The Doom Loop and Democratic Legitimacy in the Euro Area

Tal Sadeh*

Yuval Hirshorn *

May 2022

ABSTRACT

Much has been written on the ability of European Banking Union (EBU) to mitigate the mutual-capture relationships between governments and banks (the 'doom loop'). However, the effects of EBU on the democratic legitimacy of member states' governments has been neglected. We expect output legitimacy to fall when the 'doom loop' intensifies, as it did in the euro area, because it downplays voters' interests. We argue that the public responds politically to bank losses, especially under high concentration in the banking sector, as a transparent signal of the government's supervision failure. Our dataset includes more than 100 democracies since 1988. We compile data on losses of banks, and major falls in bank stock prices, calculate concentration levels in national banking sectors, the degree of financial interdependence between governments and banks, and the share of banking assets under direct SSM supervision. We find that bank losses tend to drive anti-government street protests even regardless of the level of concentration in the banking system, but that under high levels of concentration the public is especially upset about losses in locally-owned banks. Our results also confirm the expectation that the public protests more in such situations inside the euro area than outside it. Supranational supervision increases protests, and even reduces the vote for the incumbent government, rather than assuage the public's concerns. We believe that by studying the output legitimacy of supervision, this study fills an important gap in the literature on the politics of banking in the euro area; it also adds empirical value to this literature, with its original design, operationalization of output legitimacy, and comprehensive dataset.

Introduction

Launched in 1999, the euro area consisted of a single currency and a common central bank, but lacked a fiscal union and a banking union. The former shortcoming was well recognized at the time by policymakers and academics; much scholarly work has been published, and some common fiscal rules were devised at the outset and consequently developed. In contrast, the need to agree on common policies for supervision and resolution of banks was hardly discussed. Indeed, little was written on the politics of banking, before the financial crisis of 2008-09 and the euro crisis that followed. Member states remained autonomous in managing relations with banks operating within them. National governments allowed the concentration in the banking sector to increase, cultivating large 'national champion' banks (Epstein and Rhodes, 2016; Jones, 2015).

National and common policies in the euro area have been argued to enhance the mutual capture relationship between governments and banks, also known as the 'doom loop', perhaps beyond what was common outside this currency bloc. The 'culprits' included the elimination of the exchange rate risk, the increased reliance of fiscally-constrained governments on credit from pliant banks, and the increased reliance of banks on their governments, for lack of a clear lender of last resort (Barkbu, Eichengreen and Mody, 2015; Epstein and Rhodes, 2016; Marzinotto, 2016; Wallace, 2016). Member states competed to thwart foreign takeovers of 'their' banks, while encouraging them to gain control of banks in other member states.

When the euro crisis erupted in 2010, member states' policies further exacerbated the crisis. Each national agency acted based on its narrow mandate, creating common negative externalities (Howarth and Quaglia, 2016). The ECB also enhanced the 'doom loop', through its collateral policy, the Target2 settlement system, its market operations, and the Long-Term

Refinancing Operations (LTRO).[1] Even the EU's accounting rules potentially exacerbated state-bank mutual capture relationships during the crisis (Mabbett and Schelkle, 2016).

As these shortcomings were grudgingly and gradually acknowledged, the member states agreed to establish a European Banking Union (EBU) in order to loosen the 'doom loop'. This included greater centralization of banking supervision and resolution, starting in 2014 (Epstein 2017; Spendzharova 2013). However, EBU still leaves a wide range of capacities at the hands of national authorities (Donnelly 2018). Lingering distributive disputes among the member states continue to feed some skepticism about EBU's effectiveness, at least in its current form (Schimmelfennig 2016).

A growing literature in recent years studies the perspectives of the EU, national governments and banks in the politics of banking. Much less scholarly attention has been paid to the response of the wider public, both to the euro area's weaknesses, and to the remedies that have so far been put in place. Is the public aware of the state-bank mutual capture relationship in the euro area? Does it trust the ECB to do a better job than national governments in supervising banks? Are these issues politicized in a post-functionalist sense, beyond the representation of banks' interests in intergovernmental negotiations? The literature's neglect of such questions is surprising, given the rich debate on the democratic legitimacy of the euro area's institutions, supranational or intergovernmental (Sadeh 2019). We argue that while the public may not expect to provide inputs to an opaque policy area such as banking supervision, it does respond politically to bank losses, as a transparent signal of supervision failure (Chwieroth and Walter 2019a; Seabrooke 2006). Hence, in the euro area, losses in concentrated banking system are more politicized than outside it. However, while delegating supervision authority to a

---

[1] Barkbu, Eichengreen and Mody, 2016; Barta and Schelkle, 2015; Henning, 2016; Jones, 2015; Wallace, 2016; Wyplosz, 2016.

supranational authority should increase aggregate efficiency, we find that it breeds resentment, perhaps due to the remoteness of such institutions from citizens can as the literature suggests.

In the next section we discuss the 'doom loop' and how it affects the national government's output legitimacy. In the third section we discuss the ways in which the euro area exacerbated this mutual capture relationship and how EBU is supposed to correct this. The fourth section sets out our research design. We deliberately avoid studying actual bank bailouts for three reasons. First, there is an acute shortage of transparent, reliable and uniform bailout data cross countries and years. It may also be hard to know if the full cost of bailouts is indeed reported. Second, studying bailouts is bedeviled by selection problem; it is not uncommon for 'zombie banks' to linger on under government protection without a bailout. Third, what matters to us is what the public knows. The more obscure the situation, the less likely is the public to respond politically. Thus, we prefer to study the conditions that are potentially conducive to a tight 'doom loop' relationship, which we operationalize as the coincidence of bank losses under high levels of concentration in the banking sector.

Our country-year dataset includes more than 100 democracies since 1988. We operationalize output legitimacy with data on anti-government street protests and use tobit regression analysis to test our hypotheses. In a separate country-election dataset we operationalize output legitimacy with the share of the vote for the incumbent government and use linear regression analysis to test our hypotheses. We compile data on losses of banks, local and foreign-owned, and major falls in bank stock prices, calculate concentration levels in national banking sectors, the degree of financial interdependence between governments and banks, and the share of banking assets under direct SSM supervision, and control for the business cycle, financial openness and the level of democracy.

In the fifth section we discuss the preliminary results of our regression analysis. We find that bank losses tend to drive protests even regardless of the level of concentration in the banking

system, but that under high levels of concentration the public is especially upset about losses in locally-owned banks. We interpret this result as evidence of the public's expectation that governments protect 'national champions'. We explain why this finding is not merely a reflection of the business cycle. Our results confirm the expectation that the public protests more in such situations inside the euro area than outside it. Our results also show that supranational supervision increases protests, and even reduces the vote for the incumbent government, rather than assuage the public's concerns. The Sixth section provides conclusions.

We believe that by studying the output legitimacy of supervision, this study fills an important gap in the literature on the politics of banking in general, and in the euro area in particular; it also adds empirical value to this literature, with its original design, operationalization of output legitimacy, and comprehensive dataset.

The Doom Loop and government legitimacy

In its most basic form, banking is about taking deposits, and lending. Deposits are commitments on the part of the bank to allow the depositors to withdraw cash at any time. Some deposits are created when the bank's customers indeed deposit cash with it, and the bank holds the cash as an asset to back the commitment. However, much of the deposits are classically created as a result of lending. When lending, the bank creates a deposit to the benefit of the borrower, and holds the borrower's promise to repay the loan at a specified future time as an asset. While the bank's commitments (deposits) are by their nature highly liquid, its non-cash assets are

typically less liquid.[2] This creates a liquidity risk that characterizes the banking business. If many depositors demand cash simultaneously, the bank's cash reserve would be depleted, and it would fail to meet its commitments. The liquidity risk is separate from the bank's credit risk – the risk that borrowers would run down their deposits but would later fail to repay the loan, leaving the bank with a loss. Banks become insolvent when loses overwhelm their net value.

Banks have an interest in limiting the liquidity risk by keeping a safe ratio between their cash reserves and the amount of loans they give. They also have an interest in limiting their exposure to credit risk by lending only to trustworthy borrowers. Nevertheless, banks may be tempted to assume great liquidity risks, because for as long as depositors do not demand cash, a loan generates income from interest payments, with negligible costs. In addition, the high interest rates that are charged on loans to risky borrowers can tempt banks into assuming greater credit risks. There is thus a short-term tradeoff between prudence and profit-maximization. In a highly competitive financial market, banking may become riskier due to this time-inconsistency problem.

The state can help reduce such negative market externalities by regulating banking, setting a required reserve ratio (reserves to deposits), and monitoring credit risks. As a sovereign that raises taxes and issues cash, the state can also reduce the banks' liquidity risk by lending them cash when demand for it suddenly increases. This is the famous lender-of-last-resort role, typically performed by central banks. Since the sovereign never runs out of its own cash, the state can also reduce banks' credit risks by borrowing from them, providing them with safe assets (its bonds). Large banks may come to expect that the state provide them with assets when

---

[2] The liquidity of financial commitments and assets is a measure of the ease and speed with which they can be converted to cash. Cash means any legal tender that is not issued by the particular bank.

they become insolvent (bailout) (Pagliari, Phillips, and Young 2018). More broadly, banks, like any business in a market economy, depend on the state to enforce property rights.

For their part, governments may expect banks to reciprocate by lending to them and to their preferred firms and households at favorable terms. In other words, governments need banks as sources of finance and as vehicles of redistribution among sectors and constituencies (Clift and Woll 2012; Hardie and Macartney 2016). More broadly, governments enjoy the wide tax base that a prosperous economy generates, thanks to a developed and safe banking sector.

Thus, bank-state relations are characterized by interdependence. Unfortunately, this interdependence may translate into a mutual-capture relationship, often termed the 'doom-loop' (Calomiris and Haber 2014; Epstein 2017; Véron 2017; Woll 2014). In this relationship, banks may subsidize excessive government borrowing and become powerful political agenda setters (Keane 2013). As a result, state supervision of banks may be lax (Epstein 2017), and state guarantees of banks, formal or implied, may subsidize risk-taking ('moral hazard'), exacerbating rather than mitigating the above externalities (Strahan 2013). Increasingly risky government securities may gradually make bank balance sheet more fragile rather than safer.

This might impact the government's output legitimacy, assuming that the public has a utilitarian logic (Innerarity 2014, 314), based on cost-benefit evaluations of the performance of political institutions, at the individual and national levels (Hobolt and Wratil 2015). Citizens have an interest in cheap and abundant credit, provided by a safe and stable banking sector. They prefer that the government resolve any tradeoffs between credit abundance and banking stability with rigorous bank supervision and regulation, but are poorly placed to contribute

policy inputs and review the government's conduct in such an opaque policy area. Most people can only judge the outputs of bank supervision .[3]

Eventually resorting to taxpayers' money in order to fund costly bank bailouts, not to mention deep banking crises that result in assets, income and job losses, may be interpreted as a government failure (Funke, Schularick, and Trebesch 2016). The redistributive effects of bailouts may strengthen the feeling that banks have captured state's policies at the expense of taxpayers (Chwieroth and Walter 2017; 2019b; Dalton 2019).[4] However, the full extent of state aid for banks (Correia, Dubiel-Teleszynski, and Población 2017) may not be publically disclosed in real time, or at all, so the public may not be aware of it. In contrast, financial crises are clear evidence of government failure, and are thus normally followed by political turmoil (Funke, Schularick, and Trebesch 2016; Mian, Sufi, and Trebbi 2014), protests and riots. In democracies, voters punish politicians that fail to act timely and efficiently in crisis-management or prevention (Hobolt and Tilley 2016; and Hernández and Kriesi 2016); Extreme parties strengthen (Hobolt and de Vries 2016; Nicoli 2017), government majorities shrink and legislatures become ever fractionalized.

A mutual capture relationship between the government and banks, at the expense, or perceived expense of the public, is especially likely with very large banks. The government may wish to

---

[3] Anderson and Singer 2008; Chwieroth and Walter 2019a; Fernández-Villaverde, Garicano, and Santos 2013; Haber and Levi-Faur 2018; Seabrooke 2006.

[4] Arguably, over time many firms and households may benefit, directly or indirectly, from the policies that the government finances through its special relationship with banks. However, such benefits may not necessarily be transparent, and it is not clear that the public understands that it will later have to pay for these benefits when a banking crisis arrives.

cultivate a few large, too-big-to-fail banks, sometimes referred to as 'national champions' (Epstein and Rhodes 2016). Such banks can be reliable buyers of government bonds (Sadeh and Porath 2020), and resilient to small losses, which makes them more suitable as vehicles of government policies and less likely to need a bailout. This is the concentration-stability argument. The public may also view them favorably, as safe financial institutions, if the government can make sure that they provide sufficiently cheap and abundant credit rather than abusing their oligopolistic position (Beck, Demirgüç-Kunt, and Levine 2006).

However, large banks are also better placed to skew the relationship in their favor, as explained above (Calomiris and Haber 2014; Strahan 2013). In addition, as collective action theory informs us, small and homogenous groups form and act together better than small, heterogeneous groups (Woll 2014). This is the concentration-fragility argument.

Large banks control more political and bargaining power (Woll 2014). In times of crisis they can shift more of the cost of bank bailouts and restructuring on the taxpayers, and in non-crisis times they may pressure the government to lighten the burden of supervision on them (Engelen *et al*., 2011; Woll 2014). More generally, high government-bank interdependence is associated with greater capture of government by banks. In extreme cases (such as in Iceland 2008) (Kriesi 2014) 'too-big-to fail' banks become 'too-big-to bail'. In other words, the government cannot afford to bail them out, and when crisis comes, the national economy collapses (Demirgüç-Kunt and Huizinga 2013; Matthijs and Blyth 2015).[5]

---

[5] Some even suggest that very large banks can become so influential that the judicial system loses its independence, and some deviant bankers may become 'too-big-too-jail' (Pontell, Black, and Geis 2014).

Given the above conflicting considerations, it is hard to hypothesize whether the public will view high banking concentration favorably or negatively. However, large bank losses in a concentrated banking system are likely to fuel a popular suspicion that the large banks have captured the government.

> <u>H1</u>: *When the likelihood of bank bailouts (independent variable) increases, government legitimacy (dependent variable) falls, especially the greater is the government-bank interdependence (intervening variable).*

The euro area and the Doom Loop

Launched in 1999, the euro area consisted of a single currency, a common monetary policy managed by the European Central Bank (ECB), and rules restricting government deficits and sovereign debt. In contrast, despite some work on financial integration, supervision and regulation of banks was mostly left to the member states.[6] The government of each member state remained autonomous in managing relations with banks operating within it (henceforth 'its' or 'their' banks), much as the previous section characterizes. Concentration in the banking sector was allowed to increase, maintaining large 'national champion' banks. Strong local banks were seen as serving the national economy and helping favored sectors (Epstein and Rhodes, 2016; Jones, 2015).

---

[6] Efforts at financial integration included the Capital Requirements Directive (CRD), securities market law (the four Lamfalussy directives), and the establishment of the Committee of European Banking Supervisors (CEBS), the European Systemic Risk Board (ESRB), and the European Banking Authority (EBA) (Howarth and Quaglia, 2016).

Unfortunately, national and common policies in the euro area have conspired to enhance the mutual capture relationship between governments and banks beyond what was common outside this currency bloc. To begin with, the elimination of the exchange rate risk among the national economies stimulated cross-border lending (Barkbu, Eichengreen and Mody, 2015; Marzinotto, 2016; Wallace, 2016). Indeed, the EU's 2006 Banking Directive promoted cross-border banking services. However, the directive also preserved governments' ability to protect their banks (Epstein and Rhodes, 2016). There were very few cross-border takeovers in the euro area (Wallace, 2016). From the perspective of governments, there was good reason for this. Unable to rely on their national central banks to buy their debt, governments were ever more reliant on their banks for finance. For their part, banks were ever more reliant on their governments once inside the euro area, because until 2012 it was not clear that the ECB had a mandate to act as a lender of last resort. This combination of financial liberalization and banking protectionism resulted in interstate political competition, in which governments resisted foreign takeovers of their banks while encouraging them to increase their activities in other member states (Epstein and Rhodes, 2016).

When the 2008-09 global financial crisis arrived, each government bailed out its own favored banks, to keep them domestic (Epstein and Rhodes, 2016). When the euro crisis erupted in 2010, member states' policies further exacerbated the crisis. Cooperation and information-pooling among national supervisors was insufficient, each acting based on its narrow mandate. National bank supervisors tended to 'ring fence' banks that they supervised by encouraging them to reduce their cross-border exposure. While this 'balkanization' of the euro area's financial markets made sense on a national level, it had negative common externalities (Howarth and Quaglia, 2016).

The institutions of the euro area also played a part in enhancing the 'doom loop'. Since the launch of the euro, but especially during the euro crisis, the ECB was more generous than

financial markets and non-European agencies in its judgement of the quality of collateral that euro area banks swapped for cash (Barkbu, Eichengreen and Mody, 2016; Barta and Schelkle, 2015; Henning, 2016). The ECB's willingness to accept even Greek sovereign debt as collateral through the crisis was especially remarkable (Jones, 2015). This lenient approach to the quality of government debt increased banks' demand for government securities.

During the crisis, the euro area's settlement system – Target2 – was vital in preventing the collapse of the large banks, especially in the northern member states. Target2 had the indirect effect of allowing national central banks to bail-out private creditors, by making sure that their borrowers in crisis-hit countries did not run out of euros (Wallace, 2016). Protecting northern banks was also an important consideration in the design of the first rescue package to the Greek government (Wyplosz, 2016).

The ECB's market operations during the euro crisis, buying securities of distressed governments, protected the value of these assets. This helped governments, which could continue to borrow at reasonable interest rates, and their local banks, which held significant amounts of these securities (Henning, 2016). Indeed, the ECB was explicit about this, when it argued that governments' fiscal sustainability and financial sector instability cannot be separated when member states receive aid to recapitalize financial institutions. The ECB insisted on this inseparability, against the Commission's approach, because governments enjoy indirect debt monetization by selling bonds to banks, which convert them to cash at the ECB (Mabbett and Schelkle, 2016). Likewise, the Long-Term Refinancing Operations (LTRO) from December 2011 to February 2012 were exceptional in their terms. The lending of one trillion euros to euro area banks for three years, and the classification of government securities as riskless assets combined to increase again bank demand for them. It also transferred some credit risk to the ECB. (Henning, 2016; Jones, 2015).

Even the EU's accounting rules potentially exacerbated the 'doom loop': In attempting to enforce fiscal discipline, the Commission counted government financial support to banks as an expense contributing to the fiscal deficits, unless governments used the money to buy assets. This had the perverse effect of either motivating member states to hide banking problems rather than resolving them, or partly nationalizing banks (Mabbett and Schelkle, 2016).

If the euro area exacerbated the government-bank mutual capture relationship, we can hypothesize that:

> H2: *When the likelihood of bank bailouts and the government-bank interdependence jointly increase, government legitimacy falls, especially in euro area member states.*

As the euro crisis laid plain these shortcomings, in June 2012 the member states agreed to establish the EBU, some more enthusiastically than others. EBU consists of four main components, most of which are operational by now: A Single Supervisory Mechanism (SSM), a single framework for bank resolution, and the European Stability Mechanism (ESM) as a common backstop for temporary financial support. Since April 2013 EBU relies on the Single Rulebook (SR) setting common capital and liquidity definitions and rules. The fourth component of EBU – the European Deposit Insurance Scheme (EDIS) has been negotiated since 2015 with very slow progress.

The SSM – the single framework for banking supervision – became operational in November 2014. The SSM gives the ECB (in its capacity as the Single Supervisory Board) a dominant role in banking supervision in the euro area, although in close cooperation with national supervisory authorities. France, Italy, the Netherlands, Spain and the Commission wanted the SSM to cover all of the euro area's roughly 6,000 banks. France and the Netherlands were concerned about their large banks' exposure to foreign markets, and Italy and Spain were spooked by the banking crisis that they suffered in 2011. Germany resisted this, concerned that

its many small banks, which were mostly inactive outside Germany and posed no systemic risk, may be overwhelmed by the costs of compliance and formalities associated with SSM. France was concerned that limiting the SSM to large banks would single out its own banks.

