142	-.004587	.0315909
pavg8090	-.0027602	.0232804	-0.12	0.906	-.0490325	.0435122
gdpmf	.5609687	.9951019	0.56	0.574	-1.416904	2.538842
_cons	.5193461	2.133199	0.24	0.808	-3.720618	4.759311

Model 5-4: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress mysfx lgdpmax giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	98
F(8, 89) =	29.80
Prob > F =	0.0000
R-squared =	0.7196
Root MSE =	1.1893

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmax	.6870147	.2325497	2.95	0.004	.2249434	1.149086
giniavni	.0007663	.0170578	0.04	0.964	-.0331273	.0346598
ethnannx	-.3983736	.5589507	-0.71	0.478	-1.508997	.7122495
musl	-1.401479	.3740002	-3.75	0.000	-2.14461	-.6583487
fertwdi	-.6565728	.1123914	-5.84	0.000	-.8798921	-.4332536
lpopd	-.1898555	.1005567	-1.89	0.062	-.3896595	.0099484
urbwdi	.0164416	.0094629	1.74	0.086	-.0023609	.035244
pavg8090	.0047232	.0229243	0.21	0.837	-.040827	.0502733
_cons	2.0061	1.922897	1.04	0.300	-1.814656	5.826855

Model 5-4: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress mysfx lgdpmax giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnannf,  
> r
```

Linear regression

Number of obs =	98
F(9, 88) =	26.24
Prob > F =	0.0000
R-squared =	0.7198
Root MSE =	1.1955

mysfx	Coef.	Std. Err.	t	P> t	Robust [95% Conf. Interval]	
lgdph	.7104361	.2614345	2.72	0.008	.19089	1.229982
giniavni	.001683	.017494	0.10	0.924	-.0330827	.0364486
ethnannx	-.386082	.5614334	-0.69	0.493	-1.501813	.7296489
musl	-1.407969	.3758028	-3.75	0.000	-2.154798	-.6611402
fertwdi	-.6502437	.114883	-5.66	0.000	-.8785495	-.4219379
lpopd	-.1865435	.1015141	-1.84	0.069	-.3882814	.0151944
urbwdi	.0158268	.0100244	1.58	0.118	-.0040946	.0357482
pavg8090	.0055922	.0231031	0.24	0.809	-.0403204	.0515048
ethnannf	.1770786	.5092398	0.35	0.729	-.8349285	1.189086
_cons	1.759686	2.212177	0.80	0.428	-2.63655	6.155922

Table 2.5, Model 5-5: Short-Term Democracy and Female Schooling, Excl. Fertility**Model 5-5: Bivariate correlations among the independent variables**

```
. correlate mysfx lgdph giniavni ethnln musl fertwdi lpopd urbwdi pavg8090  
(obs=98)
```

	mysfx	lgdph	giniavni	ethnln	musl	fertwdi	lpopd
mysfx	1.0000						
lgdph	0.6710	1.0000					
giniavni	0.0236	-0.0349	1.0000				
ethnln	-0.4677	-0.5203	0.2094	1.0000			
musl	-0.1369	0.3155	-0.3059	-0.3021	1.0000		
fertwdi	-0.7711	-0.6401	0.1598	0.4848	0.0859	1.0000	
lpopd	0.1423	0.1550	-0.3009	-0.1614	-0.0893	-0.3794	1.0000
urbwdi	0.6205	0.8263	-0.0281	-0.5030	0.3134	-0.5576	0.0310
pavg8090	0.4104	0.2748	0.2211	-0.0655	-0.2853	-0.4745	0.1758
		urbwdi	pavg8090				
urbwdi		1.0000					
pavg8090		0.1718	1.0000				

Model 5-5: Female schooling predicted by 6 baseline variables excluding fertility

```
. regress mysfx lgdph giniavni ethnln musl lpopd urbwdi, r
```

Linear regression

Number of obs = 105
 F(6, 98) = 34.11
 Prob > F = 0.0000
 R-squared = 0.6652
 Root MSE = 1.3169

mysfx	Coef.	Std. Err.	t	P> t	Robust [95% Conf. Interval]	
lgdph	1.290357	.2726067	4.73	0.000	.749378	1.831336
giniavni	-.0130063	.0165241	-0.79	0.433	-.0457979	.0197853
ethnln	-1.395689	.5300826	-2.63	0.010	-2.44762	-.343757
musl	-2.542096	.3397031	-7.48	0.000	-3.216226	-1.867967
lpopd	-.0428688	.1060032	-0.40	0.687	-.2532286	.167491
urbwdi	.020806	.0092118	2.26	0.026	.0025255	.0390866
_cons	-5.292901	1.818562	-2.91	0.004	-8.901778	-1.684023

Model 5-5: Female schooling pred. by 6 baseline var. (excl. fert.) and short-term democracy
 (same as Model 5-4 Robustness check 1.1)

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	98
F(7, 90) =	27.73
Prob > F =	0.0000
R-squared =	0.6606
Root MSE =	1.3011

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.108003	.2895879	3.83	0.000	.5326862	1.68332
giniavni	-.0199399	.017287	-1.15	0.252	-.0542836	.0144039
ethnl	-1.477326	.5616921	-2.63	0.010	-2.593226	-.3614268
musl	-2.232	.3576052	-6.24	0.000	-2.942445	-1.521555
lpopd	-.0848166	.113217	-0.75	0.456	-.3097419	.1401086
urbwdi	.0219593	.0109118	2.01	0.047	.0002811	.0436375
pavg8090	.0491194	.0238947	2.06	0.043	.0016484	.0965904
_cons	-3.374195	2.028423	-1.66	0.100	-7.404012	.6556216

Model 5-5: Means and SDs of mean years of female schooling and short-term democracy

```
. summarize mysfx
```

Variable	Obs	Mean	Std. Dev.	Min	Max
mysfx	105	3.64511	2.209273	.1377345	9.045

```
. summarize pavg8090
```

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg8090	98	-3.05551	6.120606	-10	10

Model 5-5: How much would female schooling rise if short-term democracy rose 1 SD?

```
. estsimp regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	98
F(7, 90) =	27.73
Prob > F =	0.0000
R-squared =	0.6606
Root MSE =	1.3011

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.108003	.2895879	3.83	0.000	.5326862	1.68332
giniavni	-.0199399	.017287	-1.15	0.252	-.0542836	.0144039
ethnl	-1.477326	.5616921	-2.63	0.010	-2.593226	-.3614268
musl	-2.232	.3576052	-6.24	0.000	-2.942445	-1.521555
lpopd	-.0848166	.113217	-0.75	0.456	-.3097419	.1401086
urbwdi	.0219593	.0109118	2.01	0.047	.0002811	.0436375
pavg8090	.0491194	.0238947	2.06	0.043	.0016484	.0965904

```

_cons | -3.374195 2.028423 -1.66 0.100 -7.404012 .6556216
-----
```

Simulating main parameters. Please wait....
% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

```
. setx mean
. simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)
```

First Difference: pavg8090 -3.05551 3.065096

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(mysfx)	.3015735	.1456323	.0089934 .5791454

Model 5-5: Robustness checks

Model 5-5: Robust Check 1.1: Change specification: Include fertility (Same as Model 5-4)

```
. regress mysfx lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	98
F(8, 89) =	31.62
Prob > F =	0.0000
R-squared =	0.7274
Root MSE =	1.1726

mysfx	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.6999611	.2310969	3.03	0.003	.2407765 1.159146
giniavni	.0023205	.0165747	0.14	0.889	-.0306132 .0352541
ethnl	-.8432276	.5396323	-1.56	0.122	-1.915466 .2290103
musl	-1.49712	.364235	-4.11	0.000	-2.220847 -.773393
fertwdi	-.6063477	.1127476	-5.38	0.000	-.8303748 -.3823206
lpopd	-.1847869	.0954586	-1.94	0.056	-.3744611 .0048872
urbwdi	.0140488	.0093757	1.50	0.138	-.0045806 .0326781
pavg8090	.0073595	.0222281	0.33	0.741	-.0368072 .0515262
_cons	1.825578	1.771865	1.03	0.306	-1.69508 5.346236

Model 5-5: Robust Check 1.4: Change specification: Include geographical variables

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 airdist popcrgs latc
> apab, r
```

Linear regression

Number of obs =	98
F(10, 87) =	26.91
Prob > F =	0.0000
R-squared =	0.6925
Root MSE =	1.2596

| Robust

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.8769817	.2857632	3.07	0.003	.3089965 1.444967
giniavni	-.0206016	.0159977	-1.29	0.201	-.0523988 .0111956
ethnl	-1.228304	.6012854	-2.04	0.044	-2.423424 -.0331844
musl	-2.390483	.3617013	-6.61	0.000	-3.109404 -1.671563
lpopd	-.0676979	.1181834	-0.57	0.568	-.3026002 .1672045
urbwdi	.0272006	.0101566	2.68	0.009	.0070134 .0473879
pavg8090	.049026	.022496	2.18	0.032	.0043129 .0937392
airdist	.0001339	.0000797	1.68	0.097	-.0000245 .0002924
popcrgs	.003906	.0054049	0.72	0.472	-.0068368 .0146488
latcapab	.0341545	.0139047	2.46	0.016	.0065174 .0617916
_cons	-3.443309	1.804483	-1.91	0.060	-7.029915 .1432963

Model 5-5: Robust Check 1.5: Change specification: Include regional dummies

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 afri lati east sout,
> r
```

Linear regression

Number of obs =	98
F(11, 86) =	19.14
Prob > F =	0.0000
R-squared =	0.6917
Root MSE =	1.2686

mysfx	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	.9896531	.362711	2.73	0.008	.2686076 1.710699
giniavni	-.0109361	.019278	-0.57	0.572	-.0492596 .0273874
ethnl	-1.445285	.6868105	-2.10	0.038	-2.810619 -.0799509
musl	-1.273453	.3864692	-3.30	0.001	-2.041728 -.5051774
lpopd	-.0865498	.1112118	-0.78	0.439	-.3076315 .1345319
urbwdi	.0240372	.0150407	1.60	0.114	-.0058627 .053937
pavg8090	.0434782	.0309945	1.40	0.164	-.0181368 .1050931
afri	.7846867	.5453357	1.44	0.154	-.2994048 1.868778
lati	1.045201	.749694	1.39	0.167	-.4451415 2.535543
east	1.892724	.6223373	3.04	0.003	.6555586 3.12989
sout	.7496327	.7008951	1.07	0.288	-.6437007 2.142966
_cons	-4.042612	2.662443	-1.52	0.133	-9.335374 1.250149

Model 5-5: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 gdphf giniavnf ethnl
> f, r
```

Linear regression

Number of obs =	98
F(9, 88) =	23.65
Prob > F =	0.0000
R-squared =	0.6680
Root MSE =	1.3013

mysfx	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.128101	.2816234	4.01	0.000	.5684338 1.687768
giniavni	-.0225247	.0175444	-1.28	0.203	-.0573904 .012341
ethnl	-1.476029	.5559549	-2.65	0.009	-2.580873 -.3711856

musl	-2.208035	.3530838	-6.25	0.000	-2.909715	-1.506355
lpopd	-.0960163	.1097905	-0.87	0.384	-.3142019	.1221693
urbwdi	.0235758	.0113065	2.09	0.040	.0011065	.0460451
pavg8090	.0351858	.0282684	1.24	0.217	-.0209917	.0913632
gdphf (dropped)						
giniavnf	-.4424846	.3663341	-1.21	0.230	-1.170497	.2855274
ethnlf	-.2025234	.6824781	-0.30	0.767	-1.558805	1.153758
_cons	-3.368093	2.046245	-1.65	0.103	-7.434575	.698388

Model 5-5: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090

Huber iteration 1: maximum difference in weights = .51489811
Huber iteration 2: maximum difference in weights = .10457651
Huber iteration 3: maximum difference in weights = .01155807
Biweight iteration 4: maximum difference in weights = .14832631
Biweight iteration 5: maximum difference in weights = .02347507
Biweight iteration 6: maximum difference in weights = .00921083

Robust regression                               Number of obs =      98
                                                F(  7,    90) =   22.13
                                                Prob > F      =  0.0000
```

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.083629	.3025007	3.58	0.001	.4826588 1.6846
giniavni	-.0228814	.0181679	-1.26	0.211	-.0589752 .0132123
ethnl	-1.544663	.5426771	-2.85	0.005	-2.622786 -.4665399
musl	-2.153231	.4292036	-5.02	0.000	-3.005919 -1.300543
lpopd	-.1182183	.107402	-1.10	0.274	-.3315912 .0951545
urbwdi	.0219068	.0111914	1.96	0.053	-.0003268 .0441404
pavg8090	.0522821	.0265328	1.97	0.052	-.0004299 .104994
_cons	-2.967873	2.149403	-1.38	0.171	-7.238036 1.30229

Model 5-5: Robust Check 3.2: Outlier checks: Median regression

```
. qreg mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090
Iteration 1: WLS sum of weighted deviations = 99.540985

Iteration 1: sum of abs. weighted deviations = 98.306809
Iteration 2: sum of abs. weighted deviations = 98.021706
Iteration 3: sum of abs. weighted deviations = 97.97369
Iteration 4: sum of abs. weighted deviations = 97.452403
Iteration 5: sum of abs. weighted deviations = 96.735303
Iteration 6: sum of abs. weighted deviations = 95.940417
Iteration 7: sum of abs. weighted deviations = 95.885536
```

```
Median regression                               Number of obs =      98
                                                Raw sum of deviations 177.3172 (about 3.2690001)
                                                Min sum of deviations 95.88554          Pseudo R2      =  0.4592
```

mysfx	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.168485	.3665991	3.19	0.002	.4401717 1.896798
giniavni	-.0361891	.0219021	-1.65	0.102	-.0797013 .0073232
ethnl	-.990245	.6685448	-1.48	0.142	-2.318426 .3379359
musl	-2.079038	.5262581	-3.95	0.000	-3.124542 -1.033535

lpopd	-.2175916	.1256833	-1.73	0.087	-.4672835	.0321003
urbwdi	.030534	.0137293	2.22	0.029	.0032584	.0578095
pavg8090	.0453114	.0312461	1.45	0.150	-.0167643	.1073872
_cons	-3.38138	2.537244	-1.33	0.186	-8.422058	1.659298

Model 5-5: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry ~= "Singapore"
> e" & ctry ~= "Oman", r
```

Linear regression

Number of obs = 96
 F(7, 88) = 30.39
 Prob > F = 0.0000
 R-squared = 0.6794
 Root MSE = 1.2712

mysfx	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.262706	.2832687	4.46	0.000	.6997686 1.825642
giniavni	-.0207982	.0170372	-1.22	0.225	-.054656 .0130596
ethnl	-1.382581	.5595122	-2.47	0.015	-2.494494 -.2706681
musl	-2.262868	.3545648	-6.38	0.000	-2.967491 -1.558245
lpopd	-.0570424	.1150643	-0.50	0.621	-.2857084 .1716237
urbwdi	.0218088	.010547	2.07	0.042	.0008487 .0427688
pavg8090	.037762	.0239915	1.57	0.119	-.0099161 .08544
_cons	-4.619028	1.982886	-2.33	0.022	-8.559597 -.6784595

