Pillars of Prosperity

The Political Economics of Development Clusters

A TEN YEAR UPDATE

Chapter 1: Development Clusters

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Introduction

- Here we reassemble the charts from Chapter 1 of Pillars, comparing the main correlations with our new *Pillars 2.dta*.
  - We place these side-by-side with the old charts.
  - All original figures are placed on the left, and new figures on the right.
  - All new figures in this chapter refer to a new cross-section ten years later from the original figure, using the new data.
  - Unless specified otherwise, the old cross-section for almost all figures in Pillars is for 1999/2000 and the new cross-section using the new data is for 2010.

1.1 Specific Indexes of State Weakness and Fragility

- The following slides compare different indexes of state weakness/fragility, comparing the original choropleth maps in Pillars to the newly developed charts for a 2016 cross-section.
- Regarding the first set of charts, the Brookings Institute never updated their 'Index of State Weakness' variable, and so we rely on new data from the Fund for Peace's 'Fragile States Index'.
  - We again calculate quintiles, with darker shades representing more fragile states.
  - Unlike the Bookings Institute's index, the Fund for Peace do code the fragility even of typically "advanced" nations, and hence these countries are not shaded as white polygons due to missing data.
- The second set of charts use the 'State Fragility Index' from Polity.
  - This was updated by Polity for later years, and so the new chart uses the same datasource.
  - To maintain the observation, Sudan's fragility index is taken from 2011 – the last year of data available (all other observations are for 2016).

Figure 1.1 (old and new)

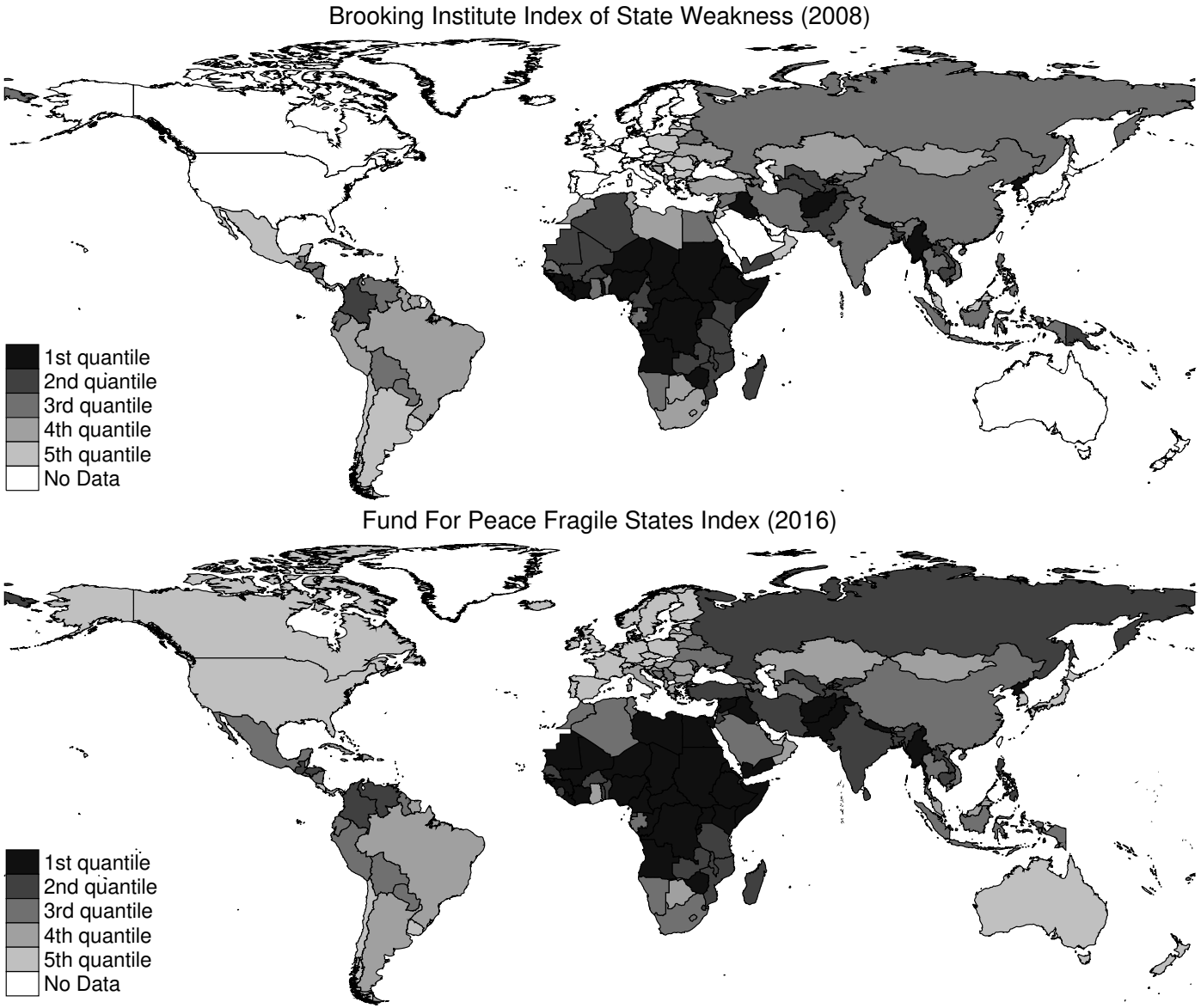
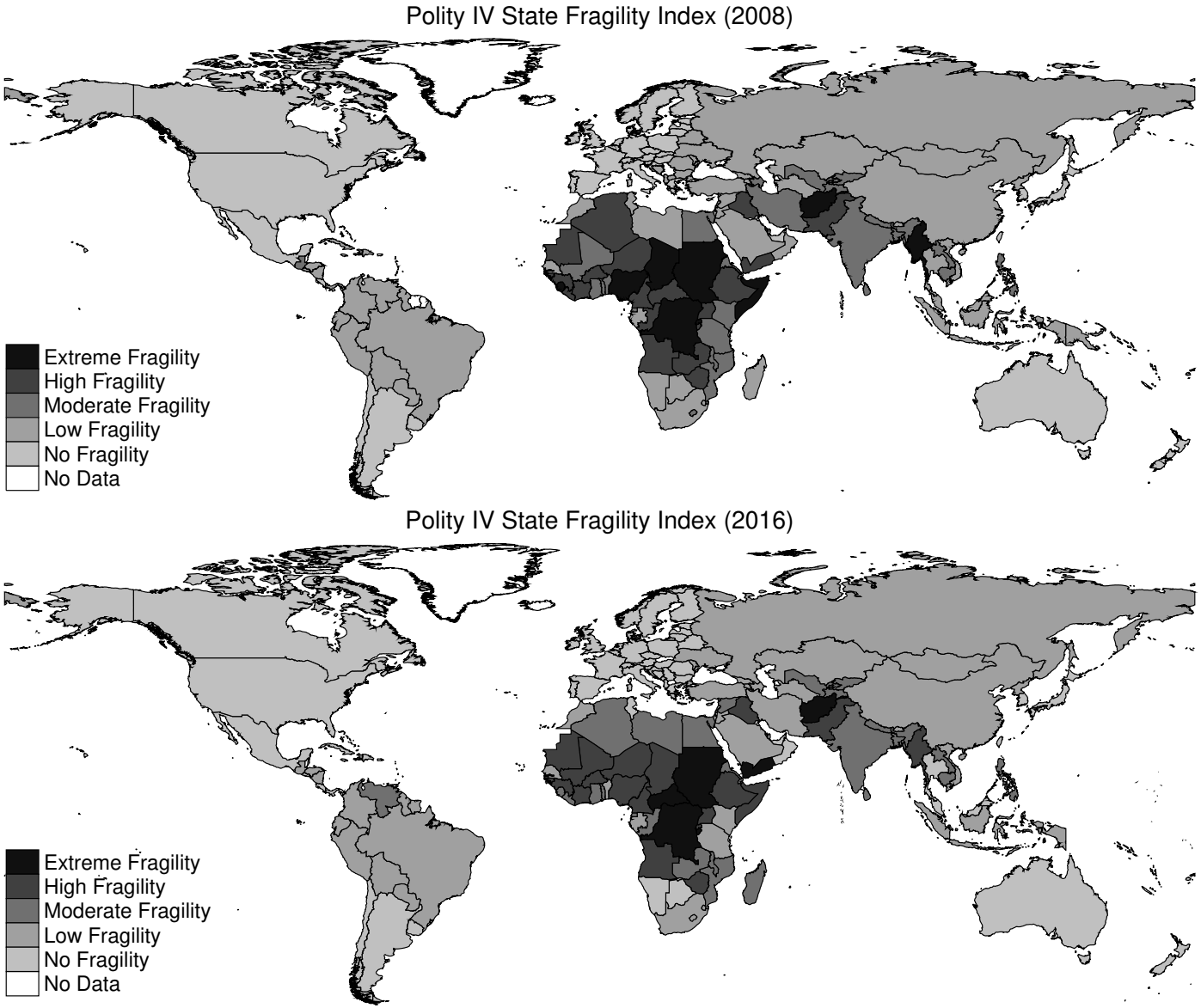
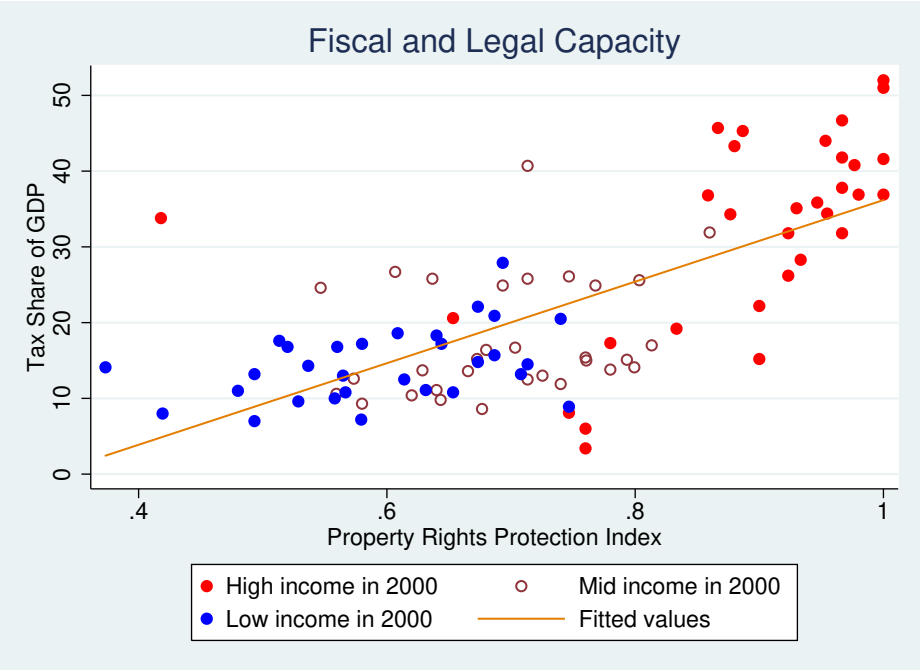


Figure 1.2 (old and new)



1.1 Some Basic Facts

- The following charts correlate fiscal and legal capacity, conditional on income levels, civil war and fragility.
- In the original figures, all variables referred to a cross-section around 2000.
  - Tax data stemmed from Baunsgaard and Keen (2005).
  - Our core measure of legal capacity was the International Country Risk Guide's (ICRG) 'government anti-diversion policy' variable, as popularised by Acemoglu et al. (2001).
- For the new figures, we look at a cross-section for 2010.
  - Tax data now stems from the International Centre for Taxation and Development (ICTD).
  - Our new core measure of legal capacity is the Fraser Institute's 'legal structure and property rights protection' index, as used by Nunn (2007).