The compromise reached restricted direct ECB supervision to the largest Euro area banks (120-127 of them, depending on the year), but subjected all banks to potential ECB supervision, if the ECB decides that the national authorities are not doing enough. More specifically, direct ECB supervision applies to any bank that meets any one of the following criteria: (1) The bank is one of the three largest banks by assets in its member state. (b) The bank's assets exceed 30 billion euros. (c) The bank's assets exceed 20 percent of its member state's GDP and exceed five billion euros. (d) the bank has a high level of cross-border exposure (which was not precisely defined). The ECB together with the EBA is qualified to approve liquidity assistance from the European Stability Mechanism (ESM) to solvent banks.

In one of its first actions as SSB, the ECB conducted an asset quality review in Autumn 2014 in all euro area banks. It found non-preforming loans worth 136 billion euros (15 percent of total assets) that the national supervisory authorities had not announced. It also found that banks over-valued their assets by 48 billion euros. 25 banks failed its Comprehensive Assessment (Howarth and Quaglia, 2016). This seemed to confirm the aggregate advantage of common rather than national supervision of banks (Stijn 2013).

Distinct from supervision, bank resolution is process by which authorities intervene to manage the failure of a bank. Resolution rules limit the disruption to the financial system and to critical economic functions that banks provide, and minimize the costs to taxpayers. A resolution regime is a political solution to distributive conflicts in bank failure (Howarth and Quaglia, 2016). Since July 2014, the euro area's resolution regime consists of the Bank Recovery and Resolution Directive (BRRD), the Single Resolution Mechanism (SRM) and the Single Resolution Fund (SRF). The BRRD stipulates the rules for distributing the costs of bank failure

among shareholders, creditors, depositors, the state and perhaps the EU. Bail-in (cancelling debts to creditors and depositors) is the first recourse, but there are exemptions. The SRM is a regulation that stipulates how, once bail-in options have been exhausted, banking sector emergency fund (SRF) would cover for remaining losses (available only to banks participating in SSM). If funds that compensate losers for bail-in measures and other resolution costs have been exhausted, state intervention is the last recourse, and member states can draw on the ESM (Howarth and Quaglia, 2016).

By making resolution more transparent and subject to common rules, the euro area's resolution regime potentially removes another crucial element of the 'doom loop'. Thus, by delegating bank supervision and resolution authority to supranational institutions, EBU is supposed to moderate governments' hazardous connection to banks (Epstein 2017; Spendzharova 2013). It should seem straightforward that the public would not blame the government for bank losses, especially those that are suspected of stemming from a supervision failure:

> H3a: *When the likelihood of bank bailouts and the government-bank interdependence jointly increase, government legitimacy falls, especially the fewer are the banking assets under direct SSM supervision.*

However, EBU still leaves a wide range of capacities at the hands of national authorities (Donnelly 2018). Some scholars are skeptical of its effectiveness, given lingering distributive disputes among the member states (Schimmelfennig 2016). In addition, a vast literature argues that the euro area's institutions, supranational or intergovernmental, lack public legitimacy (Sadeh 2019). As discussed in the previous section, it is hard to assume that the public cares about input legitimacy in bank supervision, but the more remote institutions are from citizens, the more foreign they feel, and the less trusted they may be. The public may resent the loss of national autonomy and the intrusion of foreign institutions even if it does not fully understand their role. It is thus possible that:

H3b: *When the likelihood of bank bailouts and the government-bank interdependence jointly increase, government legitimacy falls, especially the more banking assets are under direct SSM supervision.*

Research design

We identify 115 democracies between 1988-2019 (earlier data on banks is unavailable – see more below). Countries are considered democratic whenever they scored 6 or higher in the polity2 variable of the POLITY IV project (Marshall, Jaggers, and Gurr 2002), or in years when elections were held and covered by the manifesto project (Volkens *et al*. 2018). Thus, some countries drop in and out of the data over the years. Our dependent variable is the output legitimacy of the government and its policies. We operationalize this alternatively with the electoral success of the government, or the intensity of anti-government protests (Hobolt and de Vries 2016; Nicoli 2017; Margalit 2019b).[7]

We use four variables to measure electoral success. *Turnout* is the percent of voters that cast a valid vote in the ballot, out of all of the electorate. A low turnout may reflect mistrust of the political system. *VOTE* is the share of the vote that the largest incumbent-government party received in elections to the national legislature in parliamentary democracies, or the share of the vote for the presidential candidate from the same party of the incumbent president (whether

---

[7] Measuring support for the government in cross-country public opinion surveys, such as Eurobarometer, ESS or WVS, is disadvantaged by coverage and availability problems.

the incumbent is re-running or not) in executive-presidential democracies.[8] *dVOTE* is the difference in *VOTE* from the previous election.

Re-Election is a dummy variable, coded 1 in the 357 elections in which the incumbents remained in office. For this purpose, remaining in office means that the incumbent president (prime minister) and the next president (prime minister) have both been nominated by the same party. Data for *Turnout*, *VOTE* and *Re-Election* are gathered from the Manifesto Project data (Volkens *et al*. 2020) the ParlGov database (Döring, Huber and Manow 2021) media publications and official governmental websites.

---

[8] In parliamentary democracies, if the largest incumbent-government party is running as part of an electoral alliance, its share of the new vote is calculated based on its share of the vote among the same parties in the previous elections, or based on the allocation of seats in the previous parliament, depending on the availability of data. If there are new parties in the electoral alliance, their share of the new vote is thus zero. If the largest incumbent-government party is not running, the same procedure applies for the second largest incumbent-government party, within the last governing coalition. If a president, or presidential candidate, is supported by a group of politically unaffiliated politicians, they will be considered as a distinct party. If the same group supports candidates in two or more elections, it will count as the same party each time. If a government resigns or is impeached and replaced without elections by other parties already in the existing parliament, those parties will be considered incumbents in the next election. Technocratic and transition governments are ignored for the purpose of these calculations; election results are related to the last non-technical government. Under single party governments, when the incumbent party is not contesting the elections, its score is zero. If more than one round of elections is held, only the electoral success in the first round is recorded, to make the results more comparable to those in one-round democracies.

Election data are necessarily cross-section, with country-election as the analysis unit (742 observations in 113 countries, 629 observations for *dVOTE*).[9] See descriptive statistics for the dependent variables in the country-election dataset in Table 1.

Table 1: Descriptive statistics of the dependent variables in the country-election dataset

Variable	Obs.	Mean	Std. Dev.	Min	Max	Unit	Range
Turnout	742	0.69	0.14	0.24	0.99	Percent	0→1
VOTE	742	0.33	0.17	0	0.92	Percent	0→1
dVOTE	629	0.00	0.19	-0.75	0.82	Percent	-1→1
Re-Election	742	0.48	0.50	0	1	Dummy	0 or 1

Note: values for the independent variables are for the pre-election year – see descriptive statistics for the country-year dataset below.

We test the research hypotheses with linear regression when either *Turnout*, *VOTE* or *dVOTE* is the dependent variable. Standard errors are clustered on panels to reduce the effect of potential interdependence among election results within each country, and fixed effects control for differences in national election rules. When *Re-Election* is the dependent variable, probit and logit regressions are used with similar specifications (but it is technically impossible to include country fixed effects in probit regressions). We also test our hypotheses on a sub-sample of EU member states (186 country-election observations), distinguishing mainstream Europhile governments (157 country-election observations), for which we expect our tests to be particularly strong, from extreme and/or Eurosceptic governments.[10] The values of all the independent variables described below are those in the pre-election year.

---

[9] In the Central African Republic and Myanmar no elections were held when they met our criteria for democracy, leaving us with 113 data countries.

[10] This classification is based on Raskin and Sadeh (2021). Malta is not classified. Governments are classified according to the largest incumbent-government party, which is identified with the same procedures used for *VOTE*.

Alternatively, we operationalize the output legitimacy of the government and its policies with the intensity of anti-government protests. This indicator has two advantages. First, elections are held in cycles, and not every instance of public dissatisfaction is accommodated with early elections. Dissatisfaction may die-out before the next elections arrive, and go unrecorded by *Turnout*, *VOTE* and *Re-Election*. Protests on the other hand, are continuous (Kriesi 2014, 7). Second, protest data are free of the national and personal confounders that mediate between economic shocks and voting (Margalit 2019b), although they may have their own confounders (Zárate-Tenorio 2019).

We use the Mass Mobilization Data Protest (MMDP) database (Clark, David and Regan 2016), which collects data on protests, demonstrations and gatherings against the government in 166 countries since 1990, 107 of which are included in our data until 2019.[11] An anti-government protest is defined as "a gathering of 50 or more people to make a demand of the government. A protest action must be targeted at the state or state policy" (Clark, David H. and Regan 2015, 2), by locals, against their own government or its policies. Armed resistance and rallies with two or more political parties associated with upcoming elections are not coded.[12]

---

[11] We lose Australia, Iceland, Israel, Malta, New Zealand, Solomon Islands, Trinidad and Tobago and the United States.

[12] The database draws on five major newspaper sources (New York Times, Washington Post, Christian Science Monitor, Times of London and the Jerusalem Post), searched for four key words: Protest, Demonstration, Riot, Mass Mobilization. Regional and other media outlets are also searched only if the above five sources return less than 100 results for each country-year.

As a result, there are 2,409 observations of *PROTESTS* in 107 democratic countries. We measure anti-government protests with a variety of variables. *PROTESTNum* is the total number of different anti-government protests taking place in a country-year (even if they started in the previous year). *PROTESTDays* is the percentage of days (out of 365 days) in which at least one protest took place in the country-year. *PROTESTDur* is the average duration of a protest (in days) taking place in a country-year. *PROTESTParti* is the number of participants in all protests in a country-year relative to its total population.[13] Each of these four variables is also calculated considering violent protests only (denoted with the suffix *V*).

MMDP classifies demonstrators' demands into 7 nominal categories: (1) Labor or wage dispute; (2) Land tenure or farm issues; (3) Police brutality or arbitrary actions; (4) Political behavior/processes; (5) Price increases or tax policy; (6) Removal of corrupt or reviled political person; (7) Social restrictions. Of these, we regard categories 4-6 as Doom-Loop related, because they are likelier to reflect grievances related to the mutual capture relations between governments and banks, or the immediate consequences of such relationship (e.g. rising credit prices). Therefore, each of the above four variables and their violence-focused variants are also calculated considering only protests that made such demands (denoted with the suffix *DL*). In addition, *PROTESTVio* is the share of violent protests out of all protests in a country-year, which too has a *DL* variant. All of these variables and their variants are multiplied by -1, such that higher values indicate greater support for the government.

---

[13] MMDP provides estimated ranges of participants' number in each protest; *PROTESTParti* aggregates the minimum values of these ranges.

Table 2: Descriptive statistics of the dependent variable in the country-year dataset

Variable	Obs.	Mean	Std. Dev.	Min	Max	Unit	Range
PROTESTNum	2,409	-3.95	7.12	-143	0	Count	-∞→0
*PROTESTNumDL**	2,409	-3.19	5.86	-85	0	Count	-∞→0
PROTESTNumV	2,409	-0.95	2.19	-41	0	Count	-∞→0
*PROTESTNumVDL**	2,409	-0.77	1.83	-29	0	Count	-∞→0
PROTESTDays	2,409	-0.03	0.07	-1	0	Percent	-1→0
PROTESTDaysDL	2,409	-0.02	0.06	-1	0	Percent	-1→0
PROTESTDaysV	2,409	-0.01	0.05	-1	0	Percent	-1→0
*PROTESTDaysVDL**	2,409	-0.01	0.04	-1	0	Percent	-1→0
PROTESTDur	2,409	-2.02	6.87	-178	0	Days	-365→0
PROTESTDurDL	2,409	-1.85	6.79	-178	0	Days	-365→0
PROTESTDurV	2,409	-1.50	9.33	-237	0	Days	-365→0
PROTESTDurVDL	2,409	-1.44	9.31	-198	0	Days	-365→0
PROTESTParti	2,409	-0.0009	0.0031	-0.0923	0	Percent	-1→0
*PROTESTPartiDL**	2,409	-0.0008	0.0030	-0.0923	0	Percent	-1→0
PROTESTPartiV	2,409	-0.0002	0.0011	-0.0432	0	Percent	-1→0
*PROTESTPartiVDL**	2,409	-0.0001	0.0011	-0.0432	0	Percent	-1→0
PROTESTVio	2,409	-0.17	0.29	-1	0	Percent	-1→0
PROTESTVioDL	2,409	-0.16	0.29	-1	0	Percent	-1→0

Note: * This variant of the dependent variable is highly correlated with other variants and is not used in regression analysis.

PROTESTNum and *PROTESTDur* (and their variants) are count variables, while the other variables are ratios bounded between 0 and -1. All of the variables are zero-inflated. We accordingly run tobit regressions, again with standard errors clustered on panels, and country fixed effects[14] (see descriptive statistics for the country-annual dataset in Table 2).

---

[14] A high frequency of zero observations suggests latency – in this case the absence of rallies in support of the government (which MMDP does not record). Tobit regression can be described as a combination of a probit regression (people select whether to protest) and a linear regression (people select how much to protest).

We proxy for the public's suspicion that the state's supervision of banks has failed with major bank losses, or with major falls in bank stock prices. Bank losses indicate worsening credit conditions for lenders and riskier prospects for depositors; they are associated with falling bank stock prices, which depress people's wealth, and with increased likelihood of insolvency and/or a bailout at taxpayers' expense. Large losses concentrated in particular banks may make them insolvent, causing their customers to lose their assets (savings). The larger the cumulative losses of banks, the likelier it is that the government would feel compelled to act to prevent a major economic crisis. With or without a bailout, the larger are bank losses and falls in their stock prices, the higher the expected costs to the public.[15]

We use country-annual data on banks' losses, assets and ownership, from the Financial Times' Banker database[16] for banks accounting for more than 90% of banking assets in each country. This covers 109 of our democracies during 1988-2019. As Table 3 shows, while country-years with no losses are the mode, small losses are not rare either. In contrast, large bank losses are less frequent. Annual national bank losses in excess of 1 percent of total banking assets occur in only about 4 percent of the data.

---

[15] There may be more direct indicators for state aid to insolvent banks (Correia, Dubiel-Teleszynski, and Población 2017), and several agencies (e.g the European Commission and Eurostat) do collect such data, but coverage is limited in time and country. From a behavioral perspective, we prefer indicators that are transparent and observable for the public; large bank bailouts cannot be hidden, but smaller state aid to banks may not come to the public's attention. Finally, failure of bank supervision will be costly for the public even without a bailout and without bank insolvency.

[16] https://www.thebankerdatabase.com; Date Retrieved: April, 2021.

Table 3 – Frequency of bank losses and falls in bank socks' prices

National aggregate losses in the banking sectors, in percent of total banking assets	Number of country-year observations (frequency)	Number of observations (in percent of total)	Weekly falls in listed banks' stocks, in percent	Number of bank-week data points (frequency)	Number of bank-week data points (in percent of total)
0	1,345	53.4	0	525,622	54.3
0 to 0.1%	766	30.4	0 to 3%	302,018	31.2
0.1 to 1%	316	12.5	3 to 10%	121,578	12.6
1 to 2%	48	1.9	10 to 13%	8,335	0.9
2 to 4%	29	1.2	13 to 20%	6,641	0.7
greater than 4%	17	0.7	greater than 20%	3,461	0.4
Total	2,521	100		967,655	100

Notes: Bank losses data cover 109 democracies during 1988-2019, based on data from the *Financial Times' Banker* database. Bank stocks' data cover 75 democracies during 1988-2019, based on data from *Compustat Global - Security Daily* and *Compustat North America - Security Daily*. See section on research design for further information.

We operationalize bank losses in four different ways. *BankLossGDP* is the aggregate total of all of the absolute values of the losses of banks per country-year (excluding banks that made a profit) divided by GDP. The higher the losses relative to GDP, the greater the potential impact on firms and households, and the likelier it is that there was a bailout in that country-year. This measure can have any positive value. Alternatively, the aggregate losses are divided by the total bank assets per country-year. This measurement method focuses on the importance of the losses to the financial sector and to holders of financial assets. In countries with a developed financial sector, total banking assets may greatly exceed GDP, so losses that are large relative to assets are necessarily large relative to GDP. In other cases, large losses to banks may have a lower impact on the non-financial sectors, but the government may yet intervene on behalf of asset owners. Measuring losses relative to assets is also useful given coverage limitations of GDP data (taken from the World Bank). *BankLossGDP* and *BankLossAsts* can also be

