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Abstract

The declared intention of policy makers is that future bank restructuring should be conducted through bail-in rather than bail-out. Over the past years there have been a few cases of European banks being restructured where creditors were bailed in. This paper exploits these cases to investigate the market reactions of stock prices and credit default swap (CDS) spreads of European banks in order to gauge the extent to which it is expected that bail-in will indeed become the new regime. We find evidence of increased CDS spreads and falling stock prices most notably after the bail-in in Cyprus. However, bail-in expectations appear to depend on the sovereign's fiscal strength, i.e., reactions are stronger for banks in countries with limited fiscal space for bail-out. Moreover, actual bail-ins lead to stronger market reactions than the legal implementation of bank resolution regimes, supporting the saying that actions speak louder than words.

JEL Classification: G21 and G28
Keywords: bail-in, bank restructuring, creditor participation, event study and single resolution mechanism

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1. Introduction

"Never again" was the collective determination of governments after being forced to back-stop the financial system and provide guarantees and capital to avert systemic collapse. The financial and political capital involved continues to be mind-boggling. The UK put up 40 percent of its GDP in guarantees; many other countries provided a multiple of that through assurances for the entire deposit base. It is true that the back-stops broadly worked, the guarantees were often not used, and bank capital injections by the state in some cases even turned out to be profitable for the state. However, bail-outs are hugely unpopular and are likely to cause severe moral hazard. Therefore, the regulatory community has worked hard to establish a new regime in which bail-out is to be replaced by bail-in.

In Europe, several countries quickly adopted special resolution regimes, which provided mechanisms for dealing with failing banks while protecting both the financial system as well as the taxpayer. Large banks have to submit recovery and resolution plans (living wills), which have to spell out the actions that would be taken in case of deteriorating capital ratios. Their purpose is to make banks more resolvable and to ensure that shareholders and creditors will be carrying the losses rather than taxpayers. The legislative culmination so far has been the adoption of the Bank Recovery and Resolution Directive (BRRD) in the EU and the agreement on a Single Resolution Mechanism (SRM) in the euro area, which both subscribe to the bailing-in philosophy.

At the same time, sometimes cautiously sometimes audaciously, policy makers have already embarked on the route towards bailing in. Certainly, the most famous and controversial experience was the bail-in of bank creditors in Cyprus. Before and after Cyprus there had been a few other cases. We propose to use these events to study the change in creditors' expectations of bail-in across European banks and countries.

In particular, we are interested in the reactions of credit default swap (CDS) spreads and stock returns to the announcement of a bail-in. If a bail-in event reduced bail-out expectations across European banks, risk premia for all banks should rise, which would then be reflected in a rise in CDS spreads and a drop in stock returns. We then ask: do these reactions differ across the types of bail-in events? We classify events according to their bail-in basis (junior, senior debt) and to the strength of their political spillover effects on other banks in Europe. Finally, we ask whether the effects differ across different types of banks, such as systemically important banks and banks from European crisis countries (GIIPS). The latter is of particular interest because it is possible that bail-in events have a stronger political spillover effect in countries that are already perceived

as vulnerable and that have little fiscal capacity for bailing out their banks. Conversely, the expectation of a bail-out may remain higher for banks in fiscally stronger countries.

To answer these questions we analyse the reactions of CDS spreads and stock returns in response to the bank bail-in events in Denmark, Spain, Holland, Cyprus, Portugal, as well as to the implementation of the Single Resolution Mechanism (SRM). We employ an event study analysis on a broad sample of stock returns and CDS spreads of banks in the European Union. There is a long tradition of employing event study analysis to evaluate the extent of bail-out guarantees in the banking sector or the impact of regulatory reforms aiming to reduce such guarantees. An early paper by O'Hara and Shaw (1990) investigates the announcement by the US Comptroller of the Currency that certain banks were too big to fail and finds positive wealth effects for these banks. Spiegel and Yamori (2003) assess banks' stock price reactions in response to a tightened resolution regime in Japan and find that it negatively affected large banks' market values relative to other banks.

More recent papers by Bongini, Nieri, and Pelgatti (2015) and Moenninghoff, Ongena, and Wieandt (2015) analyse the effects of the designation and special regulation of global systemically important banks (G-SIBs), proposed by the Financial Stability Board. The authors generally find negative stock price reactions, albeit some of the events, especially the official designation of banks as G-SIBs, lead to partly offsetting positive effects. Schäfer, Schnabel, and Weder di Mauro (2015) analyse the impact of major structural reform measures at national level in the aftermath of the subprime crisis on CDS spreads and stock returns. The considered reforms include the prohibition of certain activities, ring-fencing, higher capital requirements, and early national reforms regarding bank resolution. Many of the national reforms led to an increase in CDS spreads and a drop in stock returns, consistent with a reduction of bail-out expectations. The detected effects of resolution procedures were, however, relatively weak, which was explained by the lack of cross-border resolution procedures. In a similar vein, Acharya, Anginer, and Warburton (2014) find that the Dodd-Frank Act did not significantly reduce bail-out expectations for systemic banks in the US. In reaction to the crisis in the euro area, European policy makers agreed to introduce a supranational resolution regime in the euro area, in the form of the Single Resolution Mechanism. Such regimes promise to be much more effective than purely national schemes. But the proof of the pudding is in the eating. Therefore, it is particularly instructive to not only consider regulatory reforms but also actual bail-in events.

Our results show that creditor bail-in events indeed led to an increase in CDS spreads and hence to a reduction in bail-out expectations of European banks. We also find decreasing stock returns,

mirroring the results for CDS spreads. However, the reaction is not uniform across events. Early instances in Denmark and Spain did not trigger significant market reactions, either because the political spillover was small or because the event sent blurred signals because it combined a bail-out with a comparatively small bail-in basis. In contrast, sharp market reactions are found around the most extreme event, the bail-in in Cyprus, which featured a comparatively large bail-in basis and a strong political spillover effect. The second event with significant market reactions, the bail-in at the Dutch bank SNS Reaal, also took place in the context of the Cyprian crisis and therefore produced significant political spillovers although the bail-in basis was narrower. The Portuguese case took place much later (actually after the agreement on the SRM) and had lower political spillover and a narrow bail-in basis and could hence not be expected to show strong effects. Finally, the legislative process of the SRM yields relatively small though significant market reactions. This may be related to the uncertainty regarding the actual creditor involvement in case of future bank distress. The bail-in rules agreed under the new framework allow for exceptions and substantial discretionary leeway, limiting their binding powers.[5] Moreover, some of the effects may already have been captured by the earlier bail-in events, especially the Cyprian bail-in.

We find heterogeneous effects for different groups of banks. Most importantly, banks in GIIPS countries are much more strongly affected than banks from other countries. This may suggest that the fiscal capacity of host countries is one important determinant of bail-out expectations. This is confirmed in supplementary cross-sectional regressions. These results suggest that bail-out expectations were reduced most effectively in fiscally weak countries but less so in countries with large fiscal capacity. Finally, we find evidence that the rise in CDS spreads is more pronounced for systemically important banks.

Overall our results suggest that the Cyprian crisis constituted a watershed regarding the bail-in of bank creditors. The actual occurrence of a broad-based bail-in convinced investors that a regime change had occurred. Some doubts remain whether a bail-in could also occur in countries with high fiscal capacity. Such countries may be inclined to bail out their banks in spite of the new SRM regulation. Hence, the strengthening of bail-in rules remains an important regulatory challenge.

Our paper adds to the huge literature on bail-out and the small literature on bail-in. Most existing papers focus either on the empirical identification and quantification of bail-out guarantees or on their effect on bank behaviour, especially risk-taking. The event studies described above belong to the first category. For example, Acharya et al. (2014) find an average funding cost advantage

[5] See German Council of Economic Experts (2014) for a discussion of the existing exemptions from bail-in under the SRM.

for systemic US banks of 30 basis points over the period 1992 until 2012, peaking at more than 100 basis points in 2009. Based on a large bank sample from a large number of developed and developing countries, Ueda and Weder di Mauro (2013) estimate a funding cost advantage for systemic banks of 60 basis points in 2007 and 80 basis points in 2009. The IMF (2014) finds that implicit funding cost subsidies rose across the board during the crisis. Interestingly, the report shows that these subsidies have declined since the crisis in many countries but remained comparatively elevated in the euro area. However, rating agencies in the meantime reacted to the new bail-in rules in Europe by substantially reducing ratings measuring public support, indicating that the new rules start having an effect.[6] Furthermore, Barth and Schnabel (2014) show that the value of bail-out guarantees, i. e., the funding cost advantage from a given implicit guarantee (as measured by support ratings by Fitch), increased sharply in the crisis but decreased afterwards.

Demirgüç-Kunt and Huizinga (2010) as well as Völz and Wedow (2011) additionally find evidence of banks becoming too big to be saved when their size exceeds certain thresholds. Barth and Schnabel (2013) show that the importance of too-big-to-fail and too-big-to-be-saved problems changed over different phases of the financial crisis. Finally, Hett and Schmidt (2015) provide evidence of an erosion of market discipline, especially after the Lehman collapse.