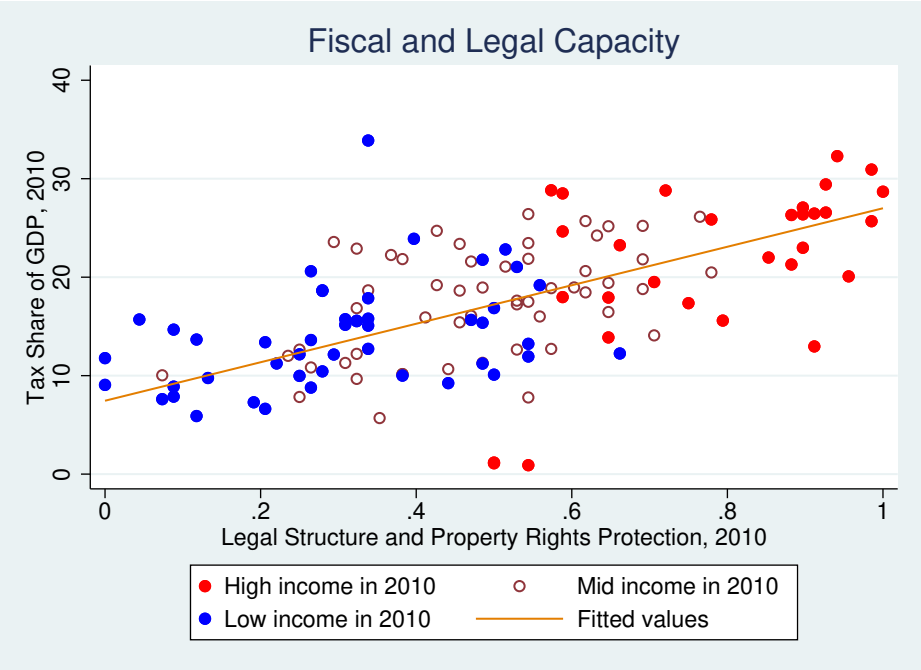
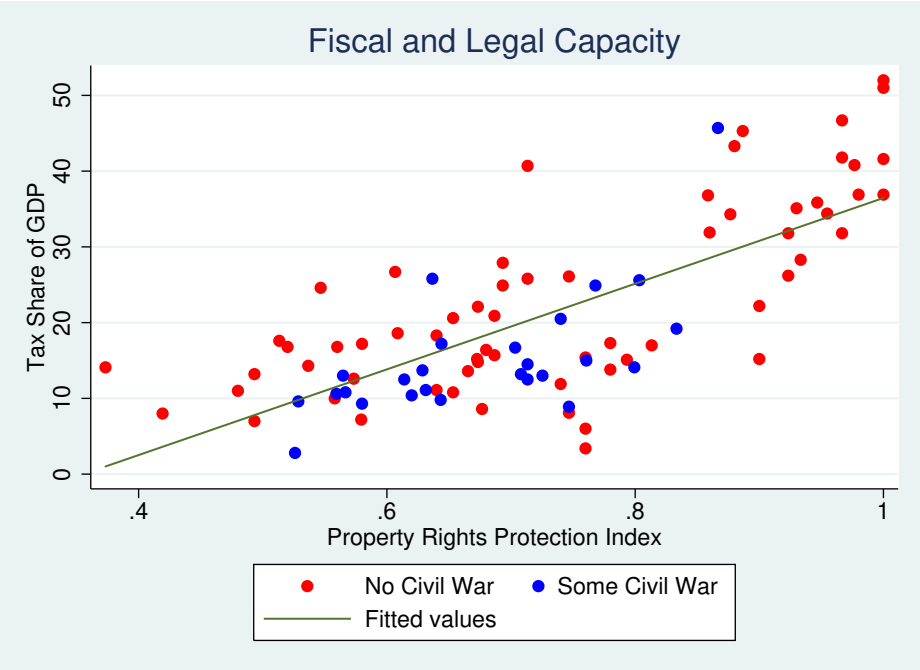


Figure 1.3 Legal and fiscal capacity conditional on income



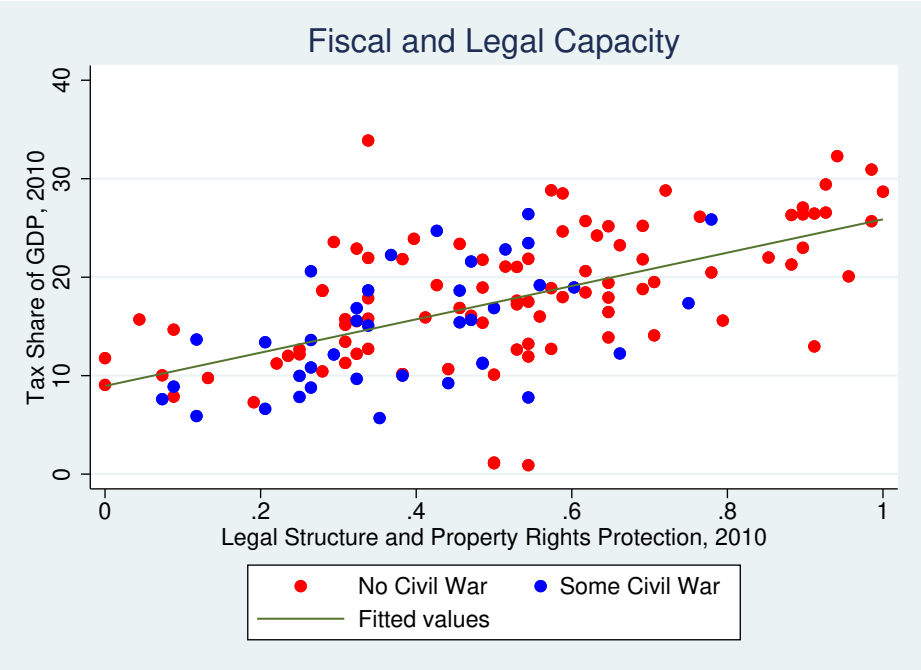
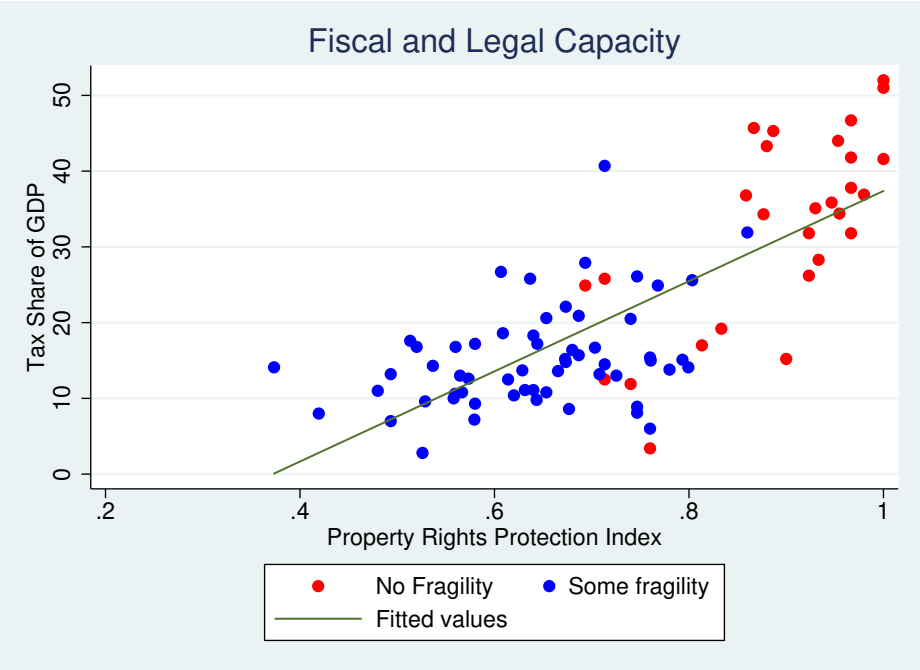


Figure 1.4 Legal and fiscal capacity conditional on civil war



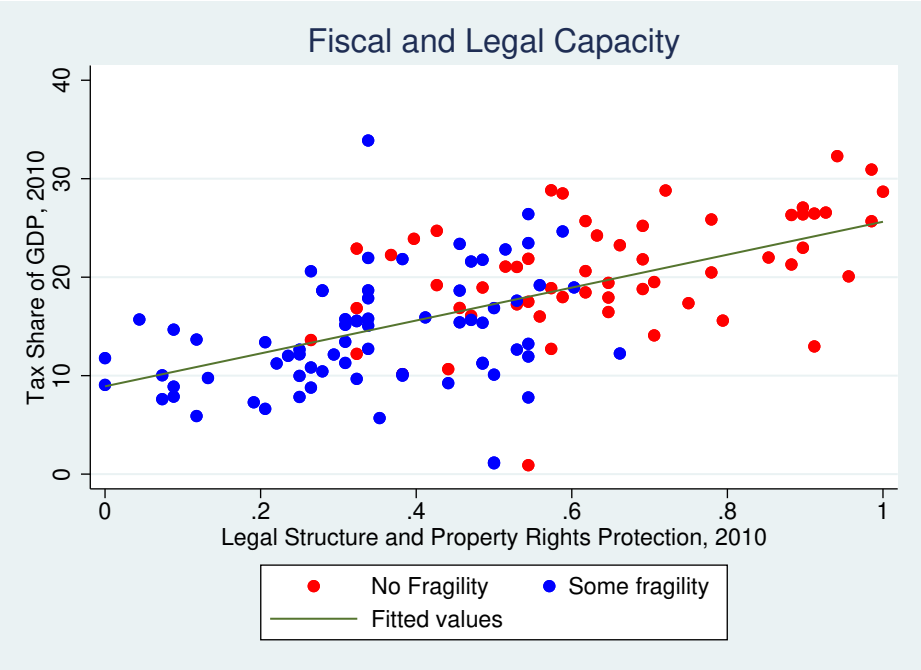
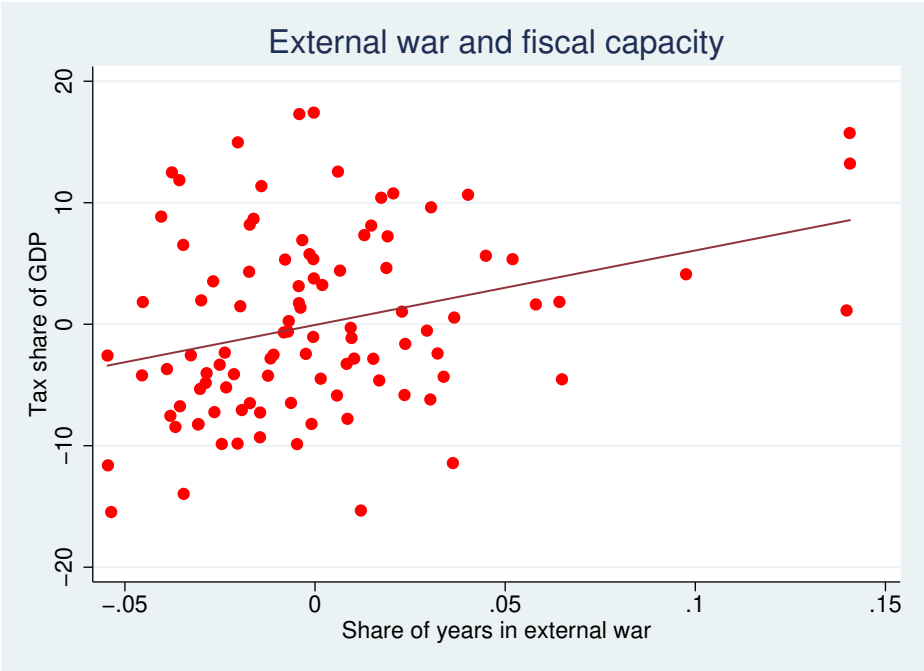