Model 5-5: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi pol90, r
```

Linear regression

Number of obs = 101
 F(7, 93) = 30.38
 Prob > F = 0.0000
 R-squared = 0.6617
 Root MSE = 1.3085

mysfx	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	1.108955	.2864676	3.87	0.000	.5400872 1.677823
giniavni	-.0222544	.017276	-1.29	0.201	-.0565611 .0120522
ethnl	-1.34289	.5644313	-2.38	0.019	-2.463739 -.2220411
musl	-2.265721	.3390606	-6.68	0.000	-2.939028 -1.592413
lpopd	-.0731982	.1059555	-0.69	0.491	-.2836049 .1372085
urbwdi	.021392	.0109121	1.96	0.053	-.0002772 .0430612
pol90	.0524364	.0225032	2.33	0.022	.0077494 .0971234
_cons	-3.411517	1.955161	-1.74	0.084	-7.29408 .4710462

Model 5-5: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi free8090, r
```

Linear regression

Number of obs = 104
 F(7, 96) = 29.87

Prob > F = 0.0000
 R-squared = 0.6581
 Root MSE = 1.3126

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.135936	.2863982	3.97	0.000	.5674401	1.704432
giniavni	-.0192541	.0169019	-1.14	0.257	-.0528042	.0142959
ethnl	-1.431768	.5331903	-2.69	0.009	-2.490143	-.373394
musl	-2.397527	.3470893	-6.91	0.000	-3.086494	-1.70856
lpopd	-.0869013	.1112685	-0.78	0.437	-.3077675	.1339649
urbwdi	.0212664	.0093321	2.28	0.025	.0027423	.0397906
free8090	-.0797871	.0504838	-1.58	0.117	-.1799967	.0204224
_cons	-2.938784	2.31953	-1.27	0.208	-7.543014	1.665447

Model 5-5: Robust Check 6.7: IndV: Vary source: pavg8090 to free90

```
. regress mysfx lgdph giniavni ethnl musl lpopd urbwdi free90, r
```

Linear regression

Number of obs = 104
 F(7, 96) = 32.68
 Prob > F = 0.0000
 R-squared = 0.6592
 Root MSE = 1.3106

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.166287	.2984094	3.91	0.000	.5739487	1.758625
giniavni	-.0200686	.0171864	-1.17	0.246	-.0541832	.0140461
ethnl	-1.415902	.5386589	-2.63	0.010	-2.485132	-.3466726
musl	-2.433182	.3406739	-7.14	0.000	-3.109415	-1.75695
lpopd	-.0885398	.1072027	-0.83	0.411	-.3013354	.1242558
urbwdi	.0199833	.0092615	2.16	0.033	.0015994	.0383672
free90	-.0722257	.0468262	-1.54	0.126	-.165175	.0207237
_cons	-3.157103	2.428752	-1.30	0.197	-7.978138	1.663932

Model 5-5: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 97
 F(7, 89) = 28.56
 Prob > F = 0.0000
 R-squared = 0.6755
 Root MSE = 1.2736

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	1.311258	.2952765	4.44	0.000	.7245504	1.897967
giniavni	-.0216292	.0170439	-1.27	0.208	-.055495	.0122366
ethnl	-1.377769	.5699185	-2.42	0.018	-2.510185	-.2453529
musl	-2.082758	.3516605	-5.92	0.000	-2.7815	-1.384016
lpopd	-.0863523	.1164491	-0.74	0.460	-.3177342	.1450296
urbwdi	.0181101	.0102953	1.76	0.082	-.0023465	.0385666

pavg8090	.0290092	.0259013	1.12	0.266	-.0224562	.0804745
_cons	-4.827634	2.207658	-2.19	0.031	-9.214203	-.4410657

Model 5-5: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress mysfx lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090 gdpmf, r
```

Linear regression

Number of obs = 97
 F(8, 88) = 25.24
 Prob > F = 0.0000
 R-squared = 0.6849
 Root MSE = 1.2621

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	1.178479	.2921165	4.03	0.000	.5979587	1.758999
giniavni	-.0183701	.0172541	-1.06	0.290	-.052659	.0159189
ethnl	-1.459139	.5406344	-2.70	0.008	-2.533536	-.3847413
musl	-2.03196	.3493424	-5.82	0.000	-2.726204	-1.337715
lpopd	-.049286	.1195402	-0.41	0.681	-.286847	.1882749
urbwdi	.0224486	.0106693	2.10	0.038	.0012455	.0436517
pavg8090	.02894	.0254812	1.14	0.259	-.0216986	.0795785
gdpmf	1.284426	1.095118	1.17	0.244	-.8918919	3.460744
_cons	-4.302419	2.221055	-1.94	0.056	-8.716299	.1114614

Model 5-5: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress mysfx lgdph giniavni ethnann musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 93
 F(7, 85) = 24.25
 Prob > F = 0.0000
 R-squared = 0.6329
 Root MSE = 1.3423

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.285469	.3073321	4.18	0.000	.6744106	1.896528
giniavni	-.0197815	.0199042	-0.99	0.323	-.0593563	.0197933
ethnann	-.6789114	.6088232	-1.12	0.268	-1.889415	.5315921
musl	-1.989388	.4177191	-4.76	0.000	-2.819926	-1.158851
lpopd	-.1199672	.1265893	-0.95	0.346	-.3716606	.1317262
urbwdi	.0223145	.0123316	1.81	0.074	-.002204	.046833
pavg8090	.0571938	.0245133	2.33	0.022	.0084549	.1059327
_cons	-4.891496	2.298496	-2.13	0.036	-9.461522	-.3214704

Model 5-5: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress mysfx lgdph giniavni ethnann musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 93
 F(7, 85) = 24.25
 Prob > F = 0.0000
 R-squared = 0.6329

Root MSE = 1.3423

mysfx	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	1.285469	.3073321	4.18	0.000	.6744106	1.896528
giniavni	-.0197815	.0199042	-0.99	0.323	-.0593563	.0197933
ethnann	-.6789114	.6088232	-1.12	0.268	-1.889415	.5315921
musl	-1.989388	.4177191	-4.76	0.000	-2.819926	-1.158851
lpopd	-.1199672	.1265893	-0.95	0.346	-.3716606	.1317262
urbwdi	.0223145	.0123316	1.81	0.074	-.002204	.046833
pavg8090	.0571938	.0245133	2.33	0.022	.0084549	.1059327
_cons	-4.891496	2.298496	-2.13	0.036	-9.461522	-.3214704

Table 2.5, Model 5-6: Short-Term Democracy and Family Planning, Excl. Fertility

Model 5-6: Bivariate correlations among independent variables

```
. correlate rtot lgdph giniavni ethnln musl fertwdi lpopd urbwdi pavg8090
(obs=84)
```

	rtot	lgdph	giniavni	ethnln	musl	fertwdi	lpopd
rtot	1.0000						
lgdph	0.1480	1.0000					
giniavni	-0.0800	-0.0072	1.0000				
ethnln	-0.1574	-0.5424	0.2174	1.0000			
musl	-0.2613	0.3318	-0.3085	-0.2644	1.0000		
fertwdi	-0.5864	-0.6209	0.1348	0.5209	0.0701	1.0000	
lpopd	0.4740	0.1486	-0.4034	-0.1876	-0.1198	-0.3987	1.0000
urbwdi	0.0099	0.8278	0.0075	-0.5413	0.3222	-0.5544	0.0361
pavg8090	0.4190	0.3129	0.2506	-0.1253	-0.2744	-0.4823	0.1419
		urbwdi	pavg8090				
urbwdi		1.0000					
pavg8090		0.2145	1.0000				

Model 5-6: Family planning effort predicted by six baseline variables excluding fertility

```
. regress rtot lgdph giniavni ethnln musl lpopd urbwdi, r
```

Linear regression

Number of obs = 88
F(6, 81) = 7.87
Prob > F = 0.0000
R-squared = 0.3014
Root MSE = 21.895

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	8.625587	5.000478	1.72	0.088	-1.323795	18.57497
giniavni	.0952713	.3219923	0.30	0.768	-.5453923	.735935
ethnln	-5.887607	8.551977	-0.69	0.493	-22.90336	11.12814
musl	-16.76848	8.490191	-1.98	0.052	-33.66129	.1243384
lpopd	7.168345	2.222191	3.23	0.002	2.746883	11.58981
urbwdi	-.2102159	.1816032	-1.16	0.250	-.5715492	.1511174
_cons	-28.16287	29.7166	-0.95	0.346	-87.28958	30.96385

Model 5-6: Family planning effort predicted by 6 baseline var and short-term democracy

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	84
F(7, 76) =	12.40
Prob > F =	0.0000
R-squared =	0.3860
Root MSE =	20.608

rtot	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	4.900089	5.067059	0.97	0.337	-5.191834	14.99201
giniavni	-.1016534	.319615	-0.32	0.751	-.7382218	.534915
ethnl	-9.078219	7.809371	-1.16	0.249	-24.63193	6.475492
musl	-10.37814	8.169842	-1.27	0.208	-26.6498	5.893508
lpopd	6.348603	2.051138	3.10	0.003	2.263406	10.4338
urbwdi	-.2461498	.1918586	-1.28	0.203	-.6282692	.1359697
pavg8090	1.276579	.4033969	3.16	0.002	.4731445	2.080014
_cons	17.69767	32.2722	0.55	0.585	-46.57798	81.97332

Model 5-6: Means and SDs of family planning effort and short-term democracy

```
. summarize rtot
```

Variable	Obs	Mean	Std. Dev.	Min	Max
rtot	88	53.85	25.27719	0	104

```
. summarize pavg8090
```

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg8090	98	-3.05551	6.120606	-10	10

Model 5-6: How much would family planning rise if short-term democracy rose 1 SD?

```
. estsimp regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	84
F(7, 76) =	12.40
Prob > F =	0.0000
R-squared =	0.3860
Root MSE =	20.608

rtot	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	4.900089	5.067059	0.97	0.337	-5.191834	14.99201
giniavni	-.1016534	.319615	-0.32	0.751	-.7382218	.534915
ethnl	-9.078219	7.809371	-1.16	0.249	-24.63193	6.475492
musl	-10.37814	8.169842	-1.27	0.208	-26.6498	5.893508
lpopd	6.348603	2.051138	3.10	0.003	2.263406	10.4338
urbwdi	-.2461498	.1918586	-1.28	0.203	-.6282692	.1359697
pavg8090	1.276579	.4033969	3.16	0.002	.4731445	2.080014

_cons	17.69767	32.2722	0.55	0.585	-46.57798	81.97332
-------	----------	---------	------	-------	-----------	----------

Simulating main parameters. Please wait....
% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

. setx mean
. simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)

First Difference: pavg8090 -3.05551 3.065096

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(rtот)	7.88511	2.416456	2.89913 12.73159

Model 5-6: Robustness checks

Model 5-6: Robust Check 1.1: Change specification: Include fertility

. regress rtot lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r

Linear regression

Number of obs =	84
F(8, 75) =	22.83
Prob > F =	0.0000
R-squared =	0.5434
Root MSE =	17.889

rtot	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-1.221856	4.614111	-0.26	0.792	-10.41364 7.969924
giniavni	.2061779	.285537	0.72	0.472	-.362641 .7749968
ethnl	2.155171	6.232105	0.35	0.730	-10.25982 14.57016
musl	.7089324	6.97226	0.10	0.919	-13.18052 14.59839
fertwdi	-10.28262	2.06473	-4.98	0.000	-14.39577 -6.169469
lpopd	4.29801	1.733953	2.48	0.015	.8437996 7.752221
urbwdi	-.3929787	.1511975	-2.60	0.011	-.6941795 -.0917778
pavg8090	.5643264	.4265672	1.32	0.190	-.2854391 1.414092
_cons	104.6731	35.17814	2.98	0.004	34.59468 174.7516

Model 5-6: Robust Check 1.2: Change specification: Include mean years female schooling

. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 mysfx, r

Linear regression

Number of obs =	84
F(8, 75) =	14.11
Prob > F =	0.0000
R-squared =	0.4288
Root MSE =	20.009

rtot	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]

lgdph	1.07615	4.808437	0.22	0.824	-8.502747	10.65505
giniavni	-.0208722	.318923	-0.07	0.948	-.6561994	.614455
ethnl	-3.741909	7.863782	-0.48	0.636	-19.40737	11.92355
musl	-1.616265	8.244025	-0.20	0.845	-18.0392	14.80667
lpopd	6.673852	1.930185	3.46	0.001	2.828726	10.51898
urbwdi	-.3739554	.1851653	-2.02	0.047	-.7428235	-.0050873
pavg8090	1.059006	.3944913	2.68	0.009	.2731393	1.844873
mysfx	4.168147	1.425285	2.92	0.005	1.328834	7.00746
_cons	27.92589	30.66813	0.91	0.365	-33.16816	89.01993

Model 5-6: Robust Check 1.3: Change specification: Include female literacy

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 litfewdi, r
```

Linear regression

					Number of obs =	84
					F(8, 75) =	12.22
					Prob > F =	0.0000
					R-squared =	0.4038
					Root MSE =	20.443

rtot	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	2.456164	5.254218	0.47	0.642	-8.010776 12.9231
giniavni	-.0894832	.3099967	-0.29	0.774	-.7070283 .5280619
ethnl	-4.131233	8.409298	-0.49	0.625	-20.88341 12.62095
musl	-4.134177	8.803175	-0.47	0.640	-21.671 13.40265
lpopd	6.486839	2.00611	3.23	0.002	2.490463 10.48321
urbwdi	-.2983126	.1844826	-1.62	0.110	-.6658209 .0691956
pavg8090	1.121392	.424913	2.64	0.010	.2749217 1.967862
litfewdi	.2028678	.1259208	1.61	0.111	-.0479793 .453715
_cons	22.38911	31.61419	0.71	0.481	-40.58959 85.36781

Model 5-6: Robust Check 1.4: Change specification: Include geographical variables

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 airdist popcrgs latca
> pab, r
```

Linear regression

					Number of obs =	84
					F(10, 73) =	8.98
					Prob > F =	0.0000
					R-squared =	0.4346
					Root MSE =	20.178

rtot	Coef.	Robust			
		Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.698705	5.237613	1.09	0.280	-4.739844 16.13725
giniavni	-.0543743	.3126661	-0.17	0.862	-.6775169 .5687683
ethnl	1.489304	8.140458	0.18	0.855	-14.73461 17.71321
musl	-17.90009	8.145492	-2.20	0.031	-34.13403 -1.666148
lpopd	4.904825	2.155795	2.28	0.026	.6083315 9.201319
urbwdi	-.2969647	.1983141	-1.50	0.139	-.6922041 .0982748
pavg8090	1.31831	.4164489	3.17	0.002	.4883285 2.148292
airdist	-.0022918	.0011925	-1.92	0.059	-.0046684 .0000847
popcrgs	.0600824	.0868235	0.69	0.491	-.1129565 .2331214
latcapab	.4182402	.2173049	1.92	0.058	-.0148479 .8513284
_cons	15.61034	30.61688	0.51	0.612	-45.40901 76.62969

Model 5-6: Robust Check 1.5: Change specification: Include regional dummies

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 afri lati east sout,
> r
```

Linear regression

Number of obs =	84
F(11, 72) =	15.16
Prob > F =	0.0000
R-squared =	0.3952
Root MSE =	21.015

rtot	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.053272	6.083149	0.83	0.409	-7.073263 17.17981
giniavni	-.0331412	.3431751	-0.10	0.923	-.7172482 .6509658
ethnl	-6.670186	10.65399	-0.63	0.533	-27.90853 14.56816
musl	-5.880357	5.730816	-1.03	0.308	-17.30453 5.543817
lpopd	5.995274	2.271226	2.64	0.010	1.467667 10.52288
urbwdi	-.2464515	.2085358	-1.18	0.241	-.66216 .169257
pavg8090	1.079127	.536426	2.01	0.048	.0097811 2.148472
afri	2.915093	10.66673	0.27	0.785	-18.34864 24.17883
lati	7.934906	11.5111	0.69	0.493	-15.01206 30.88187
east	8.046995	11.65863	0.69	0.492	-15.19406 31.28805
sout	11.91171	11.07307	1.08	0.286	-10.16206 33.98548
_cons	7.507818	44.78932	0.17	0.867	-81.77805 96.79369

Model 5-6: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 gdphf giniavnf ethnlf
> , r
```