The other part of the literature focusses on the effect of bail-out guarantees on banks' risk taking. Most of the empirical literature finds a risk-increasing effect of bail-out guarantees, starting from an early contribution by Boyd and Gertler (1994). Schnabel (2004, 2009) confirms higher risk-taking of too-big-to-fail banks for German banks during the Great Depression. More recently, Black and Hazelwood (2013) showed that large banks rescued under the troubled asset relief program (TARP) were encouraged to increase their risk-taking. Based on a German bank sample, Dam and Koetter (2012) also find a positive relationship between bail-out expectations and risk-taking. Gropp, Hakenes, and Schnabel (2011) show that bail-out guarantees may also lead to a rise in the risk-taking of competitor banks. A different strand of the literature argues that public bail-out guarantees may not always lead to excessive risk-taking due to charter value effects (Cordella and Yeyati, 2003; Hakenes and Schnabel, 2010). Lower funding costs raise charter values and thereby reduce risk-shifting incentives. In line with this observation, German Landesbanken and savings banks appear to have increased their risk-taking after the abolishment of bail-out guarantees in Germany (Fischer, Hainz, Rocholl, and Steffen, 2011; Körner and Schnabel, 2013; see, however, conflicting evidence in Gropp, Gruendl, and Guettler, 2014).

[6] For example, in their latest rating review of banks located in the EU and Switzerland Standard and Poor's concluded that the prospects of government support are now uncertain and eliminated any state support uplift in bank's ratings. See Standard and Poors, RatingsDirect, December 2, 2015.

In contrast to the large literature on bail-out, there hardly exists any empirical evidence on the effects of bail-in. This is not surprising as bail-out has been much more prominent than bail-in. But there is by now a large policy-oriented literature discussing how bail-in regimes should be designed (see, for example, Beck, 2011; Avgouleas, Goodhart, and Schoenmaker, 2013; Huertas, 2013). There have also been some critical voices regarding the benefits of bail-in relative to bail-out (e. g., Dewatripont, 2014; Goodhart and Avgouleas, 2014; Allen, Carletti, Goldstein, and Leonello, 2015). Detailed institutional information on a number of case studies of recent bail-in events can be found in the work by Dübel (2013b). This paper intensively draws on this information in order to classify different bail-in events.

The paper is structured as follows. The next chapter outlines the considered bail-in cases and describes expected market reactions. Chapter 3 explains the methodology. We first introduce our identification procedure for the event selection. Then we describe the data sample and present our empirical model. The fourth chapter contains the empirical results for the bail-in events, putting particular emphasis on the events in Cyprus. Chapter 5 summarizes and concludes.

2. Bail-in event classification and expected market reactions

A bail-in procedure aims at letting investors participate in a bank's losses at time of bankruptcy. The strength of market reactions at other banks in response to a bail-in depends on two aspects: first, the bail-in basis and second, the strength of the political signal the event sends to other countries. The size of the bail-in basis plays a crucial role for market participants because it determines which investors participate in the losses. If the announced bail-in comprises hybrid capital and subordinated debt only, we classify its basis as **junior debt**. In this case, the bail-in basis is considered as relatively small. If, in addition, senior unsecured debt and parts of customer deposits are included, we define the basis as **senior debt**.[7] In the latter case, the bail-in basis is wide and the bail-in affects a broader group of investors.

We also consider the likely strength of the signal for future regime change emanating from a particular event (called "political spillover" in the following). We suggest that a bail-in event is likely to emit a stronger signal for a future bail-in regime if (i) it happened within the period when the European SRM was being designed, or (ii) if there was Eurogroup involvement. The decision to involve bank creditors then depends on the stance of the Eurogroup leaders rather than

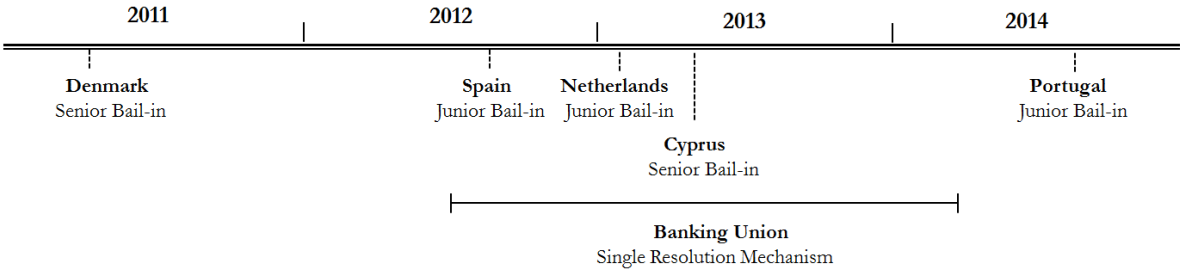
[7] For a further discussion of the bail-in basis, see Dübel (2013a) and Dübel (2013b).

national policy makers. We define the period in which the SRM was being negotiated from June 2012 until April 2014, the time when the European Parliament adopted the SRM.[8]

Outline of bail-in cases

In the following, we outline five European cases of creditor bail-in and the implementation of the European Single Resolution Mechanism.[9] Figure 1 displays the timeline of the five bail-in cases. It shows that the negotiation about the SRM stretched over an extended period, encompassing other bail-in events.

Figure 1: Timeline of bail-in events



Our first case is the creditor bail-in of the **Danish bank Amagerbanken**. The small retail bank – with total assets of only 4.5 billion euros – was wound up in early 2011 under the Danish national resolution procedure "Bank Package III".[10] The Danish resolution procedure aimed at protecting taxpayers from bank losses and included a bail-in of senior debt. Hence, depositors and other unsecured creditors of this distressed bank could not be sure to receive full coverage of their claims.[11] On Sunday, 6 February 2011, the bank announced the transfer of its assets to a state-owned bank. *CreditSights* estimated that holders of senior debt and unsecured deposits would face a haircut of 41 percent.[12] This case is of particular interest since it was the first European bank in our sample whose bail-in basis included senior unsecured debt as well as larger deposits. It is noteworthy that the authorities in Denmark, which is not part of the eurozone, decided to bail in bank creditors long before the decision for a European banking union and the creation of a SRM.

[8] See Financial Times of 12 June 2012 "Barroso pushes Banking Union".
[9] The European Banking Union consists of three pillars: the Single Supervisory Mechanism (SSM), the Single Resolution Mechanism (SSM), and the Harmonized Deposit Insurance (DGS), of which the latter has not yet been finalized. We do not investigate events attached to the construction and the implementation of SSM since it does not contain any specific rules concerning bail-in.
[10] See Dübel (2013b).
[11] See Denmark's Nationalbank (2013).
[12] See Financial Times, 8 February 2011, p. 27.

Spain applied for ESM assistance in bank restructuring and recapitalization in June 2012.[13] At this time recapitalization needs of Spanish banks were estimated at 100 billion euros. The largest bank in distress was **Bankia** with a balance sheet of about 300 billion euros. At the insistence of euro area finance ministers, the Memorandum of Understanding (MoU) included the participation of junior creditors in the losses of the Spanish institutes as a necessary condition for granting bank aid. Subordinated Liability Exercises (SLEs) included hybrid capital and subordinated debt and were either voluntary or – where necessary – mandatory.[14] In the second half of the year 2012 the Spanish government implemented a national law on the restructuring and resolution of their credit entities.[15]

Case number three is the creditor bail-in of the **Dutch bank SNS Reaal**, which had total assets of about 80 billion euros. After the bank had suffered from substantial write-downs on its real estate portfolio during the year 2012, the Dutch government nationalized SNS Reaal on 1 February 2013. In the context of nationalization, the state injected 2.2 billion euros, shareholders and junior creditors were both wiped out. One billion of subordinated debt was expropriated with zero compensation under a new Dutch law.[16] This case happened during the negotiation of the SRM. Its political spillover effect was probably further magnified for an additional reason: the responsible Dutch finance minister had just been appointed as the president of the Eurogroup. Hence, his involvement in the decision to bail in creditors in the Netherlands was a strong indication for the future stance of the Eurogroup, including in their negotiations with the incipient case, Cyprus.[17]

Cyprus is the key bail-in event because it clearly transported the signal that the euro area was going for a bail-in of creditors in bank restructurings and moreover that the bail-in basis could be very wide, including senior unsecured debt and even large deposits. Apart from the early Danish case, retail investors had not yet faced haircuts. The different bail-in options became public in February 2013. On 18 March 2013, the government of Cyprus and the eurozone Finance Ministers announced that all deposits, including those below 100 000 euros (the legal deposit guarantee limit of the EU), would be facing losses. Following an uproar and a week of further frantic negotiations, the deal finally announced on 25 March 2013 bailed in senior unsecured debt and large deposits but not retail deposits below 100 000 euros.

[13] See Financial Times – European Edition on 25 June 2012. This event date is not examined since a creditor bail-in was not discussed at this early stage.
[14] See Memorandum of Understanding (2012).
[15] See Ashurst (2012).
[16] See Dübel (2013b), p. 40.
[17] See Financial Times – European edition „Dutch moralist sends stern message“, on 26 March 2013, p. 2.