Figure 1.5 Legal and fiscal capacity conditional on fragility

1.4 War as a Measure of Common Interests

- The following charts correlate fiscal and legal capacity with external war as a measure of common interests, as per the theory developed in Pillars.
- Unfortunately, although data on interstate wars has been updated to later time periods, extrastate wars have not (to the best of our knowledge) (Reiter et al., 2016).
  - Hence, we keep the original variable, 'prop. of years in external conflict up to 2000', from the old *Pillars.dta* dataset.
  - Nonetheless, given this variable is historical in nature, and in light of the relatively few interstate conflicts that have occurred since 2000 (bar Iraq and Afghanistan), our old variable would not change significantly if accommodating ten more years worth of data.
- Note the following charts condition on executive constraints, openness of executive recruitment, ethnic fractionalization and legal origins, plotting the fitted residuals.



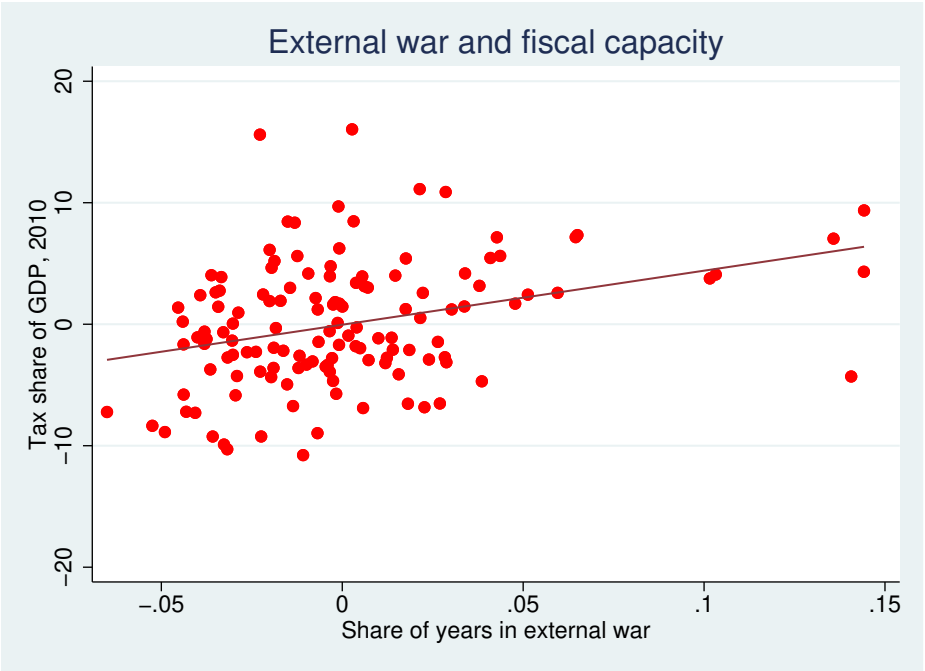
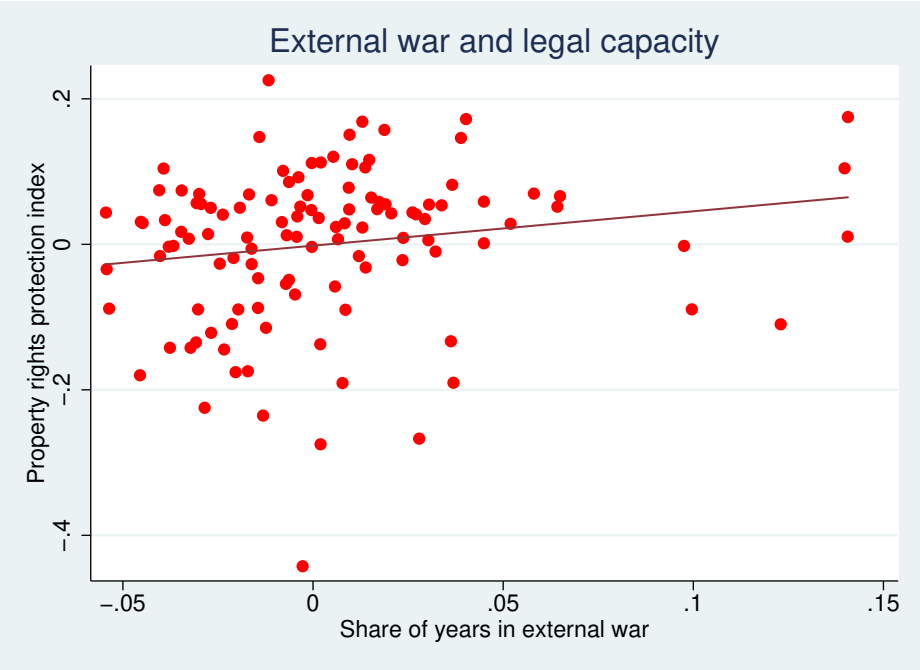


Figure 1.8a Fiscal capacity and external war



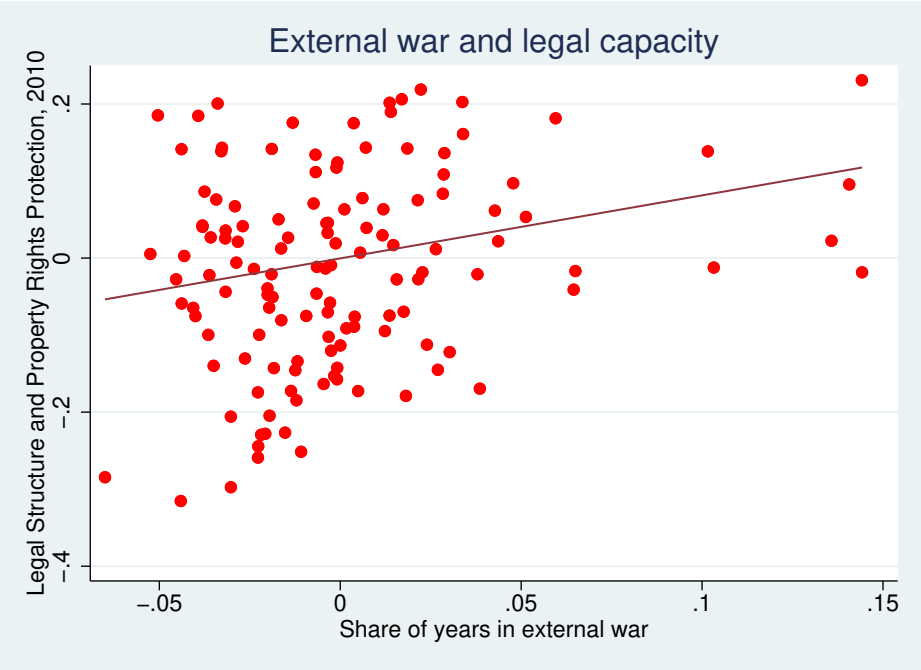
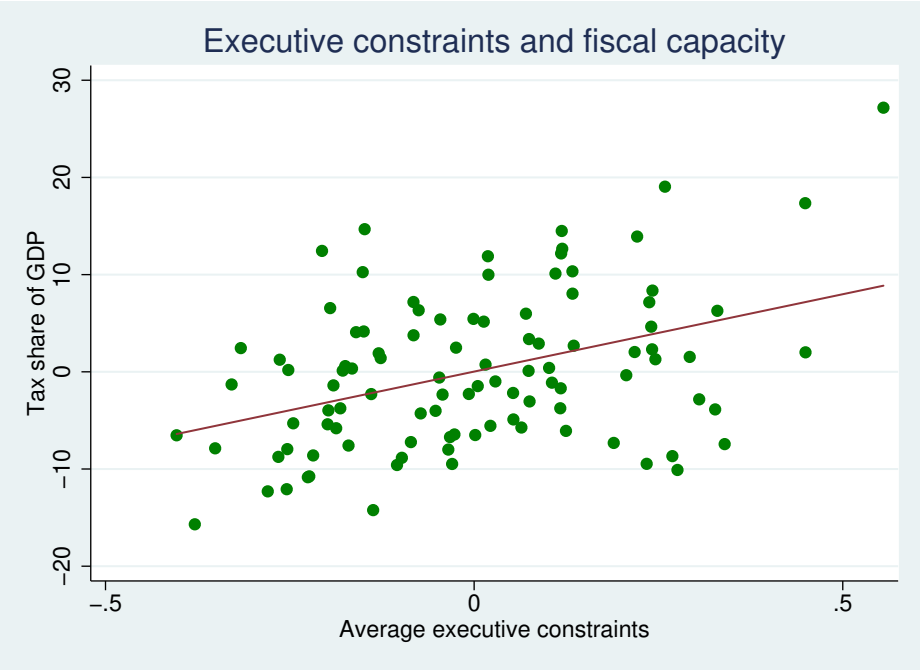


Figure 1.8b Legal capacity and external war

1.4 Political Institutions

- The following charts correlate fiscal and legal capacity with executive constraints as a proxy of political institutions.
- The original data stemmed from Polity, using their *xconst* variable.
- Given Polity frequently update their dataset to accommodate later years, we simply use this updated *xconst*, up to 2010.
  - We also use V-Dem's alternative measure of executive constraints for robustness purposes later in other chapters.
- Note that the following charts are conditioned on external war, openness of executive recruitment, ethnic fractionalization and legal origins, plotting the fitted residuals.