interpreted as representing respectively the direct (assets price volatility) and indirect (jobs and income volatility) effects that banking crises can have on households and SMEs (Chwieroth and Walter 2020a).
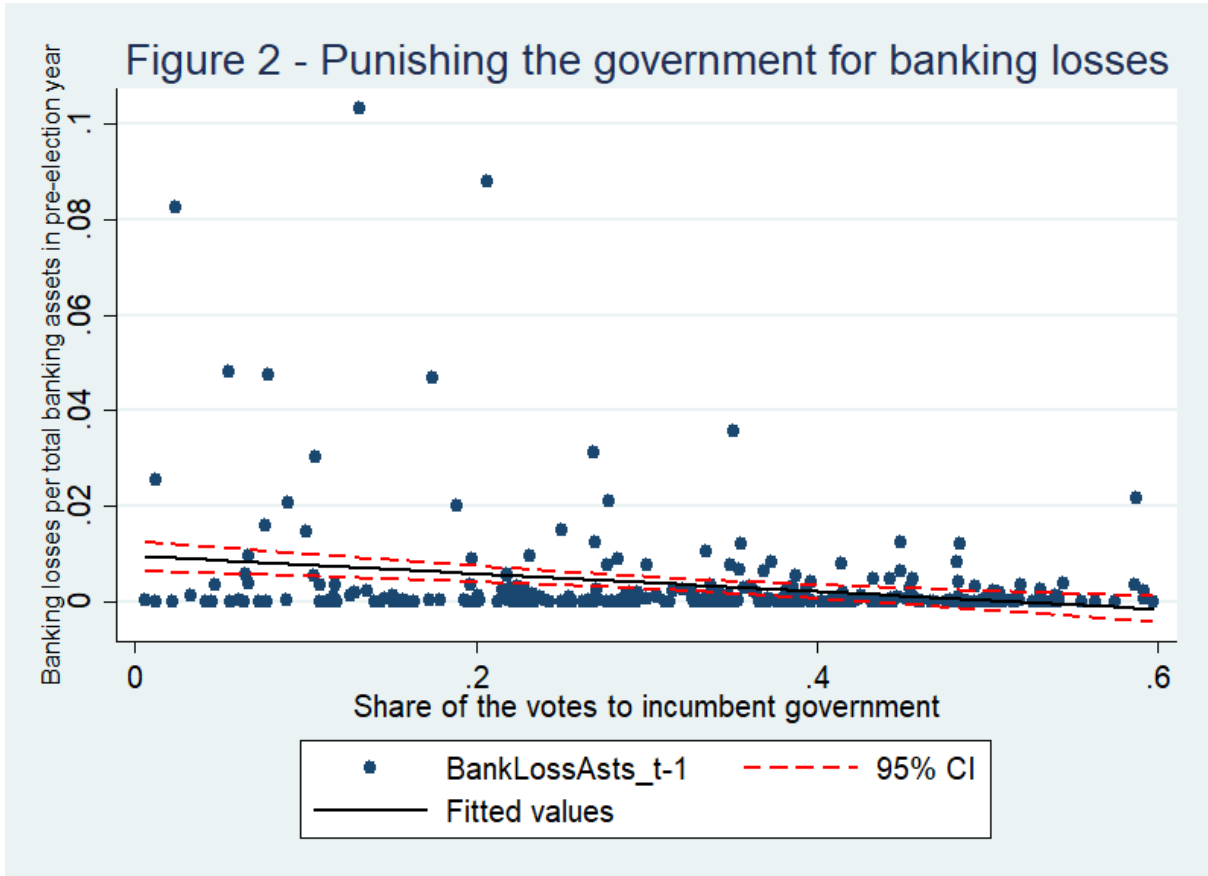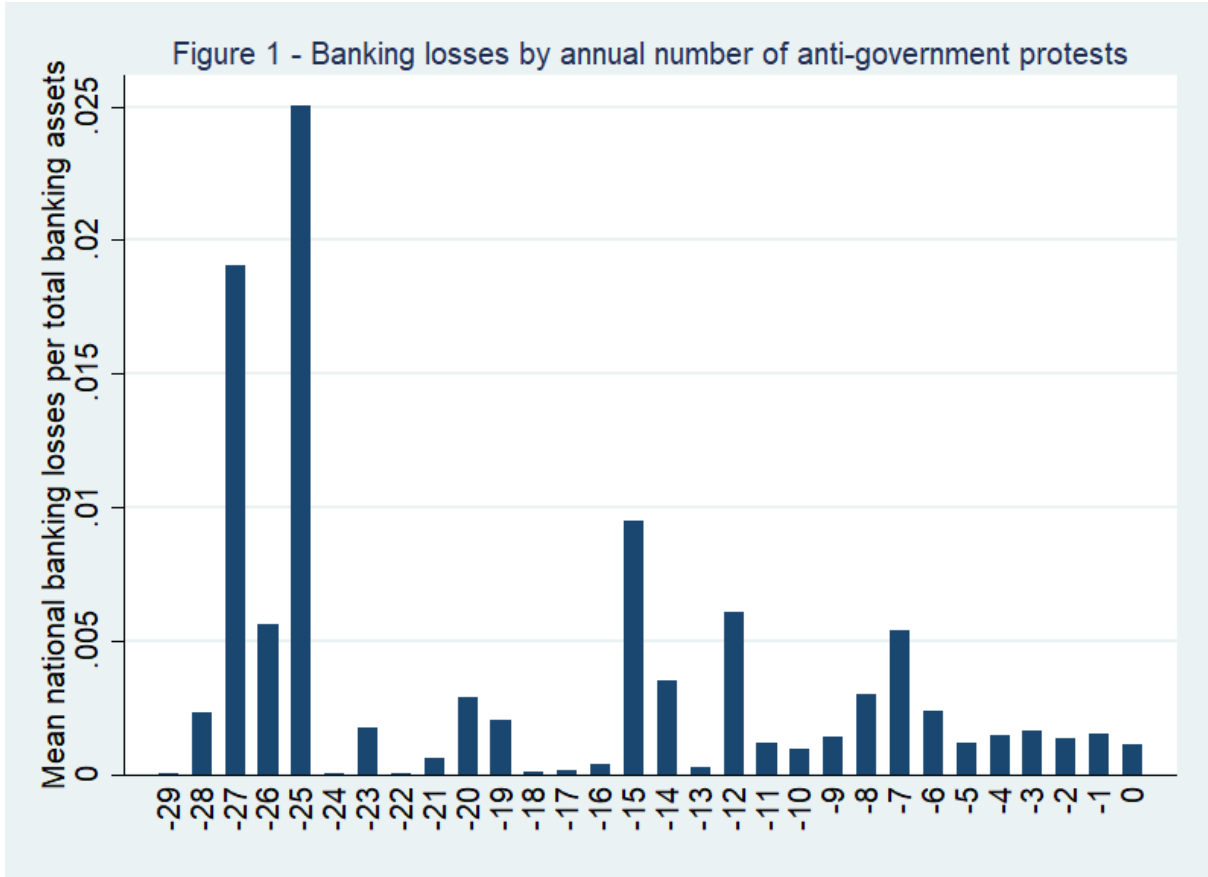
Because foreign-owned banks are less likely to engage in mutual capture relations with the government, they can be expected to better regulated and less likely to receive aid. Thus, their losses may not disappoint the public as much as those in locally-owned banks. For robustness we also calculate each of the two measures exclusively for locally-owned banks (see suffix *L*).

Table 4: Descriptive statistics of proxies for supervision failure in the country-year dataset

Variable	Obs.	Mean	Std. Dev.	Min	Max	Unit	Range
BankLossGDP	2,159	0.0020	0.0115	0	0.2620	Percent	$0 \to \infty$
BankLossGDPL	2,159	0.0007	0.0042	0	0.1074	Percent	$0 \to \infty$
BankLossAsts	2,261	0.0017	0.0082	0	0.2265	Percent	$0 \to \infty$
BankLossAstsL	2,261	0.0008	0.0043	0	0.1161	Percent	$0 \to \infty$
StockFall5dem	1,449	0.05	0.06	0	0.50	Percent	$0 \to 1$
StockFall10dem	1,449	0.07	0.07	0	0.50	Percent	$0 \to 1$
StockFall15dem	1,449	0.10	0.08	0	0.50	Percent	$0 \to 1$
StockFall20dem	1,449	0.12	0.09	0	0.52	Percent	$0 \to 1$

Note: Statistics exclude missing observations in the dependent variables.

Figures 1-3 show a general tendency of more frequent anti-government protests as bank losses mount relative to bank assets (based on the country-year dataset) and a lower vote for the incumbent government (the cross-section dataset).

Figure 1 - Banking losses by annual number of anti-government protests

Figure 2 - Punishing the government for banking losses

Figure 3 - Replacing the government for banking loses
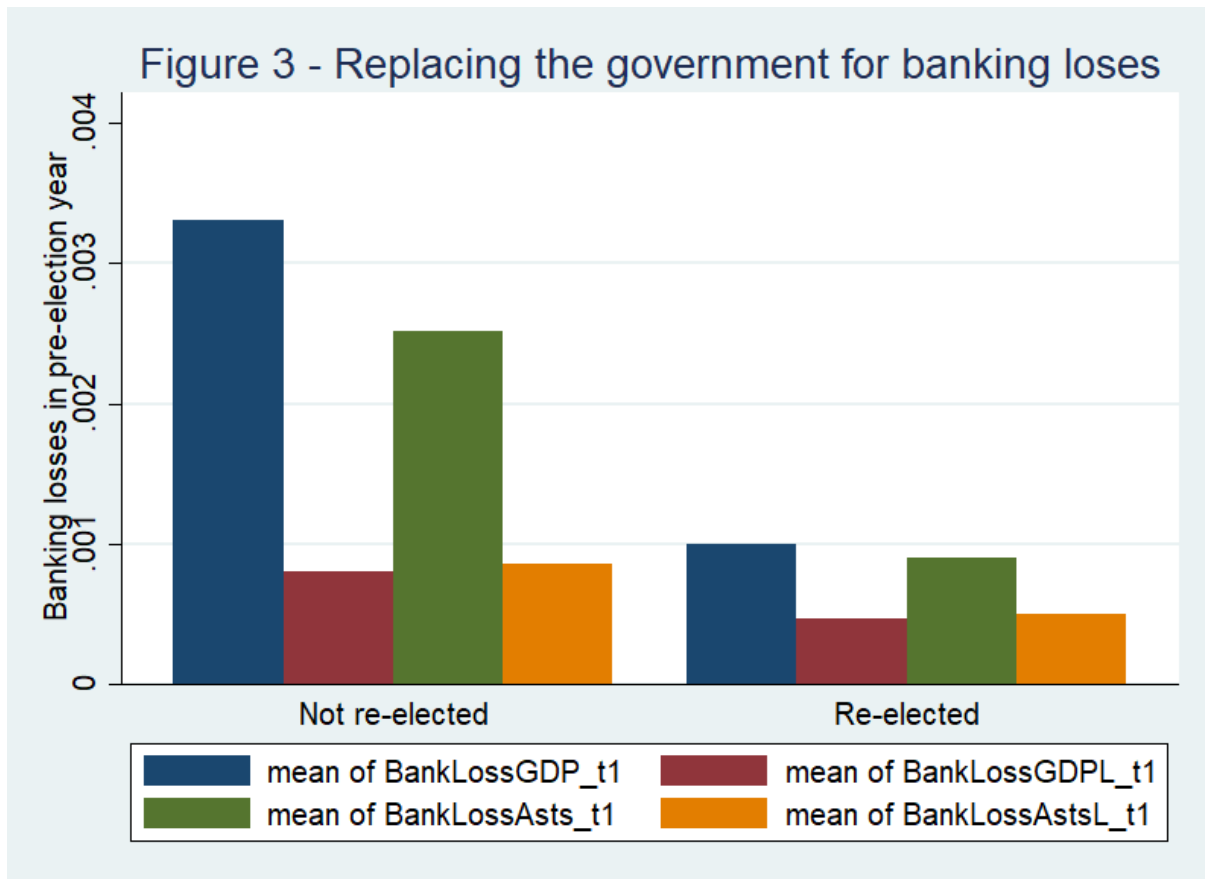
We use data from *Compustat Global - Security Daily* and *Compustat North America - Security Daily* on 4,301,048 daily prices of common stocks, to calculate 967,655 weekly price changes in 2,263 stocks series of 1,789 individual banks in 75 of our democracies 1988-2019.[17] Of these, 442,033 are weekly falls. We next identify weekly falls of more than 9.2, 6.6, 5.2 or 4.3 percent as falling within the worst 5, 10, 15 and 20 percent of the weekly falls in all countries and years. Any weekly fall that qualifies these alternative thresholds is labeled as a large fall. For every country-year (country-month), the variables *StockFall5dem*, *StockFall10dem*,

---

[17] Specifically, the weekly changes are based on weekly averages of daily closing prices, to avoid end-of-week noise. Some banks have more than on stocks series, and we treat each stocks series independently.

StockFall15dem and *StockFall20dem* are the corresponding proportions of large weekly falls out of the total number of bank-weeks in the country-year.

As Table 4 shows, while bank-weeks with no falls in stock prices are the mode, small falls are not rare either. In contrast, falls greater than 3 percent on the previous week are less frequent. Weekly falls in bank stock prices in excess of 10 percent occur in only 2 percent of the entire data (see also illustration in Figures 4-5).

Figure 4 - Rate of major weekly bank stock falls (5%), major economies
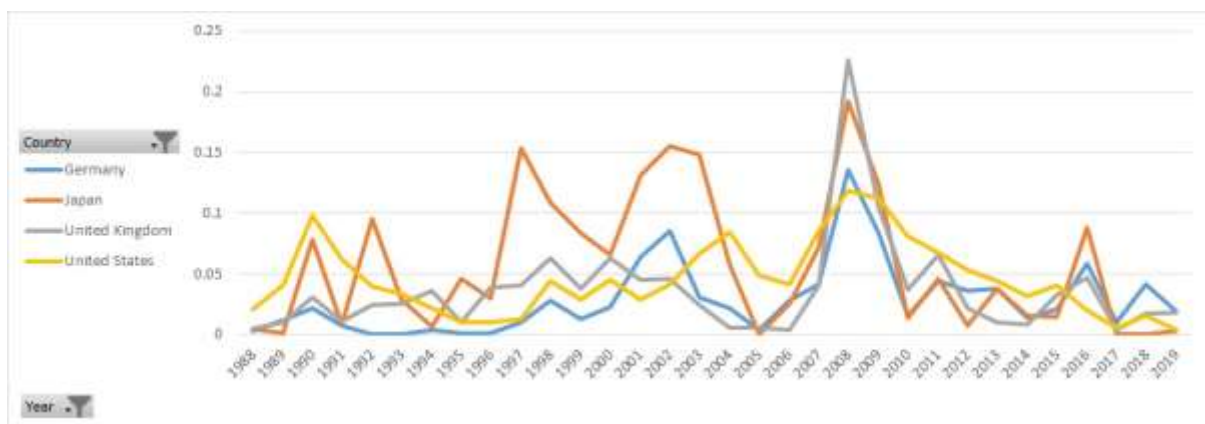
Figure 5 - Rate of major weekly bank stock falls (5%), EA core-periphery
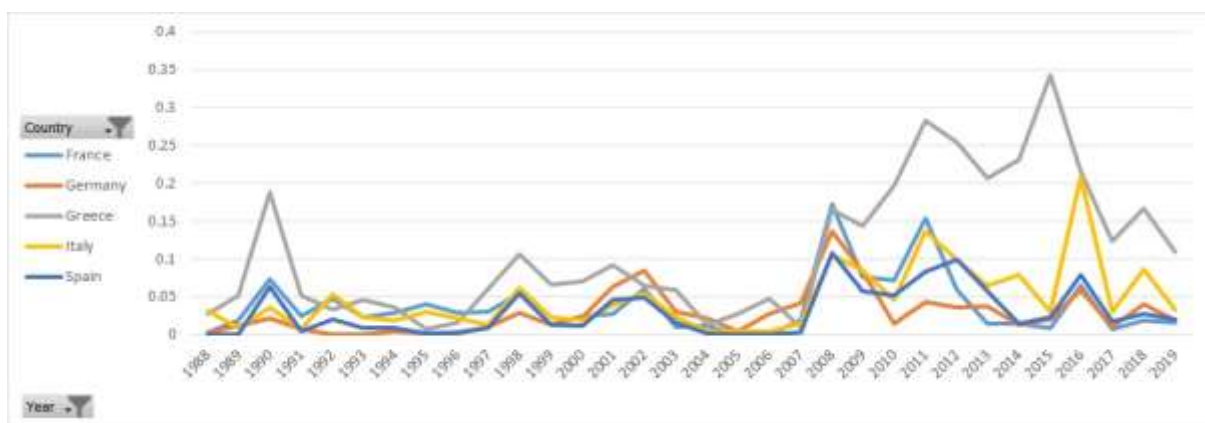
Figures 6-8 show a general tendency of more frequent anti-government protests as major falls in bank stock prices (by the 5 percent threshold) become more frequent (based on the country-year dataset) and a lower vote for the incumbent government (the cross-section dataset).

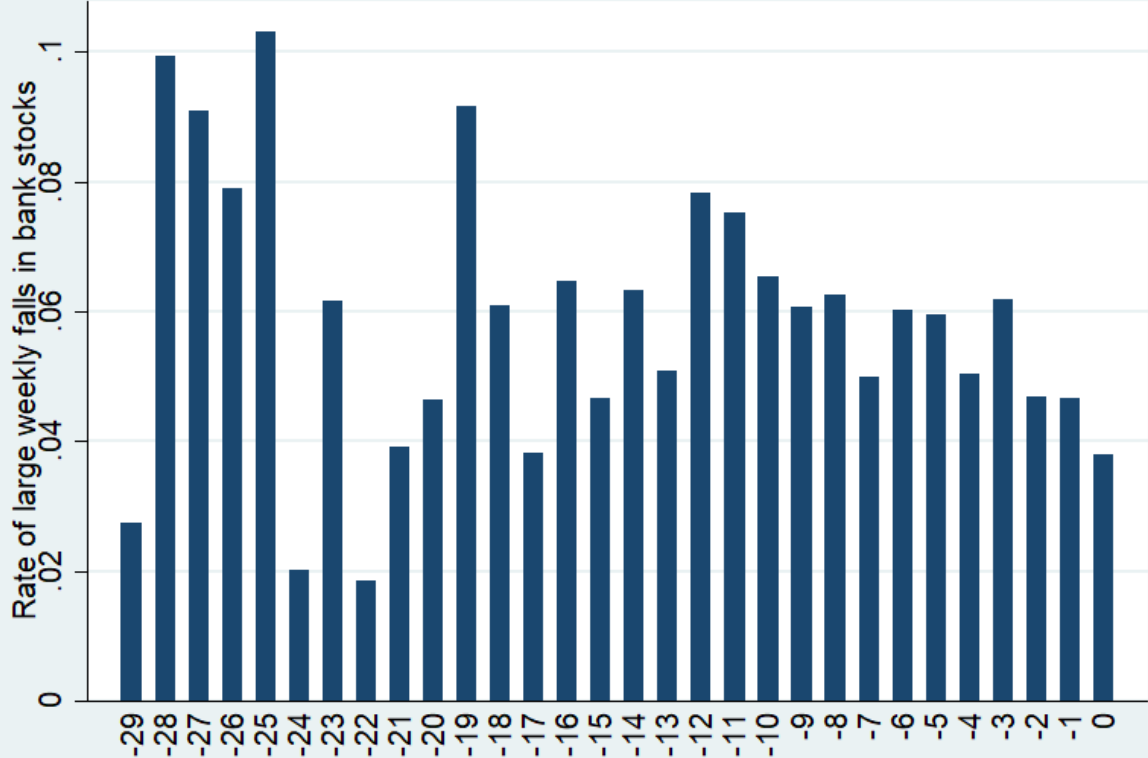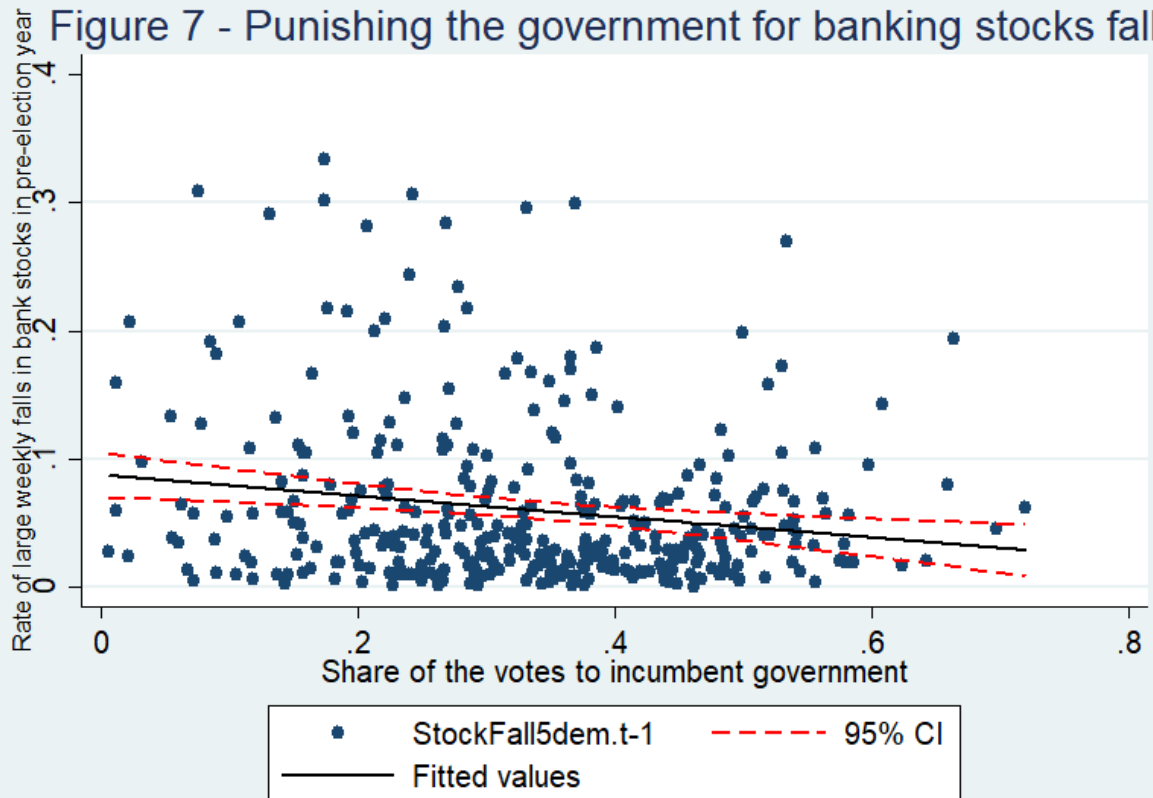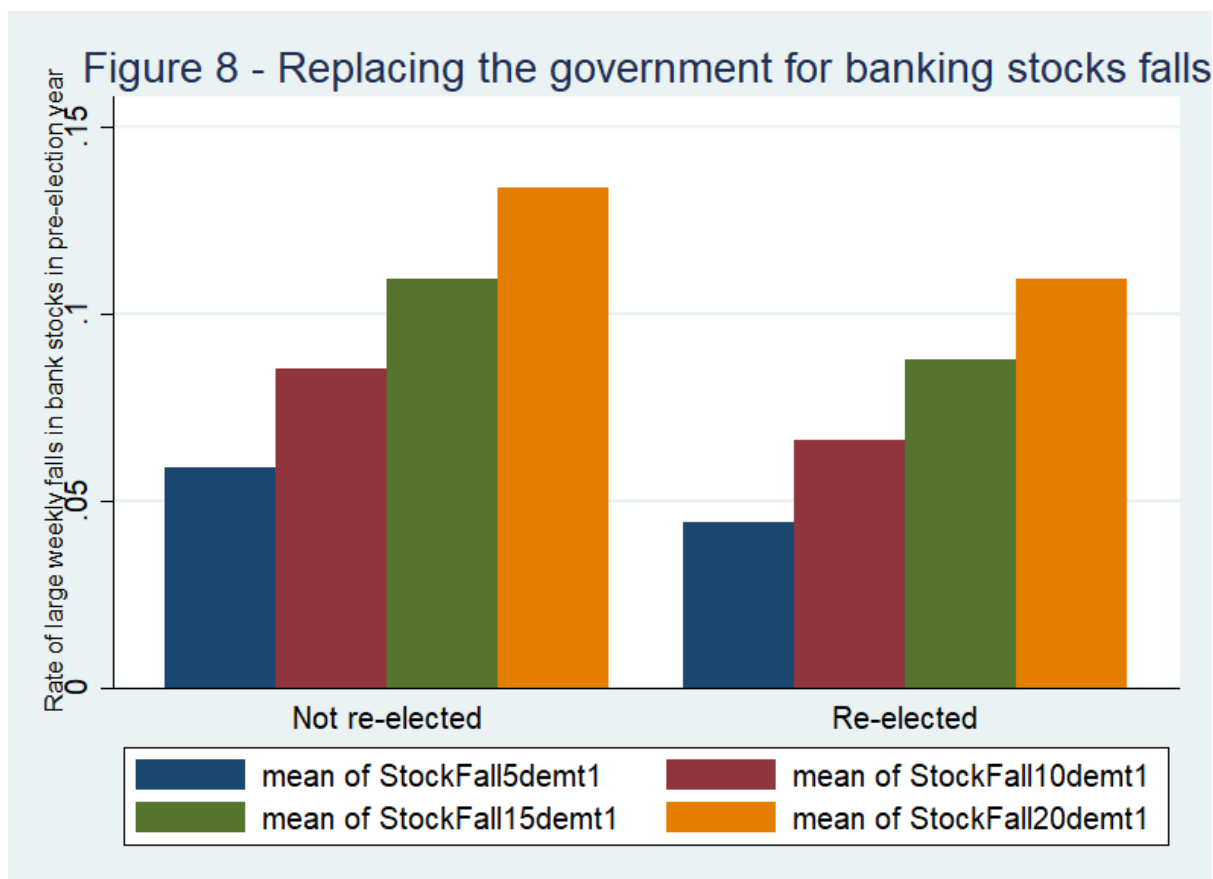Figure 6 - Large banking stocks falls by annual number of anti-government protests