The last country case focuses on the creditor bail-in of the **Portuguese bank Banco Espírito Santo**, which had total assets of about 85 billion euros. For a few days, this event dominated the news and raised the spectre of renewed turbulence in the euro area. On 10 July 2014, fears over this bank briefly triggered a stock sell-off across European financial markets. Portugal's PSI 20 share index dropped by 4.3%, the biggest drop in more than a year.[18] In September 2014 the bank posted record losses for the first half of the year. On 4 August 2014, the bank was split up into a "good bank" and a "bad bank" after a frenzied weekend of negotiations between Portuguese and European Union officials. The good bank, Novo Banco, received all sound assets, deposits and senior debt plus a capital injection of 4.9 billion euros. The bad assets were transferred to the bad bank and its losses had to be borne by junior creditors. [19]

Finally we analyse the market reactions in response to the implementation of the European **Single Resolution Mechanism (SRM)**, fixing bail-in rules within the European Banking Union. The purpose of the SRM is to ensure that potential future bank failures in the euro area are managed efficiently, such that taxpayers and the real economy are burdened with minimal costs. One of its key elements is the centralized competence to wind down distressed banks. It is therefore endowed with more comprehensive and effective arrangements to tackle cross-border banking failures than national supervisory authorities.[20] The SRM has access to a European Single Resolution Fund, which is supposed to be sourced from the banking sector instead of the taxpayer. Regarding the design of creditor bail-in, the SRM applies the rules established under the Bank Recovery and Resolution Directive (BRRD). According to the BRRD, creditors are primarily supposed to bear the costs of the bank failure in order to minimise the burden for taxpayers. The possible bail-in basis under the BRRD ranges from junior to senior unsecured debt and can involve uninsured customer deposits. Deposits from small and medium-sized enterprises as well as from natural persons, including in excess of hundred thousand euros, will be preferred over senior creditors.[21] The EU Finance ministers agreed upon the BRRD in June 2013, thereby preparing the bail-in rules for the SRM. A milestone was passed in March 2014 when the European Parliament and the Council reached a provisional agreement on the proposed SRM. In April 2014 the SRM was finally adopted by the European Parliament.

[18] See Financial Times, online: "Fear over Banco Espirito Santo trigger stock sell-off", 10 July 2014, 6:48pm. http://www.ft.com/intl/cms/s/0/4b0ce5ce-0815-11e4-9afc-00144feab7de.html#axzz3HcLjBF7Y
[19] See also Reuters (2014).
[20] See European Commission (2014a).
[21] See European Commission (2014b) for more information about the liability cascade in case of a bail-in.

Expected market reactions

The overarching hypothesis in this paper is that the occurrence of a bail-in event at some bank leads to a rise in CDS spreads and a drop in stock returns at *other* European banks if it **reduces bail-out expectations**. This captures the idea that the announcement of future bail-in remains incredible unless such bail-ins are observed in reality. CDS spreads are affected directly because a lower bail-out probability raises the probability of default. Stock prices are affected indirectly since, everything else equal, lower bail-out expectations increase banks' costs of financing and thereby reduce profits. However, banks have other margins of adjustment (e. g., an increase in loan rates), therefore the effect of a bail-in event on stock prices is likely to be less pronounced than that on CDS spreads.[22]

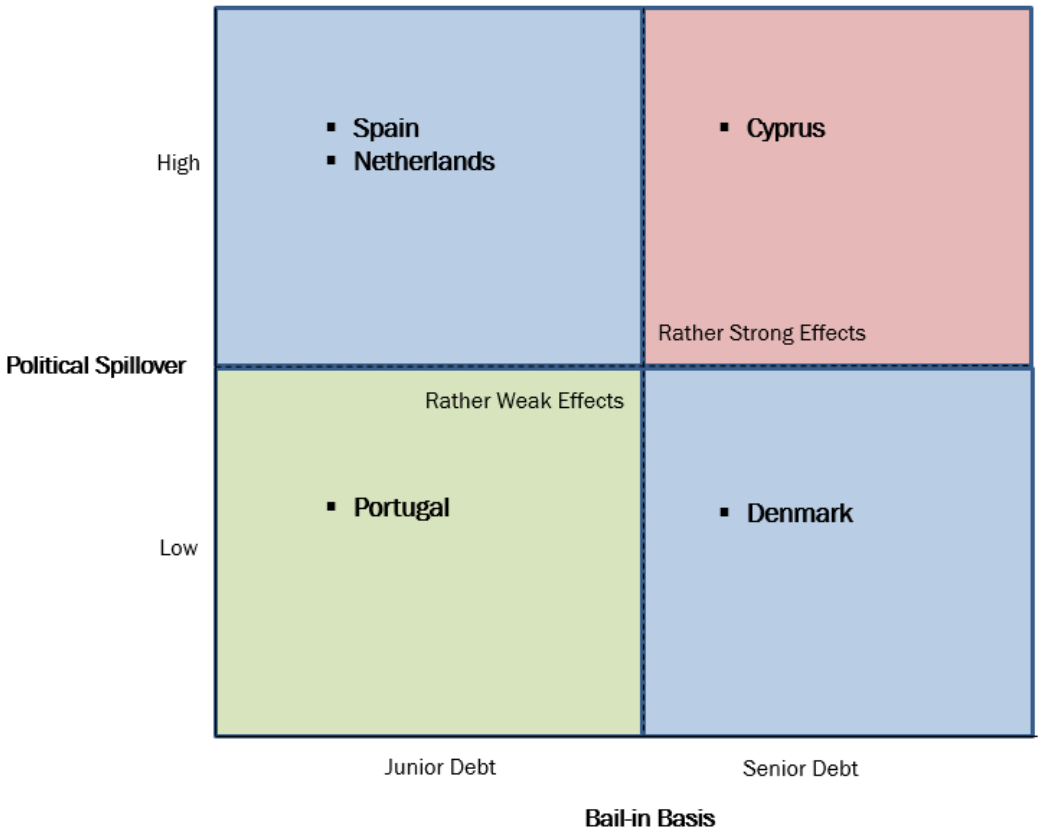
The strength of market price reactions is likely to depend on two aspects: first, on the extent of the observed bail-in (*bail-in basis*), and second, on the relevance that the event has for future bail-in decisions (*political spillover*).

As pointed out above, only two country cases incorporate a bail-in of senior debt, namely Denmark and Cyprus. In all other cases, senior unsecured debt holders as well as depositors were spared. Since a bigger bail-in basis makes it more likely that senior creditors are also going to be bailed in in future crises, we would expect stronger market reactions for country cases with a bigger bail-in basis, especially given that our CDS spreads refer to senior unsecured debt.

Moreover, not all country cases should have affected bail-in expectations to the same extent. If a bail-in was considered as a purely national event, spillovers would be more limited than if an event could be seen as a model case for the future implementation of bank bail-ins in the European Union. A high political spillover effect is likely if the event happened amidst the creation of the SRM. Such instances could serve as showcases how the future bail-in regime would function. Furthermore, the involvement of European (rather than national) leaders in the decision process would make it more likely that future cases would be handled in a similar way. Three country cases happened during the implementation process of the SRM, namely those in Spain, the Netherlands and Cyprus. These cases are likely to have induced political spillovers. Denmark's bail-in happened much earlier and under a pure national scheme. Therefore, political spillovers are expected to be small. Finally, the Portuguese case took place after the agreement on the SRM. Hence, expectations had already adjusted due to previous bail-in events and the news content would be minor. Hence, it should lead to less pronounced market reactions.

[22] Schäfer et al. (2015) also consider regulatory events that directly affect banks' profitability, which is then reflected in a drop in stock returns.

Figure 2: Expected strength of market reactions



As shown by Figure 2, only the Cyprian case combines a large bail-in basis *and* a strong political spillover; hence, it is expected to lead to the strongest market reactions, i. e., to the strongest rise in CDS spreads and the most severe drop in stock returns. The Spanish, the Dutch and the Danish cases only fulfil one of the postulated conditions for a strong expected change in market prices. Their market reactions are therefore likely to be less pronounced than those in Cyprus. The Portuguese case happened after the completion SRM process and its bail-in basis is comparatively small. Hence, in this case we expect the smallest effects in market prices.

The SRM provides for a large bail-in basis and affects banks in all countries, even beyond the eurozone countries. However, the identification of events is less clear-cut than for the country-specific cases because the process of negotiation stretches over an extended period and the informational content of the identified events may be limited as a lot of information has already been incorporated in prices. In fact, the "actions" (actual bail-in events) may be expected to have a much stronger impact on prices than the "words", i. e., the rules underlying the new resolution regime.

We furthermore expect different market reactions for different types of banks. Systemically important institutions are expected to experience a larger reduction in bail-out expectations when it comes to a bail-in decision because they are the ones who had benefited most from implicit public bail-out guarantees under the old regime.[23]

Finally, the strength of market reactions may also depend on a bank's host country. In particular, we expect stronger reactions in market prices for banks from Greece, Ireland, Italy, Portugal, and Spain (GIIPS), the countries most strongly affected by the European sovereign debt crises. As those countries were facing already high public debt levels, their ability to finance national bank bail-outs on their own was limited, which made a bail-in more likely. For those countries, a bail-in in another country could also provide information on the probability of banks experiencing another crisis (and, hence, a bail-in). However, in most cases, the information on the poor state of banks was published well before the actual bail-in event. Therefore, this interpretation is less plausible than the previous one.

3. Methodology

In the following, we outline the methodology employed to investigate the effects of bail-in events on market prices. The first subsection describes the identification of the events. Then we provide information on the data sample before we introduce the empirical models.

3.1 Identifying events

An event study analysis relies on the idea that news should be incorporated directly in market prices and that – unless the event date contains other relevant news – the observed reaction can indeed be attributed to the event in a causal way. Hence, we have to identify the exact point in time when bail-in relevant news reaches the markets. This is of particular importance as we are analysing daily market price data. Negotiations regarding the treatment of distressed banks as well as the political process to form the European SRM typically extend over a longer time period. For this reason it would not be sufficient to rely only on press releases about the final outcomes, as important interim results from longer lasting negotiations may have been spread out to the markets before. Following O'Hara and Shaw (1990), we classify an incident as a relevant event if it was published on the front page of an internationally reputable newspaper. The objective of a financial newspaper's editor is to report about the news driving the markets. This is exactly the kind of event we are looking for. For this study we rely on the Financial Times – European

[23] See Ueda and Weder di Mauro (2010) and Ueda and Weder di Mauro (2013) for an analysis of bail-out expectations for systemically important banks.