Linear regression

Number of obs =	84
F(9, 74) =	12.59
Prob > F =	0.0000
R-squared =	0.4872
Root MSE =	19.087

rtot	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.668227	4.567991	1.46	0.149	-2.433693 15.77015
giniavni	-.2016574	.3434199	-0.59	0.559	-.8859364 .4826217
ethnl	-12.41902	8.026661	-1.55	0.126	-28.41249 3.574454
musl	-12.69634	7.554171	-1.68	0.097	-27.74835 2.355673
lpopd	5.880314	2.077543	2.83	0.006	1.740719 10.01991
urbwdi	-.1828945	.1976227	-0.93	0.358	-.5766662 .2108773
pavg8090	.5302944	.434939	1.22	0.227	-.3363404 1.396929
gdphf	(dropped)				
giniavnf	-24.87322	6.80534	-3.65	0.000	-38.43316 -11.31329
ethnlf	-.6547976	10.44159	-0.06	0.950	-21.46011 20.15052
_cons	11.64302	31.89822	0.37	0.716	-51.91557 75.20161

Model 5-6: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090

    Huber iteration 1: maximum difference in weights = .49965157
    Huber iteration 2: maximum difference in weights = .03750808
Biweight iteration 3: maximum difference in weights = .15918678
Biweight iteration 4: maximum difference in weights = .0176741
Biweight iteration 5: maximum difference in weights = .00685786

Robust regression                                         Number of obs =      84
                                                               F( 7,    76) =      5.00
                                                               Prob > F = 0.0001

-----+
rtot | Coef. Std. Err.      t   P>|t| [95% Conf. Interval]
-----+
lgdph | 4.893745 5.631926 0.87 0.388 -6.323208 16.1107
giniavni | -.0891737 .3582013 -0.25 0.804 -.8025935 .6242461
ethnl | -9.101264 10.29723 -0.88 0.380 -29.60997 11.40744
musl | -8.653598 8.31976 -1.04 0.302 -25.22384 7.91664
lpopd | 6.37159 2.159371 2.95 0.004 2.070831 10.67235
urbwdi | -.2272677 .2065868 -1.10 0.275 -.638721 .1841856
pavg8090 | 1.173534 .4853766 2.42 0.018 .2068227 2.140245
_cons | 16.04105 40.15111 0.40 0.691 -63.92682 96.00892
-----+
```

Model 5-6: Robust Check 3.2: Outlier checks: Median regression

```
. qreg rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090
Iteration 1: WLS sum of weighted deviations = 1309.9987

Iteration 1: sum of abs. weighted deviations = 1326.3541
Iteration 2: sum of abs. weighted deviations = 1311.3114
Iteration 3: sum of abs. weighted deviations = 1287.9175
Iteration 4: sum of abs. weighted deviations = 1285.7612
Iteration 5: sum of abs. weighted deviations = 1282.8098
Iteration 6: sum of abs. weighted deviations = 1282.7428
Iteration 7: sum of abs. weighted deviations = 1282.6759

Median regression                                         Number of obs =      84
Raw sum of deviations 1710.3 (about 54.200001)
Min sum of deviations 1282.676                           Pseudo R2 = 0.2500

-----+
rtot | Coef. Std. Err.      t   P>|t| [95% Conf. Interval]
-----+
lgdph | .0230779 5.553569 0.00 0.997 -11.03781 11.08397
giniavni | -.0014156 .3612083 -0.00 0.997 -.7208243 .7179932
ethnl | -8.529832 10.52344 -0.81 0.420 -29.48907 12.42941
musl | -8.519999 8.002781 -1.06 0.290 -24.45892 7.418921
lpopd | 5.968677 2.208742 2.70 0.008 1.569586 10.36777
urbwdi | -.1893715 .2034968 -0.93 0.355 -.5946705 .2159275
pavg8090 | 1.359336 .4776791 2.85 0.006 .4079554 2.310716
_cons | 50.12046 39.61588 1.27 0.210 -28.78141 129.0223
-----+
```

Model 5-6: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksdf

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry ~= "Kuwait" &
> ctry ~= "Namibia", r

Linear regression                                         Number of obs =      82
                                                               F( 7,    74) =     11.95
```

Prob > F = 0.0000
 R-squared = 0.4017
 Root MSE = 19.663

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.060818	5.237136	1.16	0.251	-4.374404	16.49604
giniavni	.0436759	.3167299	0.14	0.891	-.5874223	.674774
ethnl	-8.344043	7.696069	-1.08	0.282	-23.67879	6.99071
musl	-7.224396	7.829676	-0.92	0.359	-22.82536	8.376573
lpopd	6.394308	2.041994	3.13	0.002	2.325546	10.46307
urbwdi	-.2495373	.1936551	-1.29	0.202	-.6354035	.136329
pavg8090	1.258735	.3932941	3.20	0.002	.4750793	2.04239
_cons	2.532386	31.86868	0.08	0.937	-60.96735	66.03212

Model 5-6: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi pol90, r
```

Linear regression

Number of obs =	86
F(7, 78) =	10.90
Prob > F =	0.0000
R-squared =	0.3761
Root MSE =	20.727

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.991375	5.246648	1.14	0.257	-4.453899	16.43665
giniavni	-.1233327	.3227037	-0.38	0.703	-.7657865	.5191211
ethnl	-7.871241	7.853045	-1.00	0.319	-23.50545	7.76297
musl	-13.44185	7.896332	-1.70	0.093	-29.16224	2.278539
lpopd	6.421305	2.146742	2.99	0.004	2.14747	10.69514
urbwdi	-.2677838	.1894745	-1.41	0.162	-.6449985	.1094308
pol90	.9319856	.3733496	2.50	0.015	.1887037	1.675267
_cons	8.762994	33.20117	0.26	0.793	-57.33546	74.86144

Model 5-6: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi free8090, r
```

Linear regression

Number of obs =	88
F(7, 80) =	12.20
Prob > F =	0.0000
R-squared =	0.3813
Root MSE =	20.735

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	3.701048	4.93948	0.75	0.456	-6.12883	13.53093
giniavni	-.0974979	.3186072	-0.31	0.760	-.7315463	.5365506
ethnl	-5.216325	7.970219	-0.65	0.515	-21.07757	10.64492
musl	-11.87052	7.76764	-1.53	0.130	-27.32861	3.587578
lpopd	6.361763	1.960216	3.25	0.002	2.46081	10.26272
urbwdi	-.1960466	.1769236	-1.11	0.271	-.5481357	.1560425

free8090	-2.747897	.8385657	-3.28	0.002	-4.416696	-1.079098
_cons	45.41188	37.03451	1.23	0.224	-28.28914	119.1129

Model 5-6: Robust Check 6.7: IndV: Vary source: pavg8090 to free90

```
. regress rtot lgdph giniavni ethnl musl lpopd urbwdi free90, r
```

Linear regression

Number of obs = 88
 F(7, 80) = 13.05
 Prob > F = 0.0000
 R-squared = 0.3812
 Root MSE = 20.735

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.377618	4.924894	0.89	0.377	-5.423232	14.17847
giniavni	-.1245348	.3257737	-0.38	0.703	-.7728452	.5237756
ethnl	-4.907145	8.109115	-0.61	0.547	-21.0448	11.23051
musl	-13.85781	7.679392	-1.80	0.075	-29.14029	1.424669
lpopd	6.403779	1.965192	3.26	0.002	2.492923	10.31464
urbwdi	-.2220025	.180468	-1.23	0.222	-.5811453	.1371402
free90	-2.379458	.78099	-3.05	0.003	-3.933677	-.8252379
_cons	38.57987	38.53937	1.00	0.320	-38.11592	115.2756

Model 5-6: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 84
 F(7, 76) = 12.33
 Prob > F = 0.0000
 R-squared = 0.3974
 Root MSE = 20.415

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	8.044794	5.298571	1.52	0.133	-2.508225	18.59781
giniavni	-.0977097	.3138629	-0.31	0.756	-.7228218	.5274024
ethnl	-7.646181	7.925844	-0.96	0.338	-23.43187	8.139506
musl	-10.31112	7.873003	-1.31	0.194	-25.99157	5.369319
lpopd	6.304586	2.028815	3.11	0.003	2.263851	10.34532
urbwdi	-.3254018	.2089027	-1.56	0.123	-.7414675	.090664
pavg8090	1.104275	.3944817	2.80	0.006	.318596	1.889953
_cons	-4.226218	34.58408	-0.12	0.903	-73.10637	64.65394

Model 5-6: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress rtot lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090 gdpmf, r
```

Linear regression

Number of obs = 84
 F(8, 75) = 10.77
 Prob > F = 0.0000
 R-squared = 0.3974
 Root MSE = 20.551

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	7.997989	5.610116	1.43	0.158	-3.177936	19.17391
giniavni	-.0963734	.3173715	-0.30	0.762	-.7286098	.535863
ethnl	-7.645661	7.978064	-0.96	0.341	-23.53878	8.247457
musl	-10.27745	7.989934	-1.29	0.202	-26.19421	5.639319
lpopd	6.323677	2.159359	2.93	0.005	2.022013	10.62534
urbwdi	-.3237115	.2215239	-1.46	0.148	-.7650096	.1175867
pavg8090	1.105397	.3946432	2.80	0.006	.3192275	1.891566
gdpmf	.5248816	20.60636	0.03	0.980	-40.52509	41.57485
_cons	-4.087701	35.21175	-0.12	0.908	-74.23311	66.05771

Model 5-6: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress rtot lgdph giniavni ethnannnx musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 84
 F(7, 76) = 11.82
 Prob > F = 0.0000
 R-squared = 0.3811
 Root MSE = 20.69

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.893494	5.506893	0.89	0.377	-6.074435	15.86142
giniavni	-.152001	.3184147	-0.48	0.634	-.7861787	.4821768
ethnannnx	-6.194187	10.60032	-0.58	0.561	-27.30655	14.91818
musl	-10.46747	8.18952	-1.28	0.205	-26.77831	5.843375
lpopd	6.295557	2.150195	2.93	0.005	2.013072	10.57804
urbwdi	-.2054376	.1870902	-1.10	0.276	-.57806	.1671849
pavg8090	1.305677	.414785	3.15	0.002	.4795612	2.131793
_cons	18.34983	40.07042	0.46	0.648	-61.45734	98.15699

Model 5-6: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress rtot lgdph giniavni ethnannnx musl lpopd urbwdi pavg8090 ethnannf, r
```

Linear regression

Number of obs = 84
 F(8, 75) = 10.50
 Prob > F = 0.0000
 R-squared = 0.3936
 Root MSE = 20.616

rtot	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.075625	5.437502	1.12	0.267	-4.756434	16.90768
giniavni	-.0183321	.3449972	-0.05	0.958	-.7056016	.6689375
ethnannnx	-4.424997	10.66392	-0.41	0.679	-25.66862	16.81863
musl	-7.771277	8.551063	-0.91	0.366	-24.80587	9.263313
lpopd	6.39335	2.115986	3.02	0.003	2.17809	10.60861
urbwdi	-.2779193	.1913736	-1.45	0.151	-.659155	.1033165
pavg8090	1.379521	.4361817	3.16	0.002	.5106023	2.248439
ethnannf	21.10128	11.67771	1.81	0.075	-2.161903	44.36447

_cons	4.418821	39.61241	0.11	0.911	-74.49314	83.33078
-------	----------	----------	------	-------	-----------	----------

Table 2.5, Model 5-7: Short-Term Democracy and Fertility**Model 5-7: Bivariate correlations among independent variables**

```
. correlate fertwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090  
(obs=98)
```

	fertwdi	lgdph	giniavni	ethnl	musl	fertwdi	lpopd
fertwdi	1.0000						
lgdph	-0.6401	1.0000					
giniavni	0.1598	-0.0349	1.0000				
ethnl	0.4848	-0.5203	0.2094	1.0000			
musl	0.0859	0.3155	-0.3059	-0.3021	1.0000		
fertwdi	1.0000	-0.6401	0.1598	0.4848	0.0859	1.0000	
lpopd	-0.3794	0.1550	-0.3009	-0.1614	-0.0893	-0.3794	1.0000
urbwdi	-0.5576	0.8263	-0.0281	-0.5030	0.3134	-0.5576	0.0310
pavg8090	-0.4745	0.2748	0.2211	-0.0655	-0.2853	-0.4745	0.1758
		urbwdi	pavg8090				
urbwdi		1.0000					
pavg8090		0.1718	1.0000				

Model 5-7: Fertility predicted by 6 baseline variables

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(6, 98) =	55.85
Prob > F =	0.0000
R-squared =	0.6525
Root MSE =	1.0167

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.8842633	.2458682	-3.60	0.001	-1.372181	-.3963459
giniavni	.0267901	.0119369	2.24	0.027	.0031016	.0504785
ethnl	.8486236	.3501207	2.42	0.017	.1538205	1.543427
musl	1.602146	.30901	5.18	0.000	.9889256	2.215366
lpopd	-.190935	.0812749	-2.35	0.021	-.3522224	-.0296476
urbwdi	-.0137753	.0079538	-1.73	0.086	-.0295594	.0020087
_cons	10.997	1.455255	7.56	0.000	8.10909	13.8849

Model 5-7: Fertility predicted by 6 baseline variables and short-term democracy

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	98
F(7, 90) =	56.67
Prob > F =	0.0000
R-squared =	0.6792

Root MSE = .95189

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6729504	.2571806	-2.62	0.010	-1.183885	-.1620163
giniavni	.0367122	.0112079	3.28	0.001	.0144456	.0589787
ethnl	1.045767	.357099	2.93	0.004	.3363279	1.755207
musl	1.211978	.3001865	4.04	0.000	.6156049	1.808351
lpopd	-.1648729	.0782613	-2.11	0.038	-.3203526	-.0093931
urbwdi	-.0130461	.008731	-1.49	0.139	-.0303918	.0042995
pavg8090	-.0688712	.0163922	-4.20	0.000	-.1014372	-.0363053
_cons	8.575563	1.522065	5.63	0.000	5.551716	11.59941

Model 5-7: Means and SDs of fertility and short-term democracy

. summarize fertwdi

Variable	Obs	Mean	Std. Dev.	Min	Max
fertwdi	105	4.795238	1.674089	1.3	7.6

. summarize pavg8090

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg8090	98	-3.05551	6.120606	-10	10

Model 5-7: How much would fertility rise if short-term democracy rose one SD?

. estsimp regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r

Linear regression
Number of obs = 98
F(7, 90) = 56.67
Prob > F = 0.0000
R-squared = 0.6792
Root MSE = .95189

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6729504	.2571806	-2.62	0.010	-1.183885	-.1620163
giniavni	.0367122	.0112079	3.28	0.001	.0144456	.0589787
ethnl	1.045767	.357099	2.93	0.004	.3363279	1.755207
musl	1.211978	.3001865	4.04	0.000	.6156049	1.808351
lpopd	-.1648729	.0782613	-2.11	0.038	-.3203526	-.0093931
urbwdi	-.0130461	.008731	-1.49	0.139	-.0303918	.0042995
pavg8090	-.0688712	.0163922	-4.20	0.000	-.1014372	-.0363053
_cons	8.575563	1.522065	5.63	0.000	5.551716	11.59941

Simulating main parameters. Please wait....