Figure 7 - Punishing the government for banking stocks falls

Figure 8 - Replacing the government for banking stocks falls

We operationalize government-bank interdependence with banking sector concentration and alternatively with government-bank financial interdependence. A national banking system that features a few very large banks is characterized by a high level of concentration (Beck, De Jonghe, and Schepens 2013; Beck, Demirgüç-Kunt, and Levine 2006). The more concentrated the banking system is, the more systemically significant the larger banks are, and the less they compete for business. We use two of the most common measures of concentration – the Hirschmann–Herfindahl index (*HHI*) and the *CR3* concentration ratio (Beck, De Jonghe, and Schepens 2013; Beck, Demirgüç-Kunt, and Levine 2006). *HHI* is the sum of squares of market shares of all banks in a country, based on total assets (see Table 5 for descriptive statistics and figures 9-12 for illustration). *CR3* is the combined market share of the three largest banks in a country-year and is less sensitive to the changing number of banks across countries and years (Beck, Demirgüç-Kunt, and Levine 2006).

Table 5: Descriptive statistics of proxies for government-bank interdependence in the

country-year dataset

Variable	Obs.	Mean	Std. Dev.	Min	Max	Unit	Range
HHI	2,261	0.28	0.22	0.04	1	Index	0→1
HHIRealtive	2,261	-0.00	0.17	-0.34	0.83	Index	-1→1
CR3	2,261	0.71	0.20	0.21	1	Percent	0→1
CR3Relative	2,261	-0.00	0.13	-0.34	0.52	Percent	-1→1
DLChange	726	0.05	0.29	-0.70	1	Percent	-1→1
DLChangeRelative	726	-0.01	0.27	-0.76	0.98	Percent	-2→2
DLElctCycChange	726	0.05	0.22	-0.65	1	Percent	-1→1
DLElctCycChangeRelative	726	-0.01	0.19	-0.67	0.98	Percent	-2→2
DLPositiveChange	726	0.15	0.19	0	1	Percent	0→1
DLPositiveChangeRelative	726	-0.01	0.18	-0.33	0.85	Percent	-1→1
DLDummyChange	726	0.55	0.50	0	1	Dummy	0 or 1
DLDummyChangeRelative	726	-0.15	0.59	-1	1	Index	-1→1
DL1SDChange	726	0.17	0.37	0	1	Dummy	0 or 1
DL1SDChangeRelative	726	0.13	0.39	0	1	Index	-1→1

Note: Statistics exclude missing observations in the dependent variables.
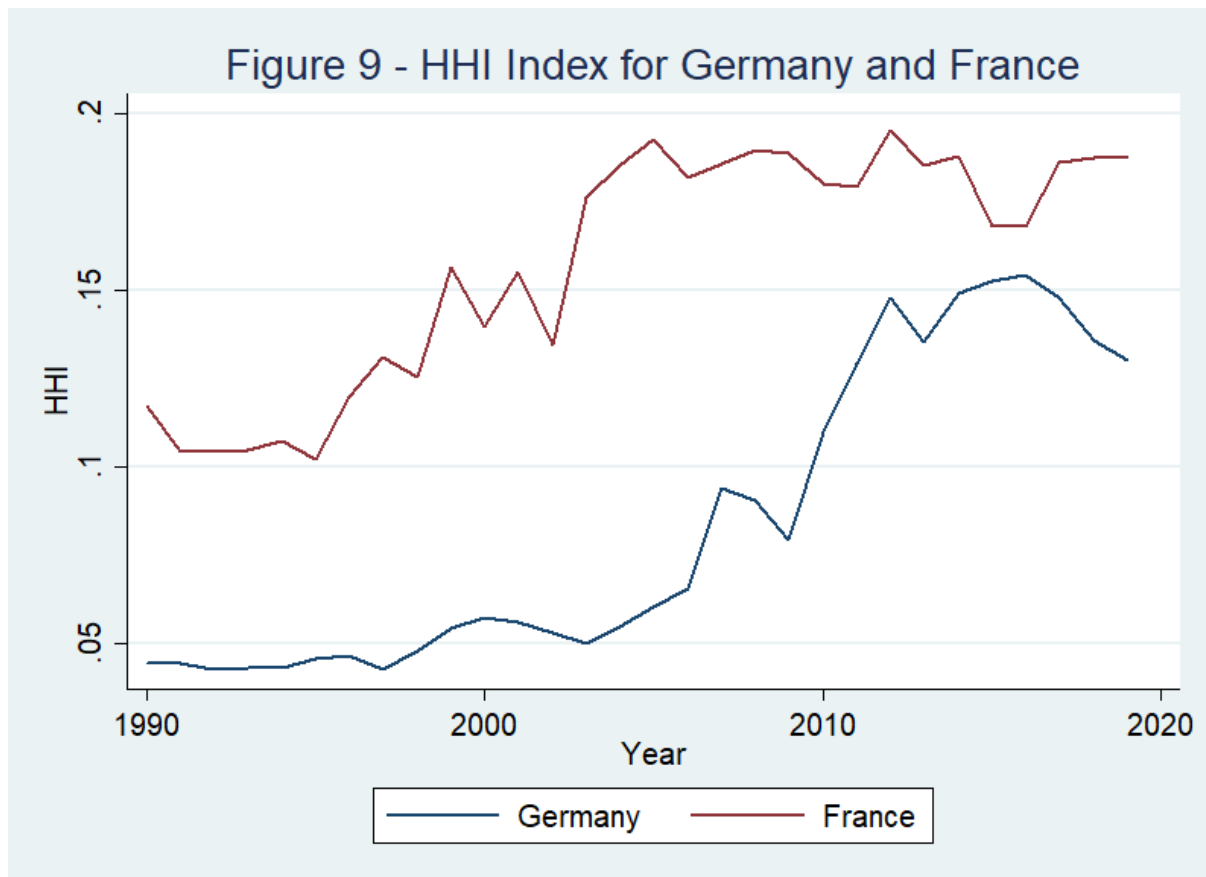

Figure 9 - HHI Index for Germany and France

Figure 10 - CR3 Index for Germany and France

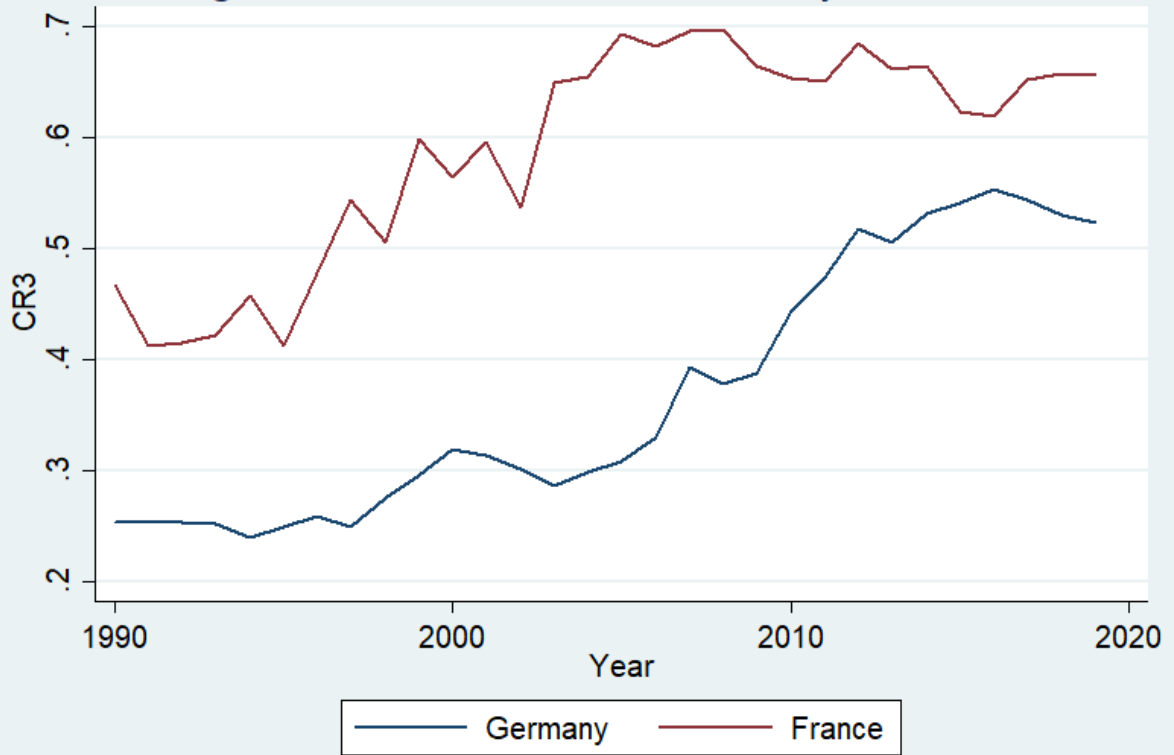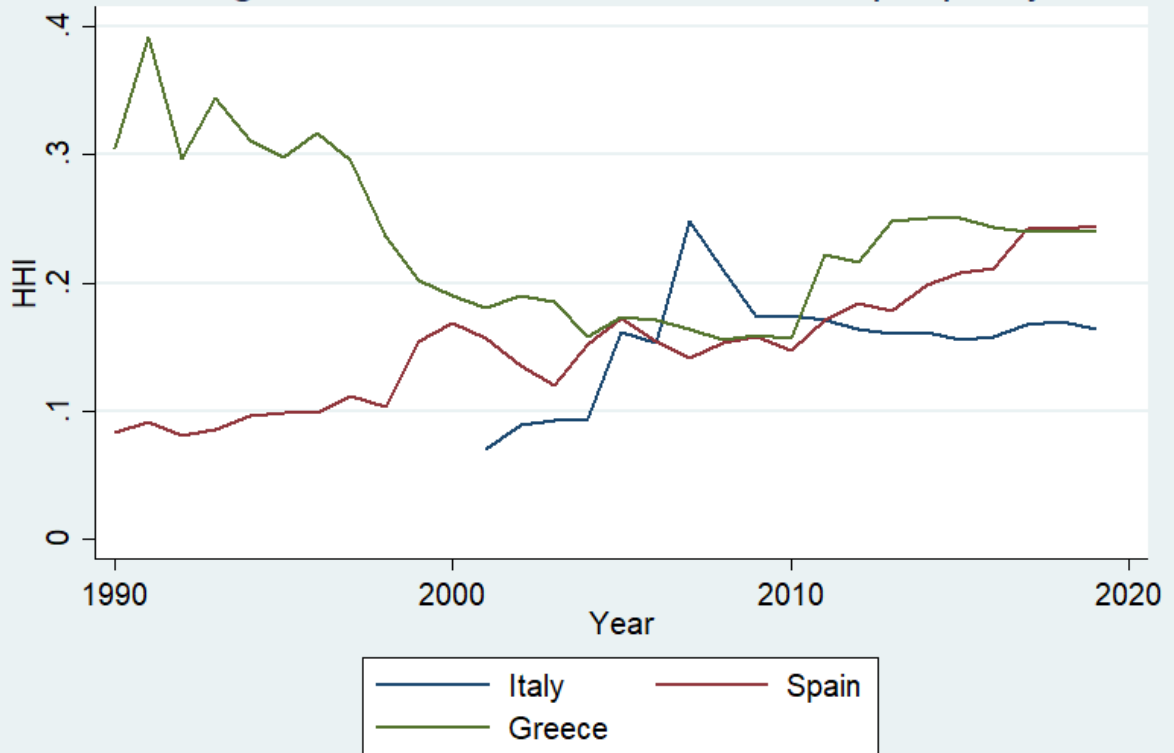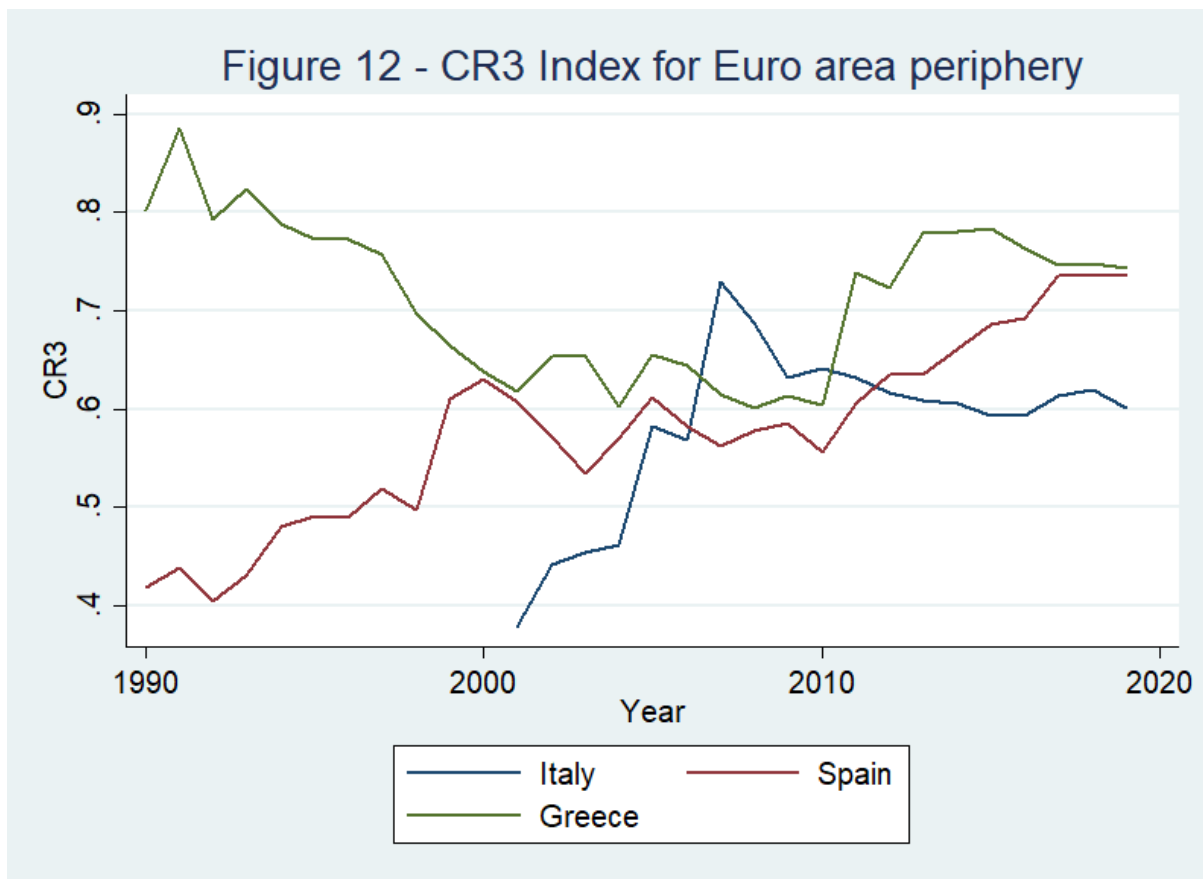Figure 11 - HHI Index for Euro area periphery

Figure 12 - CR3 Index for Euro area periphery

The impact of the concentration of the banking system on the legitimacy of the government may be relative – legitimacy may increase or decrease with national-idiosyncratic concentration levels of the banking system (Clift 2014; Hall 2014; Howarth and Quaglia 2013), not necessarily in relation to a universal concentration rate. The levels of banking concentration may be related to the levels of concentration in the rest of the national economy, or part of the national economic model, that may be perceived as legitimate. If so, then public discontent may arise only in the face of excessive concentration. Thus, we also measure the difference between a country-year HHI or CR3 and the national average HHI/CR3 for the whole 1988-2019 period (suffix *Relative*).

We measure government-bank financial interdependence with the annual correlation between the changes in the yields on government bonds in the secondary market and the changes in the prices of bank stocks. Specifically, for each bank we calculate the monthly averages of its daily closing stock prices and the monthly averages of daily closing yields on 10-year government bonds (data available for 35 of our democracies 1988-2019). We then calculate the annual Pearson correlation coefficient between the changes in these monthly values.[18] For each country-year, *DLChange* is the average correlation coefficient across banks, multiplied by -1.[19] High *DLChange* values indicate that the fates of banks and government are bound together, because financial markets perceive them to be exposed to each other's risks, or to be similarly exposed to other exogenous developments. Even if this is not by design, such an emerging interdependence is expected to be conducive to a relationship of mutual capture (see Table 5 for descriptive statistics and figures 13-16 for illustration). We also calculate the average *DLChange* per government term calculated for simplicity over the electoral term (*DLElctCycChange*).[20] Possibly, the public's suspicion of mutual capture relations does not respond in a linear way to the financial bind, but rather increases especially at high values.

