Financing Security and Financial Development (Repression)

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- Motivation:
  - Financial development is important for economic development
  - Understand how states fund security and balance political priorities
  - Large economic history literature, no evidence of a contemporary relationship
- Answers:
  - A greater demand for security hinders financial development
  - Politicians distort financial markets to raise revenue

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- This is important for investment & growth
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Why?

- Market failures
- Regulatory capture by the financial industry
- *Revenue Hungry States*

Why look to security?

Security is Expensive!

- Produces both sustained and unanticipated demand for revenue
- Leaders must balance external demands for revenue with their domestic priorities
- The financial system generates growth and capital that could be useful to the state.
- It also provides a source of “easy to collect” revenue via a captive audience

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liberalized banking sector

$\downarrow$

economic growth

$\downarrow$

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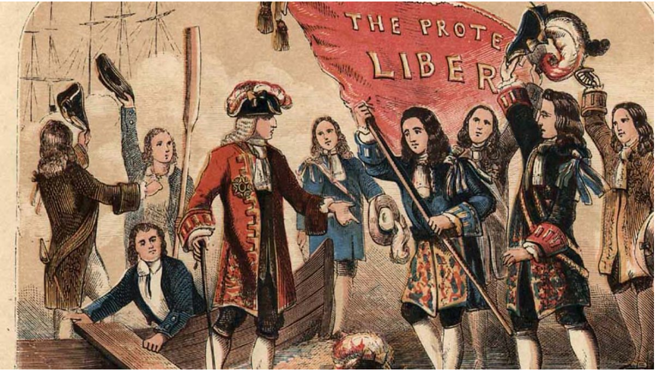
This assumes leaders care about long term growth and security

An alternative story



The Glorious Revolution, 1688

Bank of England, 1694

Financial Development & Security

- Security requires revenue
- Efforts to raise revenue through fiscal policy is politically difficult for short sighted politicians or those with low state capacity
- Governments can use the banking system (beyond a central bank) to raise revenue in an opaque and less intrusive manner
- Provides an “easy” way to raise revenue instead of increasing taxes or redirecting spending.
- But this harms the economy in long run

How States Draw Revenue from Banks, Tools of ”Financial Repression”

- Require high reserve requirements (“0% loans”)
- Pay negative real i-rate on borrowed funds
- Require banks to hold gov’t bonds (”mandated financial safety”)
- Fully or partially own banks
- States can take equity stakes in banks (via loan)
- Tax financial transactions
- Restrict market entry, extort existing monopoly holders
- Directly set interest rates below/above market rates
- Credit programs to gov’t or SOEs

Some More Context

Modern examples

- Argentina (1973) - Requires banks to deposit all financial savings with the central bank (100% reserve requirements)
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Financial repression can create non-trivial amounts of revenue

- up to 5.5% of GDP
- on average of 2% of GDP or 9% of total revenue

(Giovannini and de Melo 1993)

Why Banks & Citizens Comply?

The government grants their charter and controls the rents they receive via market entry/size.

Even if individuals withhold assets from banking system, they still require accounts for many transactions.

Hypothesis (1)

The higher a state's demand for security spending, the less developed their financial sectors

Hypothesis (2)

The higher a state's demand for security spending, the more they will direct credit towards the public sector.

Research Design

Dependent Variables:

- Financial Reform Index (Hypothesis 1)
  - 0-9, higher levels = greater liberalization
  - Market entry, privatization, securities market promotion
  - based on Abiad, Detragaiche & Tressel (2008) data
- Public Credit/GDP (Hypothesis 2)

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Two measures of security demand:

- Military Spending/GDP, lagged
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Other Covariates:

- Polity, Oil Rents, Population, Trade Openness, Growth, Civil Conflict, private credit/gdp
- Year & Country Fixed Effects
- Country Time Trends

Effect of Security on Financial Reform

	(1) Reform Index	(2) Reform Index
$privatecredit/GDP_{t-1}$		
$\frac{Mil.}{GDP}_{t-1}$	-0.030*	
	(0.015)	
$pr(mid)_{t-1}$		-3.49*
		(0.69)
GDPpc	-0.68*	1.71*
	(0.19)	(0.177)
Polity	-0.030*	-0.015
	(0.0093)	(0.0099)
Oil Rent/GDP	-0.034*	-0.032*
	(0.010)	(0.011)
ln(population)	-2.64*	8.30*
	(0.64)	(0.31)
Trade/GDP	-0.0023	-0.00035
	(0.0020)	(0.0023)
Growth	0.032*	0.051*
	(0.0054)	(0.0062)
UCDPintra	-0.23*	-0.43*
	(0.094)	(0.11)
N	1342	1343
Country FE	Yes	Yes
Year FE	Yes	Yes
Country Time Trends	Yes	Yes

Standard errors in parentheses
* $p < .05$

Security and Public Credit in the Developing World

	(1)	(2)	(3)	(4)
$\frac{Mil.}{GDP}_{t-1}$	0.45*	0.15*		
	(0.096)	(0.053)		
$pr(mid)_{t-1}$			6.62*	4.93*
			(2.21)	(1.86)
$privatecredit/GDP_{t-1}$	-0.039	0.021	-0.047*	0.021
	(0.020)	(0.018)	(0.022)	(0.020)
ln(GDPpc)	-1.22	1.09	-1.69	-0.048
	(1.52)	(1.42)	(1.73)	(1.68)
Polity	-0.054	-0.0078	-0.060*	
	(0.029)	(0.024)	(0.030)	
Oil Rent/GDP	-0.14*	-0.048*	-0.16*	-0.058*
	(0.032)	(0.020)	(0.036)	(0.023)
ln(population)	-66.7*	-26.5*	-72.2*	-41.5*
	(10.9)	(9.56)	(13.1)	(13.6)
Trade/GDP	0.0018	0.00039	0.0013	-0.0040
	(0.0059)	(0.0044)	(0.0061)	(0.0047)
Growth	-0.026	-0.021	0.0066	-0.011
	(0.026)	(0.012)	(0.031)	(0.015)
UCDPintra	1.13*	0.084	0.83*	0.020
	(0.37)	(0.28)	(0.38)	(0.28)
N	2071	2071	2072	2155
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes	Yes
$AR1_{panelspecific}$	No	Yes	No	Yes

Panel corrected standard errors in parentheses
* $p < .05$

Additional Analysis

Results remains robust to inclusion of

- Debt/gdp
- Military & personalist regimes
- tax rev/gdp
- inflation
- central bank independence
- corruption

Discussion

Implications

- External factors are important for financial development, the literature has yet to address this
- States find indirect ways of taxation to generate revenue
- Important for understanding security financing
- Important for understanding new mechanisms by which security impacts the economy

Next Steps

- Test additional measures of financial development
- *Financial repression* $\rightleftarrows$ *Security?*