% of simulations completed: 12% 25% 37% 50% 62% 75% 87% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000

Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9

```
. setx mean
. simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)
```

First Difference: pavg8090 -3.05551 3.065096

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(fertwdi)	-.4225245	.0978594	-.6059124 -.231426

Model 5-7: Robustness checks

Model 5-7: Robust Check 1.2: Change specification: Include mean years female schooling

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 mysfx, r
```

Linear regression

Number of obs = 98
F(8, 89) = 69.85
Prob > F = 0.0000
R-squared = 0.7423
Root MSE = .85788

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3133375	.2477882	-1.26	0.209	-.8056874	.1790125
giniavni	.0302405	.009685	3.12	0.002	.0109966	.0494844
ethnl	.566287	.3619144	1.56	0.121	-.1528292	1.285403
musl	.4875609	.2950999	1.65	0.102	-.0987964	1.073918
lpopd	-.1924009	.0657098	-2.93	0.004	-.322965	-.0618369
urbwdi	-.005919	.0073639	-0.80	0.424	-.020551	.0087129
pavg8090	-.0529291	.0136664	-3.87	0.000	-.0800838	-.0257743
mysfx	-.3245596	.0727723	-4.46	0.000	-.4691566	-.1799625
_cons	7.480436	1.395889	5.36	0.000	4.706835	10.25404

Model 5-7: Robust Check 1.3: Change specification: Include female literacy

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 litfewdi, r
```

Linear regression

Number of obs = 98
F(8, 89) = 69.22
Prob > F = 0.0000
R-squared = 0.7610
Root MSE = .8261

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.3332571	.2230963	-1.49	0.139	-.7765448	.1100305
giniavni	.0314226	.0094489	3.33	0.001	.0126478	.0501974
ethnl	.3463512	.3539747	0.98	0.330	-.356989	1.049691
musl	.298101	.2726634	1.09	0.277	-.2436755	.8398774
lpopd	-.1919119	.0629787	-3.05	0.003	-.3170493	-.0667745
urbwdi	-.0056739	.0070224	-0.81	0.421	-.0196272	.0082794
pavg8090	-.0495685	.0130988	-3.78	0.000	-.0755954	-.0235415
litfewdi	-.0279274	.0052583	-5.31	0.000	-.0383755	-.0174792
_cons	8.09699	1.286137	6.30	0.000	5.541464	10.65252

Model 5-7: Robust Check 1.4: Change specification: Include geographical variables

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 airdist popcrgs la
> tcapab, r
```

Linear regression

Number of obs = 98
 F(10, 87) = 45.83
 Prob > F = 0.0000
 R-squared = 0.7284
 Root MSE = .89077

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.551232	.2749364	-2.00	0.048	-1.097698	-.0047661
giniavni	.0292383	.011833	2.47	0.015	.0057189	.0527576
ethnl	.492472	.3815869	1.29	0.200	-.2659733	1.250917
musl	1.502423	.2674689	5.62	0.000	.9707992	2.034046
lpopd	-.1143369	.0882396	-1.30	0.198	-.2897226	.0610489
urbwdi	-.0124573	.00887	-1.40	0.164	-.0300875	.0051728
pavg8090	-.0653716	.0156724	-4.17	0.000	-.0965221	-.034221
airdist	.0000346	.0000484	0.72	0.476	-.0000615	.0001308
popcrgs	-.0072667	.0035262	-2.06	0.042	-.0142754	-.0002579
latcapab	-.034313	.0106584	-3.22	0.002	-.0554978	-.0131283
_cons	8.747949	1.495726	5.85	0.000	5.775033	11.72087

Model 5-7: Robust Check 1.5: Change specification: Include regional dummies

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 afri lati east sou
> t, r
```

Linear regression

Number of obs = 98
 F(11, 86) = 40.12
 Prob > F = 0.0000
 R-squared = 0.7328
 Root MSE = .88863

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4731177	.2916912	-1.62	0.108	-1.052981	.1067453
giniavni	.0218919	.0152422	1.44	0.155	-.0084086	.0521923
ethnl	.6244351	.3628575	1.72	0.089	-.0969017	1.345772
musl	.6647577	.3402572	1.95	0.054	-.0116513	1.341167
lpopd	-.1505691	.0754029	-2.00	0.049	-.300465	-.0006731
urbwdi	-.0149653	.0107033	-1.40	0.166	-.0362427	.0063122
pavg8090	-.0566366	.0207084	-2.73	0.008	-.0978035	-.0154698
afri	.2211773	.4559413	0.49	0.629	-.6852039	1.127559
lati	-.5725386	.5895258	-0.97	0.334	-1.744477	.5993999
east	-1.16282	.5008355	-2.32	0.023	-2.158448	-.1671925
sout	-.5038415	.5564679	-0.91	0.368	-1.610063	.60238
_cons	8.301614	1.74467	4.76	0.000	4.833325	11.7699

Model 5-7: Robust Check 1.6: Change specification: Include family planning effort

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 rtot, r
```

Linear regression

Number of obs = 84
 F(8, 75) = 43.44
 Prob > F = 0.0000
 R-squared = 0.7400
 Root MSE = .88084

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.4732143	.2555092	-1.85	0.068	-.9822147	.0357862
giniavni	.0274029	.0124961	2.19	0.031	.0025095	.0522964
ethnl	.8661536	.3991546	2.17	0.033	.0709969	1.66131
musl	.8195186	.2753447	2.98	0.004	.271004	1.368033
lpopd	-.0411594	.1148134	-0.36	0.721	-.2698795	.1875607
urbwdi	-.0204156	.0087397	-2.34	0.022	-.0378259	-.0030052
pavg8090	-.0374439	.0190546	-1.97	0.053	-.0754025	.0005147
rtot	-.0249289	.006367	-3.92	0.000	-.0376127	-.0122451
_cons	8.899674	1.520591	5.85	0.000	5.870501	11.92885

Model 5-7: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 gdphf giniavnf eth  

> nlf, r
```

Linear regression

Number of obs = 98
 F(9, 88) = 44.64
 Prob > F = 0.0000
 R-squared = 0.6997
 Root MSE = .93139

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.6977433	.2431153	-2.87	0.005	-1.180884	-.2146026
giniavni	.0419737	.0113697	3.69	0.000	.0193788	.0645686
ethnl	1.083288	.3692833	2.93	0.004	.3494153	1.817161
musl	1.195168	.294492	4.06	0.000	.6099268	1.780409
lpopd	-.1494852	.0707107	-2.11	0.037	-.2900079	-.0089625
urbwdi	-.0152365	.0088799	-1.72	0.090	-.0328834	.0024103
pavg8090	-.0540403	.0167037	-3.24	0.002	-.0872353	-.0208452
gdphf (dropped)						
giniavnf	.4207368	.2529847	1.66	0.100	-.0820172	.9234908
ethnlf	.5841445	.6742519	0.87	0.389	-.7557895	1.924078
_cons	8.462688	1.604996	5.27	0.000	5.273096	11.65228

Model 5-7: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090
```

```
Huber iteration 1: maximum difference in weights = .6454307
Huber iteration 2: maximum difference in weights = .10571776
Huber iteration 3: maximum difference in weights = .02829593
Biweight iteration 4: maximum difference in weights = .2783343
Biweight iteration 5: maximum difference in weights = .0399464
Biweight iteration 6: maximum difference in weights = .02270171
Biweight iteration 7: maximum difference in weights = .02093661
Biweight iteration 8: maximum difference in weights = .00334287
```

Robust regression

Number of obs = 98
 F(7, 90) = 33.24
 Prob > F = 0.0000

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.9140966	.1943888	-4.70	0.000	-1.300284 -.5279094
giniavni	.0390812	.0116748	3.35	0.001	.0158871 .0622752
ethnl	1.079456	.3487276	3.10	0.003	.3866475 1.772264
musl	1.02895	.2758088	3.73	0.000	.4810078 1.576893
lpopd	-.11022	.0690172	-1.60	0.114	-.2473347 .0268946
urbwdi	-.0074737	.0071916	-1.04	0.301	-.0217611 .0068138
pavg8090	-.0616358	.0170501	-3.61	0.000	-.0955088 -.0277628
_cons	9.887153	1.381219	7.16	0.000	7.14312 12.63119

Model 5-7: Robust Check 3.2: Outlier checks: Median regression

```
. qreg fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090
Iteration 1: WLS sum of weighted deviations = 67.768307
```

```
Iteration 1: sum of abs. weighted deviations = 70.106268
Iteration 2: sum of abs. weighted deviations = 67.1852
Iteration 3: sum of abs. weighted deviations = 66.70868
Iteration 4: sum of abs. weighted deviations = 66.247292
Iteration 5: sum of abs. weighted deviations = 66.148053
Iteration 6: sum of abs. weighted deviations = 66.138463
Iteration 7: sum of abs. weighted deviations = 66.023568
Iteration 8: sum of abs. weighted deviations = 66.016933
Iteration 9: sum of abs. weighted deviations = 65.990317
Iteration 10: sum of abs. weighted deviations = 65.989948
Iteration 11: sum of abs. weighted deviations = 65.9899
```

Median regression Number of obs = 98
 Raw sum of deviations 136.9 (about 5.0999999)
 Min sum of deviations 65.9899 Pseudo R2 = 0.5180

fertwdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.8431991	.1840441	-4.58	0.000	-1.208835 -.4775634
giniavni	.0391146	.0108082	3.62	0.000	.0176422 .060587
ethnl	1.203195	.3299903	3.65	0.000	.5476112 1.858778
musl	1.257808	.2670969	4.71	0.000	.7271737 1.788443
lpopd	-.0473943	.0589475	-0.80	0.424	-.1645039 .0697152
urbwdi	-.0084241	.0067361	-1.25	0.214	-.0218066 .0049585
pavg8090	-.0672443	.0163656	-4.11	0.000	-.0997575 -.0347311
_cons	9.190659	1.298816	7.08	0.000	6.610334 11.77098

Model 5-7: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooks'd

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry == "Oman" & ctry == "Rwanda", r
```

Linear regression Number of obs = 96
 F(7, 88) = 57.82
 Prob > F = 0.0000
 R-squared = 0.7255
 Root MSE = .86924

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.8335204	.227316	-3.67	0.000	-1.285263	-.3817777
giniavni	.043106	.0104931	4.11	0.000	.0222531	.0639589
ethnl	1.307302	.3205191	4.08	0.000	.6703379	1.944267
musl	1.2067	.2823034	4.27	0.000	.645681	1.767718
lpopd	-.1334904	.0686068	-1.95	0.055	-.2698319	.0028512
urbwdi	-.0055878	.0073752	-0.76	0.451	-.0202444	.0090688
pavg8090	-.0607356	.0161262	-3.77	0.000	-.092783	-.0286882
_cons	8.928413	1.372586	6.50	0.000	6.200687	11.65614

Model 5-7: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi pol90, r
```

Linear regression

Number of obs = 101
 F(7, 93) = 62.39
 Prob > F = 0.0000
 R-squared = 0.6723
 Root MSE = .96916

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.7115122	.2524873	-2.82	0.006	-1.212902	-.2101225
giniavni	.0364221	.0110174	3.31	0.001	.0145436	.0583005
ethnl	.7657542	.353235	2.17	0.033	.0642995	1.467209
musl	1.288768	.3214587	4.01	0.000	.6504147	1.927121
lpopd	-.1753709	.0776437	-2.26	0.026	-.3295559	-.0211859
urbwdi	-.0138026	.0085447	-1.62	0.110	-.0307706	.0031655
pol90	-.0607271	.0152597	-3.98	0.000	-.09103	-.0304243
_cons	9.188839	1.511291	6.08	0.000	6.187715	12.18996

Model 5-7: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi free8090, r
```

Linear regression

Number of obs = 104
 F(7, 96) = 61.18
 Prob > F = 0.0000
 R-squared = 0.6774
 Root MSE = .96844

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6425258	.2562763	-2.51	0.014	-1.15123	-.1338215
giniavni	.0355048	.0117146	3.03	0.003	.0122514	.0587581
ethnl	.8587333	.3400338	2.53	0.013	.1837715	1.533695
musl	1.375674	.2955751	4.65	0.000	.7889619	1.962386
lpopd	-.1518371	.0765133	-1.98	0.050	-.3037148	.0000405
urbwdi	-.0157805	.0077097	-2.05	0.043	-.031084	-.0004769
free8090	.128972	.0372919	3.46	0.001	.0549483	.2029958
_cons	7.489246	1.89384	3.95	0.000	3.730004	11.24849

Model 5-7: Robust Check 6.7: IndV: Vary source: pavg8090 to free90

```
. regress fertwdi lgdph giniavni ethnl musl lpopd urbwdi free90, r
```

Linear regression

Number of obs = 104
 F(7, 96) = 64.54
 Prob > F = 0.0000
 R-squared = 0.6706
 Root MSE = .97873

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdph	-.7193319	.2536048	-2.84	0.006	-1.222733	-.2159304
giniavni	.0353273	.0119315	2.96	0.004	.0116434	.0590111
ethnl	.832844	.3467501	2.40	0.018	.1445504	1.521138
musl	1.457638	.2952329	4.94	0.000	.8716053	2.04367
lpopd	-.1567422	.0776984	-2.02	0.046	-.3109722	-.0025121
urbwdi	-.0137801	.0076434	-1.80	0.075	-.0289522	.0013919
free90	.1001795	.034025	2.94	0.004	.0326404	.1677185
_cons	8.305011	1.861573	4.46	0.000	4.609819	12.0002

Model 5-7: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 97
 F(7, 89) = 56.06
 Prob > F = 0.0000
 R-squared = 0.6863
 Root MSE = .94431

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		
lgdpmx	-.7663841	.2515885	-3.05	0.003	-1.266285	-.2664831
giniavni	.0370077	.0115603	3.20	0.002	.0140376	.0599778
ethnl	.9805498	.3600996	2.72	0.008	.2650396	1.69606
musl	1.108858	.2927673	3.79	0.000	.5271352	1.69058
lpopd	-.1692625	.0769908	-2.20	0.031	-.3222416	-.0162834
urbwdi	-.0118646	.0086476	-1.37	0.174	-.0290472	.005318
pavg8090	-.0579082	.0184654	-3.14	0.002	-.0945985	-.0212179
_cons	9.337073	1.479162	6.31	0.000	6.398009	12.27614

Model 5-7: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress fertwdi lgdpmx giniavni ethnl musl lpopd urbwdi pavg8090 gdpmf, r
```

Linear regression

Number of obs = 97
 F(8, 88) = 52.49
 Prob > F = 0.0000
 R-squared = 0.7038
 Root MSE = .92282

fertwdi	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	t	P> t		

	lgdpmx	.6299321	.2736255	-2.30	0.024	-1.173705	-.0861588
giniavni	.0336584	.0114042	2.95	0.004	.0109949	.056322	
ethnl	1.06417	.3521051	3.02	0.003	.3644352	1.763905	
musl	1.056654	.2776088	3.81	0.000	.5049649	1.608343	
lpopd	-.207354	.0677678	-3.06	0.003	-.3420283	-.0726797	
urbwdi	-.0163231	.0093843	-1.74	0.085	-.0349724	.0023261	
pavg8090	-.057837	.0178382	-3.24	0.002	-.0932866	-.0223874	
gdpmf	-1.319951	.6758127	-1.95	0.054	-2.662986	.0230852	
_cons	8.797331	1.605298	5.48	0.000	5.607137	11.98752	

Model 5-7: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 98
 F(7, 90) = 55.48
 Prob > F = 0.0000
 R-squared = 0.6598
 Root MSE = .98025

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.6782538	.2694705	-2.52	0.014	-1.213604	-.1429036
giniavni	.0410523	.0120463	3.41	0.001	.0171202	.0649843
ethnannx	.6864437	.4302503	1.60	0.114	-.1683236	1.541211
musl	1.178559	.3001461	3.93	0.000	.5822666	1.774852
lpopd	-.1649005	.0844694	-1.95	0.054	-.3327137	.0029128
urbwdi	-.0172636	.0087699	-1.97	0.052	-.0346865	.0001592
pavg8090	-.0703734	.0165913	-4.24	0.000	-.1033349	-.0374119
_cons	8.641879	1.692438	5.11	0.000	5.279555	12.0042

Model 5-7: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress fertwdi lgdph giniavni ethnannx musl lpopd urbwdi pavg8090 ethnannf, r
```