---

[18] Bond data based on *Federal Reserve Economic Data*. For banks with more than one common stocks series we selected the series with the better coverage. 162 of the resulting 12,423 annual bank-government coefficients return extreme values of either 1 or -1 because there are only two coinciding monthly data points for both stocks and bonds.

[19] In Slovenia 2018 and Ireland 1995 data is available for only one bank with only two monthly data points, leading to extreme coefficient values (1 and -1 respectively).

[20] Election years are considered part of the previous cycle if election took place after June 1.

Thus, *DLPositiveChange* replaces negative values of *DL* with zeros, *DLDummyChange* is a dummy for positive *DLChange* values, and *DL1SDChange* is a dummy for *DLChange* values that exceed one standard deviation above the average (calculated over the entire data). We do not necessarily expect ordinary people to make such calculations. Rather, we expect high values to reflect market perceptions about the existence of government-bank financial interdependence, and we expect such perceptions to be disseminated from market agents to the wider public. As with banking concentration, government-bank financial interdependence can be part of the national economic model, so we also measure the difference between a country-year level and the national multi-annual average (suffix *Relative*).

Figure 13 - Correlation between government bonds and bank stocks (*DLChange*), major economies
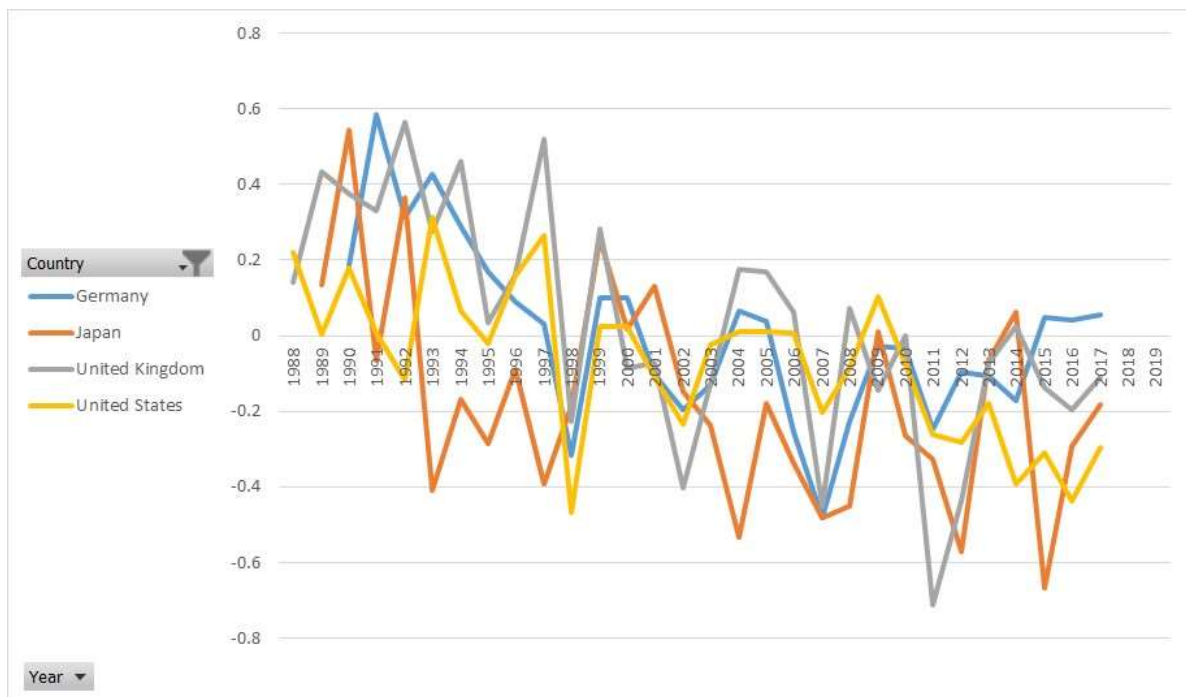
Figure 14 - Correlation between government bonds and bank stocks (*DLChange*), EA core-periphery
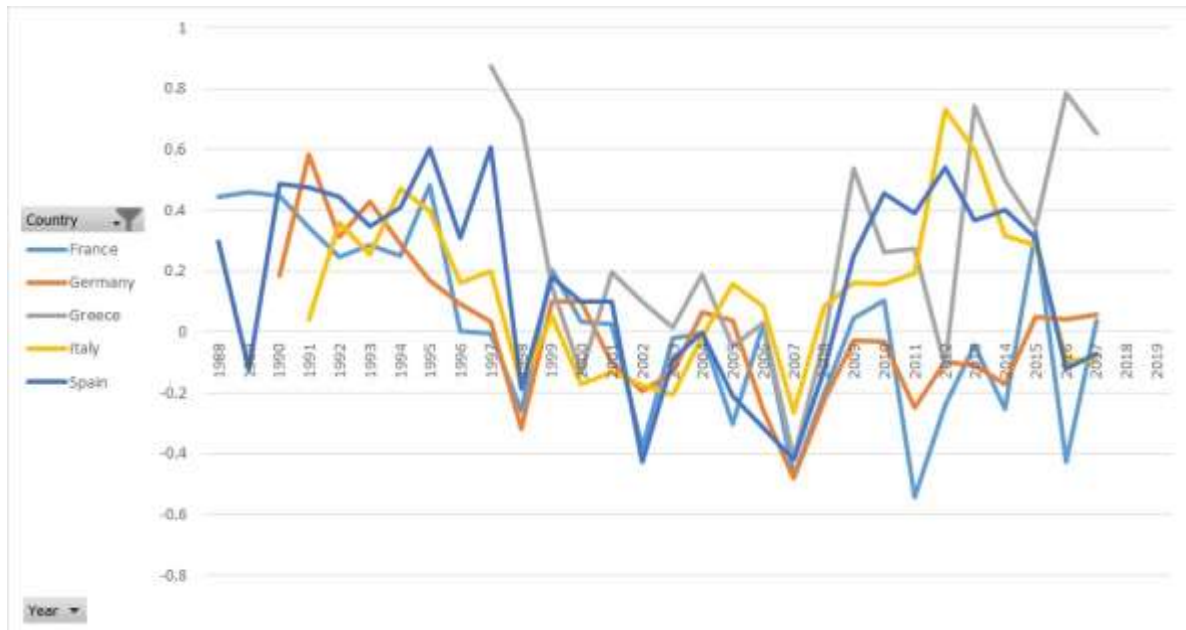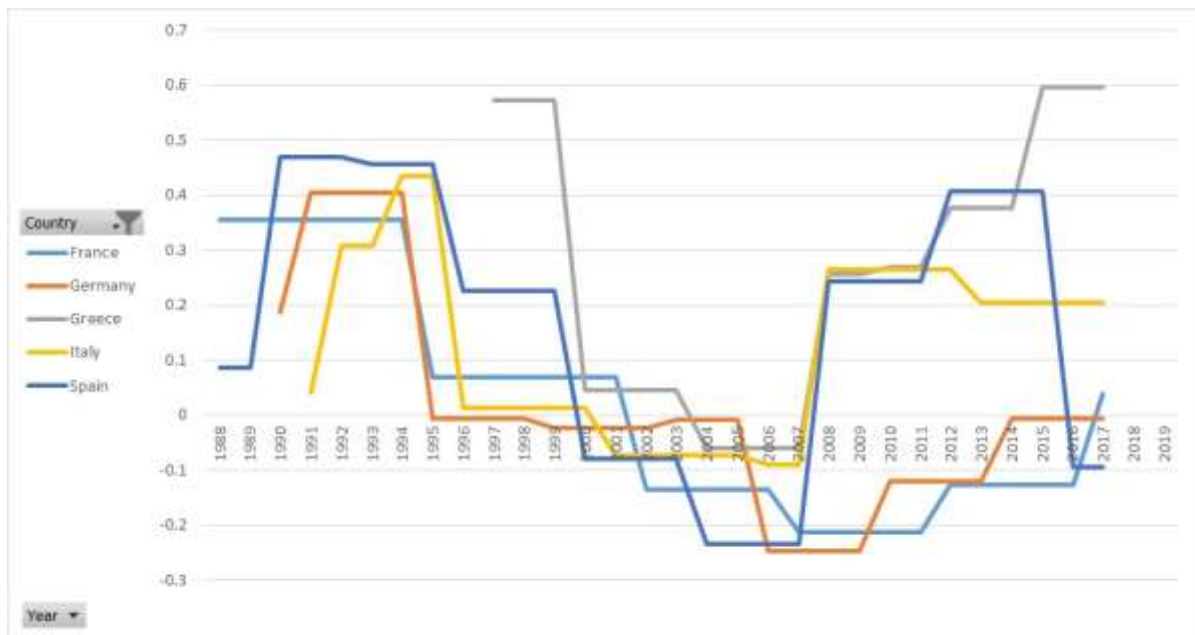

Figure 15 - Correlation between government bonds and bank stocks, major economies, by electoral cycles (*DLElctCycChange)*

Figure 16 - Correlation between government bonds and bank stocks, by electoral cycle
(*DLElctCycChange)*

Because of the conflicting concentration-stability and the concentration-fragility effects, we have no clear expectations about the direct relationship between bank concentration and the public's support for the government. A similar logic perhaps applies to the direct relationship between government-banks financial bind. However, a negative coefficient for the interaction of either bank losses or falls in bank stocks with either banking concentration or bond-stock correlation would support H1.

We code a dummy for membership in the euro area (EA) and interact it with either bank losses or falls in bank stocks, and with either banking concentration or bond-stock correlation (see Table 6 for descriptive statistics). A negative coefficient of this three-way interaction would support H2. To test H3, we code an index of the breadth of *SSM* supervision. This is the share of banks per country-year that are directly supervised by the ECB in its capacity as the Single Supervisory Board, calculated by their total assets relative to the country's total banking assets. Banking groups directly supervised by the ECB are identified based on ECB's published lists: there were 120 such groups in 2014, 122 in 2015, 127 in 2016, 122 in 2017, 115 in 2018 and

117 in 2019 – a total of 723 bank group-years.[21] Of these, for 616 bank group-years we retrieved the annual total assets data from the Financial Times' Banker database. For an additional 96 bank group-years, the data were alternatively recovered from publicly available annual reports. In eleven other cases, for which we could not find asset data in the above sources, we entered values based on the SSM classification.[22] Values are continuous and range from 0 (no bank is supervised by the ECB) to 1 (all banks are supervised by the ECB). A positive coefficient of *SSM*'s three-way interaction would support H3a; A negative coefficient would support H3b.

---

[21] One more banking group appeared in the 2015 list, three more in the 2017 list, and one more in the 2018 list. They were not included here because they ceased to exist as independent groups shortly after the publication of the lists. Three branches (and not subsidiaries) of Barclays UK appeared in the 2018 list and were not included here either. The ECB occasionally publishes updates to the list of directly supervised banking groups, as more data becomes available to it. For each year we used the latest list that related to that year (lists published towards the end of the year may apply to the following year). https://www.bankingsupervision.europa.eu/banking/list/who/html/index.en.html; Date Retrieved: August 28, 2019.

[22] Specifically, in nine of these cases we took the midpoint of the range of total assets into which the SSM reports classified the banking group (e.g. 30-50 billion euros or 100-300 billion euros). In the remaining two cases we assumed that assets amounted to 20 percent of their country's GDP, as this was the formal criterion for their inclusion in the lists.

Table 6: Descriptive statistics of Euro Area and control variables in the country-year dataset

Variable	Obs.	Mean	Std. Dev.	Min	Max	Unit	Range
EA	2,409	0.13	0.33	0	1	Dummy	0 or 1
SSM	531	0.15	0.32	0	0.99	Percent	0→1
Unemployment	2,373	0.09	0.06	0.00	0.48	Percent	0→1
UnemploymentRelative	2,373	0.00	0.03	-0.14	0.14	Percent	-1→1
dUnemployment	2,358	-0.00	0.01	-0.12	0.13	Percent	-1→1
EmployedPop	2,355	0.01	0.02	-0.14	0.26	Percent	-1→1
EmployedPopRelative	2,355	0.00	0.02	-0.14	0.23	Percent	-1→1
RealGDPgrowth	2,378	0.03	0.04	-0.45	0.62	Percent	-1→1
RealGDPgrowthRelative	2,378	0.00	0.04	-0.45	0.54	Percent	-1→1
HouseConsumption	2,211	0.03	0.05	-0.32	0.72	Percent	-1→1
HouseConsumptionRelative	2,211	0.00	0.05	-0.34	0.67	Percent	-1→1
Liberalization	2,144	0.61	0.36	0	1	Index	0→1
POLITYIV	2,252	8.40	1.71	-7	10	Index	-10→10

Note: Statistics exclude missing observations in the dependent variables.

As figure 17 shows, in practice the extent of bank assets directly supervised by the ECB under the SSM varies by country, from 29 percent of total assets in Luxembourg to 98 percent in Greece (see section on research design for further information). Figures 18 and 19 demonstrate that SSM supervision does cover the most concentrated sectors in the euro area. However, Figure 20 shows that SSM supervision is not necessarily associated with high financial interdependence between governments and banks. Perhaps the SSM does cover such cases and is successful in convincing financial markets that as a result banks and governments are less financially interdependent.

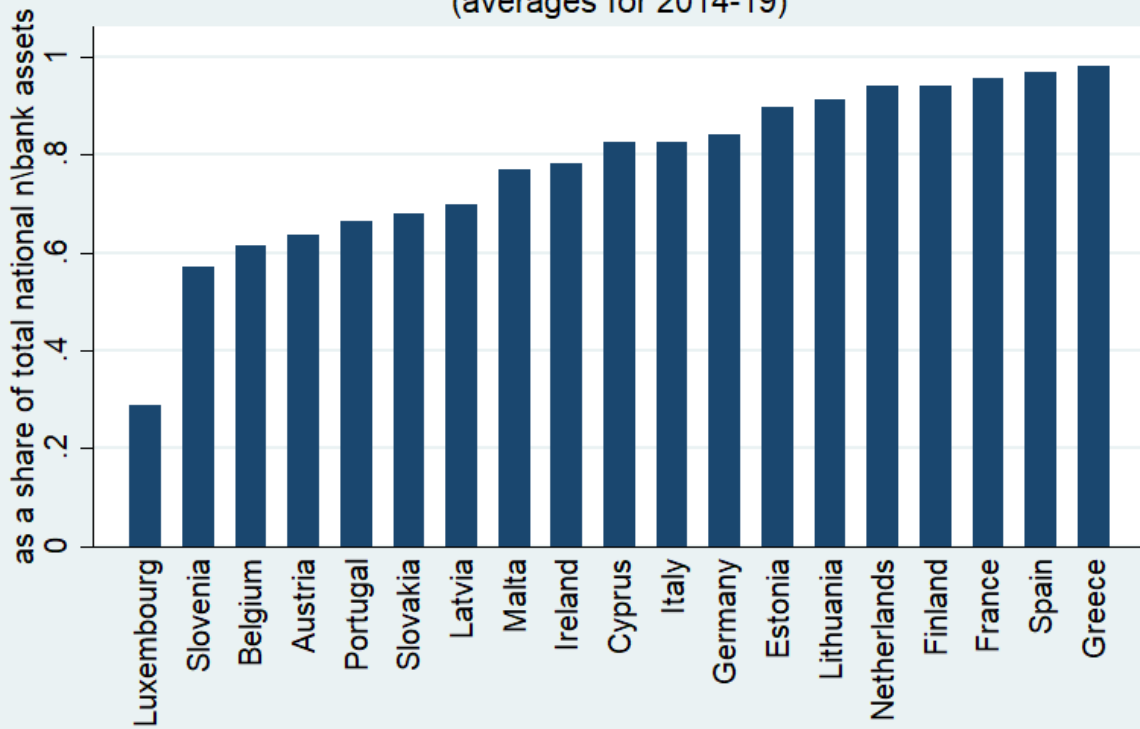Figure 17 - Bank assets undr direct SSM supervision
(averages for 2014-19)

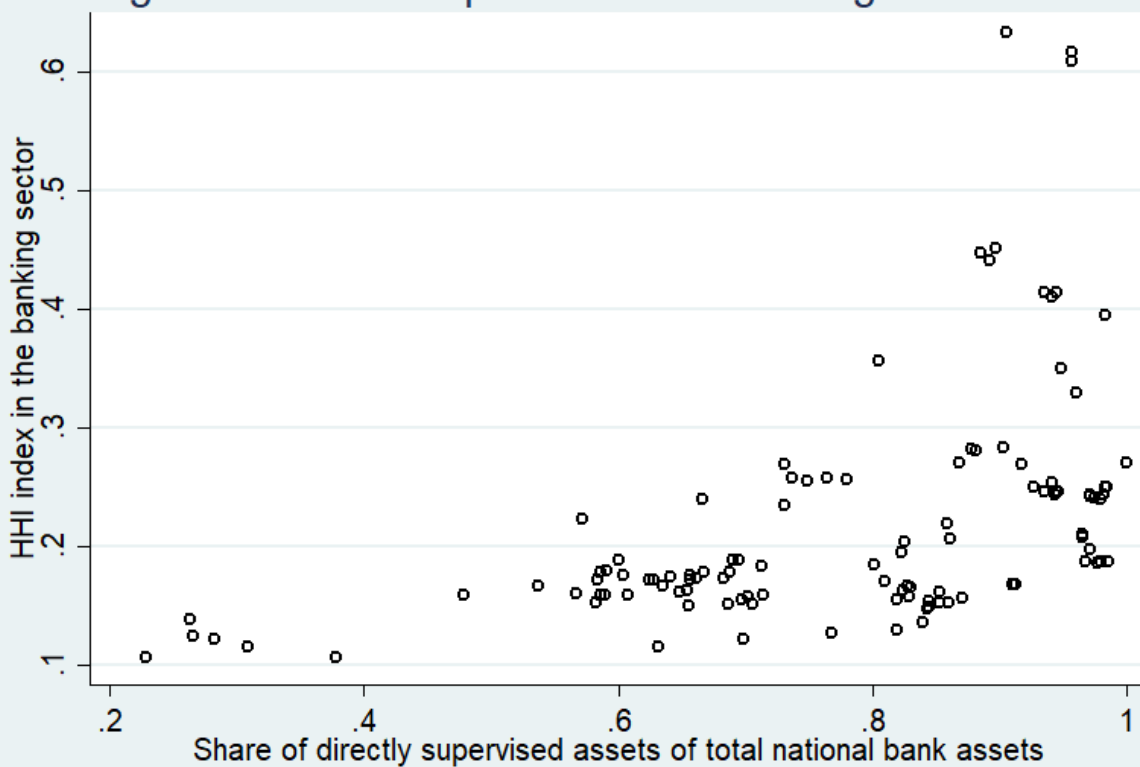Figure 18 - SSM supervision and banking concentration