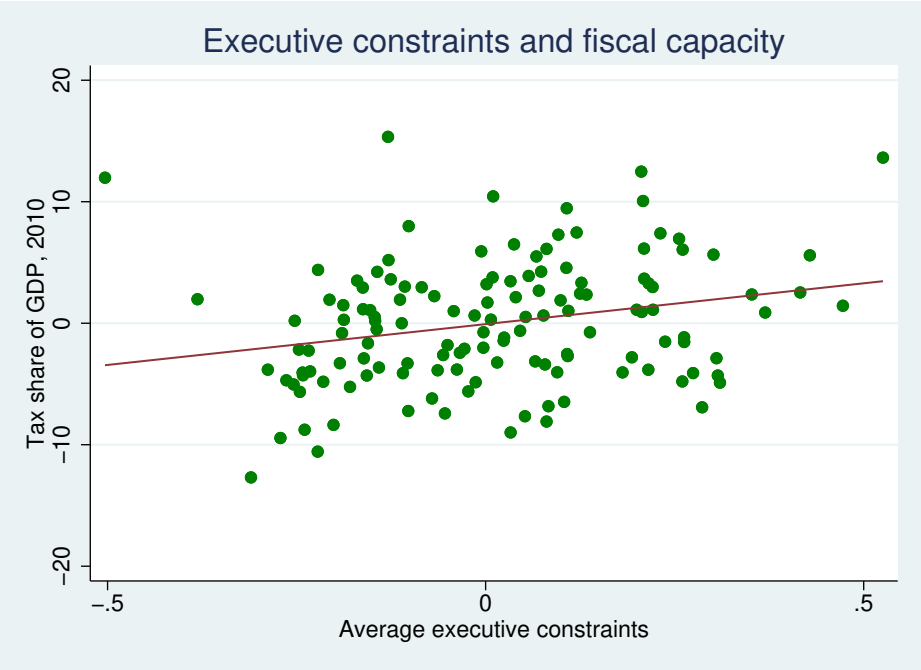
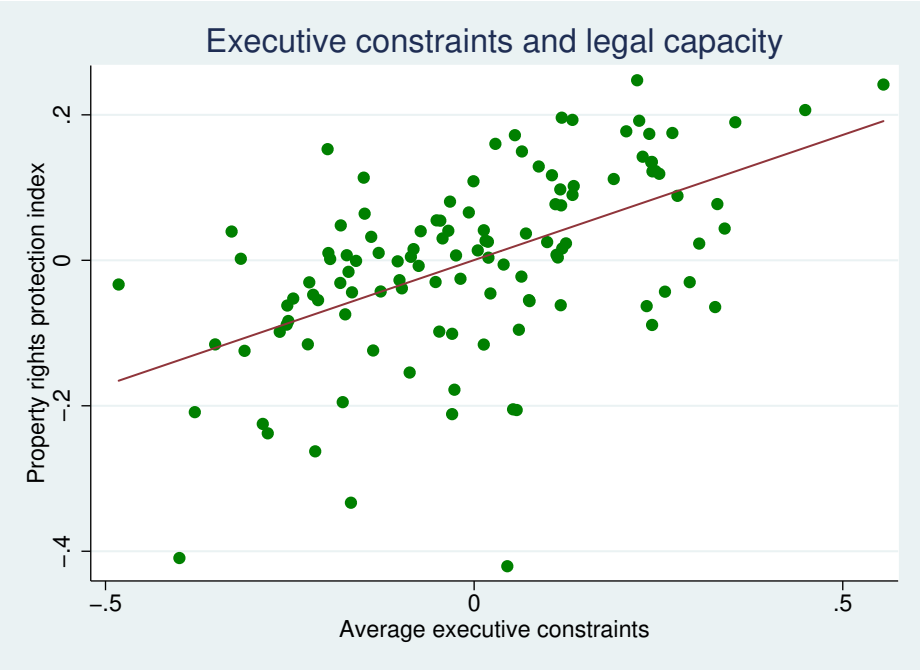


Figure 1.9a Fiscal capacity and executive constraints



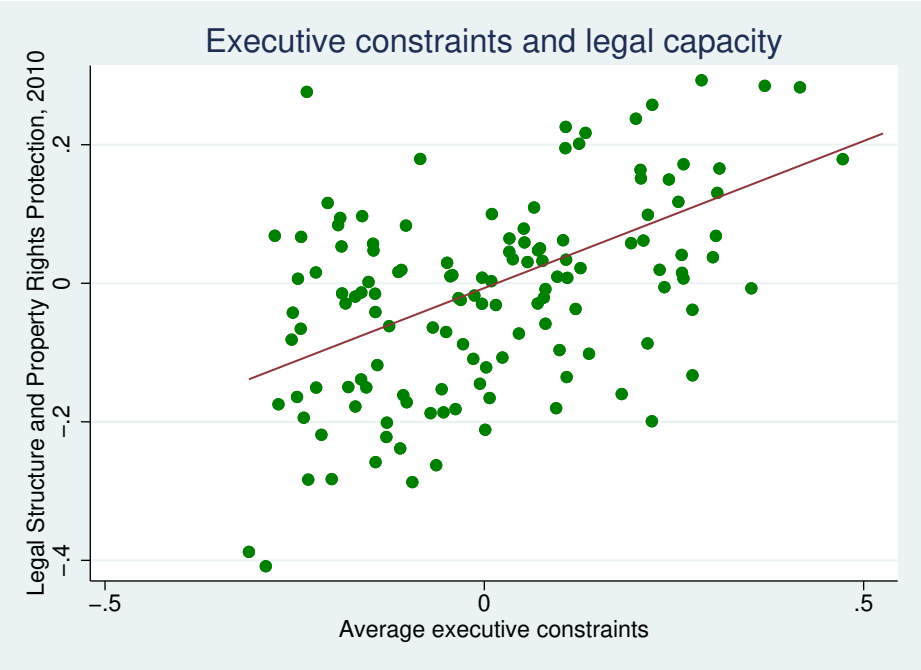
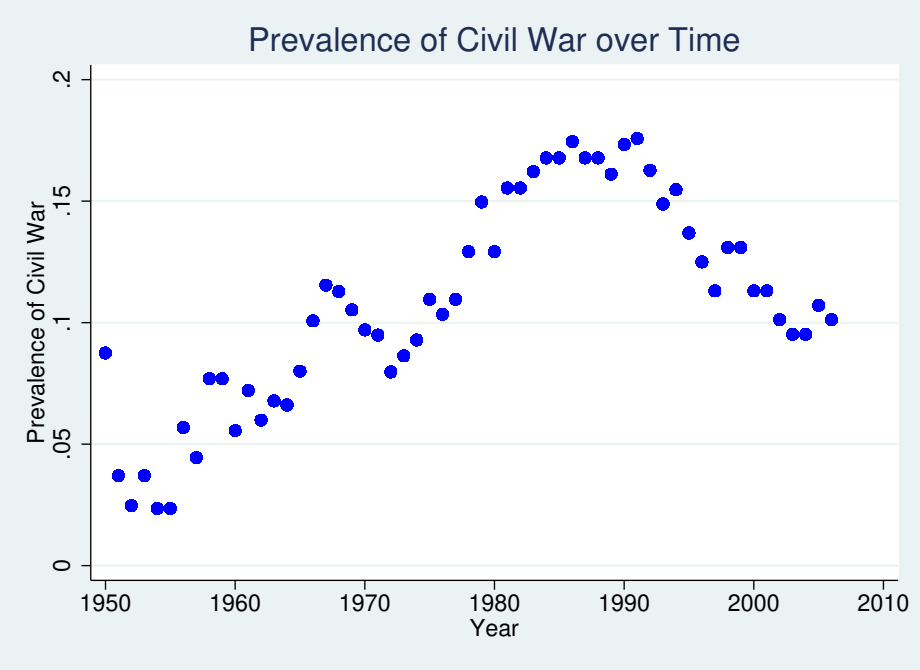


Figure 1.9b Legal capacity and executive constraints

1.5 Some Basic Facts

- The following charts look at patterns of political violence – civil war and repression.
- The 'civil war incidence' variable used in Besley and Persson (2011), Blattman and Miguel (2010) and Pillars was unfortunately never updated for later years post-2006.
  - Hence, using more recent data from the UCDP/PRIO Armed Conflict Dataset, we reconstruct this variable (see *Pillars 2.dta* codebook for further details and discussion of minor discrepancies).
- Data on repression in Pillars stemmed from the Cross-National Time-Series Data Archive, which is updated almost annually to include later years.
  - We therefore simply use the updated observations, up to 2015.
- Note the dotted line on the new time-series charts represent the starting point of additional years of (new) data.

Civil War



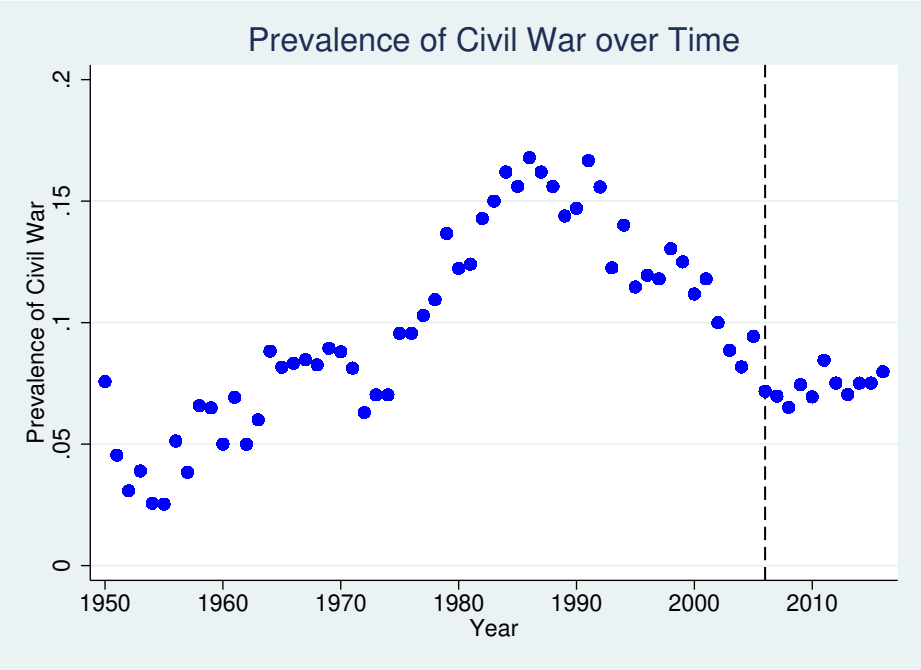
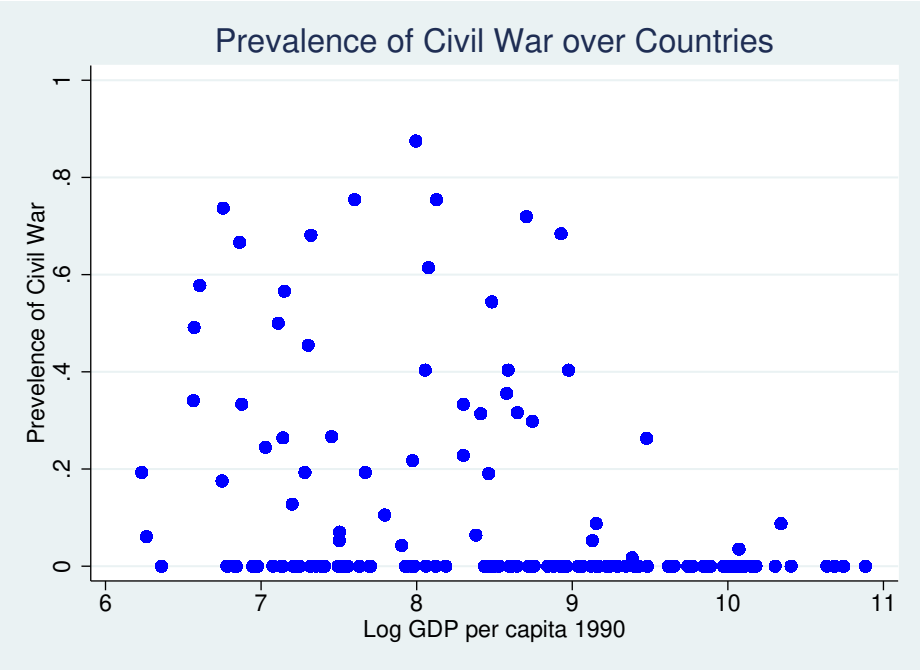