Linear regression

Number of obs = 98
 F(8, 89) = 54.41
 Prob > F = 0.0000
 R-squared = 0.6692
 Root MSE = .972

fertwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.761904	.2623265	-2.90	0.005	-1.283141	-.2406669
giniavni	.0359074	.0120066	2.99	0.004	.0120506	.0597643
ethnannx	.6136935	.4301378	1.43	0.157	-.2409811	1.468368
musl	1.17432	.3000709	3.91	0.000	.5780857	1.770555
lpopd	-.1748199	.0879947	-1.99	0.050	-.3496635	.0000236
urbwdi	-.0140974	.0081795	-1.72	0.088	-.0303499	.002155
pavg8090	-.0722258	.0164285	-4.40	0.000	-.1048689	-.0395826
ethnannf	-.7743698	.3819287	-2.03	0.046	-1.533254	-.0154855
_cons	9.480268	1.67758	5.65	0.000	6.146952	12.81358

Table 2.5, Model 5-8: Family Planning Effort and Fertility

Identical to Model 4-8

Table 2.5, Model 5-9: Short-Term Democracy and Access to Improved Water***Model 5-9: Bivariate correlations among independent variables***

```
. correlate watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
(obs=98)
```

	watecom	lgdph	giniavni	ethnl	musl	fertwdi	lpopd
watecom	1.0000						
lgdph	0.7460	1.0000					
giniavni	-0.1597	-0.0349	1.0000				
ethnl	-0.5026	-0.5203	0.2094	1.0000			
musl	0.2571	0.3155	-0.3059	-0.3021	1.0000		
fertwdi	-0.7050	-0.6401	0.1598	0.4848	0.0859	1.0000	
lpopd	0.2910	0.1550	-0.3009	-0.1614	-0.0893	-0.3794	1.0000
urbwdi	0.6817	0.8263	-0.0281	-0.5030	0.3134	-0.5576	0.0310
pavg8090	0.4047	0.2748	0.2211	-0.0655	-0.2853	-0.4745	0.1758
			urbwdi	pavg8090			
urbwdi		1.0000					
pavg8090		0.1718	1.0000				

Model 5-9: Safe water predicted by 7 baseline variables only

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs =	105
F(7, 97) =	39.61
Prob > F =	0.0000
R-squared =	0.6630
Root MSE =	14.112

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.747359	3.154281	2.14	0.035	.4869837	13.00773
giniavni	-.0095592	.1924176	-0.05	0.960	-.3914549	.3723365
ethnl	-4.22441	5.694025	-0.74	0.460	-15.52547	7.076654
musl	9.860655	6.411555	1.54	0.127	-2.864507	22.58582
fertwdi	-5.317322	1.289151	-4.12	0.000	-7.875931	-2.758714
lpopd	1.416057	1.017448	1.39	0.167	-.6032962	3.43541
urbwdi	.1548265	.1077148	1.44	0.154	-.0589575	.3686105
_cons	30.53144	23.48419	1.30	0.197	-16.07818	77.14106

Model 5-9: Safe water predicted by 7 baseline variables and short-term demoracy

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs =	98
F(8, 89) =	42.74

Prob > F = 0.0000
 R-squared = 0.7104
 Root MSE = 13.199

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.199762	3.080384	2.01	0.047	.079105	12.32042
giniavni	-.1399799	.1742423	-0.80	0.424	-.4861957	.2062358
ethnl	-2.918215	5.327857	-0.55	0.585	-13.50455	7.668123
musl	10.83491	6.704524	1.62	0.110	-2.486833	24.15666
fertwdi	-4.218291	1.374751	-3.07	0.003	-6.949892	-1.48669
lpopd	1.511713	1.008476	1.50	0.137	-.4921075	3.515534
urbwdi	.2112081	.1094456	1.93	0.057	-.006258	.4286741
pavg8090	.8102921	.2534861	3.20	0.002	.3066206	1.313964
_cons	34.27764	23.96873	1.43	0.156	-13.34771	81.90299

Model 5-9: Means and SDs of access to improved water and short-term democracy

. summarize watecom

Variable	Obs	Mean	Std. Dev.	Min	Max
watecom	105	68.07619	23.47613	4	100

. summarize pavg8090

Variable	Obs	Mean	Std. Dev.	Min	Max
pavg8090	98	-3.05551	6.120606	-10	10

Model 5-9: How much would access to water rise if short-term democracy rose 1 SD?

. estsimp regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090,
 > r

Linear regression

Number of obs = 98
 F(8, 89) = 42.74
 Prob > F = 0.0000
 R-squared = 0.7104
 Root MSE = 13.199

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.199762	3.080384	2.01	0.047	.079105	12.32042
giniavni	-.1399799	.1742423	-0.80	0.424	-.4861957	.2062358
ethnl	-2.918215	5.327857	-0.55	0.585	-13.50455	7.668123
musl	10.83491	6.704524	1.62	0.110	-2.486833	24.15666
fertwdi	-4.218291	1.374751	-3.07	0.003	-6.949892	-1.48669
lpopd	1.511713	1.008476	1.50	0.137	-.4921075	3.515534
urbwdi	.2112081	.1094456	1.93	0.057	-.006258	.4286741
pavg8090	.8102921	.2534861	3.20	0.002	.3066206	1.313964
_cons	34.27764	23.96873	1.43	0.156	-13.34771	81.90299

Simulating main parameters. Please wait....

% of simulations completed: 11% 22% 33% 44% 55% 66% 77% 88% 100%

Simulating sigma-squared. Please wait

Number of simulations : 1000
 Names of new variables : b1 b2 b3 b4 b5 b6 b7 b8 b9 b10

```
. setx mean
. simqi, fd(ev) changex(pavg8090 -3.05551 3.065096)
```

First Difference: pavg8090 -3.05551 3.065096

Quantity of Interest	Mean	Std. Err.	[95% Conf. Interval]
dE(watecom)	4.928731	1.534727	2.034966 7.881142

Model 5-9: Robustness checks

Model 5-9: Robust Check 1.1: Change specification: Exclude fertility

```
. regress watecom lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 98
 F(7, 90) = 45.06
 Prob > F = 0.0000
 R-squared = 0.6833
 Root MSE = 13.726

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	9.038462	2.987671	3.03	0.003	3.102932 14.97399
giniavni	-.2948425	.1748309	-1.69	0.095	-.6421746 .0524896
ethnl	-7.329566	5.389027	-1.36	0.177	-18.03581 3.376676
musl	5.722438	6.219745	0.92	0.360	-6.63417 18.07905
lpopd	2.207195	1.068806	2.07	0.042	.0838243 4.330565
urbwdi	.2662405	.1145486	2.32	0.022	.0386696 .4938113
pavg8090	1.100811	.2425209	4.54	0.000	.6190009 1.582621
_cons	-1.89658	20.96981	-0.09	0.928	-43.55677 39.76361

Model 5-9: Robust Check 1.2: Change specification: Include mean years female schooling

```
. regress watecom lgdph giniavni ethnl fertwdi lpopd urbwdi pavg8090 mysfx, r
```

Linear regression

Number of obs = 98
 F(9, 88) = 37.60
 Prob > F = 0.0000
 R-squared = 0.7104
 Root MSE = 13.273

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.264834	3.200342	1.96	0.053	-.0951739 12.62484
giniavni	-.1397642	.1745072	-0.80	0.425	-.4865607 .2070323
ethnl	-2.996607	5.253166	-0.57	0.570	-13.43617 7.442956
musl	10.69573	6.950842	1.54	0.127	-3.117605 24.50907
fertwdi	-4.27466	1.545356	-2.77	0.007	-7.345731 -1.203589
lpopd	1.494534	1.054883	1.42	0.160	-.6018237 3.590892

urbwdi	.2125141	.1116025	1.90	0.060	-.0092724	.4343006
pavg8090	.8109763	.256951	3.16	0.002	.3003401	1.321612
mysfx	-.0929657	1.181889	-0.08	0.937	-2.441722	2.25579
_cons	34.44736	24.24016	1.42	0.159	-13.72487	82.61958

Model 5-9: Robust Check 1.3: Change specification: Include female literacy

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 litfewdi,
> r
```

Linear regression

Number of obs =	98
F(9, 88) =	37.78
Prob > F =	0.0000
R-squared =	0.7104
Root MSE =	13.273

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.124588	3.146204	1.95	0.055	-.1278325 12.37701
giniavni	-.1418059	.1737316	-0.82	0.417	-.4870608 .2034491
ethnl	-2.72462	5.374451	-0.51	0.613	-13.40521 7.955971
musl	11.10551	7.005584	1.59	0.116	-2.816613 25.02764
fertwdi	-4.104066	1.521432	-2.70	0.008	-7.127593 -1.080539
lpopd	1.542648	1.045095	1.48	0.143	-.5342594 3.619555
urbwdi	.2093985	.1104952	1.90	0.061	-.0101874 .4289845
pavg8090	.8095193	.2562019	3.16	0.002	.3003718 1.318667
litfewdi	.0124999	.0774985	0.16	0.872	-.1415121 .1665119
_cons	33.5123	24.65068	1.36	0.177	-15.47574 82.50034

Model 5-9: Robust Check 1.4: Change specification: Include geographical variables

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist po
> pcrgs latcapab, r
```

Linear regression

Number of obs =	98
F(11, 86) =	30.95
Prob > F =	0.0000
R-squared =	0.7126
Root MSE =	13.377

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	6.332334	3.293151	1.92	0.058	-.2142331 12.8789
giniavni	-.1436018	.1658938	-0.87	0.389	-.4733879 .1861842
ethnl	-3.98821	6.275586	-0.64	0.527	-16.46366 8.487243
musl	12.23691	7.379318	1.66	0.101	-2.432692 26.90651
fertwdi	-4.606996	1.446696	-3.18	0.002	-7.482933 -1.73106
lpopd	1.344816	1.207282	1.11	0.268	-1.055181 3.744814
urbwdi	.1971477	.1080157	1.83	0.071	-.0175805 .4118759
pavg8090	.7764269	.2608451	2.98	0.004	.2578839 1.29497
airdist	-.0000535	.0007571	-0.07	0.944	-.0015586 .0014517
pcrgs	-.0023178	.0496336	-0.05	0.963	-.1009862 .0963505
latcapab	-.1247813	.1848114	-0.68	0.501	-.4921742 .2426115
_cons	39.20676	26.29316	1.49	0.140	-13.06231 91.47583

Model 5-9: Robust Check 1.5: Change specification: Include regional dummies

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati
> east sout, r
```

Linear regression

Number of obs = 98
 F(12, 85) = 29.73
 Prob > F = 0.0000
 R-squared = 0.7117
 Root MSE = 13.476

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	6.827273	3.607882	1.89	0.062	-.346164	14.00071
giniavni	-.164177	.177673	-0.92	0.358	-.5174385	.1890845
ethnl	-3.259553	7.673007	-0.42	0.672	-18.51555	11.99644
musl	11.56811	9.746118	1.19	0.239	-7.809783	30.94601
fertwdi	-4.55491	1.552012	-2.93	0.004	-7.640726	-1.469094
lpopd	1.488663	1.029521	1.45	0.152	-.5583003	3.535626
urbwdi	.1962688	.1382109	1.42	0.159	-.0785316	.4710692
pavg8090	.7709075	.3067174	2.51	0.014	.1610711	1.380744
afri	2.75991	13.18295	0.21	0.835	-23.45133	28.97115
lati	1.493505	11.17039	0.13	0.894	-20.71622	23.70323
east	-.5269978	11.85695	-0.04	0.965	-24.10179	23.0478
sout	1.650528	12.26169	0.13	0.893	-22.729	26.03005
_cons	31.33241	31.3234	1.00	0.320	-30.9469	93.61172

Model 5-9: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf gini
> avnf ethnlf, r
```

Linear regression

Number of obs = 98
 F(10, 87) = 40.63
 Prob > F = 0.0000
 R-squared = 0.7204
 Root MSE = 13.117

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.944738	3.18224	1.87	0.065	-.3803081	12.26978
giniavni	-.0560364	.1890855	-0.30	0.768	-.4318643	.3197915
ethnl	-1.39263	5.678901	-0.25	0.807	-12.68006	9.894801
musl	11.50507	6.749159	1.70	0.092	-1.909616	24.91975
fertwdi	-4.502468	1.382715	-3.26	0.002	-7.250764	-1.754173
lpopd	1.549927	.9807539	1.58	0.118	-.3994272	3.499282
urbwdi	.196188	.1125832	1.74	0.085	-.0275832	.4199592
pavg8090	.7606709	.2955897	2.57	0.012	.1731543	1.348188
gdphf	(dropped)					
giniavnf	-2.537224	4.661132	-0.54	0.588	-11.80173	6.727282
ethnlf	11.17536	5.042573	2.22	0.029	1.152702	21.19802
_cons	33.37623	24.26709	1.38	0.173	-14.85724	81.60971

Model 5-9: Robust Check 3.1: Outlier checks: Robust regression

. rreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090	
Huber iteration 1: maximum difference in weights = .69300927	
Huber iteration 2: maximum difference in weights = .06708933	
Huber iteration 3: maximum difference in weights = .02646879	
Biweight iteration 4: maximum difference in weights = .29104437	
Biweight iteration 5: maximum difference in weights = .05092671	
Biweight iteration 6: maximum difference in weights = .02614643	
Biweight iteration 7: maximum difference in weights = .02082838	
Biweight iteration 8: maximum difference in weights = .01433872	
Biweight iteration 9: maximum difference in weights = .01003243	
Biweight iteration 10: maximum difference in weights = .0059315	
Robust regression	Number of obs = 98
	F(8, 89) = 27.36
	Prob > F = 0.0000
-----	-----
watecom Coef. Std. Err. t P> t [95% Conf. Interval]	
-----	-----
lgdph 5.772778 2.976398 1.94 0.056 -.1412627 11.68682	
giniavni -.1198601 .1771431 -0.68 0.500 -.4718397 .2321195	
ethnl -2.745443 5.270517 -0.52 0.604 -13.21785 7.726962	
musl 14.00141 4.353893 3.22 0.002 5.350316 22.6525	
fertwdi -4.112266 1.419058 -2.90 0.005 -6.931904 -1.292629	
lpopd 1.408033 1.027875 1.37 0.174 -.6343324 3.450399	
urbwdi .1950177 .1059241 1.84 0.069 -.0154512 .4054866	
pavg8090 .7845297 .2658763 2.95 0.004 .2562392 1.31282	
_cons 37.23121 23.43744 1.59 0.116 -9.338478 83.8009	
-----	-----

Model 5-9: Robust Check 3.2: Outlier checks: Median regression

. qreg watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090	
Iteration 1: WLS sum of weighted deviations = 939.32809	
Iteration 1: sum of abs. weighted deviations = 1001.939	
Iteration 2: sum of abs. weighted deviations = 933.82395	
Iteration 3: sum of abs. weighted deviations = 929.99586	
Iteration 4: sum of abs. weighted deviations = 926.85842	
Iteration 5: sum of abs. weighted deviations = 926.13794	
Iteration 6: sum of abs. weighted deviations = 925.15994	
Iteration 7: sum of abs. weighted deviations = 922.25773	
Iteration 8: sum of abs. weighted deviations = 921.8573	
Iteration 9: sum of abs. weighted deviations = 921.74136	
Iteration 10: sum of abs. weighted deviations = 921.22151	
Iteration 11: sum of abs. weighted deviations = 920.5424	
Iteration 12: sum of abs. weighted deviations = 920.22532	
Iteration 13: sum of abs. weighted deviations = 920.06632	
Iteration 14: sum of abs. weighted deviations = 919.97636	
Iteration 15: sum of abs. weighted deviations = 919.96444	
Median regression	Number of obs = 98
Raw sum of deviations 1911 (about 72)	
Min sum of deviations 919.9644	Pseudo R2 = 0.5186
-----	-----
watecom Coef. Std. Err. t P> t [95% Conf. Interval]	
-----	-----
lgdph 4.579416 3.199885 1.43 0.156 -1.778688 10.93752	
giniavni -.2875273 .1903516 -1.51 0.134 -.665752 .0906973	
ethnl -7.32796 6.017551 -1.22 0.227 -19.28471 4.628786	
musl 12.2727 4.985905 2.46 0.016 2.365816 22.17959	
-----	-----

fertwdi	-3.659824	1.512067	-2.42	0.018	-6.66427	-.6553785
lpopd	.0796249	1.111128	0.07	0.943	-2.128163	2.287413
urbwdi	.2393208	.1181192	2.03	0.046	.0046204	.4740211
pavg8090	.7908619	.28503	2.77	0.007	.2245133	1.35721
_cons	56.51829	24.8888	2.27	0.026	7.064765	105.9718

Model 5-9: Robust Check 3.3: Outlier checks: Discard 2 cases highst cooksd

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry ~=
> "Afghanistan" & ctry ~= "Somalia", r
```

