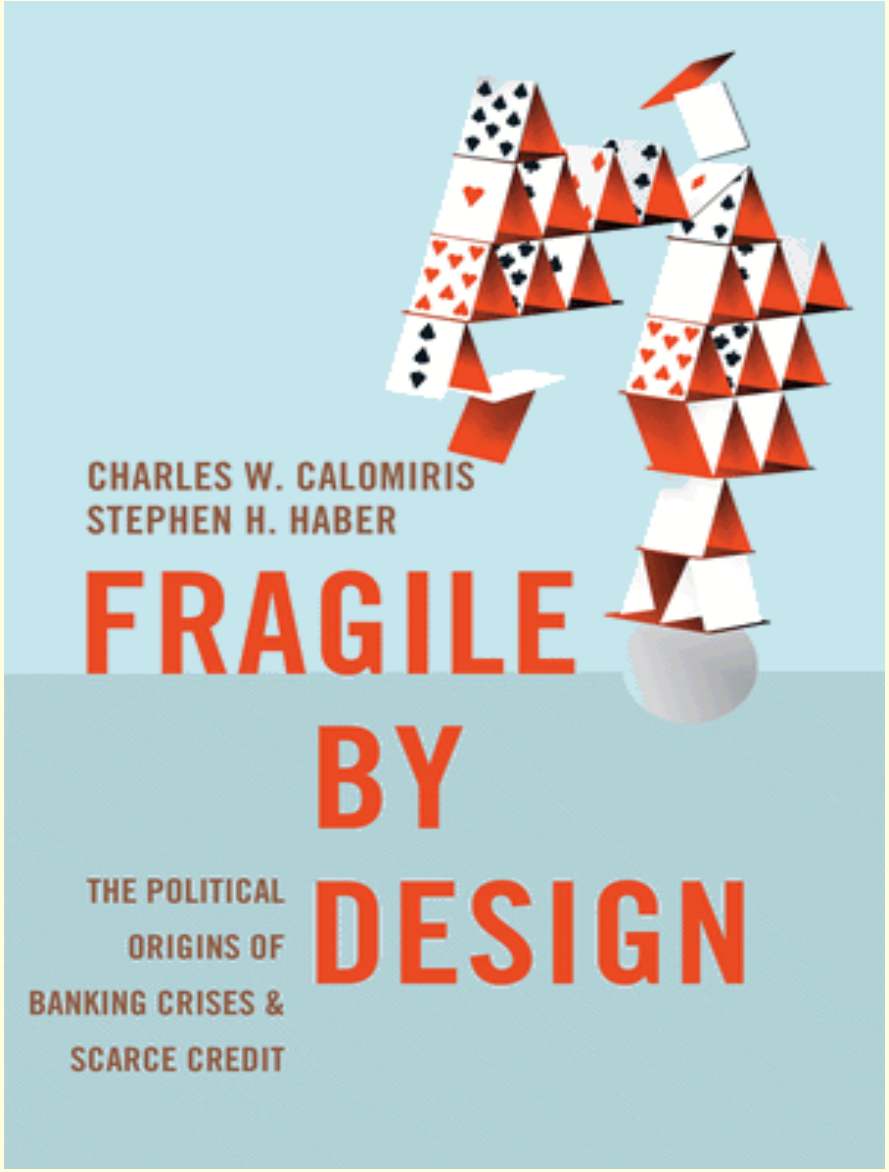
If stable and efficient banking systems are so good for economic growth, why do we see them so rarely?



There is broad agreement that stable and efficient banking systems are positive for economic development

Evidence from cross-country regressions (King and Levine 1993; Levine and Zervos 1998; Beck et. al, 2000).

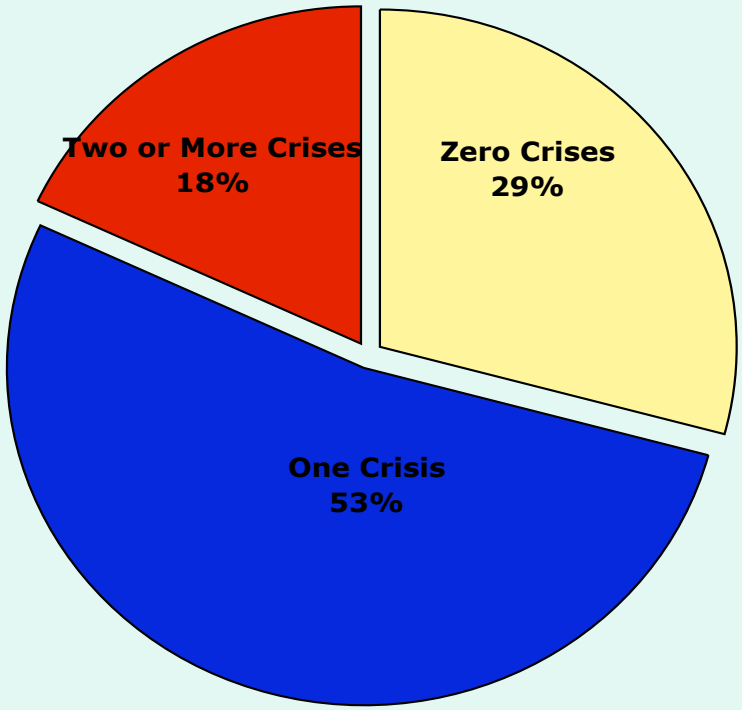
Evidence from cross-regional studies (Jayaratne and Strahan 1996; Black and Strahan 2002; Guiso, Sapienza, and Zingales 2004; Cetorelli and Strahan 2006; Dehejia and Lleras-Muney 2007; Correa 2008).

Evidence from economic history (Gerschenkron 1962; Cameron 1967; Sylla 1975, 2006, 2008; North and Weingast 1989; Neal 1990; de Vries and van der Woude 1997; Rousseau and Wachtel 1998; Rousseau 2003; Rousseau and Sylla, 2003, 2004).

Studies of finance dependent industries (Rajan and Zingales 1998; Wurgler 2000; Cetorelli and Gamberra 2001; Fisman and Love 2004; Beck, Demirguç-Kunt, Laeven, and Levine 2007).

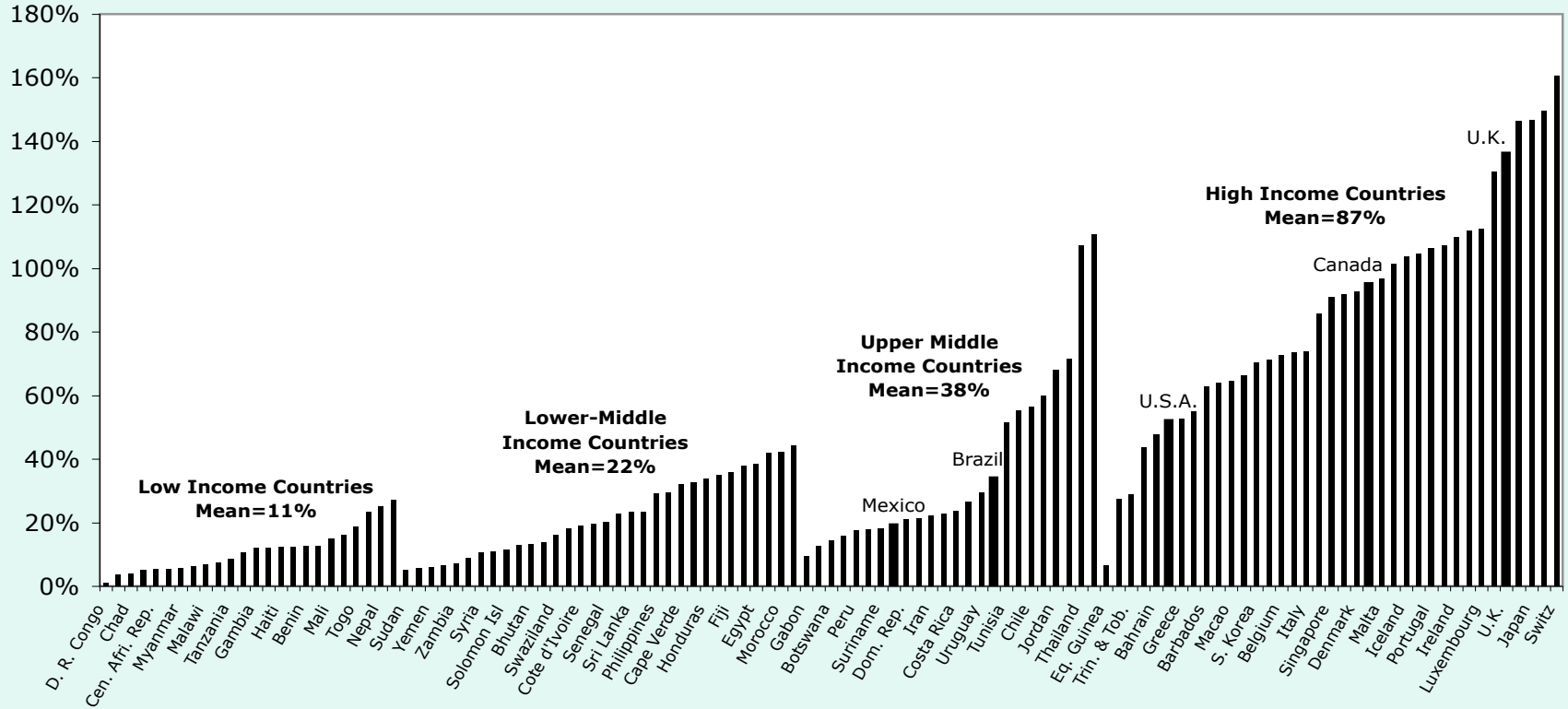
So, how common are stable banking systems?

