log using McGuireElementStataOutputTables2and3

\*\*\* VARIABLES

\*\*\* ccode: numerical code for country

\*\*\* codealp: alphabetical code for country

\*\*\* cname: name of country

\*\*\* year: year

\*\*\* rgdpnapc: GDP per capita in constant 2011 US$ using 2011 international price comparisons

\*\*\* wdi\_mortinf: infant mortality according to WB WDI (downloaded 2 Nov 2017) via Quality of Government dataset (Teorell et al. 2018)

\*\*\* vdem\_libdem: V-Dem liberal Democracy Index (downloaded 2 Nov 2017) Quality of Government dataset (Teorell et al. 2018)

\*\*\* Universe of cases: All countries in the world with data from 1970 to 2015 on GDP per capita at PPP in 2011 US$, the V-Dem liberal democracy index, and infant mortality. No missing data imputed.

\*\*\* Source: Jan Teorell et al., Quality of Government Standard Dataset, version Jan18. University of Gothenburg: The Quality of Government Institute, http://www.qog.pol.gu.se doi:10.18157/QoGStdJan18

\*\*\* Original source for GDP per capita at PPP in 2011 US$: Maddison Project Database 2018, Stata version, accessed 24 January 2018 at https://www.rug.nl/ggdc/historicaldevelopment/maddison/data/mpd2018.dta.

\*\*\* Original source for infant mortality: World Bank World Development Indicators accessed 2 November 2018.

\*\*\* Original source for V-Dem liberal Democracy Index: Varieties of Democracy (V-Dem) Project country-year/country-date dataset v7.1, downloaded 17 October 2017.

\*\*\* stipulate the panel and time variables

tsset ccode year

\*\*\* generate dummy variables for country and year

tab ccode, gen(ctry)

tab year, gen(yr)

\*\*\* generate a time trend variable

gen time = year-1970

\*\*\* take the natural logarithms of GDP per capita and infant mortality

gen lrgdpnapc = ln(rgdpnapc)

gen lwdi\_mortinf = ln(wdi\_mortinf)

\*\*\* generate lagged variables for use with Stata routines that cannot handle factor variables

gen lag1wdi\_mortinf = l1.wdi\_mortinf

gen lag1lwdi\_mortinf = l1.wdi\_mortinf

gen lag1vdem\_libdem = l1.vdem\_libdem

gen lag2vdem\_libdem = l2.vdem\_libdem

gen lag3vdem\_libdem = l3.vdem\_libdem

gen lag4vdem\_libdem = l4.vdem\_libdem

gen lag5vdem\_libdem = l5.vdem\_libdem

\*\*\* Summarize all variables

summarize ctry\* yr\*

\*\*\*Diagnostics for reduced data set (1970-2015)

\*\*\* 1. Wald test for joint significance of province and year dummies to ascertain the advisability of including these dummies in the regressions

xtpcse wdi\_mortinf lrgdpnapc l1.vdem\_libdem ctry1 ctry2 ctry3 ctry4 ctry5 ctry6 ctry7 ctry8 ctry9 ctry10 ctry11 ctry12 ctry13 ctry14 ctry15 ctry16 ctry17 ctry18 ctry19 ctry20 ctry21 ctry22 ctry23 ctry24 ctry25 ctry26 ctry27 ctry28 ctry29 ctry30 ctry31 ctry32 ctry33 ctry34 ctry35 ctry36 ctry37 ctry38 ctry39 ctry40 ctry41 ctry42 ctry43 ctry44 ctry45 ctry46 ctry47 ctry48 ctry49 ctry50 ctry51 ctry52 ctry53 ctry54 ctry55 ctry56 ctry57 ctry58 ctry59 ctry60 ctry61 ctry62 ctry63 ctry64 ctry65 ctry66 ctry67 ctry68 ctry69 ctry70 ctry71 ctry72 ctry73 ctry74 ctry75 ctry76 ctry77 ctry78 ctry79 ctry80 ctry81 ctry82 ctry83 ctry84 ctry85 ctry86 ctry87 ctry88 ctry89 ctry90 ctry91 ctry92 ctry93 ctry94 ctry95 ctry96 ctry97 ctry98 ctry99 ctry100 ctry101 ctry102 ctry103 ctry104 ctry105 ctry106 ctry107 ctry108 ctry109 ctry110 ctry111 ctry112 ctry113 ctry114 ctry115 ctry116 ctry117 ctry118 ctry119 ctry120 ctry121 ctry122 ctry123 ctry124 ctry125 ctry126 ctry127 ctry128 ctry129 ctry130 ctry131 ctry132 ctry133 ctry134 ctry135 ctry136 ctry137 ctry138 ctry139 ctry140 ctry141 ctry142 ctry143 ctry144 ctry145 ctry146 ctry147 ctry148 ctry149 ctry150 ctry151 ctry152 ctry153 ctry154 ctry155 ctry156 ctry157 yr1 yr2 yr3 yr4 yr5 yr6 yr7 yr8 yr9 yr10 yr11 yr12 yr13 yr14 yr15 yr16 yr17 yr18 yr19 yr20 yr21 yr22 yr23 yr24 yr25 yr26 yr27 yr28 yr29 yr30 yr31 yr32 yr33 yr34 yr35 yr36 yr37 yr38 yr39 yr40 yr41 yr42 yr43 yr44 yr45 yr46