Figure 1.10a Prevalence of civil war over time

Countries in Civil War, 2006-2016

Country	Year	Country	Year
Afghanistan	2006-2016	Russia	2006-2007
Algeria	2006-2016	Rwanda	2009-2012
Burundi	2006	Somalia	2006-2016
Chad	2006-2010	Sri Lanka	2006-2009
Colombia	2006-2016	Sudan	2006-2016
India	2006-2016	Syria	2011-2016
Iraq	2006-2016	Turkey	2006-2013, 2015-2016
Israel	2014	Uganda	2006-2011
Libya	2011, 2015-2016	Ukraine	2014-2016
Nepal	2006	United States	2006-2016
Nigeria	2011-2016	Yemen	2009-2016
Pakistan	2007-2016	Zaire (DRC)	2011-2014, 2016
Philippines	2006-2016		

Note: data stems from UCDP/PRIO Armed Conflict Dataset. See *Pillars 2.dta* codebook for further details on construction of variable.



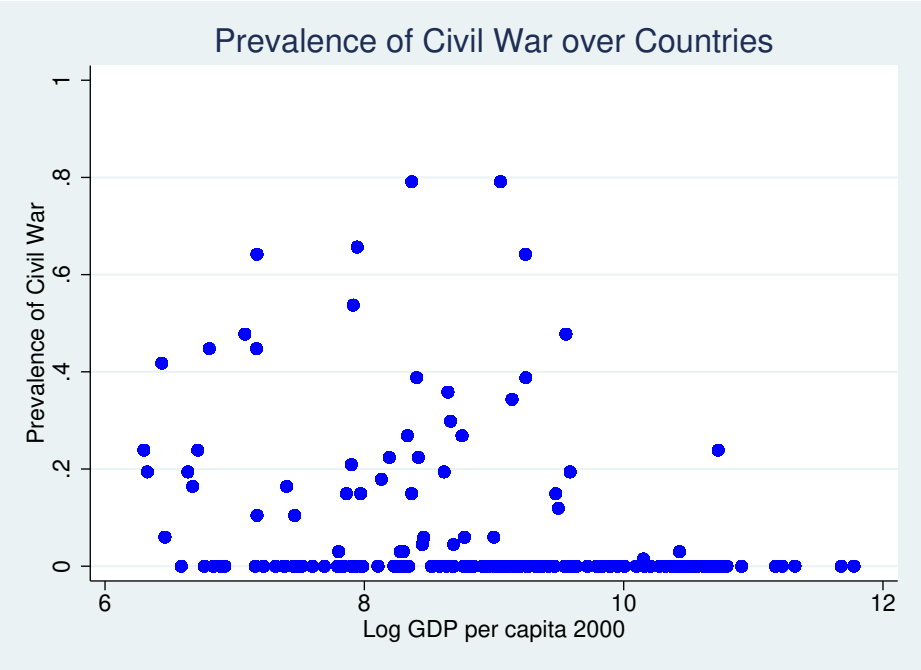
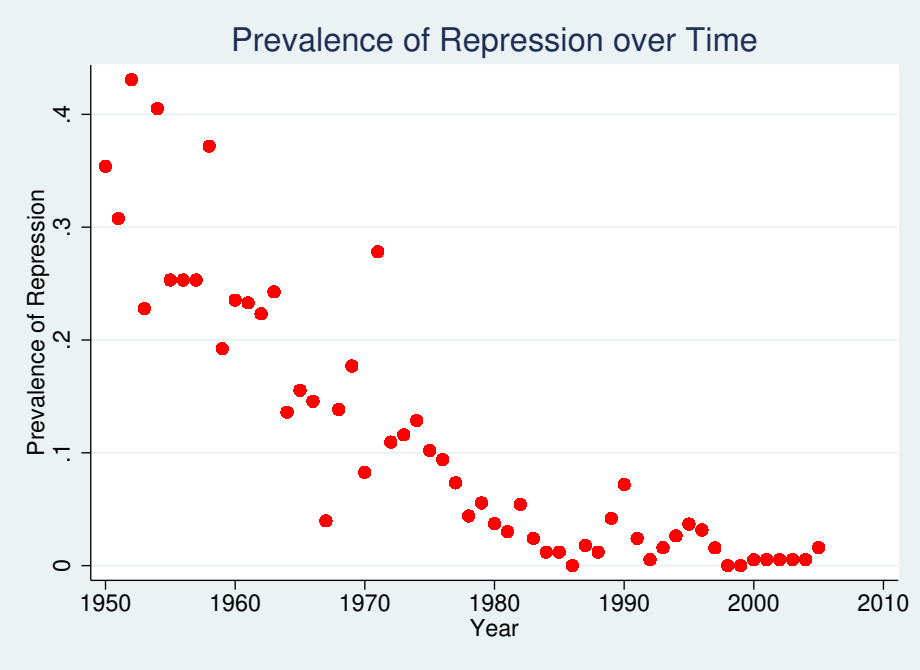


Figure 1.10b Prevalence of civil war over countries

Repression



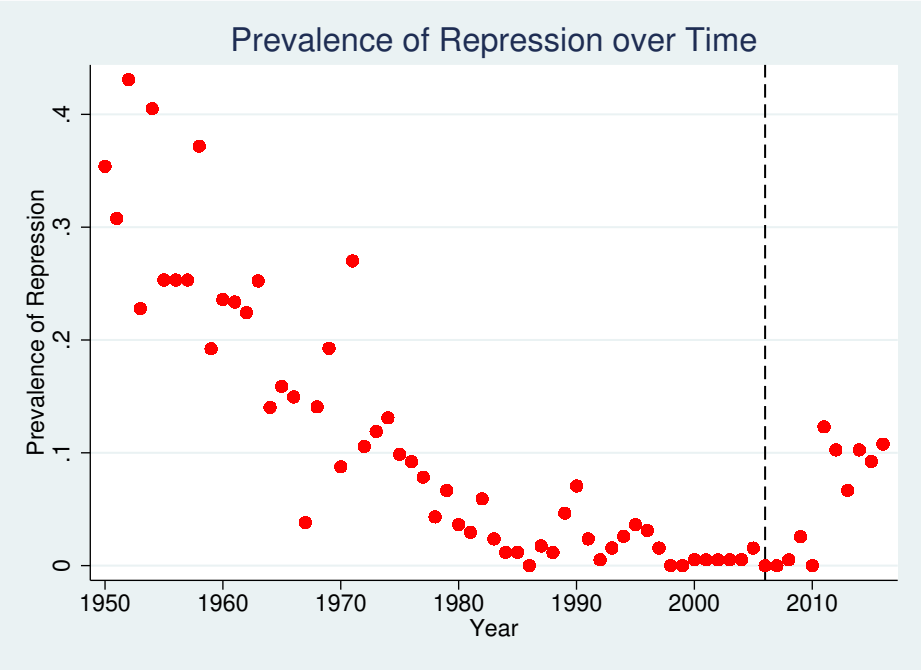
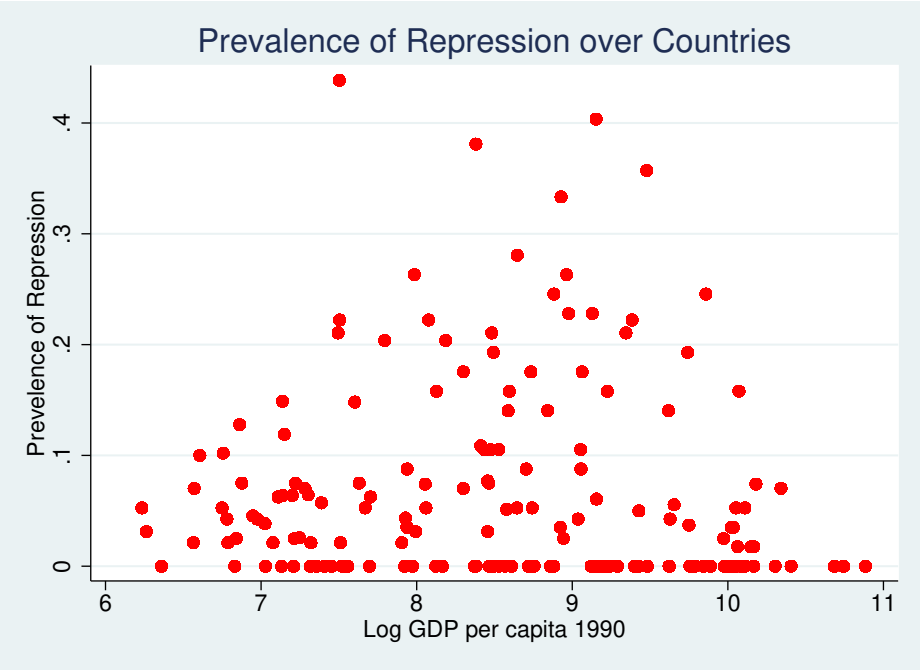


Figure 1.10c Prevalence of repression over time

Countries in Repression, 2006-2016

Country	Year	Country	Year	Country	Year
Armenia	2016	Iran	2011, 2015	Rwanda	2011
Azerbaijan	2011, 2014	Iraq	2011-2012	Senegal	2012
Bahrain	2011-2015	Ivory Coast	2011-2012, 2016	South Korea	2013-2014
Bangladesh	2013-2015	Jordan	2014	Sudan	2014-2016
Belarus	2011	Kenya	2014	Syria	2011
Bolivia	2012, 2015	Kuwait	2013	Tajikistan	2015
Brazil	2012	Kyrgyzstan	2016	Tanzania	2011, 2015
Burundi	2015-2016	Lebanon	2009	Thailand	2014
Cambodia	2014, 2016	Madagascar	2014	Togo	2009
Cameroon	2016	Malaysia	2011, 2013-2014	Tunisia	2011, 2013
China	2011-2012, 2014	Maldives	2012, 2015-2016	Turkey	2011-2013, 2015-2016
Congo	2015-2016				
Cuba	2014, 2016	Mali	2012	Uganda	2011-2012, 2014-2016
Egypt	2011, 2013-2015	Mongolia	2012	Ukraine	2011, 2014
Equatorial Guinea	2009, 2015	Mozambique	2016	Venezuela	2014-2016
Ethiopia	2009, 2011-2012, 2015-2016	Niger	2015	Vietnam	2011
Fiji	2016	Nigeria	2011	Yemen	2011
Gambia	2012, 2016	North Korea	2012, 2016	Zaire (DRC)	2013-2014
Georgia	2012-2014	Pakistan	2013	Zambia	2016
Greece	2008	Peru	2011	Zimbabwe	2011, 2013
Guinea-Bissau	2009, 2012	Philippines	2011-2012		
Honduras	2016	Romania	2012		
India	2016	Russia	2011-2015		

Note: data stems from Banks and Wilson's (2020) Cross-National Time-Series Data Archive. Repression is defined as whether a political purge occurred in a given year, defined as "[a]ny systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition".