Figure 1.1
The Frequency of Systemic Banking Crises, 1970 to 2013



And how common are efficient banking systems?

Figure 1.2
Average Private Credit from Deposit Money Banks
as a Percent of GDP, 1990 to 2010, by World Bank Income Classifications



Source: World Bank Financial Structure Database, September 2012 update.
Note: For reasons of readability, all country names not shown on X axis.

How many high crisis, low credit countries are there—and what do they have in common?

High crisis, especially low credit: Chad, Democratic Republic of the Congo

High crisis, low credit: Argentina, Bolivia Brazil, Cameroon, the Central African Republic, Colombia, Costa Rica, Ecuador, Kenya, Mexico, Nigeria, the Philippines, Turkey, and Uruguay

How many of these 16 countries have been stable democracies since 1970? Only 2: Colombia, Costa Rica.

Exactly how many crisis-free, abundant credit countries are there, and what do they have in common?

- Singapore
- Malta
- Hong Kong, China
- Australia
- Canada
- New Zealand

Half of these are small island or city states.

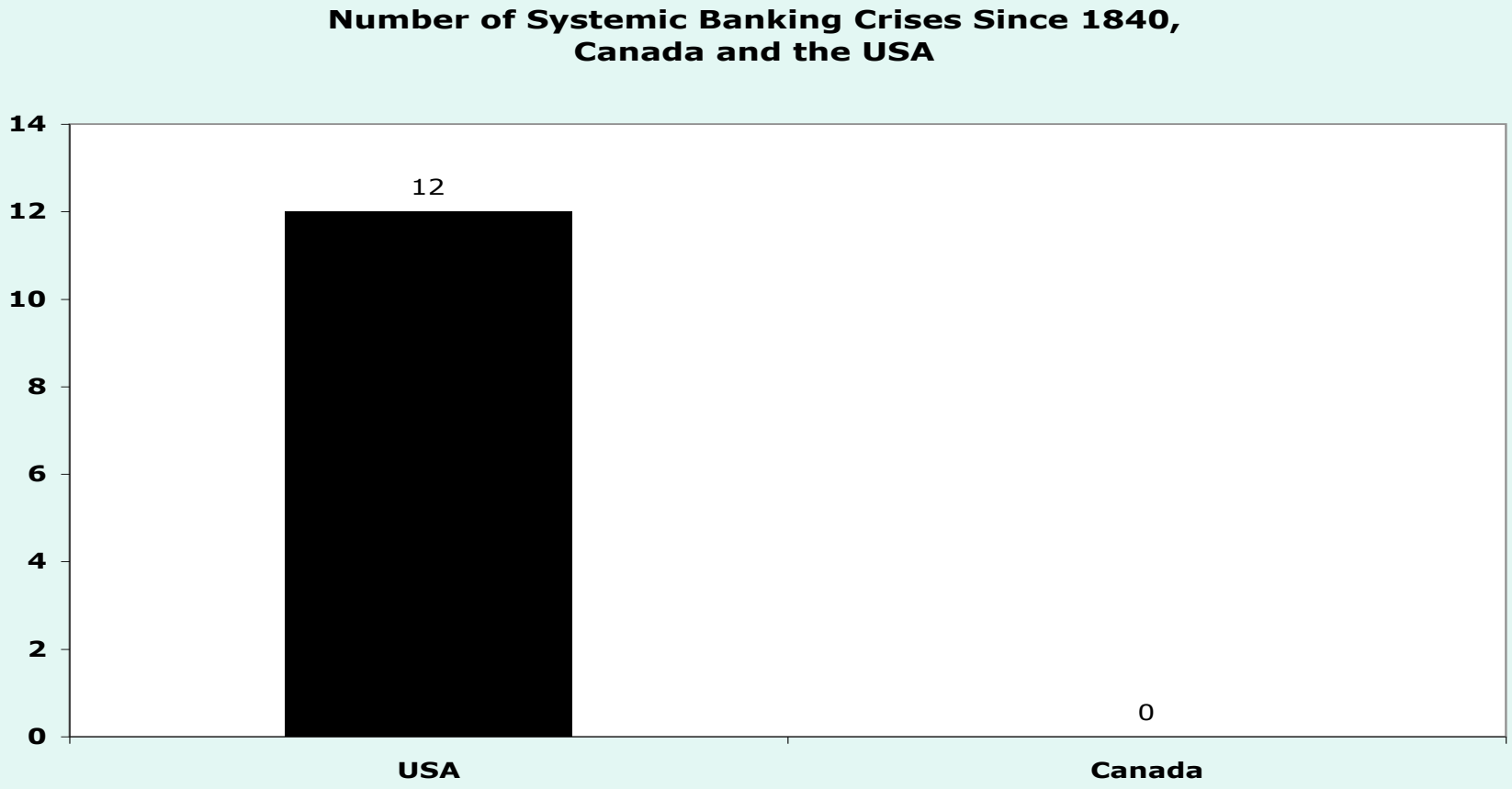
The other half are democracies.

All are former British colonies.

What pattern is suggested?

Non-democracies are systematically less likely to have stable and efficient banking systems.

But, we should not think that being a democracy is sufficient to avoid endemic banking crises—(and it should also get us thinking that banking crises are not caused by “unforeseen shocks”)



The thesis of *Fragile by Design*

1. Being crisis prone is the product of a purposeful political bargain among a subgroup of politicians, bankers, and debtors.
2. That bargain is about creation and sharing of economic rents. It makes a crisis likely, exposing everyone else to losses.
3. Under autocracy, the bargain is often about trading credit to the government for barriers to entry in banking and/or low capital requirements. Hence autocracies tend to be crisis prone and give rise to low levels of credit.
4. Under democracy, the bargain is often about trading votes for increased access to credit. Hence, democracies without strong liberal institutions that constrain populist currents are prone to crises.

Starting with first principles:
In order for there to be a banking system, three property rights problems have to be mitigated

1. Majority shareholders, minority shareholders, and depositors must be protected from expropriation by the government.
2. Depositors and minority shareholders must be protected from expropriation by majority shareholders.
3. Majority shareholders, depositors and minority shareholders must be protected from expropriation by debtors.

Mitigating these property rights problems simultaneously is very difficult—because banks need government, but governments have inherent conflicts of interest

1. Governments simultaneously borrow from banks and regulate them.
2. Governments enforce debt contracts but need the political support of debtors
3. Governments distribute losses in the event of bank failure, but they need the political support of depositors

The Implications

1. Banking systems are implicit partnerships between governments and private actors.
2. That partnership is the product of a strategic interaction we call the "Game of Bank Bargains."
3. The game governs entry and competition, the pricing of credit and its terms, and the allocation of losses when banks fail.
4. Who is in the partnership varies across countries and within countries over time--because who is in the partnership depends on who is politically crucial, and who is crucial depends on the political institutions.
5. As a result, banks are regulated according to the logic of politics, not the logic of economics.