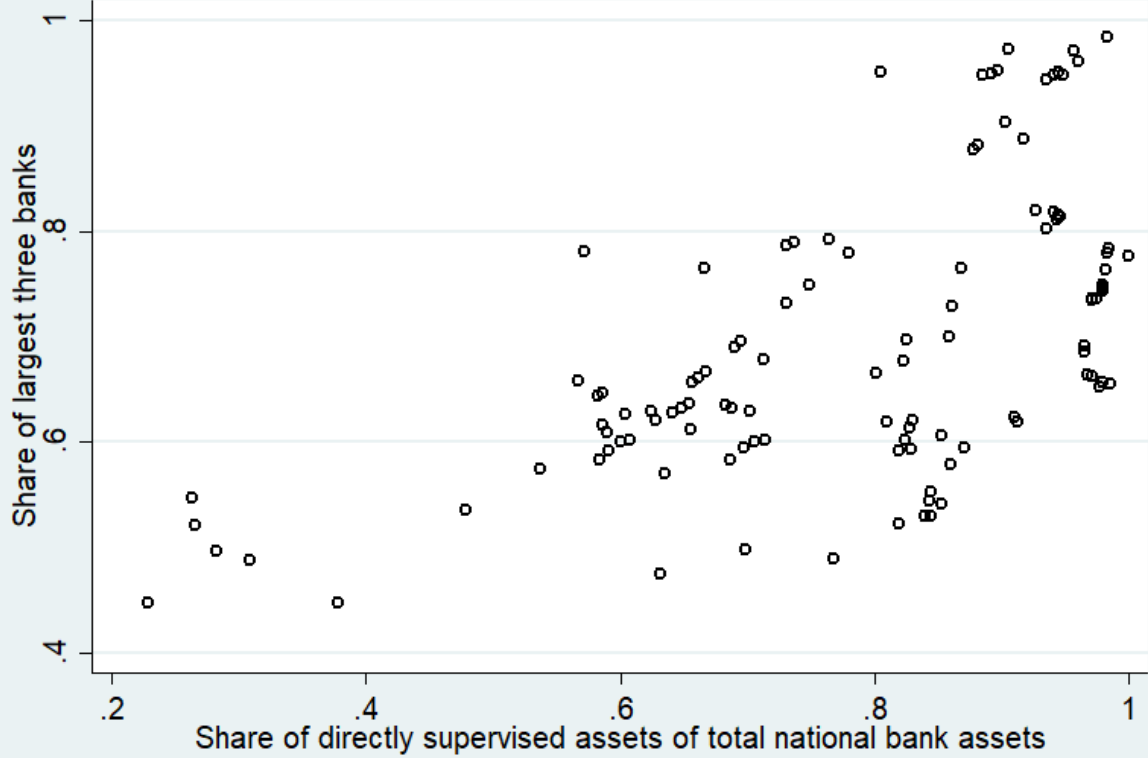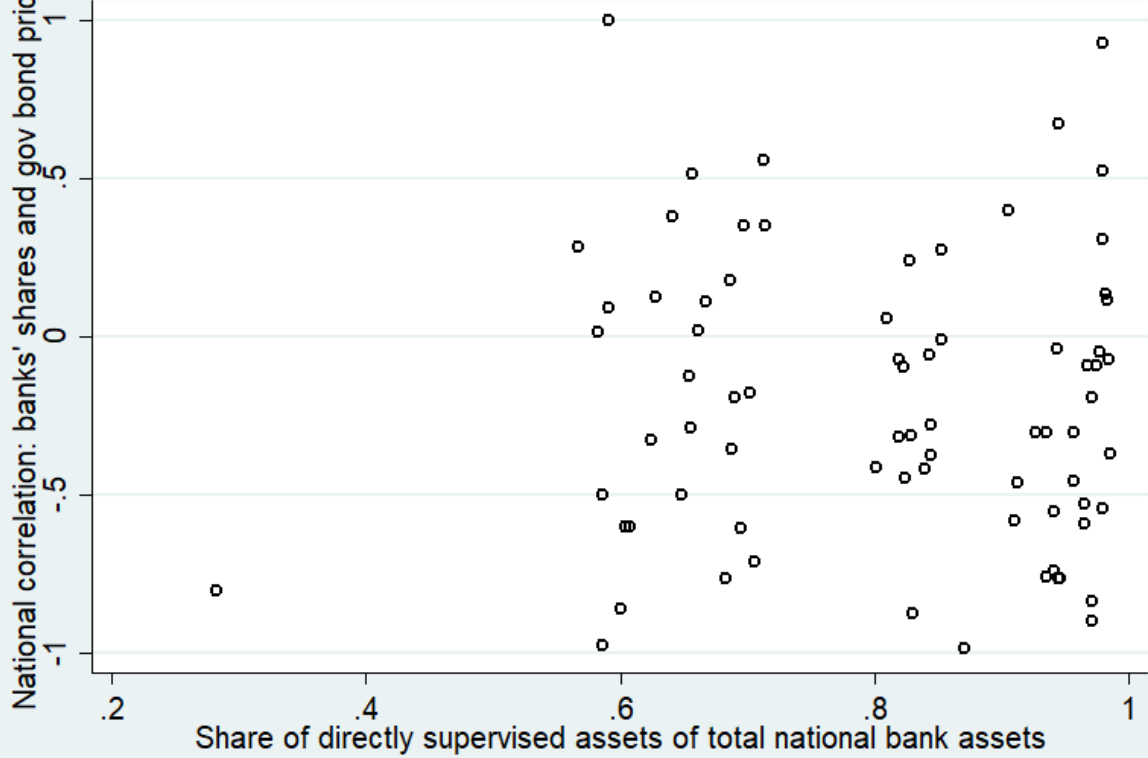Figure 19 - SSM supervision and banking concentration

Figure 20 - SSM supervision and bank-bond correlation

Our main challenge is to control for the business cycle, which potentially affects the public's political participation and support for the government (Arel-Bundock, Blais, and Dassonneville 2021; Foster and Frieden 2017; Kurer *et al*. 2019). The business cycle also affects banks' profitability, but banks are not necessarily likelier to require a bailout in recession, nor should they necessarily incur losses or steep falls in their stock shares. In recession, banks can call in their loans. We control for *Unemployment* rates (relative to the labor force), and the annual rates of change in unemployment (*dUnemployment*), the number of employed people (*EmployedPop*), real GDP (*RealGDPgrowth*) and household consumption (*HouseConsumption*). All are retrieved from the World Bank's World Development Indicators, the IMF's World Economic Outlook, the International Labor Organization (ILO) and national sources as a last resort (see Table 6 for descriptive statistics). We also calculate relative values for these variables, as their levels may reflect countries' idiosyncratic political-economic model.

Collinearity tests (not reported) show that while these business cycle variables are correlated with each of the bank loss and stock falls variables, they together explain only 2.9-8.1 percent of the variation in the loss/fall variables. In other words, while bank losses are larger and major falls in bank stock prices are likelier in economic downturns, they are mostly determined by other factors, presumably bank management and state supervision of banks (see Figures 21-24).
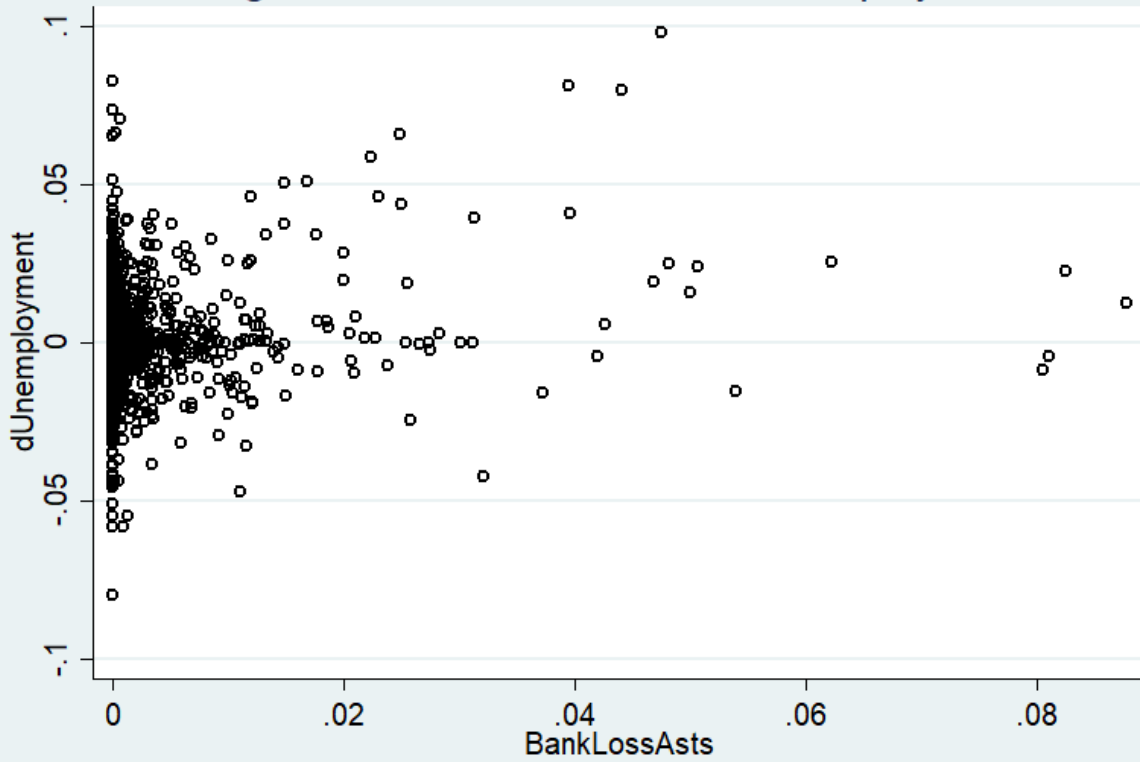
Figure 21 - Bank losses and unemployment

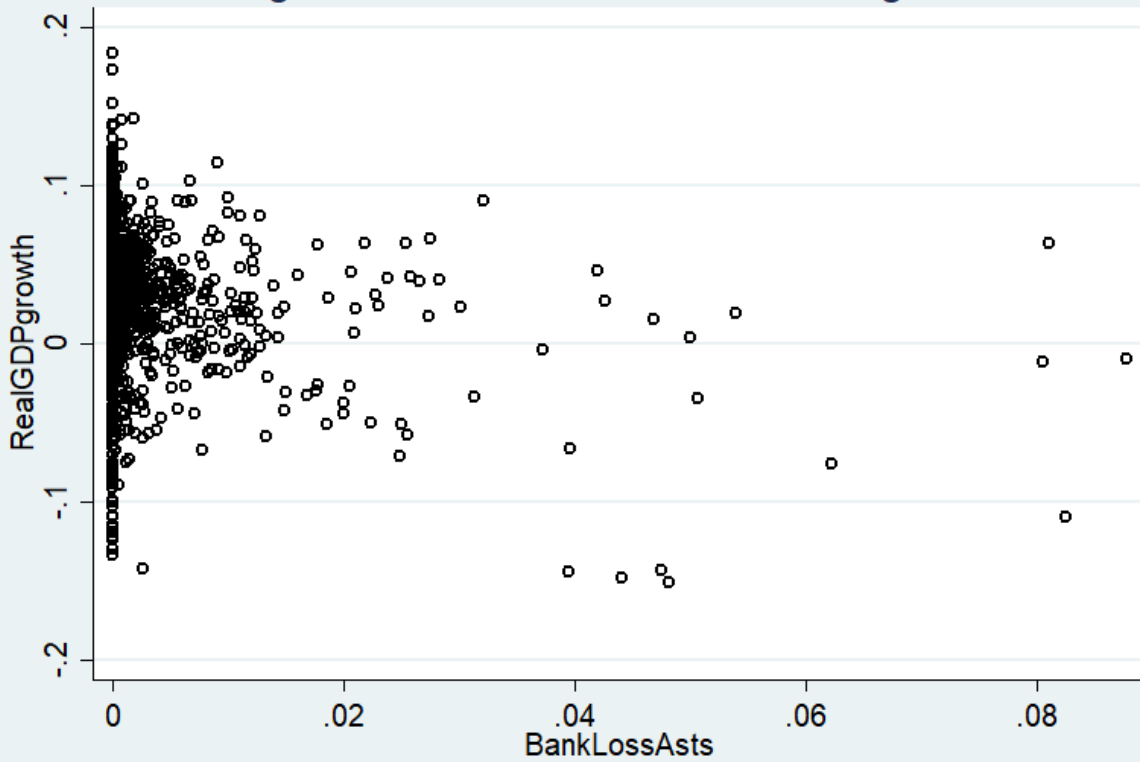
Figure 22 - Bank losses and GDP growth

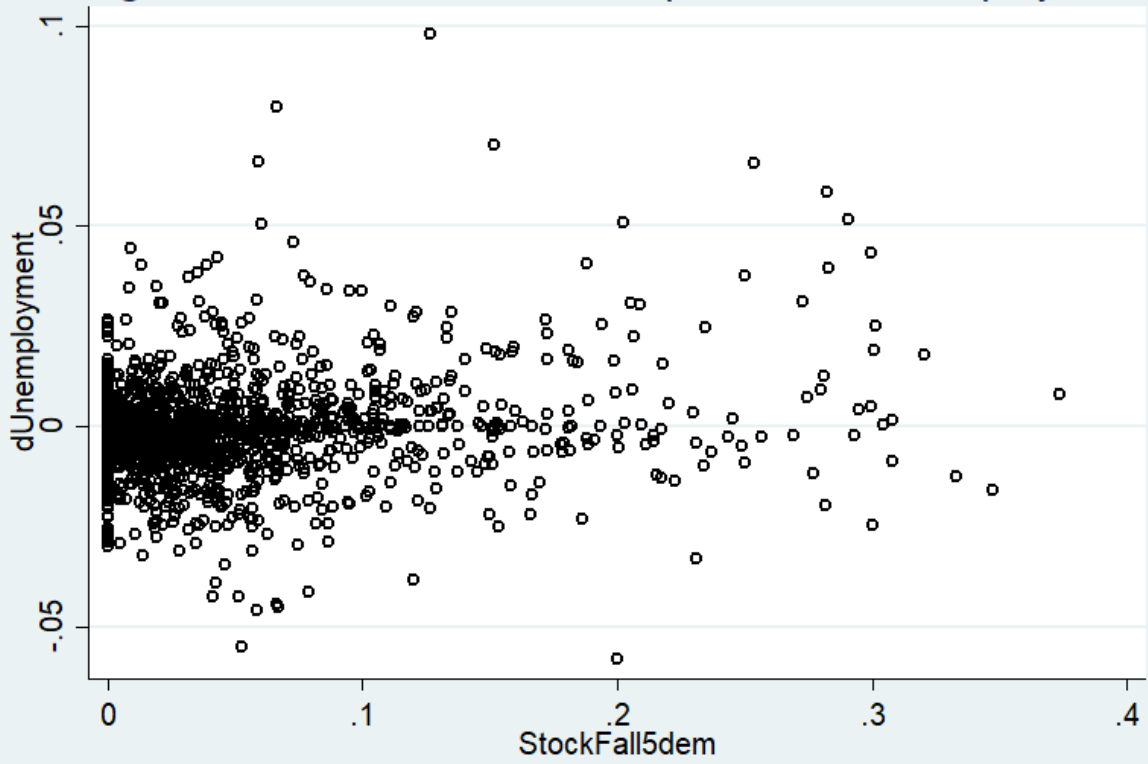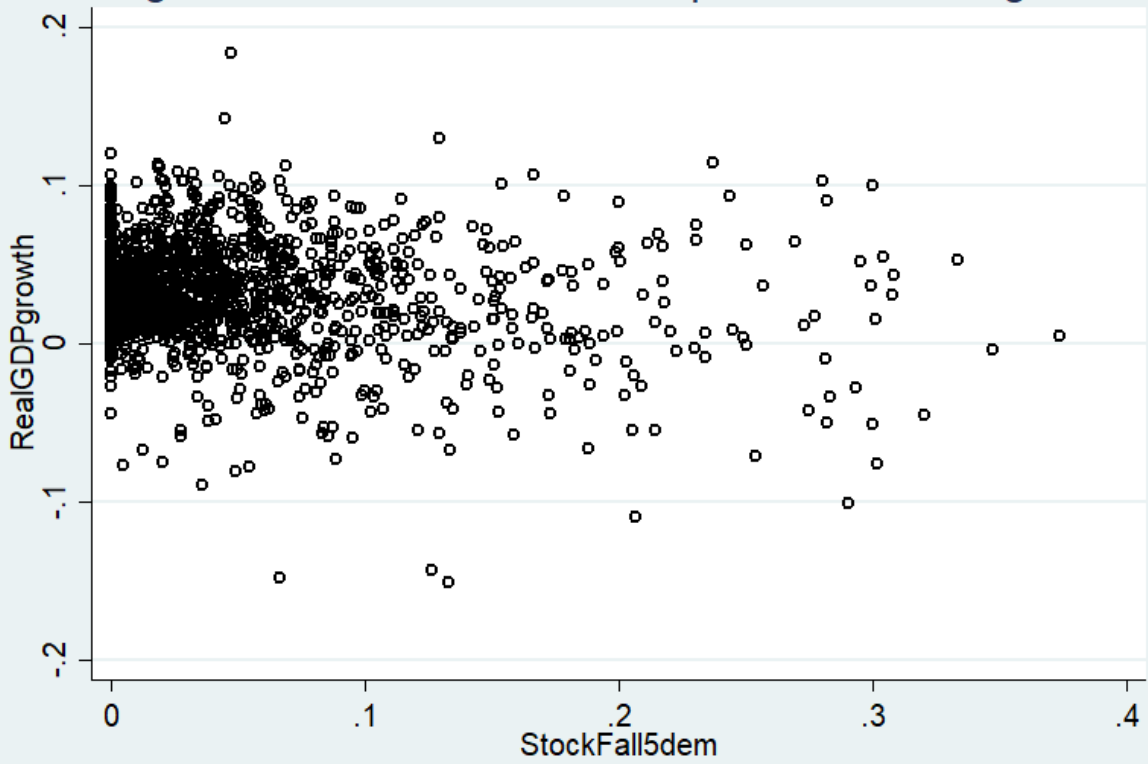Figure 23 - Falls in bank stock prices and unemployment

Figure 24 - Falls in bank stock prices and GDP growth

42

We specify two more control variables. *Liberalization* is the Chinn and Itō's (2006) Index of financial liberalization (rescaled 0 to 1), based on IMF's data on restrictions on cross-border financial transactions, controlling for possible endogeneity among the independent variables. We find that *Liberalization* is slightly negatively correlated with *HHI* (r=-0.15, p=0.0000), *DLChange* (r=-0.25, p=0.0000) and *StockFall5dem* (r=-0.11, p=0.0000), but slightly positively correlated with *BankLossGDP* (r=0.07, p=0.0012).

Figure 25 - Liberalization and banking concentration
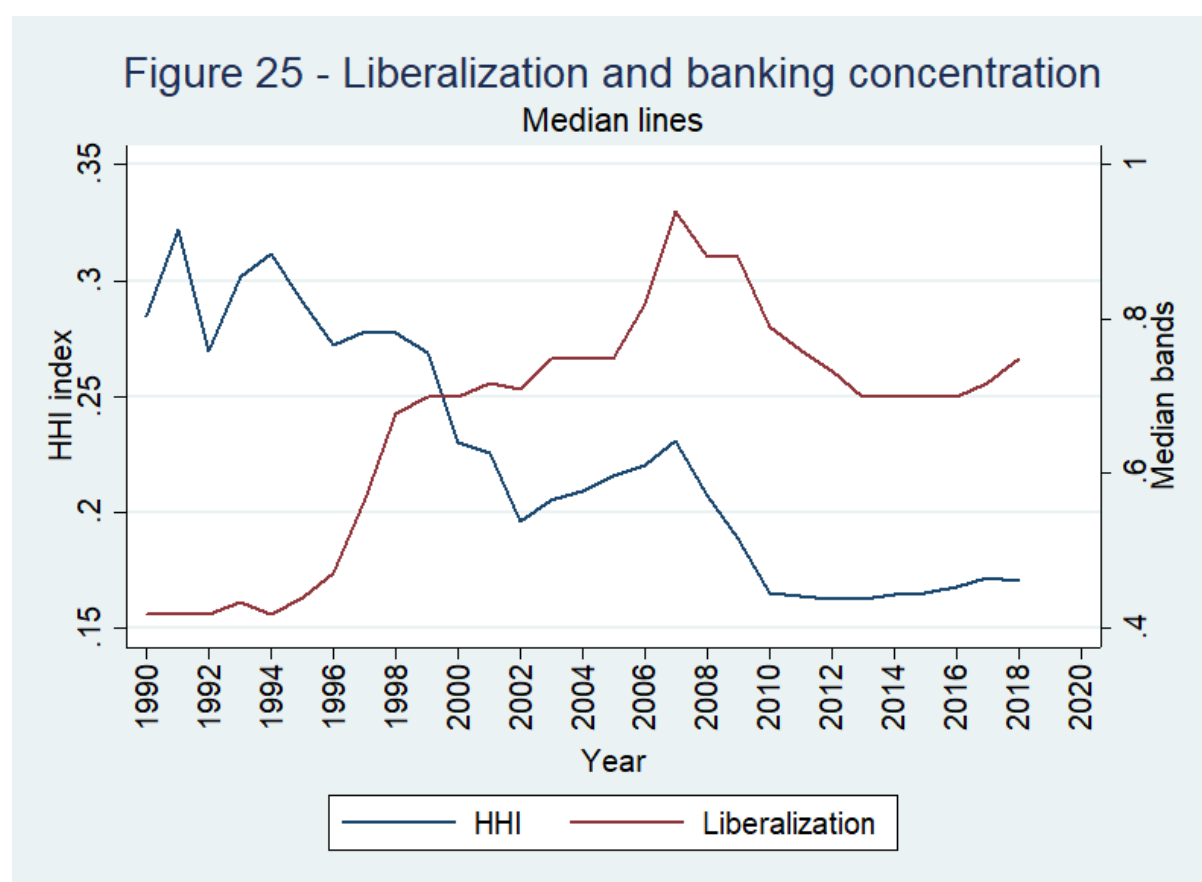
While it is common to assume that financial liberalization promotes financial competition Figure 25 shows that this relationship is more nuanced.[23] If banking concentration is the result of deliberate government policies to eliminate competition, then capital account liberalization

---

[23] The two lines in each figure represent cross-country median values, calculated only among observations with values in both series (so the Liberalization line differs across the figures).

does not allow national champions to dominate their home market as they used to, and so reduces concentration. Firms and households can borrow and deposit abroad. This is at least one possible interpretation of the pattern of diminishing concentration and rising liberalization since late 1980s to the early 2000s. However, later the pattern changes, and concentration seems to rise with liberalization (or fall with it). This is more compatible with market-led consolidation of banks, through mergers and acquisitions, which may increase concentration at high levels of liberalization (as in the years leading to the 2008 financial crisis).