Edition (FT) for our event search, which is a reputable newspaper that covers all parts of Europe with a profound reporting on financial markets. We scanned all FT front pages from September 2010 until October 2014, containing a total amount of approximately one thousand and two hundred front pages. If we detect a bail-in relevant article with respect to the above cases on a front page, we check as well the subsequent articles on the following pages to determine the exact timing of the event.[24] This is of particular importance as we need to know whether the respective event, e. g., the consensus of the Eurogroup meeting, was reached before or after markets closed. Table 1 summarizes the identified events according to their dates of occurrence, as well as the respective headlines of the FT article. Typically the relevant event happened one day prior to its publication. However, there are also cases in which the relevant news was produced on a Sunday (e. g., related to Cyprus) or late at night after markets closed (e. g., related to the SRM) such that the event day coincides with its publication date. Hence, the event date is determined by the day on which markets opened the first time after its release. As can be seen from Table 1, the timeframe of the different cases varies quite substantially. While the Cyprian, the Spanish and the SRM cases include several event dates, Netherlands', Denmark's and Portugal's cases are restricted to just one event date.

3.2 The data

The analysis is based on daily stock returns and CDS spreads for all available banks in Datastream (Thomson Reuters) from the European Union, adding banks from Norway, Switzerland and Liechtenstein due to their closeness to the EU. We downloaded all available banks and removed banks that were inactive and not continuously traded within the sample period. After these adjustments we obtained a sample of 64 banks for CDS spreads and 85 listed banks for stock returns. For the analysis of CDS spreads we use the day-to-day mid-prices (first differences) of 5-year senior tranches on an end-of-day basis. With regard to the equity analysis we use the daily returns of stocks based on their closing auctions and listed at their domestic stock exchanges. Tables 2a and 2b show the summary statistics for the data sample. All bank data is from Datastream (Thomson Reuters). The number of observations for each bank is determined by the estimation window of 80 trading days plus the event window of 3 trading days for each event (excluding overlapping observations). Since we estimate all events for all banks simultaneously rather than for each country-specific subsample separately, the number of observations remains constant for all banks across countries. When testing for heterogeneity effects, we split our sample in systemically important banks (G-SIBs) and banks that are not

[24] We complemented the newspaper search by a comprehensive internet research.

considered as systemically important (non-G-SIBs). The selection is based on the list of twenty-eight globally systemically important financial institutions, published by the Financial Stability Board on 1 November 2012. Matching our sample with this list provides us with sixteen European G-SIBs. Furthermore we construct a subsample of banks that are based in those countries that have been predominantly affected by the European sovereign debt crisis. Hence, we define banks from Greece, Ireland, Italy, Portugal, and Spain as GIIPS banks whereas the remaining ones are labelled as non-GIIPS banks. For CDS spreads, we end up with a subsample of 22 banks from GIIPS countries while the stock price sample comprises a subsample of 27 banks from GIIPS countries. Tables 2a and 2b incorporate our classifications of banks according to the two criteria for each sample bank. We furthermore conduct a number of cross-sectional regressions in order to assess the drivers for the rise in CDS spreads in response to the bail-in in Cyprus. For this purpose we use the country-specific debt-to-GDP ratios (public debt divided by the gross domestic product) as of 2012, taken from the World Economic Outlook Database by the IMF. Moreover, we construct the following bank-specific control variables: the average equity ratio is defined as average common equity in 2012 divided by average assets in 2012. The net income ratio is calculated as banks net income in 2012 scaled by average assets in 2012 and ln(Assets) stands for the natural logarithm of average assets in 2012. All bank-specific controls variables are retrieved from Bankscope (Bureau van Dijk). Table 2c displays the summary statistics for the above variables while correlations are given in Table 2d.

3.3 Empirical model

Our goal is to analyse abnormal differences in CDS spreads and stock returns on the identified event dates. The empirical approach is similar to the paper by Schäfer et al. (2015). Our empirical model of differences in CDS spreads is based on the constant return model. We estimate a system of equations in which the first differences in CDS spreads are regressed on a bank-specific constant and a set of dummy variables. Instead of the originally proposed two-step procedure for event studies as described by Campbell, Lo, and MacKinlay (1996), we include dummy variables in the equations, equal to one at an event date and zero otherwise. Hence, event- and bank-specific abnormal first differences in CDS spreads are captured by the coefficients of the respective dummies.[25] In order to estimate the equations simultaneously, we are applying the seemingly unrelated regression technique by Zellner (1962).

The system of equations then looks as follows:

[25] See Binder (1985) and Karafiath (1988) for details.

$$\Delta CDS_{1t} = \mu_1 + \sum_{n=T-1}^{T+1} \tau_{1n} D_{1nt} + \varepsilon_{1t}$$

…

$$\Delta CDS_{jt} = \mu_j + \sum_{n=T-1}^{T+1} \tau_{jn} D_{jnt} + \varepsilon_{jt}$$

…

$$\Delta CDS_{Jt} = \mu_J + \sum_{n=T-1}^{T+1} \tau_{Jn} D_{Jnt} + \varepsilon_{Jt}$$

ΔCDS_{jt} denotes the first difference of CDS spreads, μ_j stands for the mean of first differences of bank *j* within the estimation window, whereas D_{jnt} indicates the vector of dummy variables for all events. For each of our identified events in Table 1 we define three dummy variables: one for the event date itself, *T*, one for the following date, *T+1*, and one for the day prior to the event, *T-1*. All of our regressions are calculated on the basis of an estimation window of 80 trading days. If an event occurs in an estimation window, it is "dummied out" by incorporating the respective dummy variables into the regression. The estimation window length is enlarged accordingly, such that we conduct every regression with exactly 80 trading days.

We model normal returns of banks' stock prices using the market model.[26] In order to proxy the market return with a broad based benchmark, we use a widely diversified and globally structured index, namely the Stoxx Global 1800, denominated in euro.[27] In doing so, we avoid the distortion of effects due to the interdependency of financial and non-financial firms within our sample.[28] The difference compared to the model above consists of the inclusion of the market return R_M:

$$R_{1t} = \alpha_1 + \beta_1 R_{Mt} + \sum_{n=T-1}^{T+1} \tau_{1n} D_{1nt} + \varepsilon_{1t}$$

…

$$R_{jt} = \alpha_j + \beta_j R_{Mt} + \sum_{n=T-1}^{T+1} \tau_{jn} D_{jnt} + \varepsilon_{jt}$$

[26] See Campbell et al. (1996).

[27] We reran the regressions for stock returns on the basis the Stoxx Europe 50 index, which, in contrast to the former, is a purely European index. The results obtained by using the Stoxx Europe 50 Benchmark index are qualitatively very similar to the results below. Using a broader country index leads, however, to cleaner identification.

[28] See for example Ongena, Smith, and Michalsen (2003).

…

$$R_{Jt} = \alpha_J + \beta_J R_{Mt} + \sum_{n=T-1}^{T+1} \tau_{Jn} D_{Jnt} + \varepsilon_{Jt}$$

Coefficients α_j and β_j denote the bank-specific intercept and the beta factor attached to the market return, respectively. Apart from those differences, the regressions are conducted in the same way as before.

On the basis of our regressions we run a number of tests. We start by evaluating the impact on the full sample of European banks. This coefficient is obtained by calculating the average abnormal difference in CDS spreads (stock returns) of all banks in our sample. Furthermore we display the coefficients for G-SIBs, for non-G-SIBs, as well as for the difference in abnormal return between those two subgroups. Finally we repeat this procedure for banks from the GIIPS countries and the remaining banks. The enlarged event window [0+1] shows the cumulated coefficients of the event date and the following date. We also check for anticipatory effects on the day prior to the announcement and display them only when they are statistically significant. We display for each coefficient the respective p-value. Tables 3 to 16 contain our regression results for CDS spreads and stock returns.

4. Results

We start with the discussion of results for country-specific events. As we will see, early bail-in events hardly produced any market reactions at banks in other countries. The regime shift appears to have occurred at the time of the Cyprian bail-in, for which we find sharp reactions in CDS spreads and stock prices. The Portuguese case again did not induce any notable market reactions. Finally, we will discuss the effects of the negotiation of the BRRD and the SRM, which forms the legal basis for bank bail-ins in Europe. Market reactions are found to be relatively small. This seems to suggest that the actual occurrence of a bail-in as in Cyprus impressed markets much more than the implementation of the legal framework. Actions appear to speak louder than words.

4.1 Denmark – A largely national event

In Denmark, the bail-in procedure of the Danish retail bank Amagerbanken is characterized by a comparatively large bail-in basis but a small political spillover effect on the European banking

sector. The newspaper search provides us with one event date only, the day of the announcement that the bank was to be wound up.

As shown by Tables 3 and 4, this event hardly caused any market reactions in CDS spreads or stock prices, respectively. The only statistically significant result is a relative increase in CDS spreads of about six basis points for systemic banks compared to the remaining banks, shown by difference of G-SIBs versus non-G-SIBs. No other coefficient is statistically significant. These results can be attributed to the fact that the early Danish resolution was conducted under a purely national scheme and was therefore not considered as a signal for the future way of conducting bank bail-ins in Europe, especially given that Denmark was not even part of the eurozone. Also, Amagerbanken was a small bank, with total assets of only 4.5 billion euros[29] and a market share of only one percent even in Denmark.[30] This explains why financial markets did not seriously consider Amagerbanken as a model for bail-ins at larger institutes in other European countries.