How did we cleanly identify these hypothesized relationships?

1. We conducted a randomized field experiment in which we traveled back in time 300 years and randomly assigned countries autocratic and democratic political institutions—and then waited to see what happened.
2. Because that did not work, we read history and did archival research.

We picked cases that captured differences in political institutions both across countries and within countries over time

Great Britain

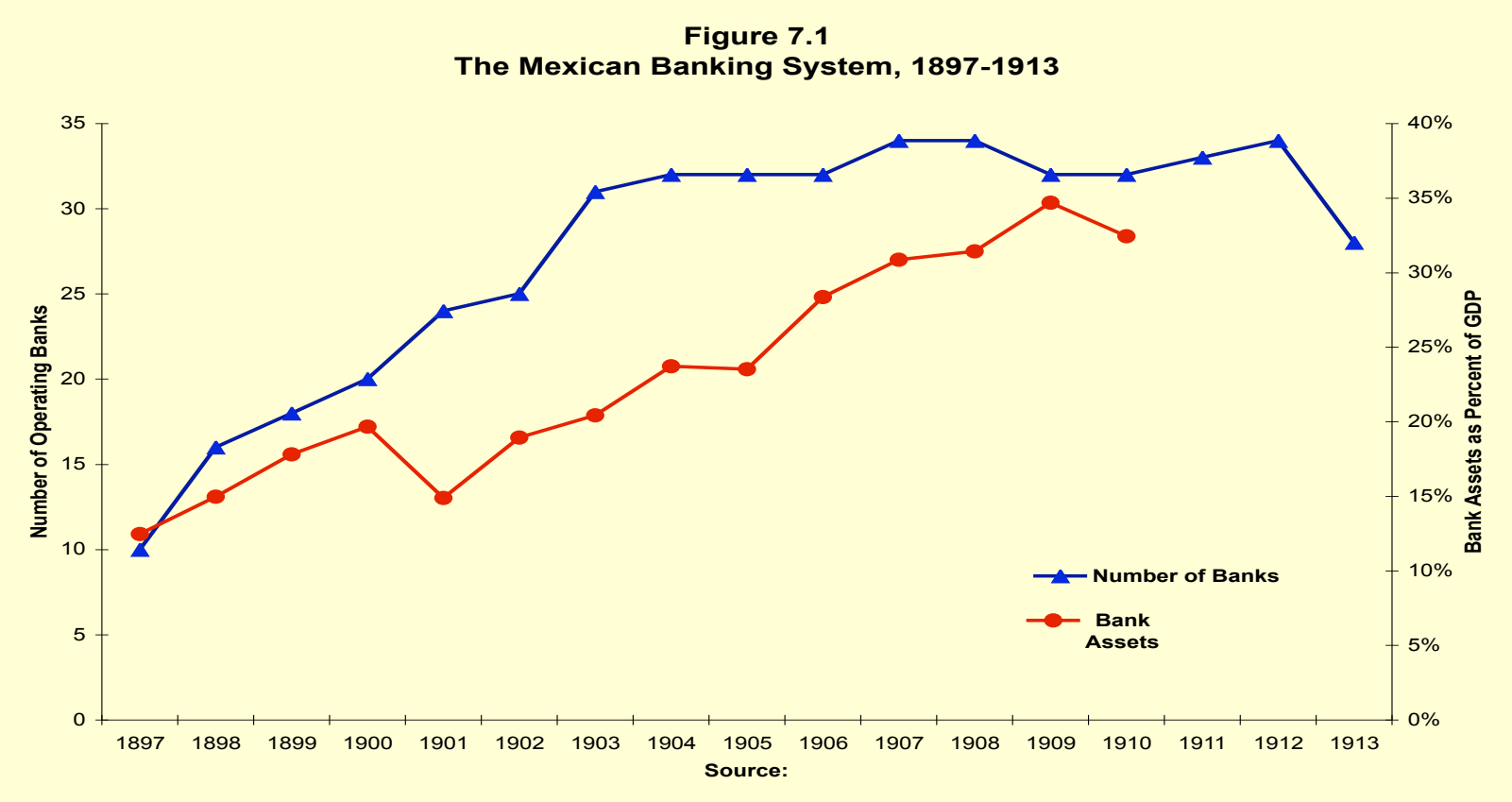
Canada

The United States

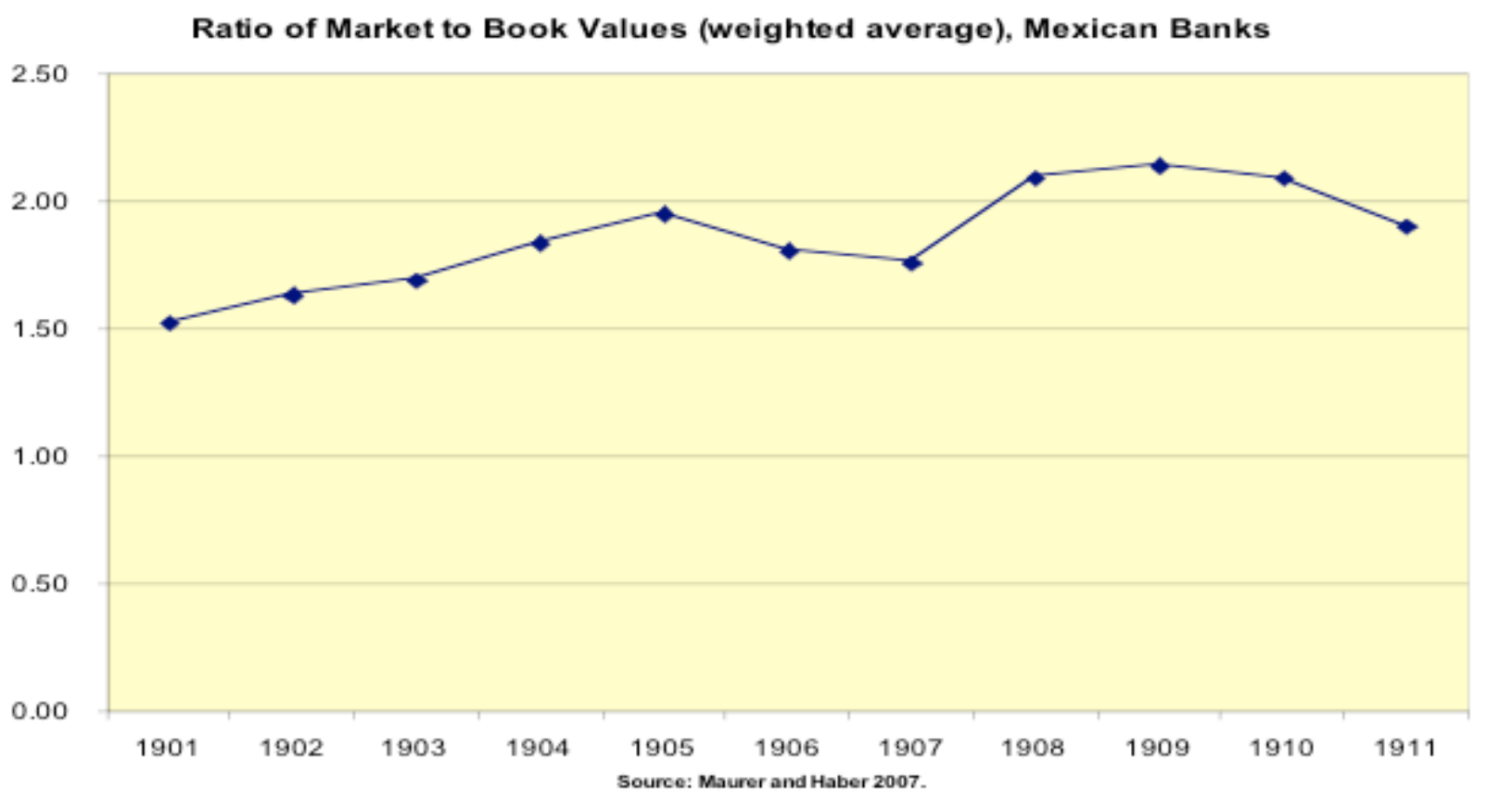
Mexico

Brazil

A glimpse into the game of bank bargains under a centralizing autocracy: Porfirian Mexico