test ctry1 ctry2 ctry3 ctry4 ctry5 ctry6 ctry7 ctry8 ctry9 ctry10 ctry11 ctry12 ctry13 ctry14 ctry15 ctry16 ctry17 ctry18 ctry19 ctry20 ctry21 ctry22 ctry23 ctry24 ctry25 ctry26 ctry27 ctry28 ctry29 ctry30 ctry31 ctry32 ctry33 ctry34 ctry35 ctry36 ctry37 ctry38 ctry39 ctry40 ctry41 ctry42 ctry43 ctry44 ctry45 ctry46 ctry47 ctry48 ctry49 ctry50 ctry51 ctry52 ctry53 ctry54 ctry55 ctry56 ctry57 ctry58 ctry59 ctry60 ctry61 ctry62 ctry63 ctry64 ctry65 ctry66 ctry67 ctry68 ctry69 ctry70 ctry71 ctry72 ctry73 ctry74 ctry75 ctry76 ctry77 ctry78 ctry79 ctry80 ctry81 ctry82 ctry83 ctry84 ctry85 ctry86 ctry87 ctry88 ctry89 ctry90 ctry91 ctry92 ctry93 ctry94 ctry95 ctry96 ctry97 ctry98 ctry99 ctry100 ctry101 ctry102 ctry103 ctry104 ctry105 ctry106 ctry107 ctry108 ctry109 ctry110 ctry111 ctry112 ctry113 ctry114 ctry115 ctry116 ctry117 ctry118 ctry119 ctry120 ctry121 ctry122 ctry123 ctry124 ctry125 ctry126 ctry127 ctry128 ctry129 ctry130 ctry131 ctry132 ctry133 ctry134 ctry135 ctry136 ctry137 ctry138 ctry139 ctry140 ctry141 ctry142 ctry143 ctry144 ctry145 ctry146 ctry147 ctry148 ctry149 ctry150 ctry151 ctry152 ctry153 ctry154 ctry155 ctry156 ctry157 yr1 yr2 yr3 yr4 yr5 yr6 yr7 yr8 yr9 yr10 yr11 yr12 yr13 yr14 yr15 yr16 yr17 yr18 yr19 yr20 yr21 yr22 yr23 yr24 yr25 yr26 yr27 yr28 yr29 yr30 yr31 yr32 yr33 yr34 yr35 yr36 yr37 yr38 yr39 yr40 yr41 yr42 yr43 yr44 yr45 yr46