4.2 Spain – A European event with a small bail-in basis

The Spanish case happened during the creation of the SRM and is therefore expected to exhibit rather high political spillover effects especially because Spain is one of the big eurozone countries. However, the Spanish bail-in procedure affected junior debt only, while senior unsecured debt holders and depositors were spared from the banks' losses. Hence, the event sent blurred signals because it combined a bail-out of senior creditors with a bail-in of junior debt holders.

Our procedure identifies three dates on which bail-in relevant news were published on page one of the FT. The first event on 10 July 2012 is given by a proposal for a Spanish bank rescue plan, implying junior creditor participation according to a memorandum of understanding (MoU) by the eurozone. On the second event date, 19 July 2012, the German government backed the European bank rescue plan and implicitly the involvement of junior bank creditors. On the last event on 23 August 2012 of Spanish authorities express their intention to implement a national bank resolution law. This effort could be considered as the response to the terms of the MoU declared before.

Tables 5 and 6 display the results for abnormal changes in CDS spreads and stock returns, respectively. As before, we find only one significant reaction, namely for CDS spreads in response to the third event, again regarding the difference of G-SIBs vs. non-G-SIBs. The

[29] See Dübel (2013b).
[30] See Denmark's Nationalbank (2013).

increase amounts to roughly 15 basis points and is highly significant. Stock markets, as before, do not exhibit any significant reaction. Similar to the previous case, overall bail-out expectations do not seem to have adjusted downwards in reaction to the bail-in at Spanish banks because the bail-in basis was so small.

4.3 Netherlands – Foreshadowing the Cyprian bail-in

The bail-in of the Dutch bank SNS Reaal also comprised only junior debt. However, it took place in the run-up to the Cyprian bail-in, which meant that investors were watching the Dutch case closely in order to learn about the future stance of policy makers towards bail-in. In addition, the SRM was already in the making at that time. This suggests a high political spillover effect on the European banking sector. Our front page filtering methodology provides us with a single event: The announcement to nationalize the SNS Reaal on 1 February 2013 including a loss participation of junior creditors.

The Dutch bail-in is the first event where we observe large and highly significant effects on other European banks, as can be seen in Tables 7 and 8. The bail-in led to a sharp and highly significant abnormal increase in CDS spreads for the full sample (Table 7). The effect amounts to almost 12 basis points in the enlarged event window. Interestingly, we find the largest rise for banks from the GIIPS countries, which have been predominantly affected by the European sovereign debt crisis. The rise for banks in GIIPS countries amounts to roughly 26 basis points and is significantly different from the rise in other countries, which amounts to only 5 basis points and is statistically insignificant. The results for stock returns (Table 8) point in the same direction. Abnormal returns in the full sample (in the enlarged event window) are – 2.5 percent and statistically significant. Similar to the results for CDS spreads, banks in the GIIPS subsample experience the strongest reaction, amounting to – 4.4 percent (compared to just – 1.6 percent for non-GIIPS countries although the difference is insignificant here). No statistically significant differences are observed between G-SIBs and non-G-SIBs, neither for CDS spreads nor for stock returns.

Taken together, the results suggest a notable reduction in bail-out expectations in response to the Dutch bail-in, especially for banks from GIIPS countries. Hence, investors appear to have expected a higher probability of a future bail-in particularly in those countries, a result that will reappear in the Cyprian crisis. Figures 3a and 3b illustrate the gradual widening between CDS spreads and stock prices, respectively, of banks from GIIPS and non-GIIPS countries in

response to the Dutch bail-in case.[31] Figures 4a to 4d illustrate the events in a longer time window, also displaying the key events in Cyprus.

4.4 Cyprus – Triggering a regime shift

The Cyprian country case is of particular importance for the analysis because it combines two important features that we assume to be essential. First, the bail-in basis is wide due to the involvement of senior debt and even large customer deposits. Second, the decision to expand the bail-in basis to senior debt and retail depositors was backed by the Eurogroup after protracted negotiations. This was a watershed in the way of dealing with distressed banks.

We identify three events for the Cyprian case: First, the outcome of the eurozone finance minister meeting on 11 February 2013. At this early stage, the bail-in of senior debt was considered as one of three possible alternatives of the meeting. The second event on 18 March 2013 is characterized by the Cyprian proposal to introduce a levy on all depositors, even if their claims were below the insured amount of one hundred thousand euros.[32] While this is not an explicit bail-in procedure its economic effect on private investors would be very similar, as it transfers the rescue costs from taxpayers to investors. The last event on 25 March 2013 marks the actual bail-in in Cyprus.

The results referring to the Cyprian bail-in are displayed in Tables 9 and 10. The results are striking for both CDS spreads and stock returns. First looking at the full sample, we see a sharp increase in CDS spreads for the second and third event, amounting to 12 and 15 basis points, respectively, when considering the enlarged event windows (Table 9). Systemic banks show sharper increases for both events, with the difference being statistically significant for the third event. The most striking result is the boost in CDS spreads of banks from the GIIPS states. The effect amounts to 22 and 31 basis points for events number two and three, respectively. Moreover, the difference to banks from the non-crisis countries is at 15 and 24 basis points and is highly statistically significant. The results for stock returns, displayed in Table 10, mirror our results on CDS spreads. The full sample coefficients show sharp significant reactions. Again, G-SIBs are affected more strongly than non-G-SIBs in case of the third event. Finally, the rise in CDS spreads for banks from European crisis countries is also reflected in sharp drops in stock returns. Stock returns from banks of the GIIPS countries are – 6.7% and – 5.1%, respectively,

[31] Note that charts are prepared on the basis of actual market data and not on the basis of our regression results. For this reason the change in market prices within the graphical illustration might differ from the results given in the tables.

[32] The proposal at this time provided for a 6.75% levy on all deposits under 100.000 euros and a 9.9% levy above this threshold.

and again the difference with respect to their non-GIIPS counterparts is significant. Figures 5a to 5d illustrate the market reactions in response to the proposition of the deposit tax whereas the effects of the actual bail-in in Cyprus are depicted in Figures 6a to 6d. As can be seen from those graphs, the heterogeneity of effects is particularly large for CDS spreads.

The strong evidence for a CDS spread increase in response to the bail-in events in Cyprus can be explained by the fact that a comparatively large bail-in basis was combined with a high political spillover effect. However, the particularly strong reaction for banks from the GIIPS-countries is worth to be investigated in greater detail. In the following, we focus on the key event in Cyprus, namely the decision to bail in senior debt on 25 March 2013.

The role of fiscal capacity

One plausible explanation for the particularly strong reaction of banks in GIIPS countries is these countries' much stronger indebtedness as measured by the ratio of government debt over GDP. This is supported by Figure 7, which shows a scatter plot of the average country-specific abnormal rises in CDS spreads on 25 March 2013 against each country's debt-to-GDP ratio. The figure suggests a positive relationship between the size of public debt (relative to GDP) and the CDS spread increase. Interestingly, banks located in the severely indebted country Greece do not seem to have been impressed much by the decision to bail in senior debt in Cyprus. This could be due to the fact that Greece banks were already in intensive care at the time, such that reactions were subdued due to the already strong interventions in the Greek banking sector. In contrast, Switzerland and the United Kingdom show a notable increase in CDS spreads even though their public debt levels stand at comparatively low levels. Especially for Switzerland, this could be due to too-big-to-be-saved considerations.

The strong relationship between the abnormal change in CDS spreads and the debt-to-GDP ratio can be explained by the importance of fiscal capacity for bail-out expectations. Only a country with sufficient fiscal space would be able to bail out banks. In contrast, an already highly indebted country would very likely be forced into a bail-in in case of disturbances in the banking sector.

In order to further investigate this issue we run cross-sectional regressions, explaining the bank-specific abnormal change in CDS spreads on 25 March 2013 by a number of country- and bank-specific variables (Tables 11 and 12). Besides the debt-to-GDP ratio (as of 2012), we include banks' risk characteristics, which could be correlated with a sovereign's indebtedness and affect abnormal changes in CDS spreads. As a broad measure of bank risk, we include the bank's CDS spreads as of 31 December 2012. In additional specifications, we include the interaction term of

those two variables to capture the idea that CDS spreads of weaker banks may react more strongly if these banks are located in fiscally weak countries. The debt-to-GDP ratio and CDS levels are demeaned in order to facilitate the interpretation when using interaction terms. We furthermore control for other bank-specific variables: the natural logarithm of average assets as a measure of bank size, a dummy variable indicating whether a bank is a G-SIB, the average equity ratio as a measure of a bank's leverage, and net income relative to total assets to measure profitability. Finally, we include a dummy variable for supersized banking sectors if the ratio of bank assets over GDP is larger than 400 percent in order to capture the effect that some banking sectors may be too large to be rescued, which would also affect the probability of a bail-in.[33]

Tables 11 and 12 show the results from the cross-sectional OLS regressions for the full sample and for a sample excluding banks from countries, which were already under an ESM (European Stability Mechanism) program, namely Greece, Spain, Ireland, and Portugal.