Bank shareholders earned rents

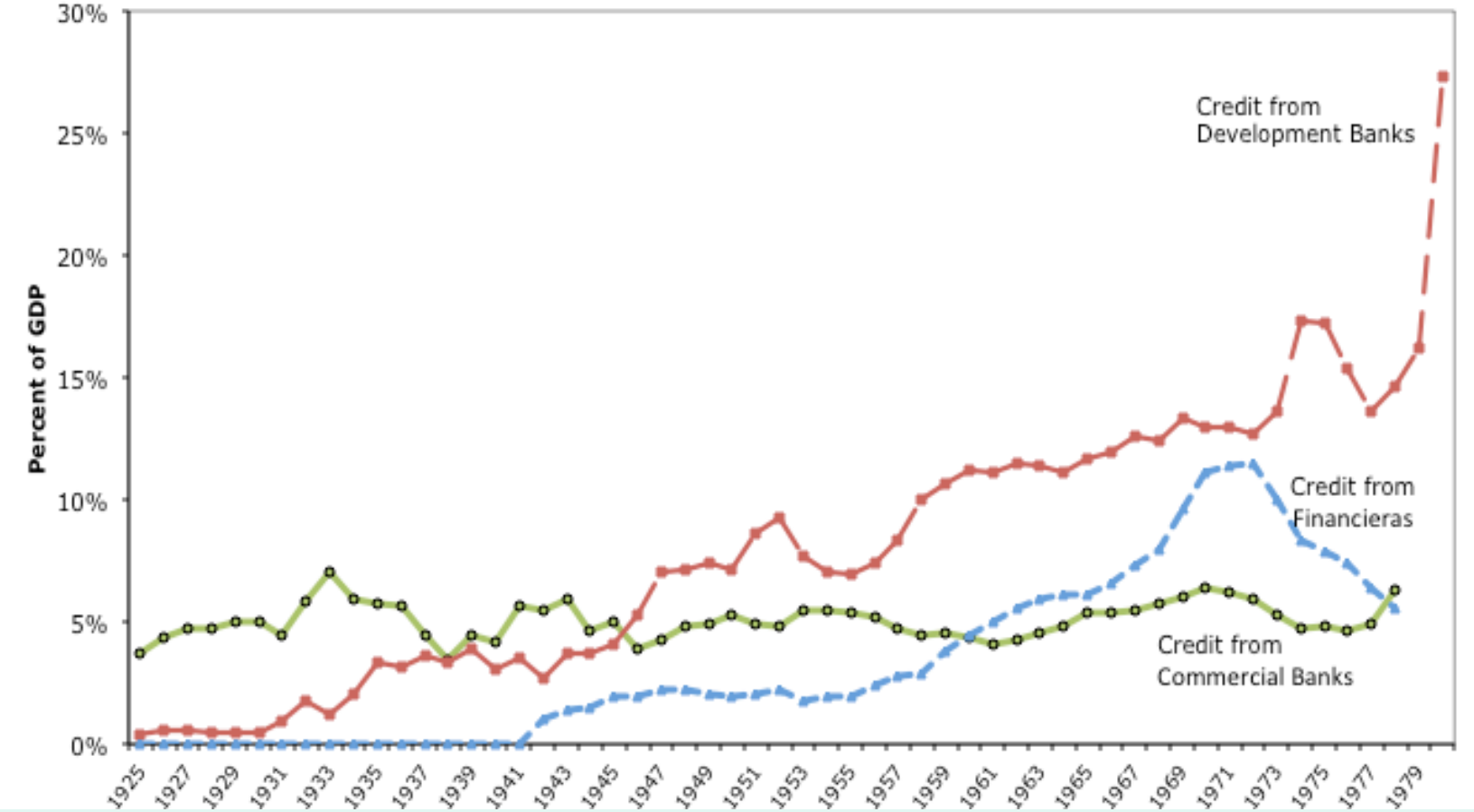


Banks lent mostly to their own directors

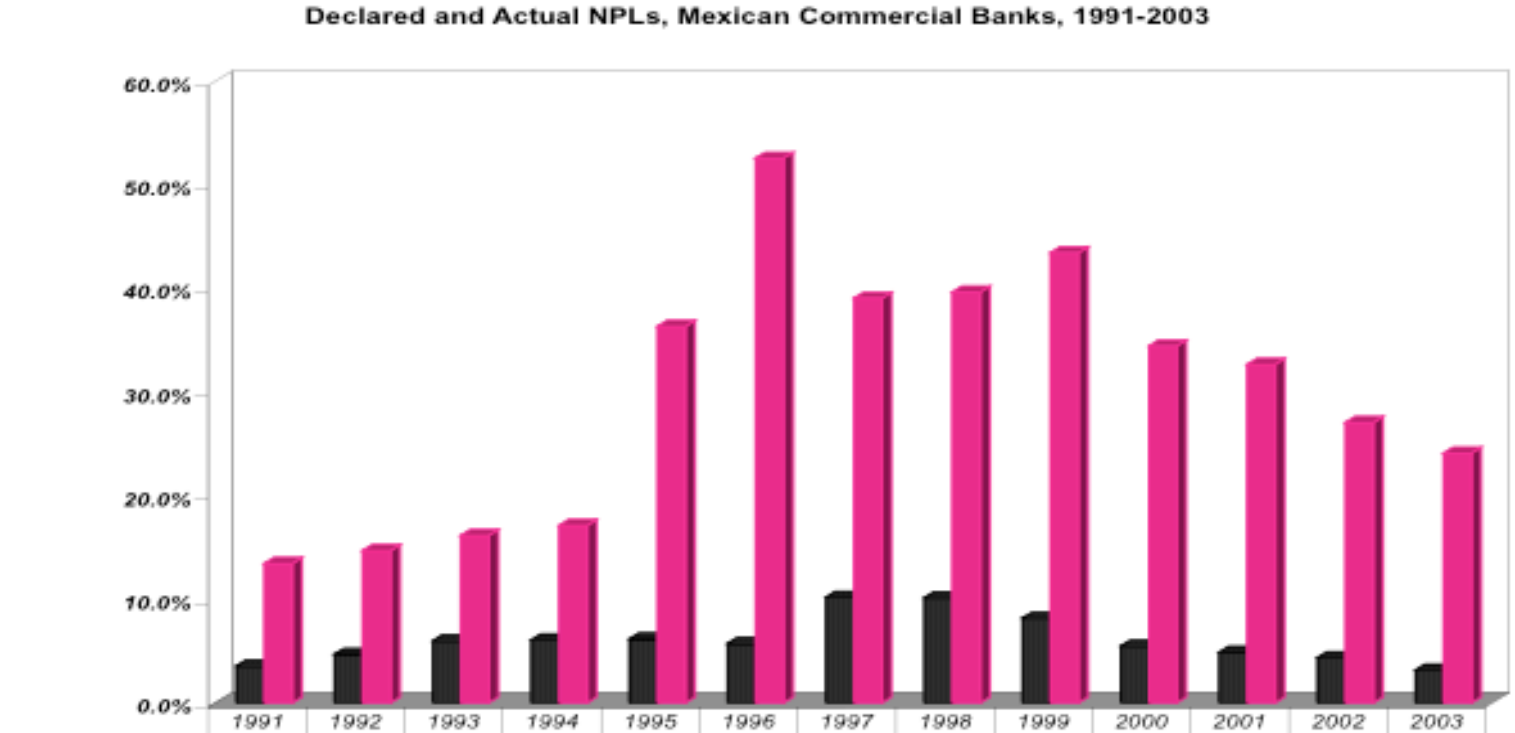
- Percent of non-government loans made to banks' own boards of directors:
- Banamex 1886 to 1901 100%
- Mercantil de Veracruz 1898-1906 86%
- Coahuila, 1908 72%
- Durango, 1908 51%
- Mercantil de Monterrey, 1908 31%
- Nuevo León, 1908 29%

The entire system depended on the maintenance of a stable, centralizing authoritarian government

Mexico's private banking system remained small under a party based dictatorship—and was then expropriated in 1982