Linear regression

Number of obs = 96
F(8, 87) = 44.57
Prob > F = 0.0000
R-squared = 0.7566
Root MSE = 11.724

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	5.765303	2.900396	1.99	0.050	.0004512 11.53015
giniavni	-.1323569	.1611234	-0.82	0.414	-.452607 .1878933
ethnl	-.8611682	4.825354	-0.18	0.859	-10.45208 8.729746
musl	12.9032	4.995827	2.58	0.011	2.973452 22.83295
fertwdi	-4.543988	1.379584	-3.29	0.001	-7.286061 -1.801914
lpopd	1.676098	1.0000545	1.68	0.097	-.3125928 3.664788
urbwdi	.2028994	.1055459	1.92	0.058	-.0068846 .4126834
pavg8090	.8069112	.2488491	3.24	0.002	.3122967 1.301526
_cons	37.49439	23.29304	1.61	0.111	-8.803047 83.79182

Model 5-9: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
```

Linear regression

Number of obs = 101
F(8, 92) = 39.26
Prob > F = 0.0000
R-squared = 0.6943
Root MSE = 13.341

watecom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	7.171633	3.135658	2.29	0.024	.9439454 13.39932
giniavni	-.1898562	.1943843	-0.98	0.331	-.5759201 .1962077
ethnl	-4.559489	5.185502	-0.88	0.382	-14.85834 5.739366
musl	9.898463	6.470865	1.53	0.130	-2.953233 22.75016
fertwdi	-3.616417	1.381199	-2.62	0.010	-6.359598 -.8732359
lpopd	1.770373	1.053035	1.68	0.096	-.3210461 3.861791
urbwdi	.1611288	.1095271	1.47	0.145	-.0564016 .3786592
pol90	.6824308	.2334708	2.92	0.004	.2187376 1.146124
_cons	27.21153	23.62806	1.15	0.252	-19.71585 74.1389

Model 5-9: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
```

Linear regression

Number of obs = 104
 F(8, 95) = 43.27
 Prob > F = 0.0000
 R-squared = 0.6922
 Root MSE = 13.504

watecom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.946654	3.139746	1.58	0.118	-1.28653	11.17984
giniavni	-.1564414	.1893659	-0.83	0.411	-.5323803	.2194976
ethnl	-5.318942	5.325809	-1.00	0.320	-15.89201	5.254126
musl	10.36655	6.286915	1.65	0.102	-2.114554	22.84765
fertwdi	-3.789349	1.324774	-2.86	0.005	-6.419358	-1.159339
lpopd	1.412882	.971414	1.45	0.149	-.5156183	3.341383
urbwdi	.2112681	.1039271	2.03	0.045	.0049468	.4175894
free8090	-1.71088	.5295726	-3.23	0.002	-2.762215	-.6595458
_cons	58.18503	25.32667	2.30	0.024	7.905231	108.4648

Model 5-9: Robust Check 6.7: IndV: Vary source: pavg8090 to free90

```
. regress watecom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
```

Linear regression

Number of obs = 104
 F(8, 95) = 37.98
 Prob > F = 0.0000
 R-squared = 0.6853
 Root MSE = 13.655

watecom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.789799	3.132547	1.85	0.068	-.4290926	12.00869
giniavni	-.1412247	.198938	-0.71	0.480	-.5361665	.2537171
ethnl	-4.724101	5.385836	-0.88	0.383	-15.41634	5.968136
musl	9.682592	6.332171	1.53	0.130	-2.888358	22.25354
fertwdi	-4.090781	1.328238	-3.08	0.003	-6.727666	-1.453896
lpopd	1.441893	.9581934	1.50	0.136	-.4603617	3.344147
urbwdi	.1806884	.1047381	1.73	0.088	-.0272431	.3886198
free90	-1.274188	.45578	-2.80	0.006	-2.179026	-.3693504
_cons	49.18119	24.5466	2.00	0.048	.4500288	97.91235

Model 5-9: Robust Ck 7.1: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx)

```
. regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 97
 F(8, 88) = 39.91
 Prob > F = 0.0000
 R-squared = 0.7140
 Root MSE = 13.049

watecom		Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	8.376484	3.140189	2.67	0.009	2.136019	14.61695

giniavni	-.1762677	.1733568	-1.02	0.312	-.5207779	.1682425
ethnl	-2.715082	5.173064	-0.52	0.601	-12.99546	7.565295
musl	11.00943	6.210668	1.77	0.080	-1.332969	23.35183
fertwdi	-3.822805	1.335716	-2.86	0.005	-6.477259	-1.16835
lpopd	1.474794	.9776288	1.51	0.135	-.4680373	3.417626
urbwdi	.1697179	.1068997	1.59	0.116	-.0427228	.3821587
pavg8090	.6921803	.2747074	2.52	0.014	.1462571	1.238104
_cons	18.81841	25.30177	0.74	0.459	-31.46354	69.10036

Model 5-9: Robust Ck 7.2: CtrlV: Vary source: GDP/cap (lgdph to lgdpmx), msg flags

```
. regress watecom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
```

Linear regression

					Number of obs =	97
					F(9, 87) =	35.35
					Prob > F =	0.0000
					R-squared =	0.7144
					Root MSE =	13.115

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	8.584369	3.142231	2.73	0.008	2.338843	14.82989
giniavni	-.179121	.1749671	-1.02	0.309	-.526887	.1686449
ethnl	-2.408428	5.234336	-0.46	0.647	-12.81224	7.995382
musl	11.03072	6.250156	1.76	0.081	-1.392144	23.45358
fertwdi	-3.946414	1.358029	-2.91	0.005	-6.645643	-1.247185
lpopd	1.369395	.9796757	1.40	0.166	-.577817	3.316606
urbwdi	.1583634	.106124	1.49	0.139	-.0525694	.3692963
pavg8090	.6851801	.2759022	2.48	0.015	.1367946	1.233566
gdpmf	-2.927323	8.534984	-0.34	0.732	-19.89153	14.03688
_cons	18.77555	25.48044	0.74	0.463	-31.86959	69.42068

Model 5-9: Robust Ck 7.3: CtrlV: Vary source: ethnic frag (ethnl to ethnannx)

```
. regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

					Number of obs =	98
					F(8, 89) =	41.01
					Prob > F =	0.0000
					R-squared =	0.7105
					Root MSE =	13.197

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	5.910383	3.094437	1.91	0.059	-.2381962	12.05896
giniavni	-.1463736	.1707697	-0.86	0.394	-.4856894	.1929422
ethnannx	-3.543358	6.078	-0.58	0.561	-15.62022	8.533499
musl	10.91172	6.867273	1.59	0.116	-2.73341	24.55684
fertwdi	-4.317664	1.378203	-3.13	0.002	-7.056124	-1.579204
lpopd	1.45054	.998227	1.45	0.150	-.5329159	3.433995
urbwdi	.2232411	.1055453	2.12	0.037	.0135248	.4329573
pavg8090	.8118909	.2518246	3.22	0.002	.3115209	1.312261
_cons	37.76362	24.04403	1.57	0.120	-10.01135	85.53859

Model 5-9: Robust Ck 7.4: CtrlV: Vary source: ethnic frag (ethnl to ethnannx), msg flags

```
. regress watecom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnann
> f, r
```

Linear regression

Number of obs = 98
 F(9, 88) = 36.33
 Prob > F = 0.0000
 R-squared = 0.7171
 Root MSE = 13.12

watecom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	4.64613	3.140031	1.48	0.143	-1.594021	10.88628
giniavni	-.1958538	.1918242	-1.02	0.310	-.5770641	.1853565
ethnannx	-4.206837	6.168775	-0.68	0.497	-16.46598	8.052308
musl	11.26203	6.3115	1.78	0.078	-1.280748	23.80481
fertwdi	-4.659302	1.390031	-3.35	0.001	-7.421697	-1.896906
lpopd	1.271762	1.036835	1.23	0.223	-.7887296	3.332255
urbwdi	.2564252	.1187483	2.16	0.034	.0204379	.4924125
pavg8090	.7649842	.2648305	2.89	0.005	.2386893	1.291279
ethnannf	-9.558432	12.17715	-0.78	0.435	-33.75795	14.64109
_cons	51.06467	26.4564	1.93	0.057	-1.511879	103.6412

Table 2.5, Model 5-10: Short-Term Democracy and Infant Mortality**Model 5-10: Bivariate correlations among independent variables**

```
. correlate limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
(obs=98)
```

	limrcom	lgdph	giniavni	ethnl	musl	fertwdi	lpopd	urbwdi	pavg8090
limrcom	1.0000								
lgdph	-0.8333	1.0000							
giniavni	0.1650	-0.0349	1.0000						
ethnl	0.5440	-0.5203	0.2094	1.0000					
musl	-0.0823	0.3155	-0.3059	-0.3021	1.0000				
fertwdi	0.7587	-0.6401	0.1598	0.4848	0.0859	1.0000			
lpopd	-0.3550	0.1550	-0.3009	-0.1614	-0.0893	-0.3794	1.0000		
urbwdi	-0.7229	0.8263	-0.0281	-0.5030	0.3134	-0.5576	0.0310	1.0000	
pavg8090	-0.3519	0.2748	0.2211	-0.0655	-0.2853	-0.4745	0.1758	0.1718	

Model 5-10: Infant mortality predicted by 7 baseline variables only (same as Model 2-3)

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi, r
```

Linear regression

Number of obs = 105
 F(7, 97) = 115.48
 Prob > F = 0.0000
 R-squared = 0.8460
 Root MSE = .32809

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	

	lgdph	.5106892	.0728516	-7.01	0.000	-.6552793	-.366099
giniavni	.0098456	.0057971	1.70	0.093	-.00166	.0213512	
ethnl	.2291501	.1208339	1.90	0.061	-.0106718	.468972	
musl	.3573075	.1090143	3.28	0.001	.1409443	.5736707	
fertwdi	.0883452	.0306893	2.88	0.005	.0274354	.1492551	
lpopd	-.0713372	.0317142	-2.25	0.027	-.1342811	-.0083933	
urbwdi	-.0046217	.0022445	-2.06	0.042	-.0090765	-.0001669	
_cons	7.311515	.6431156	11.37	0.000	6.035109	8.587922	

Model 5-10: Infant Mortality predicted by 7 baseline variables and short-term democracy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

		Number of obs = 98
	F(8, 89) = 67.29	
	Prob > F = 0.0000	
	R-squared = 0.8270	
	Root MSE = .33735	

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5045953	.0790077	-6.39	0.000	-.6615819	-.3476087
giniavni	.0105381	.0060199	1.75	0.083	-.0014233	.0224995
ethnl	.238571	.1329821	1.79	0.076	-.0256617	.5028036
musl	.3489742	.117668	2.97	0.004	.1151704	.582778
fertwdi	.0738801	.0336582	2.20	0.031	.007002	.1407582
lpopd	-.0668536	.0344128	-1.94	0.055	-.1352312	.0015239
urbwdi	-.0050127	.0026379	-1.90	0.061	-.0102541	.0002287
pavg8090	-.0051223	.006951	-0.74	0.463	-.0189338	.0086891
_cons	7.29213	.6901443	10.57	0.000	5.920828	8.663432

Model 5-10: Robustness checks

Model 5-10: Robust Check 1.1: Change specification: Exclude fertility

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi pavg8090, r
```

Linear regression

	Number of obs = 98
	F(7, 90) = 77.84
	Prob > F = 0.0000
	R-squared = 0.8194
	Root MSE = .34276

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5543129	.0710028	-7.81	0.000	-.6953725	-.4132534
giniavni	.0132504	.0061498	2.15	0.034	.0010327	.0254681
ethnl	.3158323	.1304303	2.42	0.017	.0567098	.5749549
musl	.4385152	.117642	3.73	0.000	.2047988	.6722317
lpopd	-.0790345	.0330776	-2.39	0.019	-.144749	-.0133199
urbwdi	-.0059766	.0027856	-2.15	0.035	-.0115106	-.0004426
pavg8090	-.0102106	.006558	-1.56	0.123	-.0232392	.0028181
_cons	7.925693	.5880949	13.48	0.000	6.75734	9.094046

Model 5-10: Robust Ck 1.1a: Change specification: Exclude fertility, -2 highest cooks

```
. regress limrcom lgdph giniavni ethnl musl lpopd urbwdi pavg8090 if ctry ~= "Mongolia" & ctry ~= "Cuba"
```

Source	SS	df	MS	Number of obs	=	96
Model	46.4105222	7	6.6300746	F(7, 88)	=	64.40
Residual	9.0602905	88	.102957847	Prob > F	=	0.0000
Total	55.4708127	95	.583903292	R-squared	=	0.8367

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.5833843	.0714239	-8.17	0.000	-.7253243 -.4414444
giniavni	.0134439	.0046158	2.91	0.005	.0042709 .0226169
ethnl	.3390478	.1281729	2.65	0.010	.0843311 .5937644
musl	.4478714	.1050257	4.26	0.000	.2391548 .656588
lpopd	-.0550821	.0268484	-2.05	0.043	-.1084377 -.0017265
urbwdi	-.0046584	.0026872	-1.73	0.087	-.0099986 .0006819
pavg8090	-.010871	.0062006	-1.75	0.083	-.0231934 .0014513
_cons	7.980398	.5274094	15.13	0.000	6.932283 9.028514

Model 5-10: Robust Check 1.2: Change specification: Include mean years of female school