In both tables we observe that the debt-to-GDP ratio is significant in all model specifications. The coefficient is also economically significant: Increasing the debt-to-GDP ratio by one standard deviation (i. e., by 28 percentage points) raises the abnormal change in CDS spreads by 3 basis points in the baseline specification in column 1 (compared to a mean effect of 7 basis points and a standard deviation of 10, see Table 2c). The effect increases to 4 basis points when program countries are omitted. The level of banks' CDS spreads is not significant in all but one specification. The results on the interaction effect are mixed. The full sample yields the somewhat puzzling result that the interaction term is negative and sometimes statistically significant (see Table 11), although quite small. In contrast, the coefficient becomes positive and significant, once we drop the program countries. Bank size has a strong positive and significant effect, no matter whether it is measured by total average assets or the G-SIB dummy. Hence, results are consistent with the previous findings from the event-study analysis. Omitting program countries (see Table 12) improves the explanatory power of the model without changing the overall structure of results. The increase in the adjusted R squared is mostly driven by the fact that Greek banks show a comparatively low increase in CDS spreads combined with a huge public debt level. Furthermore the dummy for supersized banking sectors gains significance in this alternative specification. The result is mainly driven by the substantial CDS increase of banks from Switzerland and the United Kingdom. Both countries host huge domestic banking sectors whose

[33] As at 2012, the United Kingdom, Switzerland, and Ireland were the only countries within this sample where the dummy turns 1. See data for bank assets scaled by GDP at the HelgiLibrari: http://www.helgilibrary.com/indicators/index/bank-assets-as-of-gdp.

banks exhibit a substantial rise in CDS spreads while Ireland, where CDS reactions are rather mild, is excluded as a program country (see Figure 7).

The most important result from these regressions is that the abnormal change in CDS spreads in response to the bail-in event in Cyprus appears to be driven to a large extent by the host country's fiscal capacity, which limits a country's ability to bail out the domestic banking sector and therefore makes a bail-in more credible.

Overall it seems that that the Cyprian crisis constituted a watershed regarding the bail-out of bank creditors. The bail-in of senior creditors and even large depositors showed investors quite plainly that bail-outs would be much less likely in the future. However, not all banks were affected equally. The effects were strongest in countries with low fiscal capacities. In contrast, countries with high fiscal capacity may still be inclined to bail out their banks.

4.5 Portugal – Late event with little impact

The last country event is the bail-in of the Portuguese bank Banco Espírito Santo. Political spillovers are likely to be small because the event occurred at a time when the SRM had already been agreed upon. Moreover, the bail-in basis was only junior debt, hence senior creditors were spared another time. We identified one bail-in relevant event only, which is given by the announcement to split up the bank into a good and a bad bank.

Table 13 reports the results for CDS spreads. Interestingly, the event itself does not lead to any significant reactions whereas the Friday prior to the weekend of negotiations exhibits a significant coefficient for the full sample. As can be seen from the last column, this is largely driven by the GIIPS banks. Given that CDS spreads are bouncing back on the actual day (albeit not significantly), it seems that markets had anticipated a less favourable outcome than the one finally realized. Conceivably, markets might have expected parts of senior debt to be bailed in addition to junior debt. Equity markets do not seem to have been impressed much by the Portuguese case (Table 14). Only the difference of GIIPS versus their counterparts turns out to be marginally significant within the enlarged event window.

4.6 The Single Resolution Mechanism (SRM)

Finally, we consider the implementation of the new European framework for bank resolution, namely the Single Resolution Mechanism (SRM). We identified five bail-in relevant events according to our article search. The first event occurred when the EU finance ministers agreed

upon the rules for the Bank Recovery and Resolution Directive (BRRD) on 28 June 2013. The second event is the proposal of the SRM by the European Commission on 9 July 2013. According to this proposal the power to wind down failing banks was to be centralized in Brussels.[34] Event number three on 18 December 2013 combines two relevant messages for financial markets. While the Council of the European Union agreed upon the general approach towards the SRM, including the applicable rules of the BRRD[35], the European Central Bank (ECB) cast some fundamental doubts. The key concern according to the ECB was the unresolved question about the financing of the resolution fund, required to conduct a centralized wind-down procedure in a credible way. The fourth event describes the provisional agreement between the Council and the European Parliament on the construction of the SRM, reached on 20 March 2014.[36] An important result of this compromise included the financing of the resolution fund. Hence, this event could be regarded the crucial step in reaching a conclusion to the long-lasting negotiations. Finally, the fifth event on 15 April 2014 refers to the formal agreement of the European Parliament to back the Commission's proposals on completing the SRM.

Given the lengthy negotiation process typical for this type of legal reform an evaluation using event study methods is complicated by the permanent revisions of expectations in the context of the gradual negotiation process. Nevertheless, our analysis is able to detect some noteworthy reactions to the SRM implementation process.

This concerns especially the fourth event, which can be considered the key step towards the introduction of the Single Resolution Mechanism because a provisional agreement was reached. We find a significant abnormal increase in CDS spreads by 3 basis points in the full sample (see Table 15). The reaction of G-SIBs is significantly stronger (by 3 basis points), as would be expected. Interestingly, we do not find any significant differences between banks from GIIPS and non-GIIPS countries. This may reflect the introduction of common rules for all eurozone countries. The other events show hardly any reactions, apart from a significant difference of systemic vs. non-systemic banks at the time of the first event. Interestingly, the second and third event display negative though mostly not significant coefficients, which may reflect disappointed expectations.

[34] Note that the proposal was going to be presented on the following day. But the key points had been published by the Financial Times – European Edition one day before.
[35] For further details, see Council of the European Union (2013).
[36] European Parlament (2014).

Stock prices, given in Table 16, largely mirror CDS reactions for the fourth event (though only in the enlarged event window), with stock returns dropping by 1.6 percentage points in the full sample. There is no significant difference between G-SIBs and non-G-SIBs here. In addition, the fifth event generates widespread negative effects on stock returns, with a slightly stronger negative effect on G-SIBs and banks from GIIPS countries (although the difference is not significant). This seems to be driven less by changes in bail-out expectations, given the lack of significance in the CDS regressions, but rather by a perceived decrease in bank profitability, e. g., through the required contributions to the Single Resolution fund. A significant difference between banks from GIIPS and non-GIIPS countries is found only for the second event; there the difference is, however, substantial.

Overall it appears that the effects are quantitatively much less important than those from the Cyprus event, in spite of the significance of the SRM for the occurrence of future bail-outs. This strengthens the view that bail-out expectations are determined more by the actual occurrence of bail-ins than by the implementation of rules. It may also reflect the general scepticism of markets towards the commitment to these rules in crisis times.

5. Conclusion

In this paper we have investigated whether the European policy makers' intentions to move from bail-out to bail-in has led to market reactions indicating reduced bail-out expectations. We have analysed the reactions of CDS spreads and stock returns in response to five bail-in cases occurring between 2011 and 2014 as well as to the implementation of the European Single Resolution Mechanism. We employ an event study analysis on a broad sample of European CDS spreads and stock returns.

Our results suggest that the occurrence of a bail-in indeed led to a reduction in bail-out expectations. By far the strongest rise in CDS spreads was found in the Cyprian case, which had the largest bail-in basis and a strong political spillover. Equity markets mostly mirrored the results for CDS spreads, especially in the cases of the Netherlands or Cyprus. This suggests that the expectation of bail-in affects future bank returns indirectly through the effect on funding costs. These strong results do not imply that the process of restructuring Cyprus' banks should be taken as a blueprint for bank restructuring. After all, the process of negotiation was chaotic and unnecessarily disruptive. However, bailing in senior creditors and even depositors sent a strong and credible signal to investors that the euro area was entering a new regime, moving from bail-out to bail-in.

Effects are not homogeneous across banks. In many cases systemic banks showed larger reactions. This is exactly what would be expected since bail-out expectations for these banks were larger to begin with. Even more importantly, there appears to be a strong heterogeneity between banks from GIIPS and non-GIIPS countries. Especially for the bail-in cases in the Netherlands and Cyprus the impact on CDS spreads was much stronger for banks located in GIIPS than in non-GIIPS countries. This indicates that a bail-in was perceived to be more likely in countries with lower fiscal capacity. Given the increasing unwillingness of the eurozone to finance bank restructuring in vulnerable countries, such countries would simply not be able to conduct bank bail-outs. From a policy perspective, this is a somewhat troubling result because it might indicate that bank bail-out is still likely in fiscally strong countries such as Germany, which could easily finance a bank bail-out without financial support from the eurozone. This would also entail competitive distortions in the European banking sector.

Market reactions in response to the implementation of the European SRM were less pronounced than for the most prominent country-level events. This suggests that markets were impressed much more by the actual occurrence of bail-ins, such as in Cyprus, ("actions") than by the implementation of rules ("words"). However, this would not do full justice to the SRM regulation. First, the SRM had not been fully implemented yet. Second, some of the change in expectations that we measure in the individual events has to be assigned to the expectations on the future regime, as implemented by the SRM.

In this interpretation, the new restructuring regime indeed reduced bail-out expectations in a significant way. However, there is still a long way to go. The observed heterogeneity across country groups suggests that the credibility of bail-in depends on countries' ability to conduct bail-outs. Hence, bail-in rules need to be further strengthened to increase their credibility and foster national governments' commitment to bail-in. It will also be crucial how future banking crises will be handled. The fact that senior creditors of Greek banks were spared from losses in 2015 and the political uproar upon the recent bail-ins of investors in Italy and Portugal raises concerns that policy makers will continue to try to circumvent bail-in rules. Whether Europe will truly get to bail-in instead of bail-out will depend crucially on the handling of the next resolution cases. Our results suggest that actions speak louder than rules and good intentions.

References

Acharya, V., D. Anginer, and **A. J. Warburton** (2014): "The End of Market Discipline? Investor Expectations of Implicit State Guarantees," Working Paper, June 2014.