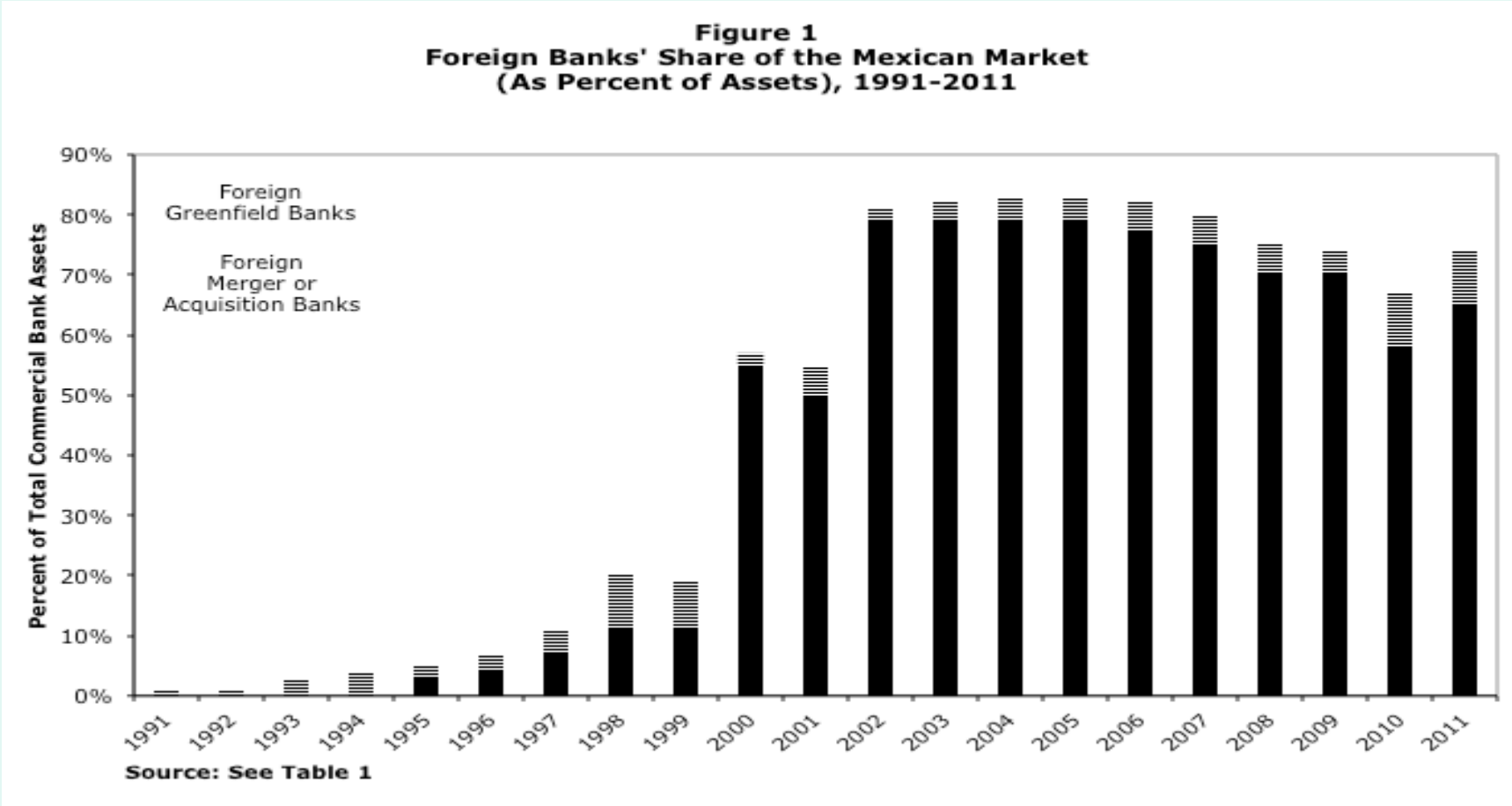
The same credibility problem reemerged in the privatization of 1991→leveraged buyouts→ a banking crisis→fall of the gov't



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Declared NPLs	3.6%	4.7%	6.0%	6.1%	6.2%	5.7%	10.2%	10.2%	8.2%	5.5%	4.9%	4.4%	3.2%
Actual NPLs	13.5%	14.7%	16.2%	17.1%	36.3%	52.6%	39.0%	39.7%	43.5%	34.4%	32.7%	27.1%	24.1%

Source: Haber and Musacchio 2012.

Mexico's democratizing governments solved the commitment problem by partnering with foreign banks



A partnership with foreign-owned banks solved one commitment problem, but has produced another…

1. Foreign owned banks could be counted on to provide real (not fictitious) capital.
2. Foreign owned banks had weak incentives to tunnel because they did not own non-financial enterprises.
3. Foreign owned banks could not count on bail outs.
4. But foreign owned banks had to operate under the property rights system of the ancien regime.
5. And are now under political pressure to lend more freely, but won’t do so unless the property rights regime is reformed or unless there are public subsidies.

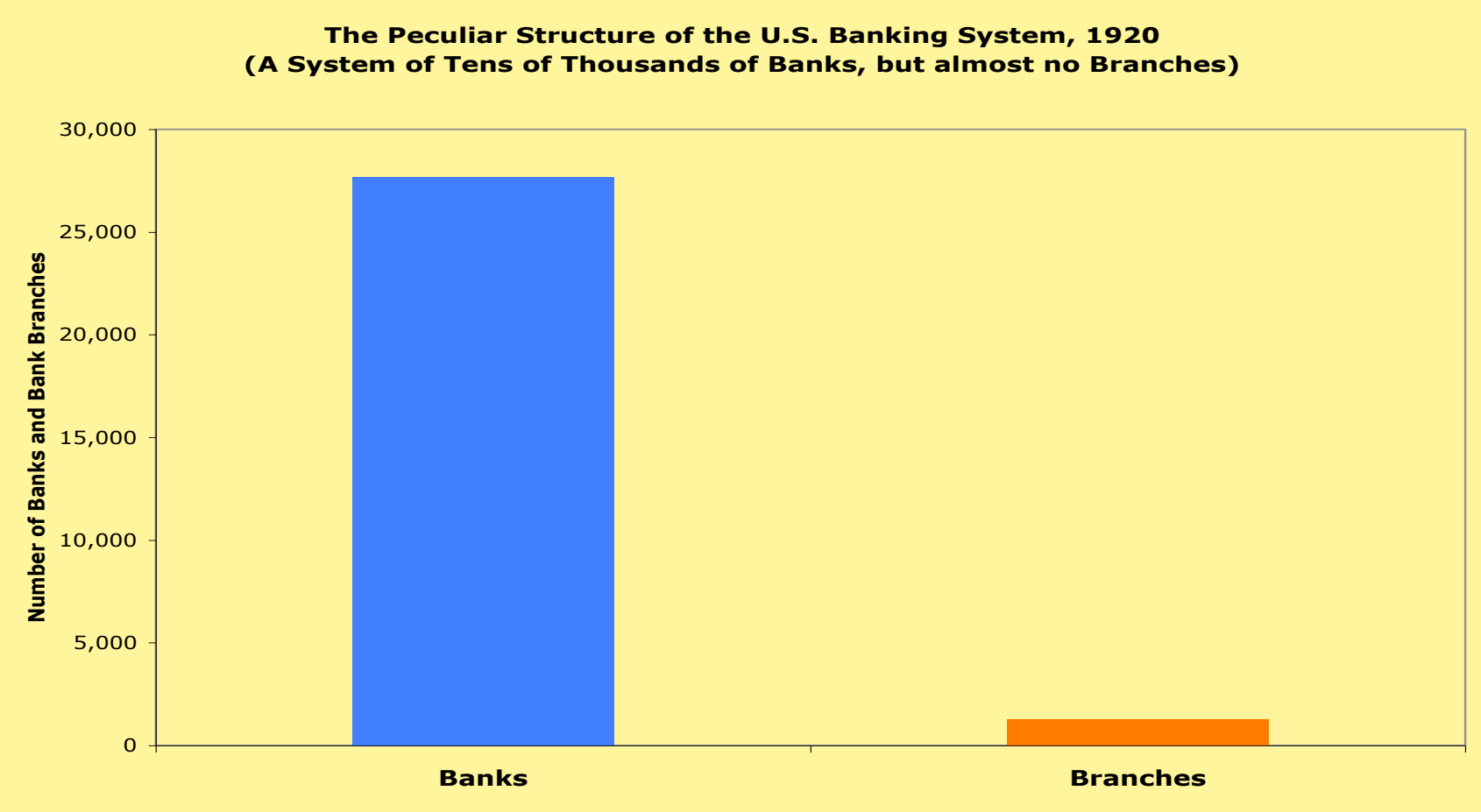
Why democracy, by itself is not a solution: the problem of populism