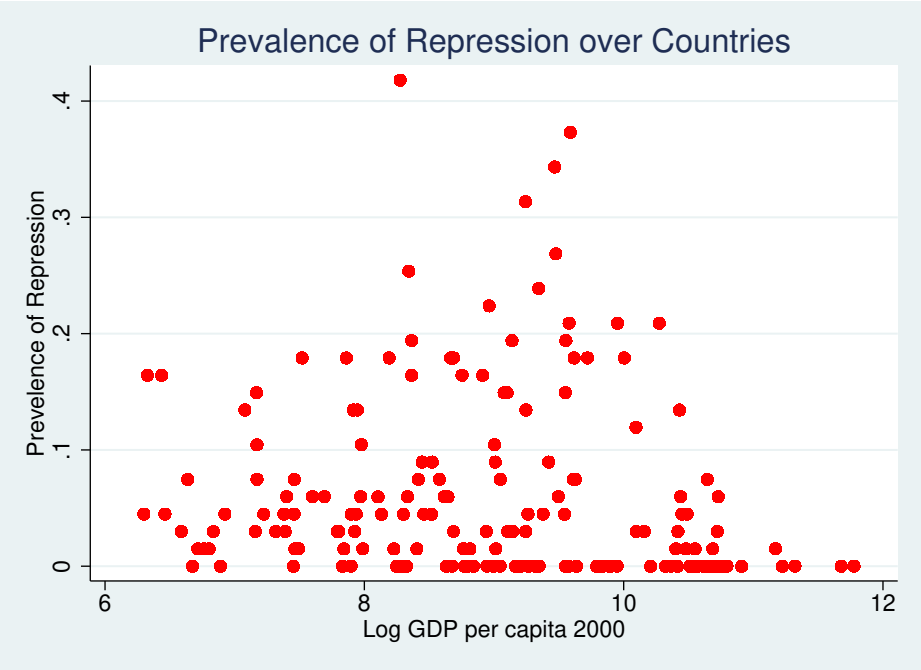
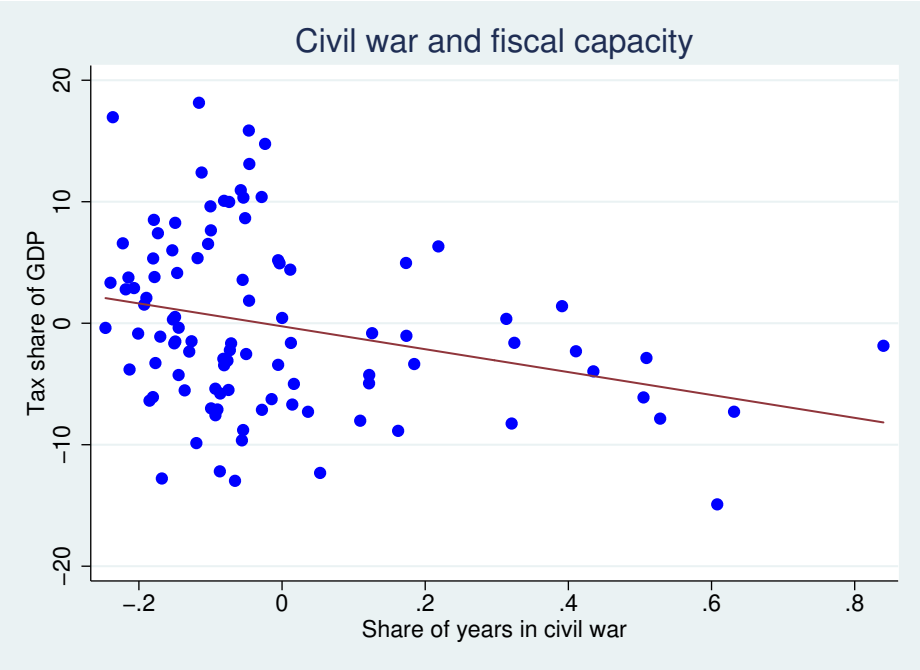


Figure 1.10d Prevalence of repression over countries

1.6 State Capacity and Political Violence

- The following charts correlate fiscal and legal capacity with civil war.
- Note that these charts condition on external war, executive constraints, openness of executive recruitment, ethnic fractionalization and legal origins, plotting the fitted residuals.



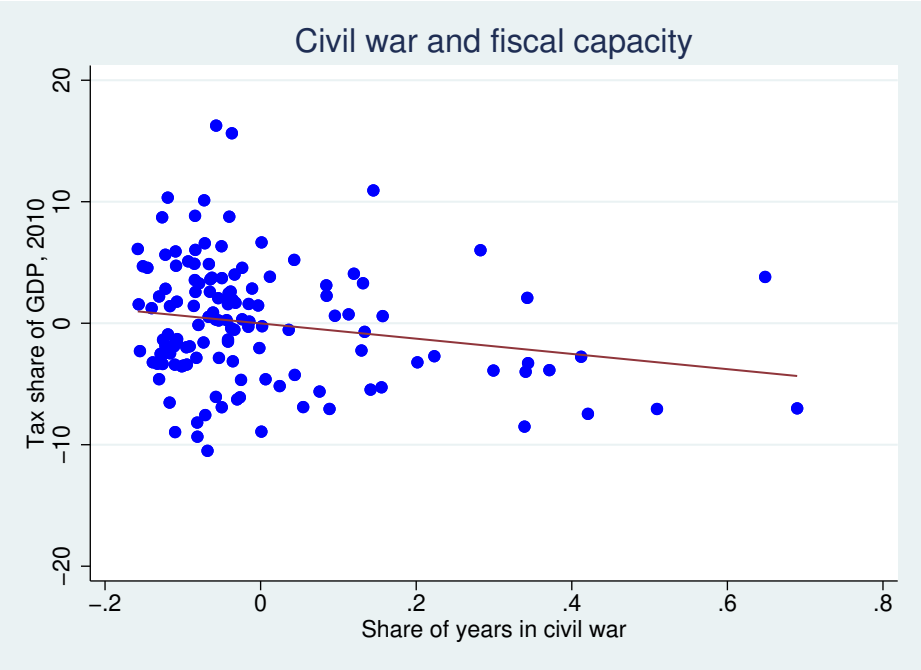
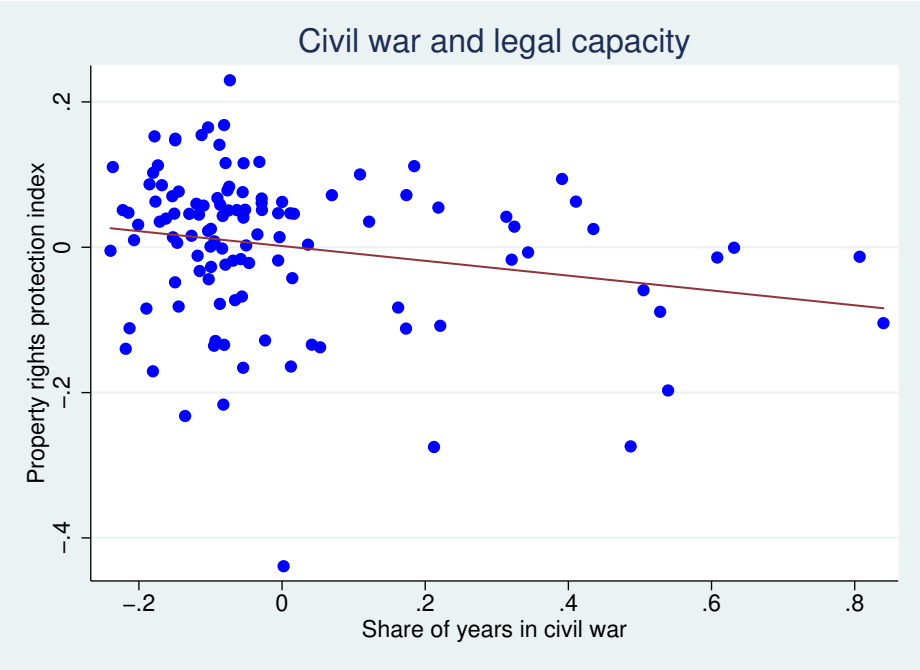