Allen, F., **E. Carletti, I. Goldstein** and **A. Leonello** (2015): "Moral Hazard and Government Guarantees in the Banking Industry," *Journal of Financial Regulation,* 1, 30-50.

Ashurst (2012): "Law reform for bank restructurings in Spain," Ashurst Madrid, November 2012.

Avgouleas, E., C. Goodhart, and **D. Schoenmaker** (2013): "Bank Resolution Plans as a catalyst for global financial reform," *Journal of Financial Stability*, 9, 210-218.

Barth, A. and **I. Schnabel** (2013) "Why Banks Are Not Too Big To Fail - Evidence from the CDS Market," *Economic Policy*, 28(74), 335-369.

Barth, A., and **I. Schnabel** (2014): "Implicit guarantees and market discipline: Has anything changed over the financial crisis?", Working Paper, November 2014.

Binder, J. J. (1985): "Measuring the effects of regulation with stock price data," *Rand Journal of Economics*, 16(2), 167–183.

Beck, T. (2011) "Bank Failure Resolution: A Conceptual Framework," in: Panagiotis Delimatsis and Nils Herger (eds.), Financial Regulation at the Crossroads: Implications for Supervision, Institutional Design and Trade.

Black, L. K. and **L.N. Hazelwood** (2013) "The effect of TARP on Bank Risk-Taking," *Journal of Financial Stability*, 9 (4), 790-803.

Bongini, P., L. Nieri, and **M. Pelagatti** (2015): "The Importance of being Systemically Important Financial Institutions," *Journal of Banking and Finance*, 50, 562–574.

Boyd, J. H., and **M. Gertler** (1994): "The role of large banks in the recent U.S. banking crisis," *Federal Reserve Bank of Minneapolis Quarterly Review*, 18(1), 2–21.

Council of the European Union (2013): "Council agrees general approach on Single Resolution Mechanism," Press Release by the Council of the European Union on 18 December 2013, Brussels,

http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/140190.pdf, retrieved on 19 October 2014.

Campbell, J. Y., A. W. Lo, and **A. C. MacKinlay** (1996): "The Econometrics of Financial Markets," Princeton University Press, Princeton.

Cordella, T., and **E. L. Yeyati** (2003): "Bank Bailouts: Moral Hazard vs. Value Effect," *Journal of Financial Intermediation*, 12, 300-330.

Dam, L., and **M. Koetter** (2012) "Bank bailouts and moral hazard: Evidence from Germany," *Review of Financial Studies*, 25 (8), 2343-2380.

Denmarks Nationalbank (2013): "Key Legal Aspects of Bank Resolution - Danish experiences," Presentation by N. C. Andersen, General Council, 1 November 2013.

Demirgüç-Kunt, A., and **H. Huizinga** (2010): "Are banks too big to fail or too big to save? International evidence from equity prices and CDS spreads," CEPR Discussion Paper No. 7903.

Dewatripont, M. (2014): "European banking: Bailout, bail-in and state aid control," *International Journal of Industrial Organization,* 34 (2014), 37–43.

Dübel, H.-J. (2013a): "Creditor Participation in Banking Crisis in the Eurozone – A Corner Turned?", Study commissioned by Bundestagsfraktion Bündnis 90 / Die Grünen in Bundestag and The Greens / European Free Alliance in European Parliament. June.

Dübel, H.-J. (2013b): "The Capital Structure of Banks and Practice of Bank Restructuring - Eight Case Studies on Current Bank Restructurings in Europe," Final Report, Study commissioned by Center for Financial Studies of Frankfurt, Berlin, 8 October 2013.

European Commission (2014a): "A Single Resolution Mechanism for the Banking Union – frequently asked questions," Memo, Issued by the European Commission on 15 April 2014, Brussels, http://europa.eu/rapid/press-release_MEMO-14-295_en.htm?locale=en retrieved on 23 October 2014.

European Commission (2014b): "EU Bank Recovery and Resolution Directive (BRRD): Frequently Asked Questions," Memo, Issued by the European Commission on 15 April 2014, Brussels, http://europa.eu/rapid/press-release_MEMO-14-297_de.htm retrieved on 23 October 2014.

European Parliament (2014): "Parliament negotiators rescue seriously damaged bank resolution system," Committees Committee on Economic and Monetary Affairs, Press Release by the European Parliament on 20 April 2014, Brussels, http://www.europarl.europa.eu/pdfs/news/expert/infopress/20140319IPR39310/20140319IPR39310_en.pdf, retrieved on 19 October 2014.

Fischer, M., C. Hainz, J. Rocholl, and **S. Steffen** (2011): "Government Guarantees and Bank Risk Taking Incentives," Working paper.

German Council of Economic Experts (2014): "The Long Road to More Financial Stability in Germany and Europe," Annual Report 2014/2015, Chapter 5.

Goodhart, C. and **E. Avgouleas** (2014) "A Critical Evaluation of Bail-ins as Bank Recapitalisation Mechanisms," Centre for Economic Policy Research, Discussion Paper 10065, July 2014.

Gropp, R., H. Hakenes and **I. Schnabel** (2011) "Competition, Risk-shifting, and Public Bail-out Policies," *Review of Financial Studies*, 24 (6), 2084-2120.

Gropp, R., C. Gruendl, and **A. Guettler** (2014): "The Impact of Public Guarantees on Bank Risk Taking: Evidence From a Natural Experiment," *Review of Finance*, 18 (2), 457-488.

Hakenes, H., and **I. Schnabel** (2010) "Banks without parachutes: Competitive effects of government bail-out policies," *Journal of Financial Stability*, 6 (3), 156-168.

Hett, F., and **A. Schmidt** (2015): "Bank Rescues and Bailout Expectations: The Erosion of Market Discipline During the Financial Crisis," Working Paper.

Huertas, T.F. (2013) "The Case for Bail-ins," in Kenadjian, P. S., Ed. The Bank Recovery and Resolution Directive, De Gruyter, e-book.

International Monetary Fund (2014): "Global Financial Stability Report," Chapter 3, Washington, D.C.

Karafiath, I. (1988): "Using Dummy Variables in the Event Methodology," *The Financial Review*, 23 (3), 351–357.

Körner, T., and **I. Schnabel** (2013): "Abolishing Public Guarantees in the Absence of Market Discipline", Working Paper.

Memorandum of Understanding (2012): "Memorandum of Understanding on Financial-Sector Policy Conditionality," 20 July 2012.

Moenninghoff, S. C., S. Ongena, and **A. Wieandt** (2015): "The Perennial Challenge to Counter Too-Big-to-Fail in Banking: Empirical Evidence from the New International Regulation Dealing with Global Systemically Important Banks," *Journal of Banking and Finance*, 61, 221-236.

O'Hara, M., and **W. Shaw** (1990): "Deposit Insurance and Wealth Effects: The Value of Being 'Too Big To Fail'," *Journal of Finance*, 45(5), 1587–1600.

Ongena, S., D. C. **Smith**, and **D. Michalsen** (2003): "Firms and their distressed banks: lessons from the Norwegian banking crisis," *Journal of Financial Economics*, 67, 81–112.

Reuters (2014): "Portugal in 4.9 billion euro rescue of Banco Espirito Santo," web article by Sergio Goncalves, Lisbon, Monday, 4 August, 2014 9:26pm BST, retrieved on 20 October 2014.

Schäfer, A., I. Schnabel and **B. Weder di Mauro** (2015): "Financial Sector Reform After the Subprime Crisis: Has Anything Happened?", CEPR Discussion Paper No. 9502, forthcoming in *Review of Finance*.

Schnabel, I. (2004): "The German Twin Crisis of 1931," *Journal of Economic History*, 64, 822-871.

Schnabel, I. (2009): "The Role of Liquidity and Implicit Guarantees in the German Twin Crisis of 1931," *Journal of International Money and Finance*, 28, 1–25.

Spiegel, M. M., and **N. Yamori** (2003): "The impact of Japan's financial stabilization laws on bank equity values," *Journal of the Japanese and International Economies*, 17(3), 263–282.

Ueda, K., and **B. Weder di Mauro** (2010): "The Value of the Too-Big-to-Fail Subsidy to Financial Institutions," in Financial Sector Taxation: The IMF's Report to the G-20 and Background, pp. 106–116. Stijn Claessens, Michael Keen, Ceyla Pazarbasioglu (eds.), International Monetary Fund, Washington.

Ueda, K., and **B. Weder di Mauro** (2013): "Quantifying Structural Subsidy Values for Systemically Important Financial Institutions," *Journal of Banking and Finance*, 37, 3830-3842.

Völz, M. and **M. Wedow** (2011) "Market Discipline and too-big-to-fail in the CDS market: Does banks' size reduce market discipline," *Journal of Empirical Finance*, (18), 195-210.

Zellner, A. (1962): "An Efficient Method of Estimating Seemingly Unrelated Regressions and Tests for Aggregation Bias," *Journal of the American Statistical Association*, 57, 348–368.