Figure 26 - Liberalization and Gov-bank financial interdependence
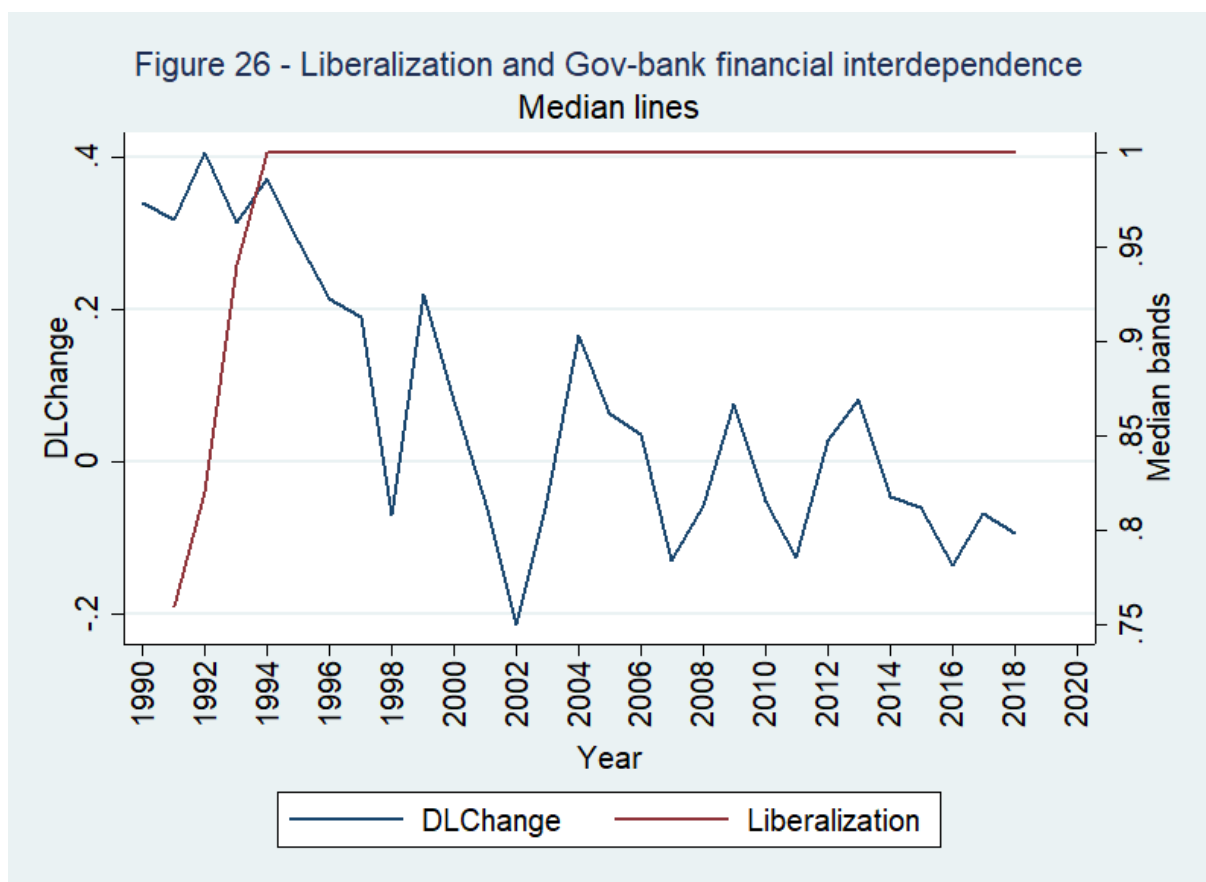Median lines
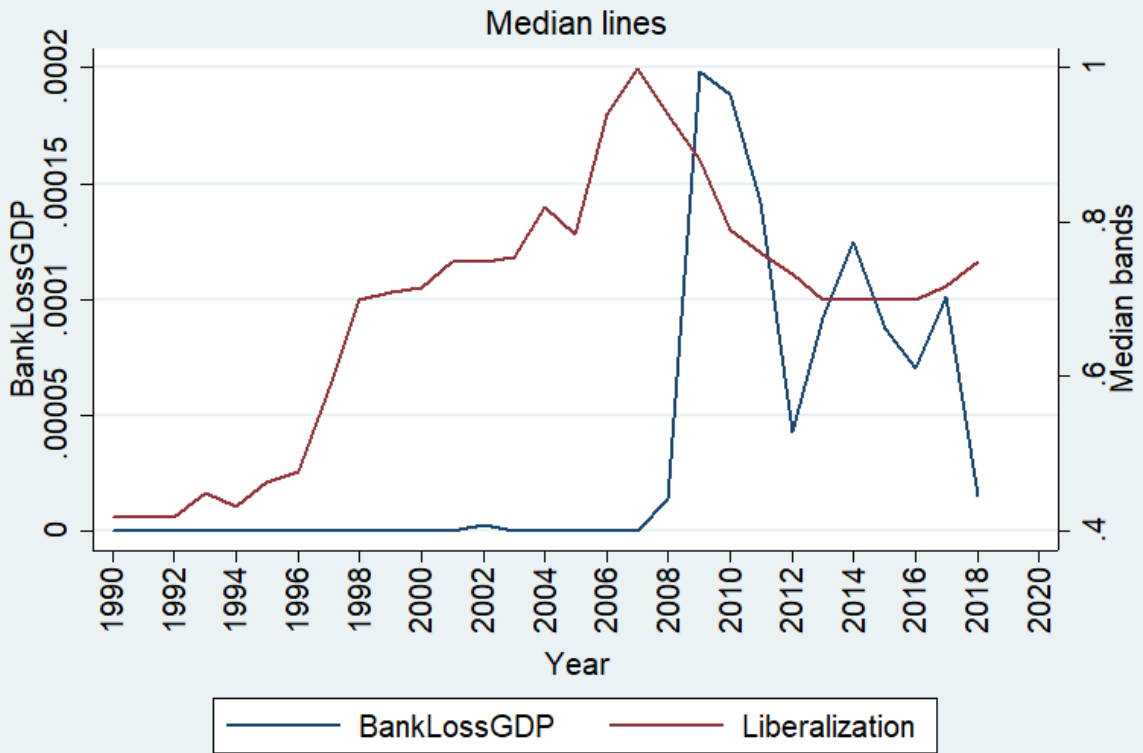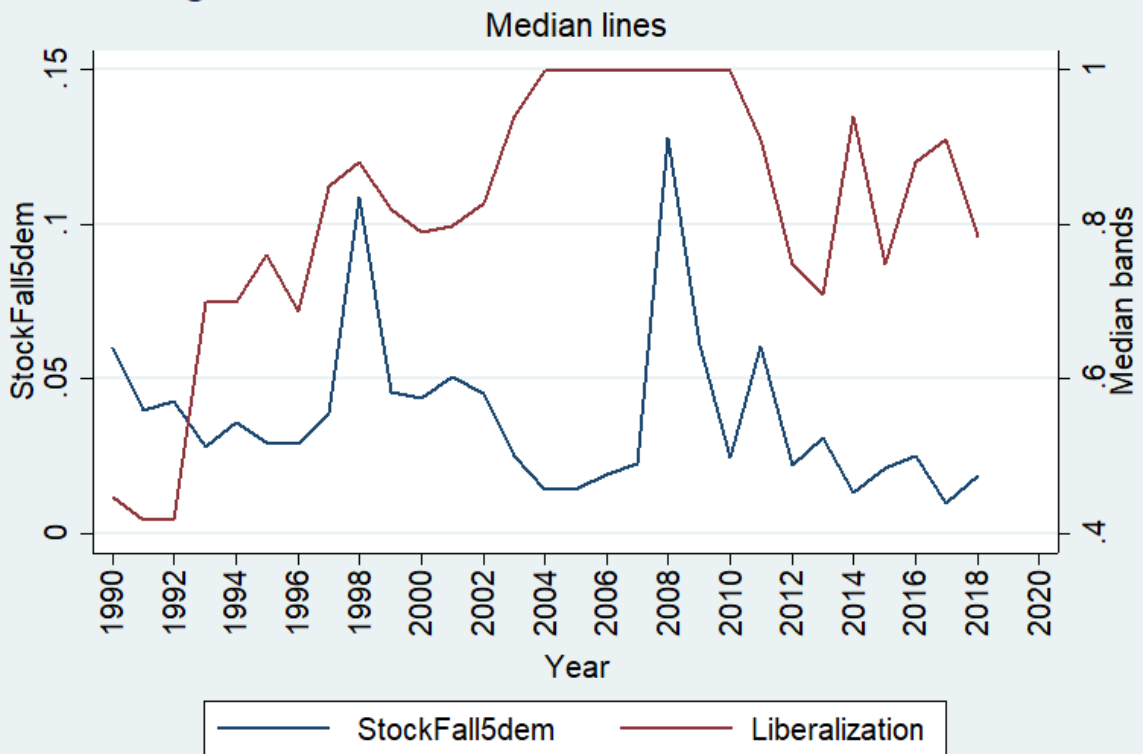
Figure 27 - Liberalization and bank losses

Figure 28 - Liberalization and bank stock falls

Government are expected to be more legitimate the more democratic the regime is. The degree of democratic regime is controlled for through *POLITYIV* – the polity2 score as evaluated in the POLITY IV project (Marshall, Jaggers, and Gurr 2002).This variable ranges from -7 to 10. The country-year dataset includes 54 observations with *POLITYIV* score lower than 6, and the country-election dataset includes 34 such observations. These are observations in which national elections were held and covered by the Comparative Manifesto Project (Volkens *et al*. 2018). We expect the coefficient of *POLITYIV* to be positive with *PROTESTS*, but negative with *VOTE*: in a degrading democracy protesting should increase and incumbents should be harder to dislodge through the ballot.

Results

As this is work in progress, we can only report preliminary results at this time. As described above, the dependent variable *PROTESTS* features a high frequency of zero observations. This suggests latency – an absence of observations with values on the other side of this threshold. In other words, our measure of protests against the government ignores rallies in support of the government, which in any case may be infrequent in a democracy: the public is perhaps willing to spend much more resource on communicating its criticism of the government, than on praising it. This means that observed protests are the result of two choices for the public: whether to protest at all, and if so, how much. The tobit regression, which can be understood as a combination of a probit regression and a linear regression, is the appropriate estimator in such a situation.

Table 7: Bank losses, concentration and support for the government

Dependent variable →	(1) PROTESTS	(2) PROTESTS	(3) fPROTESTS	(4) PROTESTS	(5) PROTESTS	(6) VOTE (transf.)	(7) VOTE (transf.)
BankConcentration	0.70	0.85	0.21	0.90	0.79	-0.05	-0.09
	(1.12)	(1.12)	(1.14)	(1.11)	(1.13)	(0.26)	(0.27)
BankLossGDP	-42.2 ***	3.78	53.2			-6.71	-23.5
	(12.8)	(31.2)	(32.8)			(4.35)	(14.6)
BankConcentration×BankLossGDP		-180.1	-305.7 ***				51.1
		(111.1)	(114.5)				(35.9)
LBankLossGDP				63.7			
				(41.3)			
BankConcentration×LBankLossGDP				-477.8 ***			
				(156.4)			
BankLossAsts					-59.5***		
					(18.1)		
EA	0.06	0.04	-0.97	0.20	-0.32	-0.17	-0.17
	(0.78)	(0.78)	(0.79)	(0.78)	(0.77)	(0.12)	(0.12)
SSM	-7.20 ***	-7.20 ***	-6.21 ***	-7.23 ***	-6.86***	-0.03	0.01
	(1.31)	(1.30)	(1.35)	(1.30)	(1.32)	(0.15)	(0.17)
LIBERALIZATION	-0.65	-0.65	-1.01	-0.62	-0.28	0.20	0.22
	(0.93)	(0.93)	(0.93)	(0.93)	(0.93)	(0.23)	(0.22)
DEMOCRACY	1.06 ***	1.06 ***	1.01 ***	1.06 ***	1.2***	-0.05*	-0.05*
	(0.31)	(0.31)	(0.31)	(0.31)	(0.29)	(0.03)	(0.03)
dUNEMPLOYMENT	-25.6 **	-24.6 **	-16.2	-26.0 **	-27.2**		
	(12.2)	(12.2)	(12.4)	(12.0)	(12.0)		
UNEMPLOYMENT						-0.26	-0.16
						(1.15)	(1.15)
Constant	-11.1 ***	-11.2 ***	-10.0 ***	-11.2 ***	-12.6***	-0.41	-0.40
	(2.78)	(2.78)	(2.79)	(2.77)	(2.62)	(0.29)	(0.29)
Wald chi^2	65.5 ***	68.4 ***	57.8 ***	79.5 ***	67.3***	11.3	48.4***
Observations	1,381	1,381	1,395	1,381	1,466	443	443
Countries	70	70	69	70	76	82	82

Note: Regressions (1)-(5) report results from tobit regressions, standard errors in parentheses, run on a country-year dataset. Regressions (6)-(7) report results from linear regressions, standard errors clustered on countries in parentheses, run on a country-election dataset. * $.05 < p \leq .10$. ** $.01 < p \leq .05$. *** $p \leq .01$. Green shades indicate hypothesized or expected results. Orange shades indicate contrarian results with weak statistical significance. *PROTESTS* is the country-annual number of anti-government street protests, multiplied by -1. *fPROTESTS* is *PROTESTS* with a one-year lead. *VOTE* is the share of the vote in national elections for the largest incumbent government party. It is transformed to remove its bounds, thus: ln(*VOTE*/[1-*VOTE*]). *BankConcentration* is the HHI concentration index in the banking sector. *BankLossGDP* is the sum of losses in the banking sector, divided by GDP. *LBankLossGDP* is calculated similarly, for non-foreign owned banks. *BankLossAsts* is calculated similarly for all banks, but relative to total banking assets. *EA* is a dummy for membership in the euro area. *SSM* is the share of the national banking sector (by assets) directly supervised by the ECB. *LIBERALIZATION* is the Chinn and Itō (2006) index of financial liberalization. *DEMOCRACY* is the polity2 score on POLITY IV project (Marshall, Jaggers, and Gurr 2002). *dUNEMPLOYMENT* and *UNEMPLOYMENT* are respectively the annual difference in, and the level of the rate of unemployment.

Regression (1) in Table 7 confirms that bank losses are associated with a rise in anti-government street protests. Specifically, an increase in banking losses worth 2.5 percent of GDP is associated with one more protest (0.025×42.2) (recall that the dependent variable is the negative number of protests). Regression (5) shows a similar effect when losses re related to banking assets.

Regression (2) does not support H1, as the coefficient of the interaction of *BankConcentration* and *BankLossGDP* is statistically insignificant. However, when the dependent variable is specified with a one-year lead in Regression (3), H1 is supported. Perhaps it takes time for the public to be fully informed about the circumstances of the losses. Note that unemployment does not drive next year's protest. The same is true when focusing on non-foreign owned banks in Regression (4) – apparently the public is more upset when local banks are at a loss than when foreign-owned ones do. We interpret as a political attitude, as from a strictly economic perspective there should not be a difference for the public between local and foreign banks. Perhaps the public expects the government to protect the local banks, especially the national champions (which lead to high values of *BankConcentration*). Specifically, a rise of one standard deviation in the banking concentration (0.22) coupled with a loss in local banks worth 2.5 percent of GDP is associated with 0.025×0.22×477.8=2.6 more protests per year. The variation in results in Regressions (2)-(4) suggests that the effect of bank losses on the public is not a mere reflection of the business cycle, which is anyway controlled for with *dUNEMPLOYMENT* (see more below).

Interestingly, H1 is not supported with *BankLossAsts* or *LBankLossAsts* (regressions not reported to save space), although Regression (5) shows the public does care about losses relative to assets. We interpret these results as evidence that the public expects the government to mitigate the effect of bank losses on business and jobs but cares less for government

intervention to protect the profitability of the financial sector, especially regarding cross-border activity.

The control variables also return interesting results. As expected, protests increase when the rate of unemployment rises (although it takes an annual increase of five percent points in unemployment to generate one protest), and when democracy degrades (one more protest for every one notch decline in *DEMOCRACY*). Less obvious, but not surprising given the literature, supranational bank supervision is resented. Figure 3 shows that in a majority of euro area member states (including France, Germany, Italy and Spain) the ECB directly supervises more than 80% of banking assets. Applying this to a coefficient of roughly 7 translates into $0.8 \times 7 = 5.6$ more protests per year, a very large effect indeed.

Turning to Regressions (6)-(7) and the country-election dataset, there is no evidence that banking losses or concentration affect the vote for (or against) the government. Similar results are obtained when banking losses are measured only for locally-owned banks, or related to assets (not reported).

In Table 8, Regressions (8)-(9) support H2, as the three-way interactions are negative and statistically significant. We note above that H1 could not be supported when bank losses are related to their assets. However, Regression (9) shows that in the euro area, the public does seem to expect governments to protect the financial sector: Large losses relative to the size of the banking sector do increase protests when banking concentration increases in the block. Interestingly, similar regressions focusing on locally-owned banks (not reported in order to save space) do not support H2. This suggests that H2 is supported mostly with regard to foreign-owned banks. As for Regressions (10)-(11) and the country-election dataset, they show no support for H2: in the euro area as outside it, government do not seem to pay in the ballot for losses in concentrated banking system.