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 mysfx, r
```

Linear regression	Number of obs	=	98
	F(9, 88)	=	63.12
	Prob > F	=	0.0000
	R-squared	=	0.8455
	Root MSE	=	.32065

limrcom	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4388159	.0799923	-5.49	0.000	-.5977837 -.279848
giniavni	.0107562	.0059481	1.81	0.074	-.0010643 .0225767
ethnl	.1593279	.1317853	1.21	0.230	-.1025676 .4212234
musl	.2082811	.1158266	1.80	0.076	-.0218999 .4384621
fertwdi	.0168981	.0349545	0.48	0.630	-.0525666 .0863627
lpopd	-.0842191	.035777	-2.35	0.021	-.1553185 -.0131198
urbwdi	-.0036925	.0026589	-1.39	0.168	-.0089764 .0015915
pavg8090	-.0044307	.0069248	-0.64	0.524	-.0181922 .0093308
mysfx	-.0939758	.0274111	-3.43	0.001	-.1484496 -.0395021
_cons	7.46369	.7117649	10.49	0.000	6.049207 8.878173

Model 5-10: Robust Check 1.3: Change specification: Include female literacy

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 litfewdi, r
```

Linear regression	Number of obs	=	98
	F(9, 88)	=	58.98
	Prob > F	=	0.0000
	R-squared	=	0.8407
	Root MSE	=	.32559

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.466442	.076256	-6.12	0.000	-.6179848	-.3148992
giniavni	.0114648	.0060712	1.89	0.062	-.0006004	.02353
ethnl	.1403147	.1272131	1.10	0.273	-.1124946	.393124
musl	.2116359	.1207433	1.75	0.083	-.028316	.4515878
fertwdi	.0159071	.0388497	0.41	0.683	-.0612984	.0931127
lpopd	-.0825541	.0351501	-2.35	0.021	-.1524076	-.0127006
urbwdi	-.0040943	.0027157	-1.51	0.135	-.0094911	.0013025
pavg8090	-.0047301	.0068096	-0.69	0.489	-.0182627	.0088024
litfewdi	-.0063441	.0021011	-3.02	0.003	-.0105197	-.0021685
_cons	7.680566	.699276	10.98	0.000	6.290901	9.07023

Model 5-10: Robust Check 1.4: Change specification: Incl geographical variables

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 airdist popcrgs latcapab, r
```

Linear regression

Number of obs =	98
F(11, 86) =	50.91
Prob > F =	0.0000
R-squared =	0.8339
Root MSE =	.33627

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4953973	.0779702	-6.35	0.000	-.6503969	-.3403977
giniavni	.0113564	.0056965	1.99	0.049	.0000321	.0226807
ethnl	.3032974	.1273502	2.38	0.019	.0501337	.5564612
musl	.2725183	.1288222	2.12	0.037	.0164283	.5286084
fertwdi	.090386	.0386594	2.34	0.022	.0135337	.1672382
lpopd	-.0508295	.0332601	-1.53	0.130	-.1169484	.0152893
urbwdi	-.0044644	.0026612	-1.68	0.097	-.0097547	.000826
pavg8090	-.0028947	.0072883	-0.40	0.692	-.0173834	.011594
airdist	-9.23e-06	.0000182	-0.51	0.613	-.0000454	.000027
popcrgs	-.0008886	.0011904	-0.75	0.457	-.003255	.0014778
latcapab	.0062187	.0040098	1.55	0.125	-.0017526	.01419
_cons	6.998859	.6461199	10.83	0.000	5.714415	8.283303

Model 5-10: Robust Check 1.5: Change specification: Include regional dummies

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 afri lati east sout, r
```

Linear regression

Number of obs =	98
F(12, 85) =	47.26
Prob > F =	0.0000
R-squared =	0.8293
Root MSE =	.34292

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5329039	.0948784	-5.62	0.000	-.7215475	-.3442603
giniavni	.012318	.0062933	1.96	0.054	-.0001948	.0248309
ethnl	.2535829	.1641064	1.55	0.126	-.0727046	.5798705

musl	.2722065	.1047294	2.60	0.011	.0639765	.4804366
fertwdi	.0799093	.0414851	1.93	0.057	-.0025742	.1623928
lpopd	-.0696161	.0353562	-1.97	0.052	-.1399136	.0006814
urbwdi	-.0039032	.0032531	-1.20	0.234	-.0103713	.0025648
pavg8090	-.0045229	.00923	-0.49	0.625	-.0228746	.0138288
afri	-.1434022	.1357867	-1.06	0.294	-.4133826	.1265781
lati	-.1207812	.211787	-0.57	0.570	-.5418704	.3003081
east	-.0789175	.17249	-0.46	0.648	-.4218738	.2640388
sout	.0257162	.2170851	0.12	0.906	-.4059072	.4573396
_cons	7.465959	.8423204	8.86	0.000	5.7912	9.140718

Model 5-10: Robust Check 2.1: Imputation check: Include missing data flags

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdphf giniavnf ethnlf, r
```

Linear regression

						Number of obs = 98
						F(10, 87) = 51.46
						Prob > F = 0.0000
						R-squared = 0.8380
						Root MSE = .33023

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4841035	.0744238	-6.50	0.000	-.6320289	-.3361781
giniavni	.0071958	.0058682	1.23	0.223	-.004468	.0188595
ethnl	.1856752	.133503	1.39	0.168	-.0796765	.4510268
musl	.3223158	.1157348	2.78	0.007	.0922803	.5523512
fertwdi	.0940195	.0321512	2.92	0.004	.0301155	.1579236
lpopd	-.068697	.0325046	-2.11	0.037	-.1333034	-.0040906
urbwdi	-.0040299	.0026051	-1.55	0.126	-.0092078	.0011479
pavg8090	-.0066006	.006922	-0.95	0.343	-.0203588	.0071576
gdphf	(dropped)					
giniavnf	-.0495309	.0861734	-0.57	0.567	-.2208098	.121748
ethnlf	-.3457947	.1682633	-2.06	0.043	-.6802362	-.0113532
_cons	7.208462	.6124959	11.77	0.000	5.99106	8.425864

Model 5-10: Robust Check 3.1: Outlier checks: Robust regression

```
. rreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
```

Huber iteration 1: maximum difference in weights = .46496616
 Huber iteration 2: maximum difference in weights = .08761523
 Huber iteration 3: maximum difference in weights = .01282814
 Biweight iteration 4: maximum difference in weights = .15649768
 Biweight iteration 5: maximum difference in weights = .01407672
 Biweight iteration 6: maximum difference in weights = .00254776

Robust regression

						Number of obs = 98
						F(8, 89) = 46.45
						Prob > F = 0.0000

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5017038	.0838119	-5.99	0.000	-.6682362	-.3351714
giniavni	.0111559	.0049881	2.24	0.028	.0012445	.0210672
ethnl	.2499687	.1484116	1.68	0.096	-.044922	.5448593
musl	.3540931	.1226005	2.89	0.005	.1104885	.5976977

fertwdi	.0765627	.039959	1.92	0.059	-.002835	.1559604
lpopd	-.0540939	.0289438	-1.87	0.065	-.1116045	.0034167
urbwdi	-.0051873	.0029827	-1.74	0.085	-.0111138	.0007393
pavg8090	-.004839	.0074868	-0.65	0.520	-.019715	.0100371
_cons	7.184185	.6599707	10.89	0.000	5.872837	8.495532

Model 5-10: Robust Check 3.2: Outlier checks: Median regression

```
. qreg limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090
Iteration 1: WLS sum of weighted deviations = 25.802323
```

```
Iteration 1: sum of abs. weighted deviations = 25.475739
Iteration 2: sum of abs. weighted deviations = 25.395838
Iteration 3: sum of abs. weighted deviations = 25.332311
Iteration 4: sum of abs. weighted deviations = 25.244717
Iteration 5: sum of abs. weighted deviations = 25.220778
Iteration 6: sum of abs. weighted deviations = 25.170145
Iteration 7: sum of abs. weighted deviations = 25.166834
```

Median regression	Number of obs =	98
Raw sum of deviations 61.51615 (about 4.1271343)		
Min sum of deviations 25.166833	Pseudo R2 =	0.5909

limrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4326221	.104955	-4.12	0.000	-.6411654	-.2240787
giniavni	.0104867	.0064752	1.62	0.109	-.0023794	.0233528
ethnl	.1753957	.1836314	0.96	0.342	-.1894759	.5402674
musl	.274257	.1502941	1.82	0.071	-.0243741	.5728881
fertwdi	.1032122	.0503884	2.05	0.043	.0030916	.2033328
lpopd	-.0640686	.037101	-1.73	0.088	-.1377875	.0096503
urbwdi	-.006339	.003848	-1.65	0.103	-.0139848	.0013069
pavg8090	-.002962	.0096301	-0.31	0.759	-.0220969	.0161729
_cons	6.729543	.8268164	8.14	0.000	5.086677	8.37241

Model 5-10: Robust Check 3.3: Outlier checks: Discard 2 cases highest cooksd

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 if ctry == "Mongolia" &
ctry == "Cuba", r
```

Linear regression	Number of obs =	96
	F(8, 87) =	61.95
	Prob > F =	0.0000
	R-squared =	0.8428
	Root MSE =	.3166

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5360531	.0712453	-7.52	0.000	-.6776609	-.3944453
giniavni	.0115457	.0051974	2.22	0.029	.0012153	.021876
ethnl	.275023	.1269781	2.17	0.033	.0226402	.5274058
musl	.3770214	.1057118	3.57	0.001	.1669077	.587135
fertwdi	.0654923	.0303045	2.16	0.033	.0052587	.1257258
lpopd	-.0430929	.0277487	-1.55	0.124	-.0982465	.0120607
urbwdi	-.0040015	.0024924	-1.61	0.112	-.0089555	.0009526
pavg8090	-.0062542	.0067405	-0.93	0.356	-.0196517	.0071433
_cons	7.37109	.5543789	13.30	0.000	6.269202	8.472979

Model 5-10: Robust Check 5.1: DepV: change IMR to U5MR (limrcom to lu5mrcom)

```
. regress lu5mrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 98
 $F(8, 89) = 72.09$
 Prob > F = 0.0000
 R-squared = 0.8315
 Root MSE = .38364

lu5mrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5253003	.0961597	-5.46	0.000	-.7163677	-.334233
giniavni	.0096849	.0066102	1.47	0.146	-.0034495	.0228193
ethnl	.3268423	.1578252	2.07	0.041	.0132471	.6404375
musl	.2847177	.1330912	2.14	0.035	.0202683	.549167
fertwdi	.106339	.0393338	2.70	0.008	.0281836	.1844943
lpopd	-.0759772	.0378084	-2.01	0.048	-.1511017	-.0008527
urbwdi	-.0057211	.0030467	-1.88	0.064	-.0117749	.0003326
pavg8090	-.0100683	.0081111	-1.24	0.218	-.0261849	.0060483
_cons	7.674179	.8287572	9.26	0.000	6.027456	9.320902

Model 5-10: Robust Check 5.2: DepV: Vary source: infant mortality (limrcom to limrwdi)

```
. regress limrwdi lgdph giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 98
 $F(8, 89) = 74.84$
 Prob > F = 0.0000
 R-squared = 0.8458
 Root MSE = .31574

limrwdi	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4980542	.0738438	-6.74	0.000	-.6447803	-.3513281
giniavni	.011731	.0054299	2.16	0.033	.0009419	.0225202
ethnl	.1845545	.1191028	1.55	0.125	-.0521001	.4212091
musl	.2827785	.1116053	2.53	0.013	.0610211	.5045359
fertwdi	.098046	.0317742	3.09	0.003	.0349114	.1611806
lpopd	-.0430421	.0263418	-1.63	0.106	-.0953827	.0092986
urbwdi	-.0048411	.0026097	-1.86	0.067	-.0100266	.0003444
pavg8090	-.0033091	.0068138	-0.49	0.628	-.016848	.0102298
_cons	7.029437	.6290442	11.17	0.000	5.779539	8.279334

Model 5-10: Robust Check 6.5: IndV: Vary source: pavg8090 to pol90

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi pol90, r
```

Linear regression

Number of obs = 101
 $F(8, 92) = 70.58$
 Prob > F = 0.0000
 R-squared = 0.8251
 Root MSE = .33614

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5076704	.0785054	-6.47	0.000	-.6635888	-.3517519
giniavni	.0096712	.006051	1.60	0.113	-.0023465	.0216889
ethnl	.2421963	.1257071	1.93	0.057	-.0074687	.4918614
musl	.3559339	.1138282	3.13	0.002	.1298613	.5820066
fertwdi	.0896921	.0315532	2.84	0.006	.0270248	.1523595
lpopd	-.0683067	.0346556	-1.97	0.052	-.1371358	.0005223
urbwdi	-.0044318	.0026266	-1.69	0.095	-.0096485	.0007848
pol90	.0005023	.0056102	0.09	0.929	-.0106399	.0116446
_cons	7.267295	.6838396	10.63	0.000	5.909131	8.62546

Model 5-10: Robust Check 6.6: IndV: Vary source: pavg8090 to free8090

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free8090, r
```

Linear regression

Number of obs = 104
F(8, 95) = 80.42
Prob > F = 0.0000
R-squared = 0.8346
Root MSE = .33108

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5043111	.075832	-6.65	0.000	-.6548566	-.3537656
giniavni	.0103645	.0056825	1.82	0.071	-.0009166	.0216456
ethnl	.2367949	.1226763	1.93	0.057	-.0067484	.4803382
musl	.353758	.1101216	3.21	0.002	.1351389	.5723771
fertwdi	.0852302	.0335064	2.54	0.013	.0187116	.1517489
lpopd	-.067483	.0331989	-2.03	0.045	-.1333911	-.0015749
urbwdi	-.0046124	.0022789	-2.02	0.046	-.0091367	-.0000881
free8090	.004467	.0137573	0.32	0.746	-.0228447	.0317786
_cons	7.195571	.6824858	10.54	0.000	5.840665	8.550477

Model 5-10: Robust Check 6.7: IndV: Vary source: pavg8090 to free90

```
. regress limrcom lgdph giniavni ethnl musl fertwdi lpopd urbwdi free90, r
```

Linear regression

Number of obs = 104
F(8, 95) = 81.62
Prob > F = 0.0000
R-squared = 0.8344
Root MSE = .33127

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.5098933	.0745452	-6.84	0.000	-.6578841	-.3619024
giniavni	.0098879	.0056748	1.74	0.085	-.0013779	.0211538
ethnl	.2323253	.1234844	1.88	0.063	-.0128221	.4774728
musl	.3556633	.1096073	3.24	0.002	.1380653	.5732613
fertwdi	.0894577	.0332819	2.69	0.008	.0233847	.1555307
lpopd	-.0686136	.0333705	-2.06	0.043	-.1348623	-.0023649
urbwdi	-.0045007	.0022606	-1.99	0.049	-.0089885	-.0000129

free90	-.0005148	.0116276	-0.04	0.965	-.0235986	.022569
_cons	7.288191	.6647769	10.96	0.000	5.968442	8.60794

Model 5-10: Robust Check 7.1: CtrlV: Vary source: GDP/cap at PPP (lgdph to lgdpmx)

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 97
 F(8, 88) = 60.62
 Prob > F = 0.0000
 R-squared = 0.8367
 Root MSE = .32943

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5368288	.0837271	-6.41	0.000	-.7032189	-.3704387
giniavni	.0104784	.0050981	2.06	0.043	.000347	.0206097
ethnl	.2055628	.1299839	1.58	0.117	-.0527528	.4638784
musl	.2723354	.1111425	2.45	0.016	.0514631	.4932077
fertwdi	.0604053	.0358563	1.68	0.096	-.0108516	.1316622
lpopd	-.0785463	.0275992	-2.85	0.006	-.1333939	-.0236988
urbwdi	-.0058867	.0024319	-2.42	0.018	-.0107196	-.0010539
pavg8090	.0004616	.0073975	0.06	0.950	-.0142393	.0151625
_cons	7.749256	.7149004	10.84	0.000	6.328542	9.169971