Democracy helps solve the problem of expropriation of the banks by the government

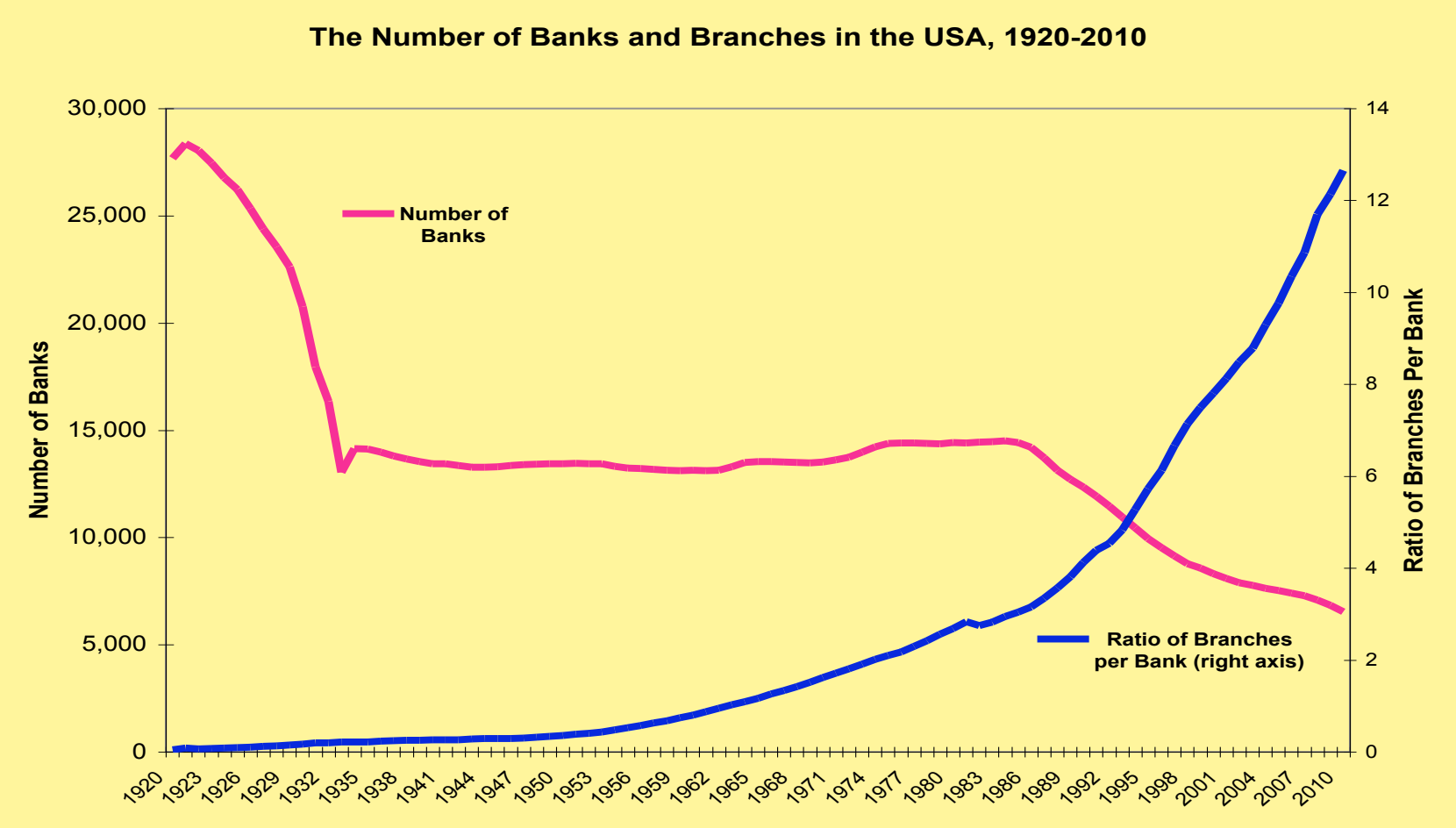
But what is to keep debtors from voting for cheap credit and debt forgiveness?

A smart banker can see this coming, and hence has an incentive to form a coalition with a sub-set of debtors—against everyone else

A classic example: the U.S. banking system from the 1820s to the 1980s



Technology and inflation killed this bizarre system



Why was the system of large banks with branches created after 1990 not more stable?

"We support the NationsBank acquisition of BankAmerica because…they will make credit work for low and moderate income people and they will work with the community institutions."

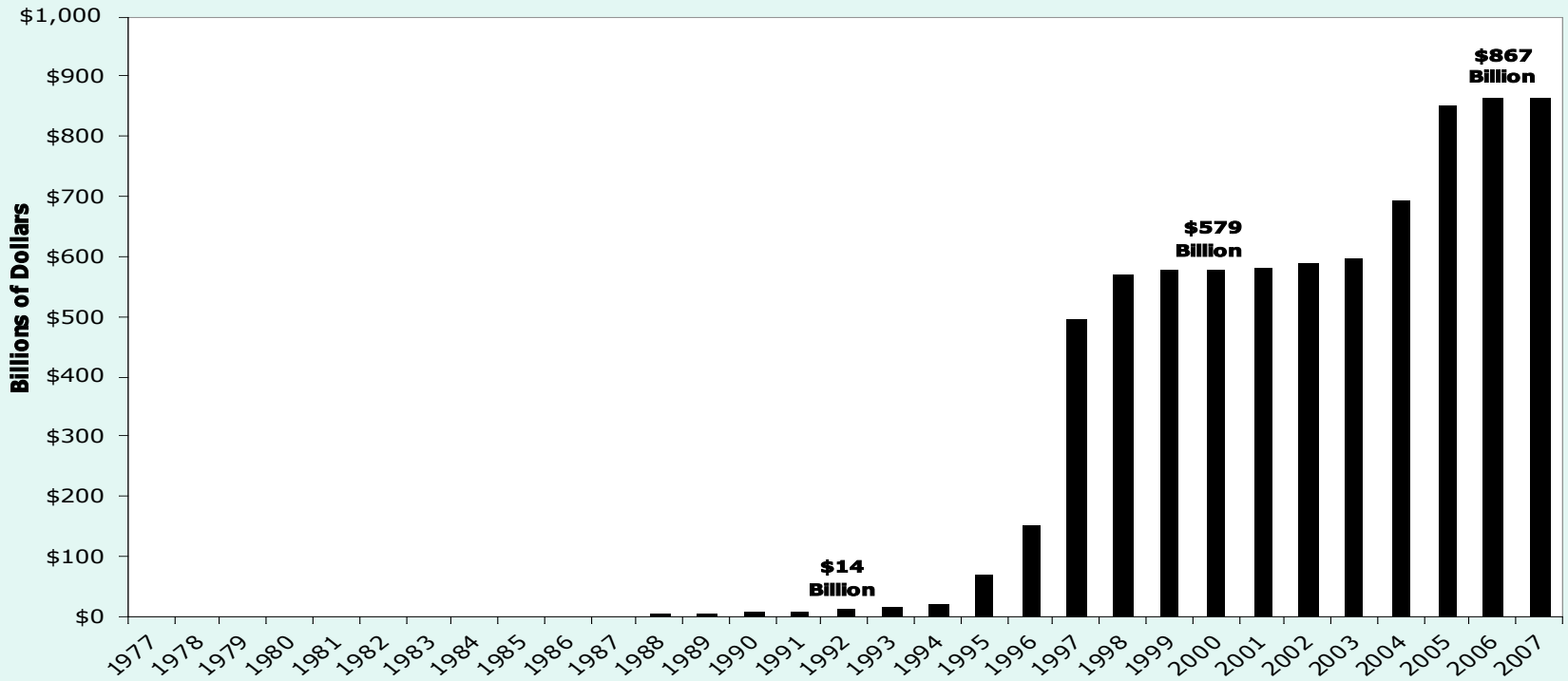
--George Butts, President of ACORN Housing

"The ability to purchase a home with no downpayment, no closing costs, no application fee, no perfect credit, at less than 7% interest is incredible. . . . The regulators need to approve the application immediately."