Table 8: Bank losses, concentration and support for the government in the euro area

Dependent variable →	(8) PROTESTS	(9) PROTESTS	(10) VOTE (transf.)	(11) VOTE (transf.)
BankConcentration	0.67	0.78	-0.05	-0.12
	(1.13)	(1.14)	(0.29)	(0.28)
EA	-0.64	-0.49	-0.06	-0.12
	(1.32)	(1.32)	(0.19)	(0.18)
EA×BankConcentration	4.08	3.55	-0.48	-0.34
	(4.70)	(4.77)	(0.52)	(0.51)
BankLossGDP	-19.3		-23.4	
	(54.3)		(22.2)	
BankConcentration×BankLossGDP	74. 7		29.2	
	(165.3)		(50.5)	
EA×BankLossGDP	102.6		-1.02	
	(69.6)		(25.5)	
EA×BankConcentration×BankLossGDP	-626.9 ***		26. 9	
	(235.6)		(59.2)	
BankLossAsts		-33.3		-22.2
		(37.5)		(23.2)
BankConcentration×BankLossAsts		21.2		83.6
		(93.8)		(103.2)
EA×BankLossAsts		131.3		-28.9
		(117.4)		(37.2)
EA×BankConcentration×BankLossAsts		-1,253.8 ***		35. 6
		(471.6)		(127.0)
SSM	-7.31 ***	-6.91 ***	-0.00	0.08
	(1.30)	(1.31)	(0.14)	(0.15)
LIBERALIZATION	-0.59	-0.13	0.22	0.21
	(0.93)	(0.92)	(0.22)	(0.22)
DEMOCRACY	1.02 ***	1.16 ***	-0.05	-0.06 **
	(0.31)	(0.29)	(0.03)	(0.03)
dUNEMPLOYMENT	-27.4 **	-22.0 *		
	(12.4)	(12.0)		
UNEMPLOYMENT			0.01	-0.28
			(1.15)	(1.13)
Constant	-10.9 ***	-12.5 ***	-0.45	-0.32
	(2.77)	(2.60)	(0.29)	(0.27)
Wald chi2	80.3 ***	88.4 ***	157.2 ***	79.0 ***
Observations	1,381	1,466	443	467
Countries	70	76	82	88

Note: Regressions (8)-(9) report results from tobit regressions, standard errors in parentheses, run on a country-year dataset. Regressions (10)-(11) report results from linear regressions, standard errors clustered on countries in parentheses, run on a country-election dataset. Light-green shades indicate hypothesized or expected but low-significance results. See further notes to Table 7.

Table 9: Bank losses, concentration and support for the government under the SSM

Dependent variable →	(12) PROTESTS	(13) PROTESTS	(14) VOTE (transf.)	(15) VOTE (transf.)
BankConcentration	0.87	0.80	-0.09	-0.11
	(1.11)	(1.13)	(0.28)	(0.27)
SSM	-17.9 ***	-18.5 ***	-0.77 **	-0.43
	(3.72)	(3.86)	(0.34)	(0.36)
SSM×BankConcentration	47. 5 ***	51.4 ***	1.69	1.02
	(14.7)	(15.3)	(1.26)	(1.28)
BankLossGDP	2.37		-30.4 *	
	(31.0)		(18.3)	
BankConcentration×BankLossGDP	-166.7		65.3	
	(110.3)		(43.6)	
SSM×BankLossGDP	1,068.8		207.0 ***	
	(695.2)		(37.9)	
SSM×BankConcentration×BankLossGDP	-4,624.4 *		-762.1 ***	
	(2,707.0)		(128.3)	
BankLossAsts		-70.6 **		-19.6
		(33.5)		(17.7)
BankConcentration×BankLossAsts		46.3		50.1
		(89.6)		(59.5)
SSM×BankLossAsts		3,169.9 **		252.7 ***
		(1,404.2)		(76.2)
SSM×BankConcentration×BankLossAsts		-13,730.8 **		-967.7 ***
		(5,584.1)		(295.2)
EA	-0.03	-0.39	-0.15	-0.24 **
	(0.77)	(0.77)	(0.13)	(0.12)
LIBERALIZATION	-0.54	-0.16	0.23	0.21
	(0.92)	(0.92)	(0.22)	(0.22)
DEMOCRACY	1.02 ***	1.16 ***	-0.05 *	-0.06 **
	(0.30)	(0.29)	(0.03)	(0.03)
dUNEMPLOYMENT	-26.0 **	-28.4 **		
	(12.1)	(12.0)		
UNEMPLOYMENT			-0.13	-0.43
			(1.16)	(1.12)
Constant	-10.9 ***	-12.4 ***	-0.40	-0.29
	(2.75)	(2.59)	(0.29)	(0.27)
Wald chi2	82.9 ***	84.9 ***	480.7 ***	189.2 ***
Observations	1,381	1,466	443	467
Countries	70	76	82	88

Note: Regressions (8)-(9) report results from tobit regressions, standard errors in parentheses, run on a country-year dataset. Regressions (10)-(11) report results from linear regressions, standard errors clustered on countries in parentheses, run on a country-election dataset. Light-green shades indicate hypothesized or expected but low-significance results. See further notes to Table 7.

In Table 9, Regressions (12)-(15) support H3b, as the three-way interactions are negative and statistically significant. In other words, the SSM aggravates the public's discontent with losses in a concentrated banking system. As with the euro area in general, this is true regardless whether GDP or assets are used as the denominator of the losses. And this time, it is also true for losses in locally-owned banks (again not reported in order to save space). Indeed, the SSM even affects the vote for government. We don't think this is merely a reflection of a tendency for greater unrest in the participating country-years. The main political upheavals in the euro area took place during 2010-12; by 2014, when the SSM was launched, the crisis was largely over. 2015 was an eventful year only in Greece. Anyway, the euro area dummy should control for this. Nor is it just a reflection of the situation in the crisis-hit member states, since even France and Germany are much exposed to the SSM.

Conclusions

Launched in 1999, the euro area lacked a banking union. The need to agree on common policies for supervision and resolution of banks was hardly discussed. Member states used their autonomy in this policy area to tolerate increased concentration levels in the banking sector and to cultivate large 'national champion' banks. Indeed, national and common policies in the euro area have conspired to enhance the mutual capture relationship between governments and banks, also known as the 'doom loop', beyond what is common outside this currency bloc. When the euro crisis erupted in 2010, member states' policies, ECB policies and the EU's accounting rules further exacerbated the 'doom loop'.

As of 2014, EBU is supposed to gradually loosen this mutual capture relationship. However, EBU still leaves a wide range of capacities at the hands of national authorities, which feeds some skepticism of its effectiveness. While much has been written on the democratic

legitimacy of the euro area's institutions in general, there are hardly any studies of the response of the wider public, both to the euro area's weaknesses, and to the remedies that have so far been put in place. We argue that the public responds politically to bank losses, as a transparent signal of supervision failure, especially when banking concentration is high. We further argue that in the euro area, losses in concentrated banking system are more politicized than outside it, but that delegating supervision authority to the ECB breeds more public resentment.

Our dataset includes up to 115 democracies since 1988. We operationalize output legitimacy with data on anti-government street protests, or alternatively with the share of the vote for the incumbent government. We use tobit and linear regression analyses to test our hypotheses. We compile data on losses of banks, local and foreign-owned, calculate concentration levels in national banking sectors and the share of banking assets under direct SSM supervision, and control for financial openness, level of democracy, and the business cycle.

We find that bank losses tend to drive protests even regardless of the level of concentration in the banking system. Specifically, an increase in banking losses worth 2.5 percent of GDP is associated with one more protest per year. Under high levels of concentration, the public is especially upset about losses in locally-owned banks. Specifically, a rise of one standard deviation in the banking concentration coupled with a loss in local banks worth 2.5 percent of GDP is associated with 2.6 more protests per year. We interpret this result as evidence of the public's expectation that governments protect 'national champions'.

We explain why this finding is not merely a reflection of the business cycle: first, bank losses and rates of unemployment are not correlated. Second, losses in locally-owned banks immediately lead to more protests while losses in foreign-owned banks do not, although the two types of banks should not be differently related to the business cycle, if any. Third, losses in foreign-owned banks may lead to more protests within a year, while changes in unemployment do not.

Interestingly, the coincidence of bank losses and high banking concentration is not associated with more protests when losses are related to banking assets. Perhaps the public expects the government to mitigate the effect of bank losses on business and jobs but cares less for government intervention to protect the profitability of the financial sector, especially regarding cross-border activity.

Our results confirm the expectation that the public protests more in such situations inside the euro area than outside it. Furthermore, EU citizens may be more sensitive to losses on cross-border banking activity than non-euro citizens, which makes sense if they hold significant financial assets in other member states. Our results also show that supranational supervision increases protests (by an average of 5.6 more protests per year), and even reduces the vote for the incumbent government, rather than assuage the public's concerns. We don't think this is merely a reflection of a tendency for greater unrest in the participating member states. The main political upheavals in the euro area took place during 2010-12; by 2014, when the SSM was launched, the crisis was largely over. 2015 was an eventful year only in Greece. Nor is it just a reflection of the situation in the crisis-hit member states, since even France and Germany are much exposed to the SSM.

We believe that by studying the output legitimacy of supervision, this study fills an important gap in the literature on the politics of banking in general, and in the euro area in particular; it also adds empirical value to this literature, with its original design, operationalization of output legitimacy, and comprehensive dataset. We look forward to developing this study in a number of ways: We plan to compliment the regressions analysis with marginal effects analysis, develop additional proxies for bank-supervision failure that are transparent for the public, and control for different electoral systems and varieties of capitalism.

References

Anderson, Christopher J. and Matthew M. Singer. 2008. "The Sensitive Left and the Impervious Right." *Comparative Political Studies* 41 (4-5): 564-599.

Barkbu, Bergljot, Barry Eichengreen and Ashoka Mody. 2016. The Euro's Twin Challenges. In *Political and Economic Dynamics of the Eurozone Crisis*, edited by James Caporaso and Martin Rhodes, 48-78. Oxford: Oxford University Press.

Barta, Zsofia and Waltraud Schelkle (2015), 'At Cross-Purposes: Commercial versus Technocratic Governance of Sovereign Debt in the EU', *Journal of European Integration* 37(7): 833-846.

Beck, Thorsten, Olivier De Jonghe, and Glenn Schepens. 2013. "Bank Competition and Stability: Cross-Country Heterogeneity." *Journal of Financial Intermediation* 22 (2): 218-244.

Beck, Thorsten, Asli Demirgüç-Kunt, and Ross Levine. 2006. "Bank Concentration, Competition, and Crises: First Results." *Journal of Banking & Finance* 30 (5): 1581-1603.

Calomiris, Charles W. and Stephen H. Haber. 2014. *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. Vol. 48 Princeton University Press.

Chinn, Menzie David and Hiro Itō. 2006. "What Matters for Financial Development? Capital Controls, Institutions, and Interactions." *Journal of Development Economics* 81 (1): 163-192.

Chwieroth, Jeffrey M. and Andrew Walter. 2017. "Banking Crises and Politics: A Long-Run Perspective." *International Affairs* 93 (5): 1107-1129.

———. 2019a. "The Financialization of Mass Wealth, Banking Crises and Politics Over the Long Run." *European Journal of International Relations*: 135406611984331. doi:10.1177/1354066119843319.

———. 2019b. *The Wealth Effect* Cambridge University Press.

Clark, David H. and Patrick M. Regan. 2015. *Mass Mobilization Data Project Codebook and User's Manual*: Political Instability Task Force.

Clark, David and Patrick Regan. 2016. "Mass Mobilization Protest Data." *Cambridge: Harvard Dataverse.[Google Scholar]*. https://doi.org/10.7910/DVN/HTTWYL.

Clift, Ben and Cornelia Woll. 2012. "Economic Patriotism: Reinventing Control Over Open Markets." *Journal of European Public Policy* 19 (3): 307-323.

Correia, Ricardo, Tomasz Piotr Dubiel-Teleszynski, and Javier Población. 2017. *A Structural Model to Study the Bail-Out Process in a Bank and its Macro-Prudential Policy Implications*. Tartu: Tartu Univ. Press.

Dalton, Russell J. 2019. *Citizen Politics: Public Opinion and Political Parties in Advanced Industrial Democracies*. 7th ed. Los Angeles: SAGE, CQ Press.

Demirgüç-Kunt, Asli and Harry Huizinga. 2013. "Are Banks Too Big to Fail Or Too Big to Save?" *Journal of Banking & Finance* 37 (3): 875-894.

Donnelly, Shawn. 2018. *Power Politics, Banking Union and EMU: Adjusting Europe to Germany* Routledge.

Döring, Holger, Constantin Huber and Philip Manow. 2021. "Parliaments and Governments Database (ParlGov): Information on Parties, Elections and Cabinets in Established Democracies." *Development Version*.

Engelen, E., I. Ertürk, J. Froud, S. Johal, A. Leaver, M. Moran, A. Nilsson, and K. Williams. 2011. *After the Great Complacence: Financial Crisis and the Politics of Reform.* Oxford: Oxford University Press.

Epstein, Rachel A. 2017. *Banking on Markets: The Transformation of Bank-State Ties in Europe and Beyond* Oxford University Press.

Epstein, Rachel A. and Martin Rhodes. 2016. "International in Life, National in Death? Banking Nationalism on the Road to Banking Union." In *Political and Economic Dynamics of the Euro Zone Crisis*, edited by Caporaso James and Rhodes Martin, 200-232. Oxford: Oxford University Press.

Fernández-Villaverde, Jesús, Luis Garicano, and Tano Santos. 2013. "Political Credit Cycles." *The Journal of Economic Perspectives* 27 (3): 145-166.

Foster, Chase and Jeffry Frieden. 2017. "Crisis of Trust: Socio-Economic Determinants of Europeans' Confidence in Government." *European Union Politics* 18 (4): 511-535.

Funke, Manuel, Moritz Schularick, and Christoph Trebesch. 2016. "Going to Extremes: Politics After Financial Crises, 1870–2014." *European Economic Review* 88: 227-260. d

Haber, Hanan and David Levi-Faur. 2018. "The Financialization of European Union Citizenship: An Alternative to Democratic Empowerment." In *Democratic Empowerment in the European Union*: Edward Elgar Publishing.

Hardie, Iain and Huw Macartney. 2016. "EU Ring-Fencing and the Defence of Too-Big-to-Fail Banks." *West European Politics* 39 (3): 503-525. d

Henning, C. Randall. 2016. The ECB as a Strategic Actor. In *Political and Economic Dynamics of the Eurozone Crisis*, edited by James Caporaso and Martin Rhodes, 167-99. Oxford: Oxford University Press.

Hernández, Enrique and Hanspeter Kriesi. 2016. "The Electoral Consequences of the Financial and Economic Crisis in Europe." *European Journal of Political Research* 55 (2): 203-224.

Hobolt, Sara B. and Catherine E. de Vries. 2016. "Public Support for European Integration." *Annual Review of Political Science* 19: 413-432.

Hobolt, Sara B. and James Tilley. 2016. "Fleeing the Centre: The Rise of Challenger Parties in the Aftermath of the Euro Crisis." *West European Politics* 39 (5): 971-991.

Hobolt, Sara B. and Christopher Wratil. 2015. "Public Opinion and the Crisis: The Dynamics of Support for the Euro." *Journal of European Public Policy* 22 (2): 238-256.

Howarth, David and Lucia Quaglia. 2016. *The Political Economy of European Banking Union*. Oxford: Oxford University Press.

Innerarity, Daniel. 2014. "What Kind of Deficit? Problems of Legitimacy in the European Union." *European Journal of Social Theory* 17 (3): 307-325.

Jones, Erik. 2015. The Forgotten Financial Union. In *The Future of the Euro*, edited by Matthias Matthijs and Mark Blyth, 44–69. Oxford: Oxford University Press.

Keane, John. 2013. "A Short History of Banks and Democracy." *OpenDemocracy*, Apr 23. https://search.proquest.com/docview/1347356712.

Kriesi, Hanspeter. 2014. "The Political Consequences of the Economic Crisis in Europe." In *Mass Politics in Tough Times*, edited by Larry M. Bartels and Nancy Bermeo, 1-50. US: Oxford University Press.

Kurer, Thomas, Silja Häusermann, Bruno Wüest, and Matthias Enggist. 2018. "Economic Grievances and Political Protest." *European Journal of Political Research*.

Mabbett, Deborah and Waltraud Schelkle. 2016. Searching Under the Lamppost. In *Political and Economic Dynamics of the Eurozone Crisis*, edited by James Caporaso and Martin Rhodes, 122-44. Oxford: Oxford University Press.

Marshall, Monty G., Jaggers, Keith and Gurr, Ted R. 2002. "Polity IV Project, Political Regime Characteristics and Transitions, 1800-2017." Center for International Development and Conflict Management at the University of Maryland College Park, accessed 6 August, 2019, http://www.systemicpeace.org/inscrdata.html.

Marzinotto, Benedicta. 2016. "United We Fall". In *Political and Economic Dynamics of the Eurozone Crisis*, edited by James Caporaso and Martin Rhodes, 100-21. Oxford: Oxford University Press.

Matthijs, Matthias and Mark Blyth. 2015. "Introduction: The Future of the Euro and the Politics of Embedded Currency Areas." In *The Future of the Euro*, edited by Matthias Matthijs and Mark Blyth, 1-17. Oxford: Oxford University Press, USA.

Mian, Atif, Amir Sufi, and Francesco Trebbi. 2014. "Resolving Debt Overhang: Political Constraints in the Aftermath of Financial Crises †." *American Economic Journal: Macroeconomics* 6 (2): 1-28.

Nicoli, Francesco. 2017. "Hard-line Euroscepticism and the Eurocrisis: Evidence from a Panel Study of 108 Elections Across Europe." *JCMS: Journal of Common Market Studies* 55 (2): 312-331.

Pagliari, Stefano, Lauren M. Phillips, and Kevin L. Young. 2018. "The Financialization of Policy Preferences: Financial Asset Ownership, Regulation and Crisis Management." *Socio-Economic Review*.

Pontell, Henry, William Black, and Gilbert Geis. 2014. "Too Big to Fail, Too Powerful to Jail? on the Absence of Criminal Prosecutions After the 2008 Financial Meltdown." *Crime, Law and Social Change* 61 (1): 1-13.

Raskin, Yoav and Tal Sadeh. 2021. "Responsive Voters – How European Integration Empowers Eurosceptic Parties." *Journal of European Public Policy*. doi.org/10.1080/13501763.2021.1942517.

Sadeh Tal. 2019. "How Did the Euro Area Survive the Crisis?" *West European Politics* 42 (1): 201-226.

Sadeh, Tal and Yehuda Porath. 2020. "Autonomous Agencies and Relational Contracts in Government Bond Issues." *Regulation & Governance* 14 (4): 741-763.

Schimmelfennig, Frank. 2016. "A Differentiated Leap Forward: Spillover, Path-Dependency, and Graded Membership in European Banking Regulation." *West European Politics* 39 (3): 483-502.

Seabrooke, Leonard. 2006. *The Social Sources of Financial Power: Domestic Legitimacy and International Financial Orders*. Ithaca: Cornell University Press.

Spendzharova, Aneta B. 2013. "Banking Union Under Construction: The Impact of Foreign Ownership and Domestic Bank Internationalization on European Union Member-States' Regulatory Preferences in Banking Supervision." *Review of International Political Economy* 21 (4): 949-979. d

Stijn, Verhelst. 2013. *Assessing the Single Supervisory Mechanism: Passing the Point of no Return for Europe's Banking Union*. Brussels, Belgium: Academia Press.

Strahan, Philip E. 2013. "Too Big to Fail: Causes, Consequences, and Policy Responses." *Annual Review of Financial Economics* 5 (1): 43-61.

Véron, Nicolas. 2017. "The Governance and Ownership of Significant Euro-Area Banks." *Bruegel Policy Contribution* 2017/15. https://www.econstor.eu/handle/10419/173111.

Volkens, Andrea, Onawa Lacewell, Pola Lehmann, Sven Regel, Henrike Schultze, and Annika Werner. 2020. "The Manifesto Data Collection. Manifesto Project (MRG/CMP/MARPOR). Version 2020b." *Berlin: Wissenschaftszentrum Berlin Für Sozialforschung (WZB)*. https://doi.org/10.25522/manifesto.mpds.2020b.

Wallace, Paul. 2016. *The Euro Experiment* Cambridge University Press.

Woll, Cornelia. 2014. *The Power of Inaction: Bank Bailouts in Comparison* Cornell University Press.

Wyplosz, Charles. 2016. The six flaws of the Eurozone. *Economic Policy* 31 (87): 559-606.