Model 5-10: Robust Check 7.2: CtrlV: Vary source: lgdph to lgdpmx, msg flags

```
. regress limrcom lgdpmx giniavni ethnl musl fertwdi lpopd urbwdi pavg8090 gdpmf, r
```

Linear regression

Number of obs = 97
 F(9, 87) = 53.67
 Prob > F = 0.0000
 R-squared = 0.8370
 Root MSE = .33109

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdpmx	-.5315657	.0862618	-6.16	0.000	-.7030204	-.3601109
giniavni	.0104061	.0051448	2.02	0.046	.0001803	.0206319
ethnl	.2133266	.131354	1.62	0.108	-.0477538	.474407
musl	.2728744	.1110836	2.46	0.016	.0520837	.4936651
fertwdi	.0572758	.0377737	1.52	0.133	-.0178034	.132355
lpopd	-.0812148	.02973	-2.73	0.008	-.1403064	-.0221233
urbwdi	-.0061742	.0026342	-2.34	0.021	-.0114099	-.0009385
pavg8090	.0002843	.0074591	0.04	0.970	-.0145414	.0151101
gdpmf	-.0741132	.1742739	-0.43	0.672	-.4205015	.2722751
_cons	7.748171	.7205166	10.75	0.000	6.316066	9.180276

Model 5-10: Robust Check 7.3: CtrlV: Vary source: ethnic fragment (ethnl to ethnannx)

```
. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090, r
```

Linear regression

Number of obs = 98
 F(8, 89) = 70.32

Prob > F = 0.0000
 R-squared = 0.8266
 Root MSE = .33775

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4833274	.0852412	-5.67	0.000	-.6526998	-.3139549
giniavni	.0110509	.0059473	1.86	0.066	-.0007663	.0228681
ethnannx	.2685296	.1647067	1.63	0.107	-.0587392	.5957984
musl	.3402121	.1175951	2.89	0.005	.1065532	.573871
fertwdi	.0827314	.0334705	2.47	0.015	.0162262	.1492366
lpopd	-.0622788	.0339782	-1.83	0.070	-.1297927	.0052351
urbwdi	-.0059598	.0027608	-2.16	0.034	-.0114454	-.0004742
pavg8090	-.0051483	.006958	-0.74	0.461	-.0189737	.0086771
_cons	7.035096	.7537476	9.33	0.000	5.537416	8.532776

Model 5-10: Robust Check 7.4: CtrlV: Vary source: ethnl to ethnannx, msg flags

. regress limrcom lgdph giniavni ethnannx musl fertwdi lpopd urbwdi pavg8090 ethnannf, r

Linear regression

Number of obs = 98
 F(9, 88) = 62.56
 Prob > F = 0.0000
 R-squared = 0.8269
 Root MSE = .33941

limrcom	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lgdph	-.4916001	.0892693	-5.51	0.000	-.6690041	-.3141962
giniavni	.0107271	.0059364	1.81	0.074	-.0010703	.0225245
ethnannx	.2641881	.1661634	1.59	0.115	-.0660269	.594403
musl	.3425045	.1181751	2.90	0.005	.1076563	.5773527
fertwdi	.0804958	.033736	2.39	0.019	.0134526	.1475391
lpopd	-.0634487	.0338529	-1.87	0.064	-.1307242	.0038268
urbwdi	-.0057426	.0027567	-2.08	0.040	-.0112209	-.0002644
pavg8090	-.0054552	.0069867	-0.78	0.437	-.0193398	.0084293
ethnannf	-.0625467	.2217887	-0.28	0.779	-.5033053	.3782118
_cons	7.122133	.787539	9.04	0.000	5.557065	8.687201

Replication of Filmer and Pritchett Model with Developing Countries Only

The results obtained by Filmer and Pritchett (1999) (Model FP) were replicated using a similar model (Model TS) to predict the under-5 mortality rate in 1990.

	FP	TS
GDP per capita at PPP (ln)	-.611 (9.71)	-.400*** (4.52)
Mean years of schooling, female	-.093 (3.54)	-.144*** (4.62)
Gini index of income inequality	.008 (1.28)	.014** (2.81)

Ethno-linguistic fractionalization	.549 (3.43)	.246 (1.55)
More than 90% of population Muslim	.450 (3.18)	.330* (2.16)
Public health spend. share of GDP (ln)	-.135 (1.78)	-.082 (1.22)
% population urban	.001 (0.46)	-.011 (0.27)
Country within 20 degrees of equator	-.051 (0.55)	-.035 (0.10)
% pop. with access to safe water	-.001 (0.61)	-.005* (2.17)
Number of cases	98	103
R-squared	.9469	.8811

Model FP: Filmer and Pritchett findings for developing and industrialized countries.

Model TS: This study's findings for developing countries only.

Dependent variable: Under-5 deaths per 1000 live births (natural log).

Universe: 105 developing countries circa 1990.

Top number: unstandardized OLS coefficient; bottom number: absolute value of t-score.

†signif. at .10 level; *signif. at .05 level; **signif. at .01 level; ***signif. at .001 level (all two-tailed).
nb.: Filmer and Pritchett do not use asterisks to signify the P-values of their t-scores.

Additional variables: Constant term, dummy variable flags for missing data, dummy variables for Sub-Saharan Africa, Latin America and the Caribbean, South Asia, and East Asia and the Pacific. None of the dummy variables for region or for missing data had a statistically significant effect on under-5 mortality in Model 1.

Check on robustness: As in the Filmer and Pritchett study, the two country observations with the largest impact on the parameter vector (as identified by Cook's D test) were dropped. In Model FP, South Korea and Zaire were dropped. In Model TS, Mongolia and Singapore were dropped.

The exercises differed in three ways:

1. Model TS included developing countries only, whereas Model FP included industrialized as well as developing countries.
2. Model TS used a wider range of data sources to construct each variable.
3. Model TS used updated sources of data for GDP per capita and female schooling.

Despite these differences, the models produced results that were similar in four important respects.

1. The predictor variables explained a very high proportion of the cross-national variance in under-5 mortality.

2. GDP per capita and female education were by far the strongest predictors.
3. All statistically significant predictor variables had the expected signs.
4. Urbanization, tropical location, and public health care spending as a share of GDP all lacked significant associations with under-5 mortality.

Five differences in the findings should also be noted.

1. The regressors in Model FP explained 95 percent of the cross-national variance in under-5 mortality, whereas the regressors in Model TS explained only 88 percent.
2. GDP per capita had a weaker association with under-5 mortality in Model TS than in Model FP, whereas mean years of female schooling had a stronger association.
3. The Gini index of income inequality had a stronger association with under-5 mortality in Model TS than in Model FP, perhaps because Model TS was applied exclusively to developing countries, or perhaps because different methods were used in each study to impute the values of missing observations. In Model TS, 25 of the 105 societies lacked data on the Gini index. These societies were assigned the Gini index of the country identified as the "nearest neighbor" according to the method described in Rajkumar and Swaroop (2002: 26-27). If the nearest neighbor's Gini was also missing, the country was assigned the mean Gini of the world region in which it is located -- either the Middle East and North Africa, sub-Saharan Africa, Latin America and the Caribbean, South Asia, or East Asia and the Pacific. Filmer and Pritchett, by contrast, apparently assigned the world average Gini, rather than a regional average Gini, to countries with missing data (Filmer 2001).
4. Ethnolinguistic fractionalization and Muslim religion had weaker effects in Model TS than in Model FP. Both differences could be due to the different universe of cases; the difference in ethnolinguistic fractionalization could also be due to different sources of data on this indicator. Filmer and Pritchett (1999) used ethnolinguistic fractionalization data associated with Easterly and Levine (1996), which provided figures for 72 of the 105 cases studied here. The present study uses ethnolinguistic fractionalization data from La Porta et al. 1998, which provided figures for 98 of the 105 cases (figures were assigned to the 7 missing cases based on the ethnic composition of countries judged to be similar on this dimension). Checks for robustness involved using missing data flags for the La Porta et al. data and using an alternative ethnolinguistic fractionalization data set constructed by Annett (2001), which provided figures for 98 of the 105 cases. Across 72 cases included in all three data sets, the La Porta et al. figures had a .87 correlation with the Easterly and Levine figures and a .74 correlation with the Annett figures. When Model 2-1 was reestimated using the Annett rather than the La Porta et al. data, the coefficient on ethnolinguistic fractionalization rose to .356 and was significant at almost the .05 level ($t= 1.97$). If Muslim religion is measured not as whether more than 90 percent of the country's inhabitants are Muslim, but as the percentage of Muslims in the population (La Porta et al. 1998), its association with under-5 mortality vanishes.
5. Access to safe water was associated significantly in Model TS, but not in Model FP, with lower under-5 mortality.

Statistical Output for Replication of Filmer and Pritchett Model

```
. regress lu5mrcom lgdph mysfx giniavni ethnl musl lhlxpuwd urbwdi trop20 watecom afri lati east
sout gdphf giniavnf ethnlf if ctry ~= "Singapore" & ctry ~= "Mongolia"
```

Source	SS	df	MS	Number of obs	=	103
Model	72.5362133	16	4.53351333	F(16, 86)	=	39.85
Residual	9.7842228	86	.113770033	Prob > F	=	0.0000
Total	82.3204361	102	.807063099	R-squared	=	0.8811
				Adj R-squared	=	0.8590
				Root MSE	=	.3373

lu5mrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.400053	.0885338	-4.52	0.000	-.5760523 -.2240536
mysfx	-.1438388	.0311159	-4.62	0.000	-.2056951 -.0819824
giniavni	.0144282	.0051258	2.81	0.006	.0042384 .024618
ethnl	.2462685	.1586456	1.55	0.124	-.0691084 .5616455
musl	.3302258	.152959	2.16	0.034	.0261534 .6342982
lhlxpuwd	-.0815258	.0666571	-1.22	0.225	-.2140358 .0509842
urbwdi	-.000914	.0033645	-0.27	0.787	-.0076023 .0057743
trop20	-.0109813	.1106328	-0.10	0.921	-.230912 .2089494
watecom	-.0052927	.0024388	-2.17	0.033	-.0101409 -.0004446
afri	.1646999	.1915122	0.86	0.392	-.2160138 .5454136
lati	.1086827	.2124879	0.51	0.610	-.3137293 .5310948
east	.0361725	.2095722	0.17	0.863	-.3804432 .4527882
sout	.0873081	.2178342	0.40	0.690	-.3457319 .5203481
gdphf	-.2698908	.3846996	-0.70	0.485	-1.034648 .4948667
giniavnf	.0042965	.0946761	0.05	0.964	-.1839133 .1925064
ethnlf	-.1833751	.170679	-1.07	0.286	-.5226737 .1559235
_cons	7.421959	.562778	13.19	0.000	6.303193 8.540725

Correlations among three indicators of ethnic fragmentation

```
. correlate ethnel ethnl ethnann
(obs=72)
```

	ethnel	ethnl	ethnann
ethnel	1.0000		
ethnl	0.8733	1.0000	
ethnann	0.7440	0.7426	1.0000

ethnel is ethnolinguistic fractionalization according to Filmer (2001), which takes the variable from Easterly and Levine (1996). ethnl is ethnolinguistic fractionalization according to La Porta et al. 1998. ethnann is ethnolinguistic fractionalization according to Annett 2001.

Model TS with ethnic fractionalization measured by Annett rather than La Porta et al.

```
. regress lu5mrcom lgdph mysfx giniavni ethnannx musl lhlxpuwd urbwdi trop20 watecom afri lati east
sout gdphf giniavnf ethnannf if ctry ~= "Singapore" & ctry ~= "Mongolia"
```

Source	SS	df	MS	Number of obs	=	103
Model	72.4873408	16	4.5304588	F(16, 86)	=	39.62
Residual	9.8330953	86	.114338317	Prob > F	=	0.0000
Total	82.3204361	102	.807063099	R-squared	=	0.8806
				Adj R-squared	=	0.8583
				Root MSE	=	.33814

lu5mrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.4019847	.0977047	-4.11	0.000	-.5962151 -.2077543

mysfx	-.1473361	.0315204	-4.67	0.000	-.2099967	-.0846756
giniavni	.0160002	.0049582	3.23	0.002	.0061437	.0258567
ethnannx	.31999	.1817281	1.76	0.082	-.0412736	.6812536
musl	.2901627	.1524098	1.90	0.060	-.0128179	.5931433
lhlpwuwd	-.0824921	.0641072	-1.29	0.202	-.2099331	.0449488
urbwdi	-.0014928	.003557	-0.42	0.676	-.0085639	.0055782
trop20	-.0498994	.1148014	-0.43	0.665	-.2781172	.1783183
watecom	-.00521	.0024516	-2.13	0.036	-.0100836	-.0003364
afri	.1391498	.1941523	0.72	0.475	-.2468123	.5251119
lati	.0638322	.2140219	0.30	0.766	-.3616293	.4892936
east	.0259754	.2088086	0.12	0.901	-.3891224	.4410731
sout	.0455164	.223906	0.20	0.839	-.3995939	.4906268
gdphf	-.1664763	.3950662	-0.42	0.675	-.9518419	.6188894
giniavnf	-.0014758	.0968537	-0.02	0.988	-.1940145	.191063
ethnannf	-.0896777	.1670123	-0.54	0.593	-.4216872	.2423318
_cons	7.373304	.658773	11.19	0.000	6.063706	8.682901

Model TS with percent Muslim rather than a 0/1 variable indicating >90% Muslim

```
. regress lu5mrcom lgdph mysfx giniavni ethnl muslpct lhlpwuwd urbwdi trop20 watecom afri lati east sout gdphf giniavnf ethnlf if ctry ~= "Singapore" & ctry ~= "Mongolia"
```

Source	SS	df	MS	Number of obs =	103
Model	72.0308323	16	4.50192702	F(16, 86) =	37.63
Residual	10.2896038	86	.119646556	Prob > F =	0.0000
Total	82.3204361	102	.807063099	R-squared =	0.8750
				Adj R-squared =	0.8518
				Root MSE =	.3459

lu5mrcom	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lgdph	-.3868264	.0906679	-4.27	0.000	-.5670682 -.2065845
mysfx	-.1541946	.0338777	-4.55	0.000	-.2215412 -.086848
giniavni	.0140083	.0052803	2.65	0.010	.0035114 .0245053
ethnl	.2020987	.1614169	1.25	0.214	-.1187874 .5229847
muslpct	.0007505	.0016455	0.46	0.649	-.0025205 .0040216
lhlpwuwd	-.0744675	.068525	-1.09	0.280	-.2106908 .0617557
urbwdi	-.0002736	.0034617	-0.08	0.937	-.0071552 .006608
trop20	-.0002334	.1135082	-0.00	0.998	-.2258803 .2254135
watecom	-.0053112	.0025178	-2.11	0.038	-.0103165 -.0003059
afri	-.013516	.18724	-0.07	0.943	-.3857369 .3587049
lati	-.0996006	.2139037	-0.47	0.643	-.5248272 .325626
east	-.1478245	.2100641	-0.70	0.484	-.5654182 .2697692
sout	-.0632745	.2215972	-0.29	0.776	-.5037951 .3772461
gdphf	-.2862189	.3947618	-0.73	0.470	-1.070979 .4985416
giniavnf	-.0141622	.0980757	-0.14	0.886	-.2091302 .1808058
ethnlf	-.1745919	.175007	-1.00	0.321	-.5224943 .1733105
_cons	7.555329	.5846497	12.92	0.000	6.393084 8.717574