xtpcse lwdi\_mortinf lrgdpnapc l1.vdem\_libdem lrgdpnapc l1.vdem\_libdem ctry1 ctry2 ctry3 ctry4 ctry5 ctry6 ctry7 ctry8 ctry9 ctry10 ctry11 ctry12 ctry13 ctry14 ctry15 ctry16 ctry17 ctry18 ctry19 ctry20 ctry21 ctry22 ctry23 ctry24 ctry25 ctry26 ctry27 ctry28 ctry29 ctry30 ctry31 ctry32 ctry33 ctry34 ctry35 ctry36 ctry37 ctry38 ctry39 ctry40 ctry41 ctry42 ctry43 ctry44 ctry45 ctry46 ctry47 ctry48 ctry49 ctry50 ctry51 ctry52 ctry53 ctry54 ctry55 ctry56 ctry57 ctry58 ctry59 ctry60 ctry61 ctry62 ctry63 ctry64 ctry65 ctry66 ctry67 ctry68 ctry69 ctry70 ctry71 ctry72 ctry73 ctry74 ctry75 ctry76 ctry77 ctry78 ctry79 ctry80 ctry81 ctry82 ctry83 ctry84 ctry85 ctry86 ctry87 ctry88 ctry89 ctry90 ctry91 ctry92 ctry93 ctry94 ctry95 ctry96 ctry97 ctry98 ctry99 ctry100 ctry101 ctry102 ctry103 ctry104 ctry105 ctry106 ctry107 ctry108 ctry109 ctry110 ctry111 ctry112 ctry113 ctry114 ctry115 ctry116 ctry117 ctry118 ctry119 ctry120 ctry121 ctry122 ctry123 ctry124 ctry125 ctry126 ctry127 ctry128 ctry129 ctry130 ctry131 ctry132 ctry133 ctry134 ctry135 ctry136 ctry137 ctry138 ctry139 ctry140 ctry141 ctry142 ctry143 ctry144 ctry145 ctry146 ctry147 ctry148 ctry149 ctry150 ctry151 ctry152 ctry153 ctry154 ctry155 ctry156 ctry157 yr1 yr2 yr3 yr4 yr5 yr6 yr7 yr8 yr9 yr10 yr11 yr12 yr13 yr14 yr15 yr16 yr17 yr18 yr19 yr20 yr21 yr22 yr23 yr24 yr25 yr26 yr27 yr28 yr29 yr30 yr31 yr32 yr33 yr34 yr35 yr36 yr37 yr38 yr39 yr40 yr41 yr42 yr43 yr44 yr45 yr46

test ctry1 ctry2 ctry3 ctry4 ctry5 ctry6 ctry7 ctry8 ctry9 ctry10 ctry11 ctry12 ctry13 ctry14 ctry15 ctry16 ctry17 ctry18 ctry19 ctry20 ctry21 ctry22 ctry23 ctry24 ctry25 ctry26 ctry27 ctry28 ctry29 ctry30 ctry31 ctry32 ctry33 ctry34 ctry35 ctry36 ctry37 ctry38 ctry39 ctry40 ctry41 ctry42 ctry43 ctry44 ctry45 ctry46 ctry47 ctry48 ctry49 ctry50 ctry51 ctry52 ctry53 ctry54 ctry55 ctry56 ctry57 ctry58 ctry59 ctry60 ctry61 ctry62 ctry63 ctry64 ctry65 ctry66 ctry67 ctry68 ctry69 ctry70 ctry71 ctry72 ctry73 ctry74 ctry75 ctry76 ctry77 ctry78 ctry79 ctry80 ctry81 ctry82 ctry83 ctry84 ctry85 ctry86 ctry87 ctry88 ctry89 ctry90 ctry91 ctry92 ctry93 ctry94 ctry95 ctry96 ctry97 ctry98 ctry99 ctry100 ctry101 ctry102 ctry103 ctry104 ctry105 ctry106 ctry107 ctry108 ctry109 ctry110 ctry111 ctry112 ctry113 ctry114 ctry115 ctry116 ctry117 ctry118 ctry119 ctry120 ctry121 ctry122 ctry123 ctry124 ctry125 ctry126 ctry127 ctry128 ctry129 ctry130 ctry131 ctry132 ctry133 ctry134 ctry135 ctry136 ctry137 ctry138 ctry139 ctry140 ctry141 ctry142 ctry143 ctry144 ctry145 ctry146 ctry147 ctry148 ctry149 ctry150 ctry151 ctry152 ctry153 ctry154 ctry155 ctry156 ctry157 yr1 yr2 yr3 yr4 yr5 yr6 yr7 yr8 yr9 yr10 yr11 yr12 yr13 yr14 yr15 yr16 yr17 yr18 yr19 yr20 yr21 yr22 yr23 yr24 yr25 yr26 yr27 yr28 yr29 yr30 yr31 yr32 yr33 yr34 yr35 yr36 yr37 yr38 yr39 yr40 yr41 yr42 yr43 yr44 yr45 yr46