--Bruce Marks, CEO of NACA

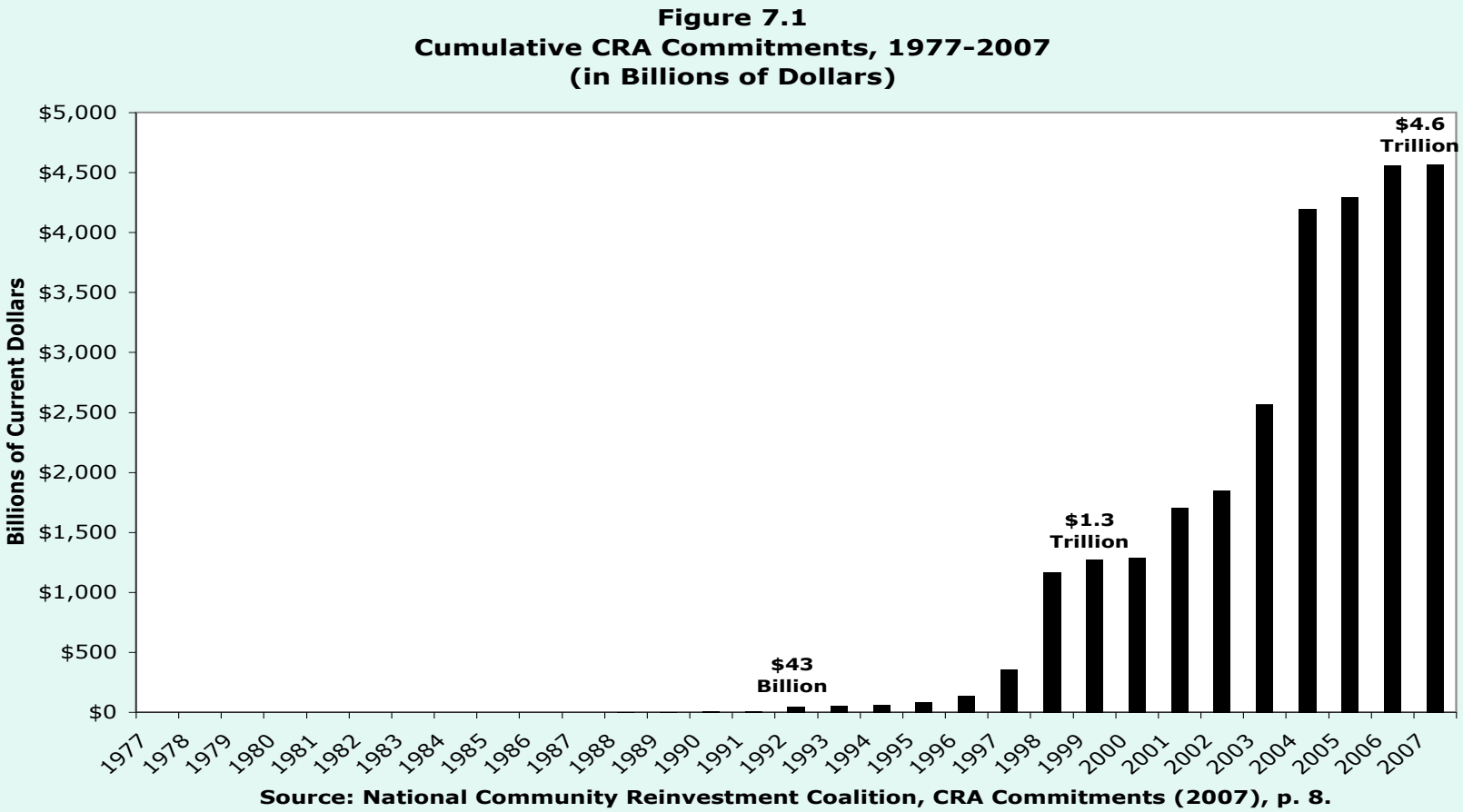
The curious coalition between emerging megabanks and activist groups

Figure 7.2
Cumulative Value of CRA Agreements Between Banks and Activist Groups, 1977-2007 (in Billions of



Source: National Community Reinvestment Coalition, CRA Commitments (2007), pp. 11-17.

$867 billion in bank lending through activist groups is a lower bound estimate



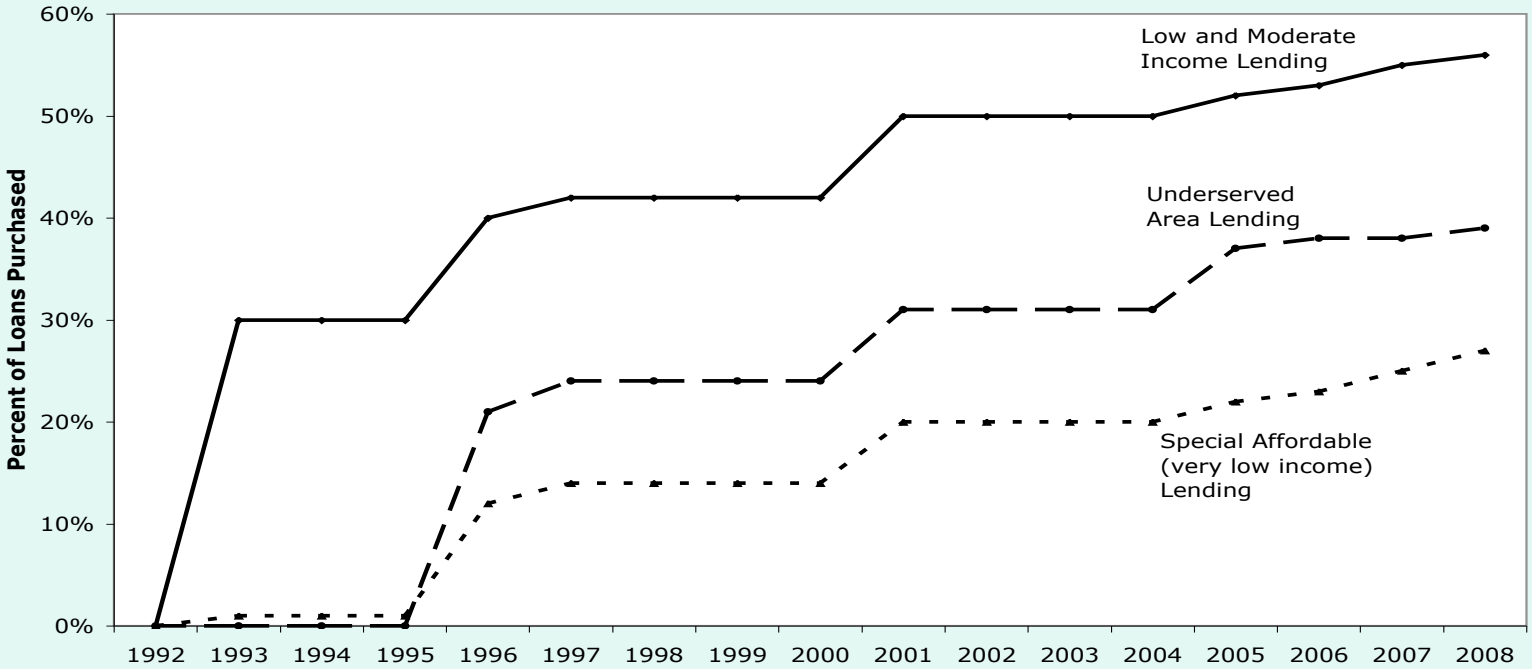
These deals could only persist if Fannie and Freddie were drawn into the bargain

"It is ACORN's observation that the underwriting criteria employed by Fannie Mae and Freddie Mac have been developed not for the general mortgage market, which includes low and moderate income homeowners, but the middle income and substantially suburban mortgage market. As as result, it is our firm belief that the underwriting standards dictated by the secondary mortgage market are, at a minimum, income discretionary and may, be extension, be racially discriminatory."

---George Butts, President of ACORN Housing, from his testimony to the Senate Banking Committee, 1991.

What did Fannie and Freddie agree to, what did they get in return, and where did this lead them?