Figure 1.13c Civil War and Fiscal Capacity



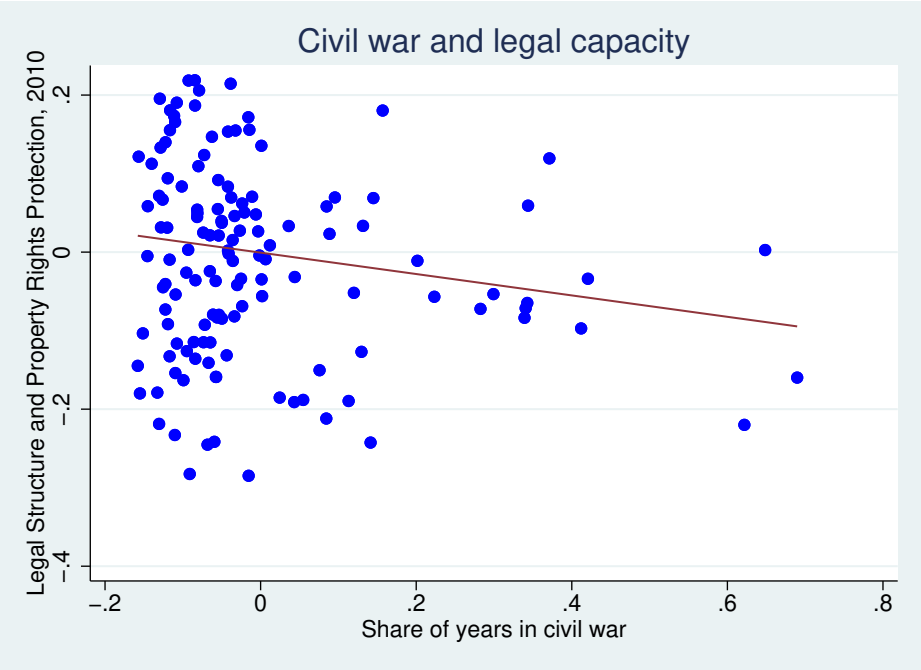
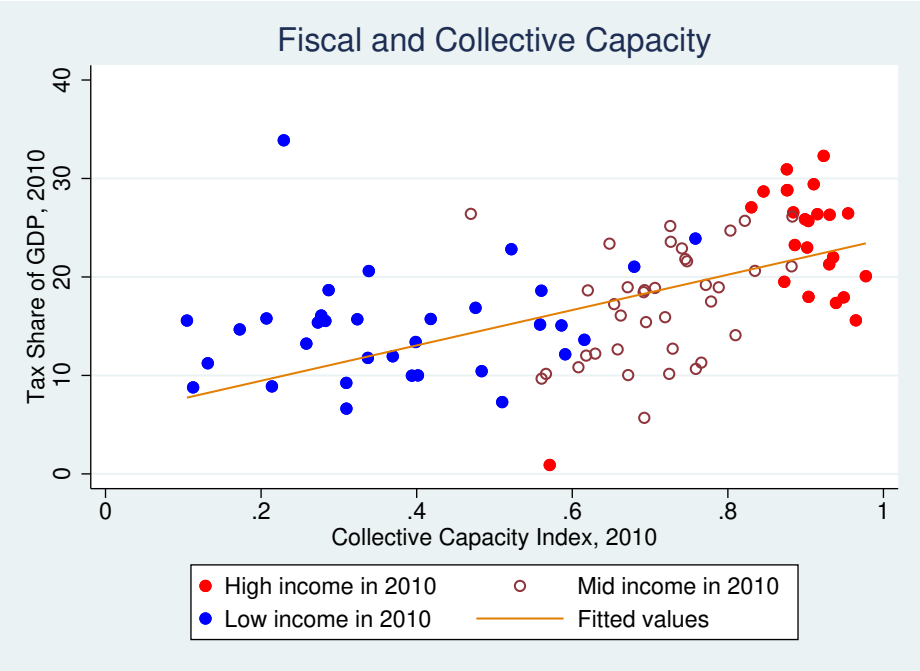
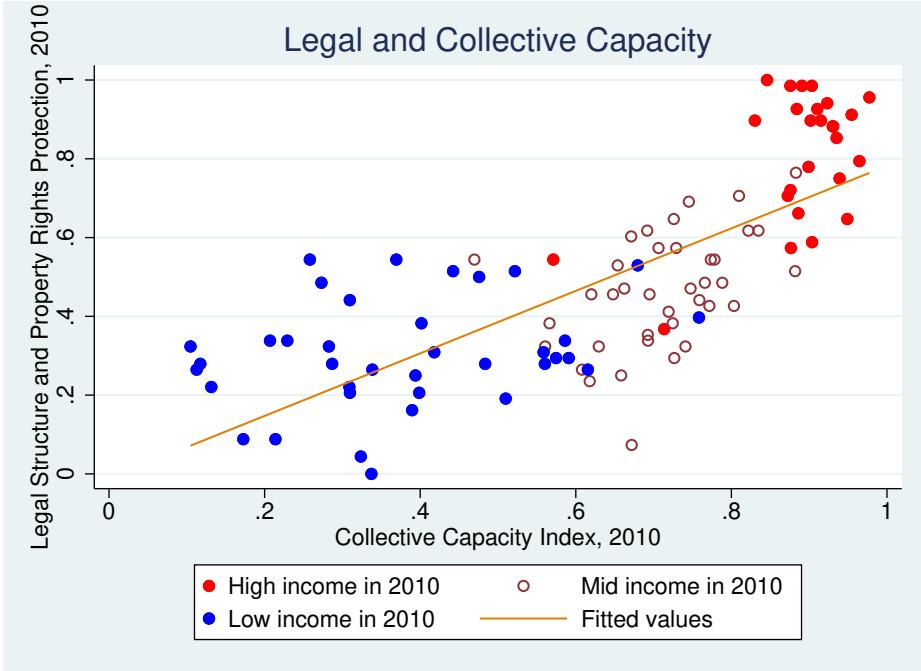


Figure 1.13d Civil War and Legal Capacity

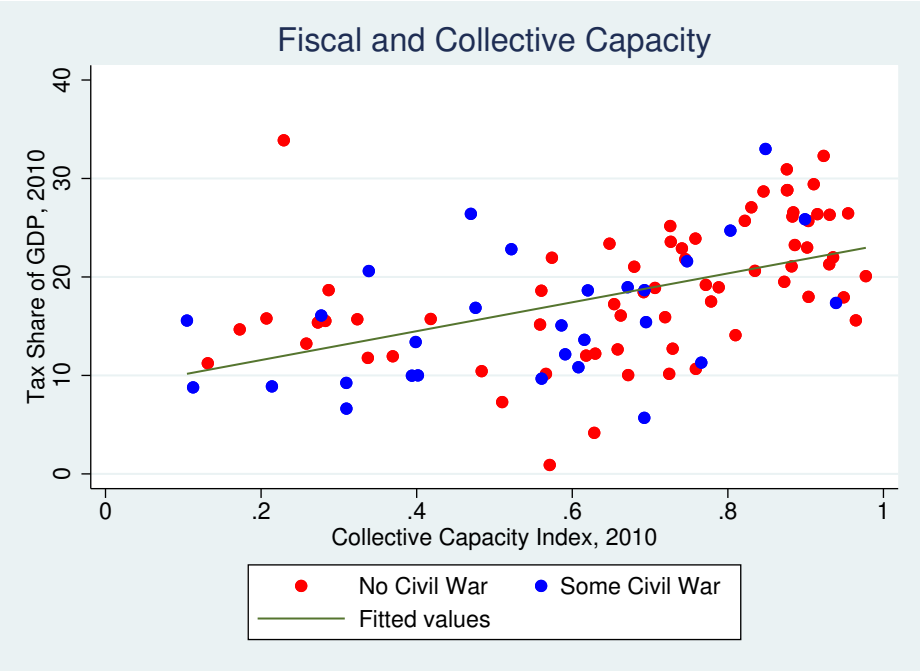
Collective Capacity

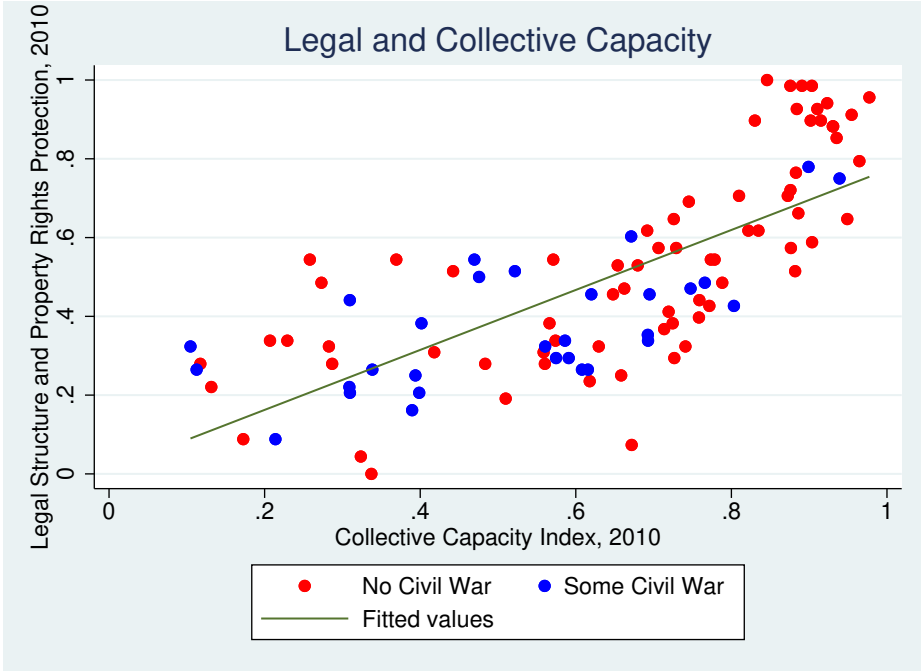
- *Collective capacity* – the state's ability to turn resources into public goods and services.
- Although in Pillars we did not initially look at this element of state capacity within our theoretical framework, other work has briefly explored this (see Besley & Persson, 2014).
- However, using *Pillars 2.dta*, we can again look at the broad patterns in the data concerning collective capacity, as has been done for fiscal and legal capacity.
- We develop a basic 'collective capacity index' which combines average educational attainment from Barro and Lee (2013) and life expectancy from the World Development Indicators.
  - For 2010 as a cross-section, we normalise each variable via min-max normalisation and then take the average (so both variables are weighted equally in the index).