\*\*\* 2. Hausman tests for consistency of random effects model (if P < .05, random effects is inconsistent)

xtreg wdi\_mortinf lrgdpnapc l1.vdem\_libdem, fe

estimates store fixed

xtreg wdi\_mortinf lrgdpnapc l1.vdem\_libdem, re

estimates store random

hausman fixed random, sigmamore

estimates store clear

xtreg lwdi\_mortinf lrgdpnapc l1.vdem\_libdem, fe

estimates store fixed

xtreg lwdi\_mortinf lrgdpnapc l1.vdem\_libdem, re

estimates store random

hausman fixed random, sigmamore

estimates store clear

\*\*\* 3. Likelihood ratio test to see if intercepts vary across groups (if P < .05, intercepts vary and fixed effects is the appropriate model)

xtreg wdi\_mortinf lrgdpnapc l1.vdem\_libdem, i(ccode) mle

xtreg lwdi\_mortinf lrgdpnapc l1.vdem\_libdem, i(ccode) mle

\*\*\* 4. Modified Wald statistic to detect the presence of groupwise heteroskedasticity in the residuals of a fixed effect regression model (if P < .05, groupwise heteroskedasticity is present).

xtreg wdi\_mortinf lrgdpnapc l1.vdem\_libdem yr\*, fe vce(r)

xttest3

xtreg lwdi\_mortinf lrgdpnapc l1.vdem\_libdem yr\*, fe vce(r)

xttest3

\*\*\* 5. Wooldridge test for autocorrelation in panel data (if P < .05, error term is characterized by first-order autocorrelation)

xtserial wdi\_mortinf lrgdpnapc lag1vdem\_libdem

xtserial lwdi\_mortinf lrgdpnapc lag1vdem\_libdem

\*\*\* 6. Pesaran test for cross-sectional correlation in fixed effects model (if P < .05, error term is characterized by cross-sectional correlation)

xtreg wdi\_mortinf lrgdpnapc l1.vdem\_libdem, fe

xtcsd, pesaran

xtreg lwdi\_mortinf lrgdpnapc l1.vdem\_libdem, fe

xtcsd, pesaran

\*\*\*Table 2 Regressions

\*\*\* Models 1 and 2: GLS with time (year) as well as unit (country) fixed effects and country-clustered standard errors

xtreg wdi\_mortinf lrgdpnapc L.vdem\_libdem yr\*, fe cluster(ccode)

xtreg lwdi\_mortinf lrgdpnapc L.vdem\_libdem yr\*, fe cluster(ccode)

\*\*\* Models 3 and 4: pooled OLS with country and year fixed effects and panel-corrected standard errors

xtpcse wdi\_mortinf lrgdpnapc L.vdem\_libdem yr\* ctry\*, c(ar1)

xtpcse lwdi\_mortinf lrgdpnapc L.vdem\_libdem yr\* ctry\*, c(ar1)

\*\*\* Models 5 and 6: pooled OLS with country and year fixed effects, a lagged dependent variable, and panel-corrected standard errors

xtpcse wdi\_mortinf lrgdpnapc L.vdem\_libdem L.wdi\_mortinf yr\* ctry\*, c(ar1)

xtpcse lwdi\_mortinf lrgdpnapc L.vdem\_libdem L.lwdi\_mortinf yr\* ctry\*, c(ar1)

\*\*\*Table 3 Regressions

\*\*\* Models 7 and 8: GLS with unit (country) but not time fixed effects and country-clustered standard errors

xtreg wdi\_mortinf lrgdpnapc L.vdem\_libdem, fe cluster(ccode)

xtreg lwdi\_mortinf lrgdpnapc L.vdem\_libdem, fe cluster(ccode)

\*\*\* Models 9 and 10: pooled OLS with country and year fixed effects and Driscoll-Kraay standard errors

xtscc wdi\_mortinf lrgdpnapc lag1vdem\_libdem yr\*, fe

xtscc lwdi\_mortinf lrgdpnapc lag1vdem\_libdem yr\*, fe

\*\*\* Models 11 and 12: pooled OLS with country and year fixed effects, a lagged dependent variable, and Driscoll-Kraay standard errors

xtscc wdi\_mortinf lrgdpnapc lag1vdem\_libdem lag1wdi\_mortinf yr\*, fe

xtscc lwdi\_mortinf lrgdpnapc lag1vdem\_libdem lag1wdi\_mortinf yr\*, fe