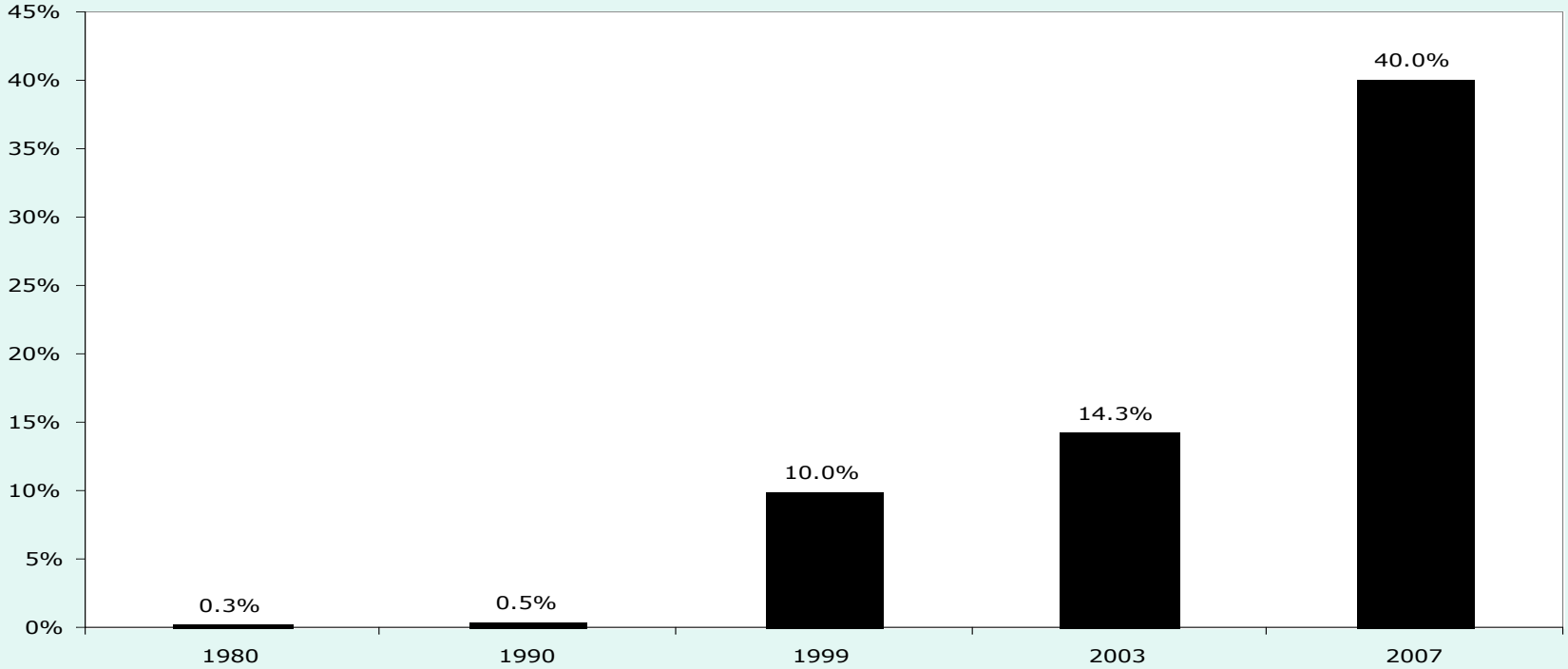
Figure 7.3
HUD Loan Repurchase Mandates for Fannie and Freddie, 1992-2008



Source Pinto (2011), pp. 76, 87, 104, 105.
Note: Fannie and Freddie actual loan purchases met these goals.

Fannie and Freddie had to apply the same lax lending standards to everyone and *anyone*

Figure 7.4
Percent of Home Purchases in the United States with a Downpayment of Three Percent or Less, 1980-2007

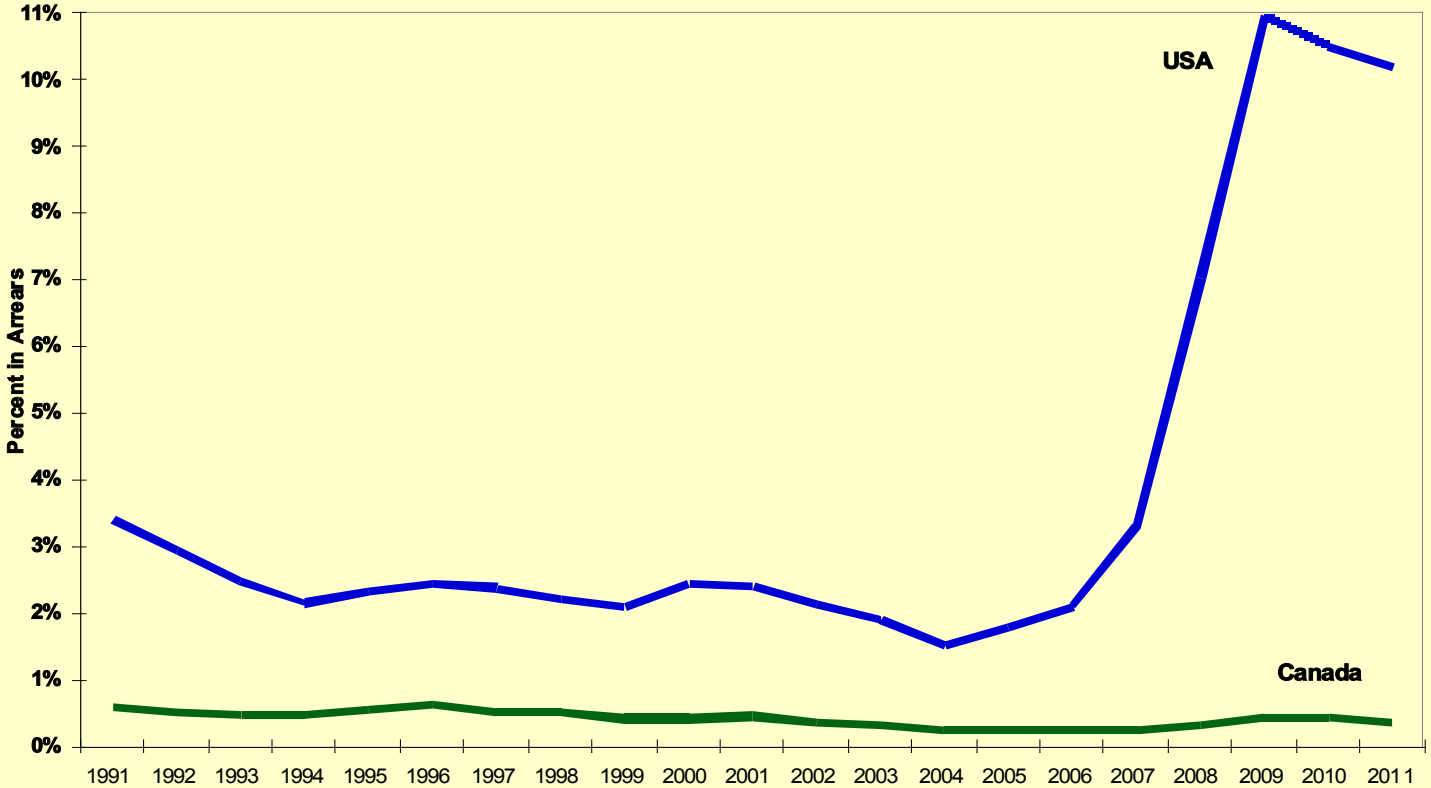


Source: Pinto (2011), pp. 24-25.

The logic of this deal required regulatory forbearance

1. The bargain struck with Fannie and Freddie as part of the GSE Act of 1992 allowed them to back their portfolios with 40% less capital than commercial banks.
2. This created incentives for regulatory arbitrage.
3. Banks could issue mortgages, sell them to Fannie and Freddie, buy them back as Fannie and Freddie MBS—and back them with half the capital.
4. Both the Fed looked the other way while this happened (Barth, Caprio, and Levine 2012).
5. We hypothesize that it relinquished its autonomy regarding bank regulation in order to preserve its autonomy in monetary policy.

The outcome is well-known



Going beyond *Fragile by Design*

In our penultimate chapter we assess whether the patterns I've talked about today travel to other countries and are consistent with results from cross-country regressions.

We invite other researchers, however, to test our hypotheses against detailed studies of the regulatory politics of banking in other countries.

Doing so, however, will require scholars to employ similar approaches to evidence. Causality can be nailed down through structured historical narratives, provided that you have a theory and the relevant facts.