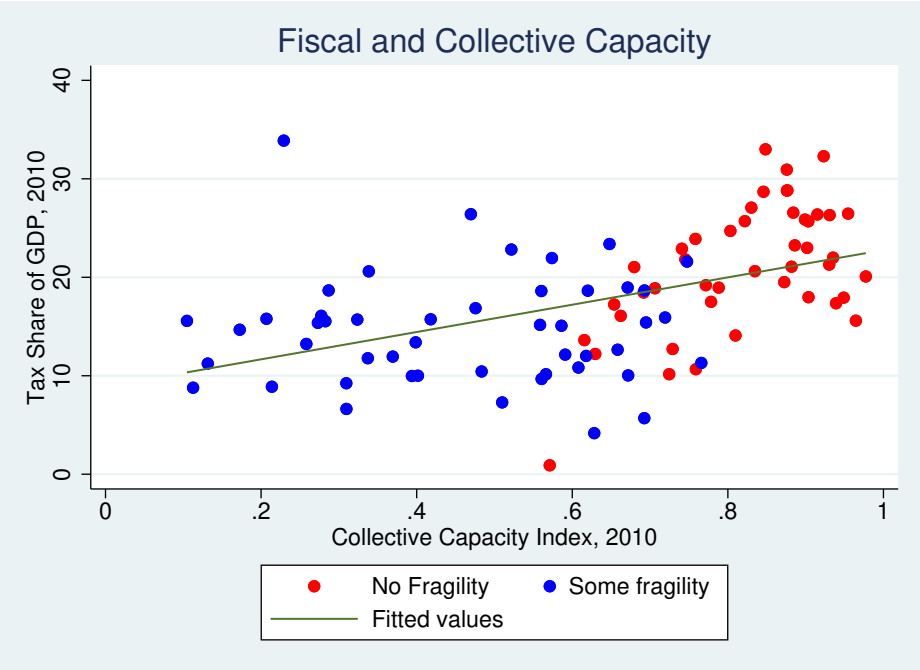


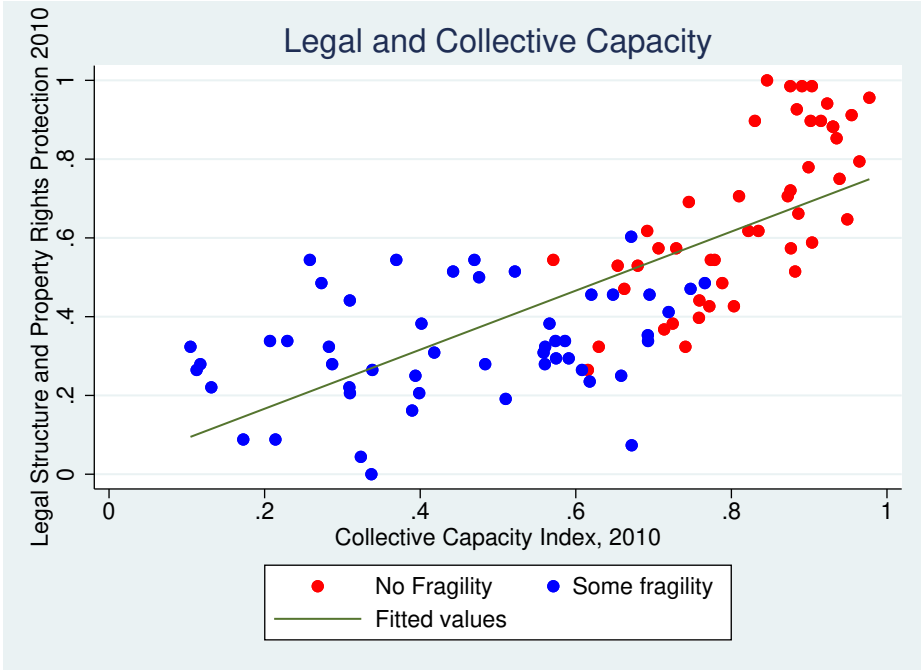
Collective Capacity and Fiscal and Legal Capacity Conditional on Income



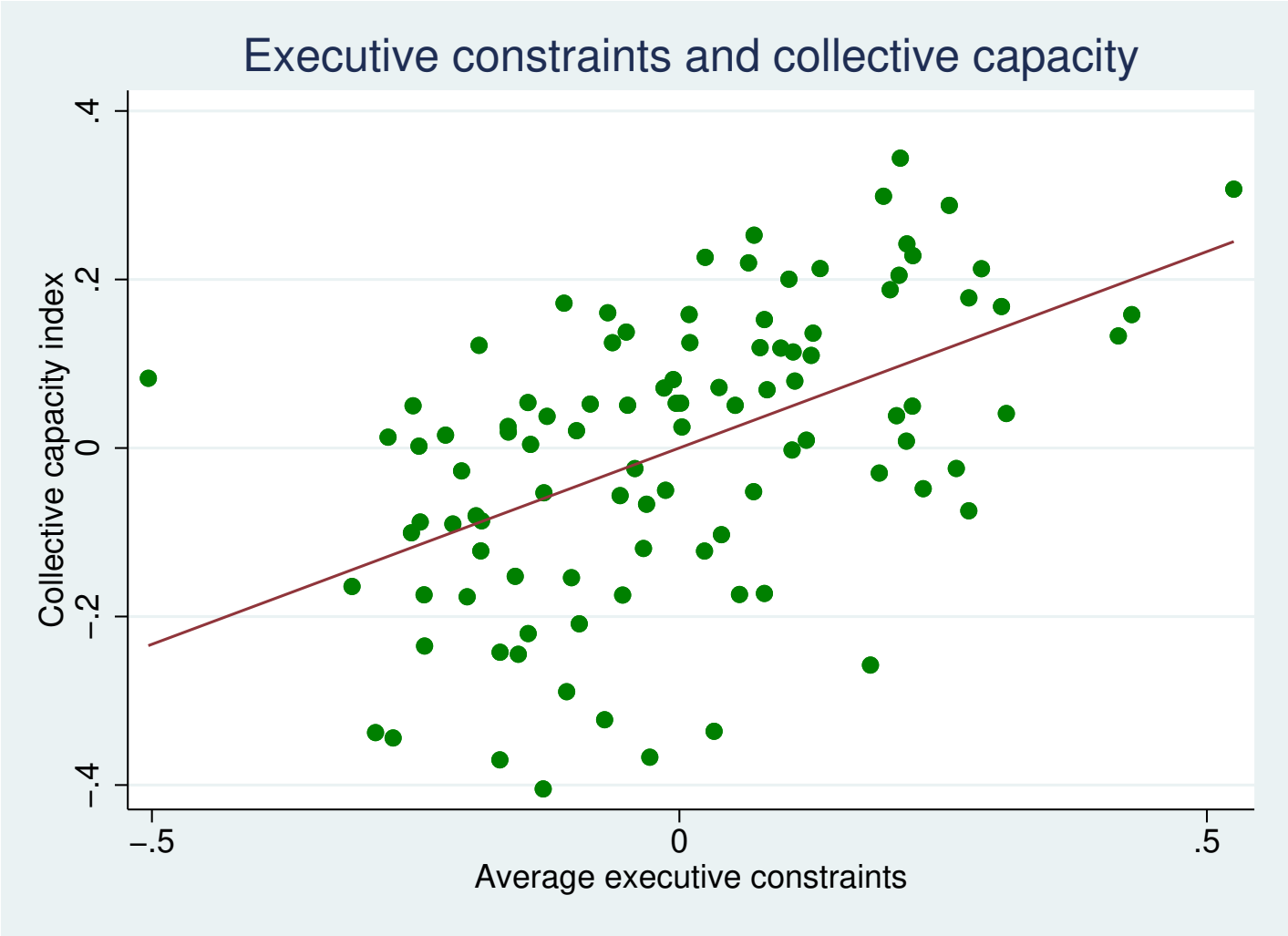


Collective Capacity and Fiscal and Legal Capacity Conditional on Civil War

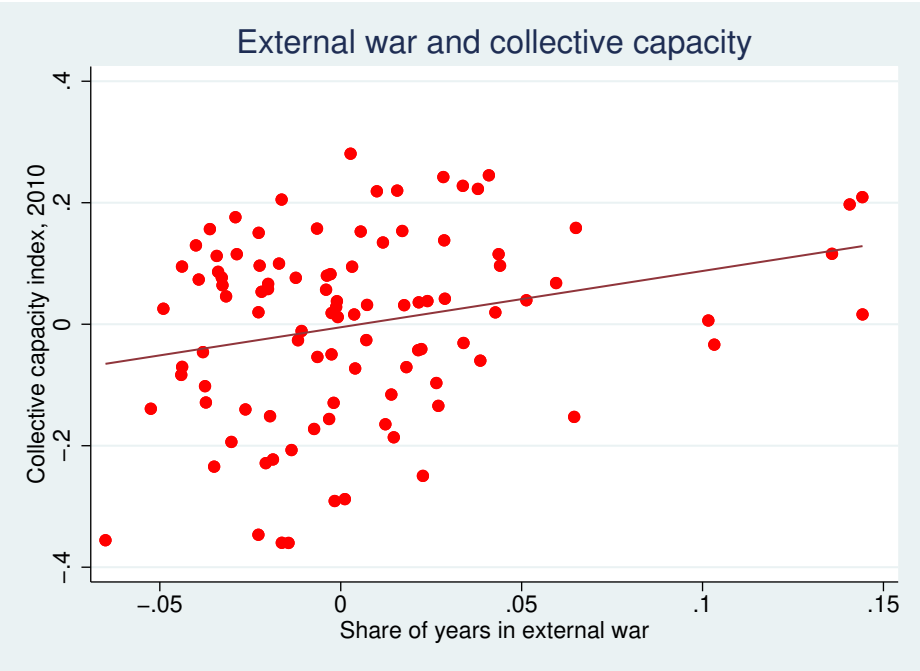


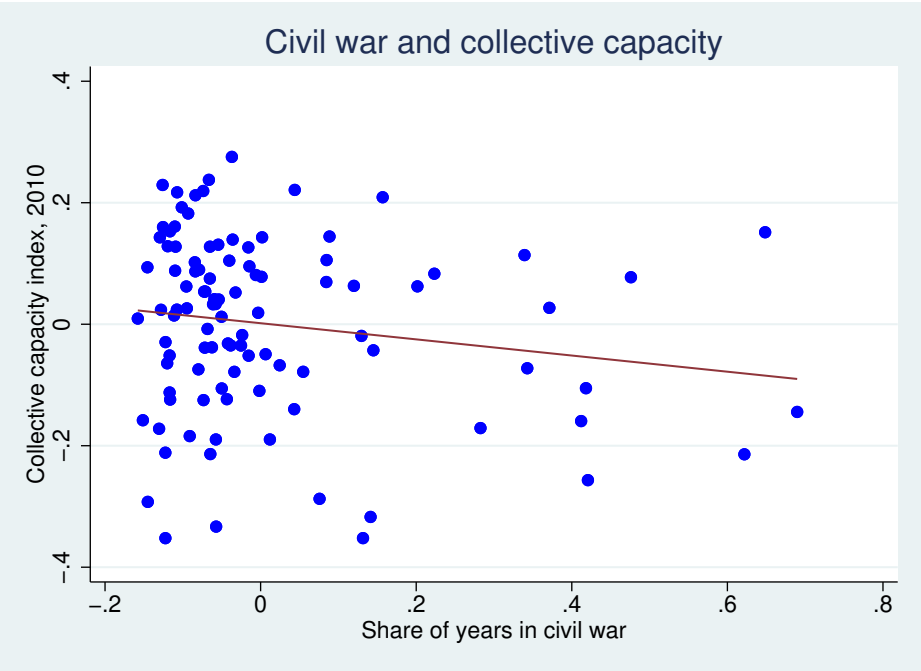


Collective Capacity and Fiscal and Legal Capacity Conditional on Fragility



Collective Capacity and Executive Constraints





Collective Capacity and External and Civil War

Collective Capacity – Comments

- As per the last few slides, collective capacity triangulates quite closely with fiscal and legal capacity (see Besley and Persson (2014) for 3-dimensional scatter plot of all three dimensions of state capacity).
- Again, high income countries with limited civil conflict and no fragility generally have much higher collective capacity than low-income, conflict affected and fragile nations.
- Executive constraints, even after conditioning on other relevant covariates, is sharply positively correlated with collective capacity.
  - The theory from Pillars would posit cohesive institutions incentivise investments into public goods versus private transfers.
- Finally, external and internal war are positively and negatively correlated with our collective capacity index respectively, exactly as we find for fiscal and legal capacity.