Figure 3a. Bail-in Netherlands | CDS Spreads

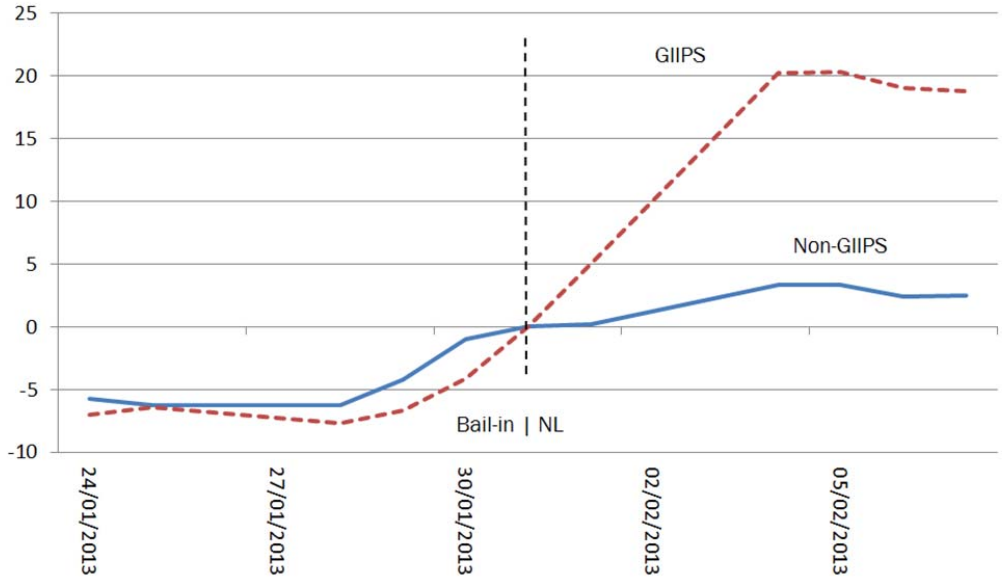
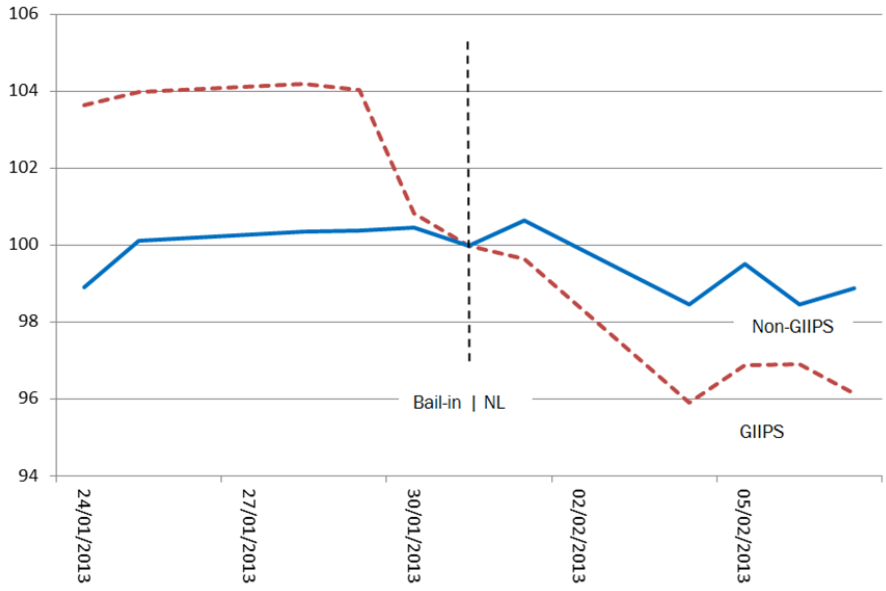


Figure 3b. Bail-in Netherlands | Stock Prices



The figures show the reaction of stock prices and CDS spreads in response to the given event. The graph for stock prices shows equally weighted indices, normalized to 100 at the day prior to the event. The graph for CDS spreads shows the average differences in CDS spreads with respect to the day prior to the event. Both graphs are starting five trading days before and ending five trading days after the event.

Figure 4a. Key Events in Netherlands and Cyprus | CDS Spreads

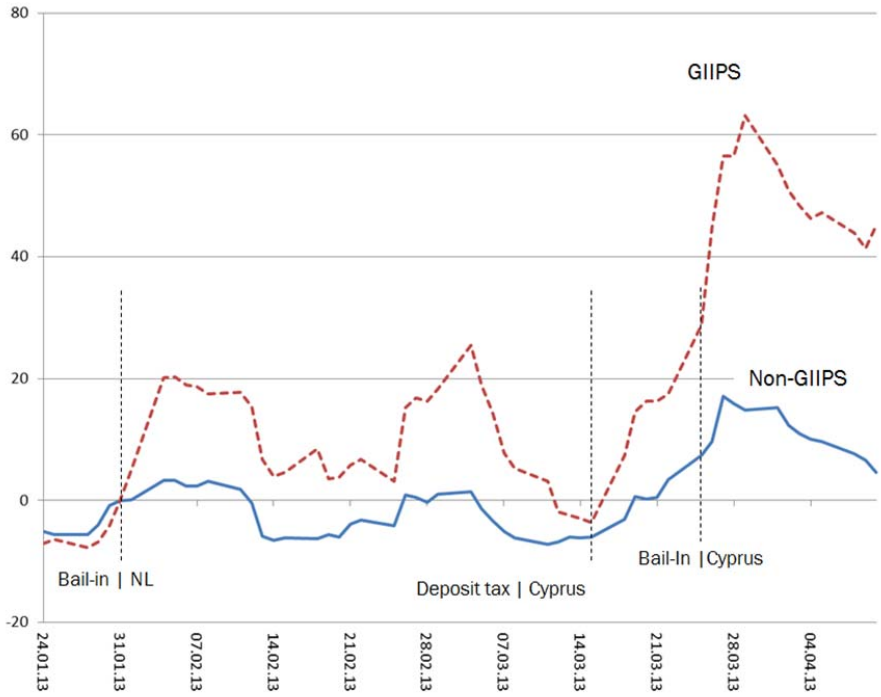


Figure 4b. Key Events in Netherlands and Cyprus | Stock Prices

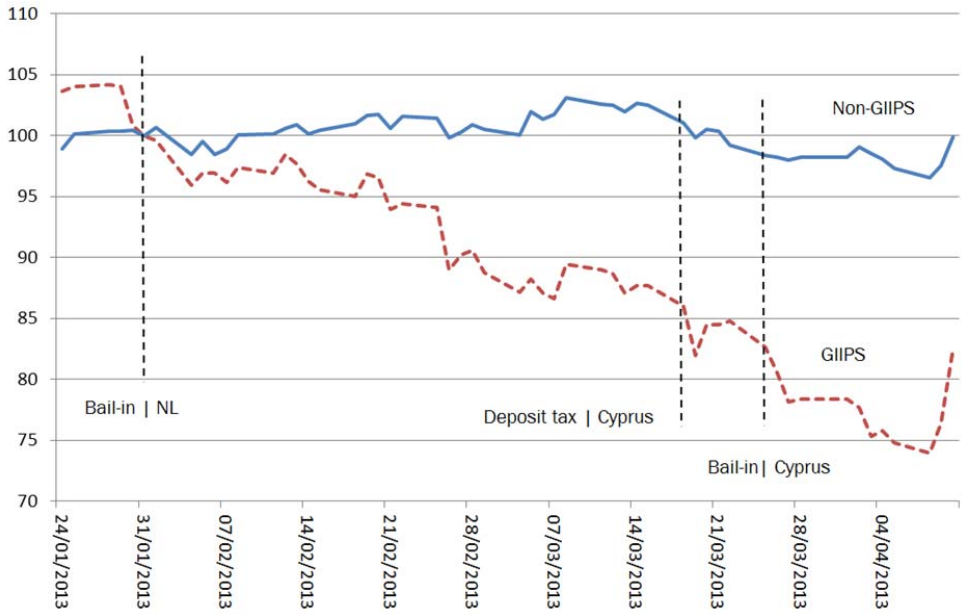


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Figure 4c. Key Events in Netherlands and Cyprus | CDS Spreads

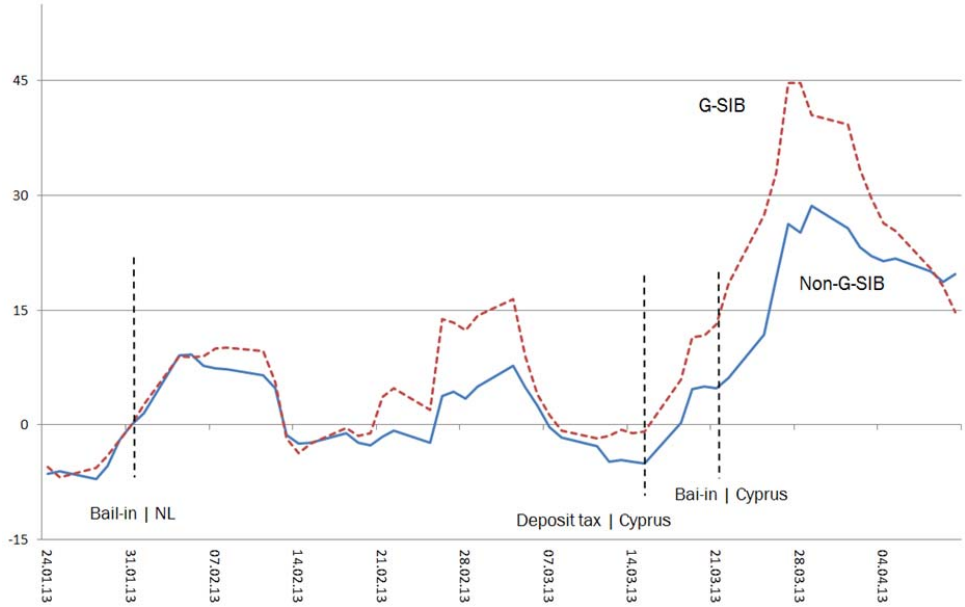

Figure 4d. Key Events in Netherlands and Cyprus | Stock Prices

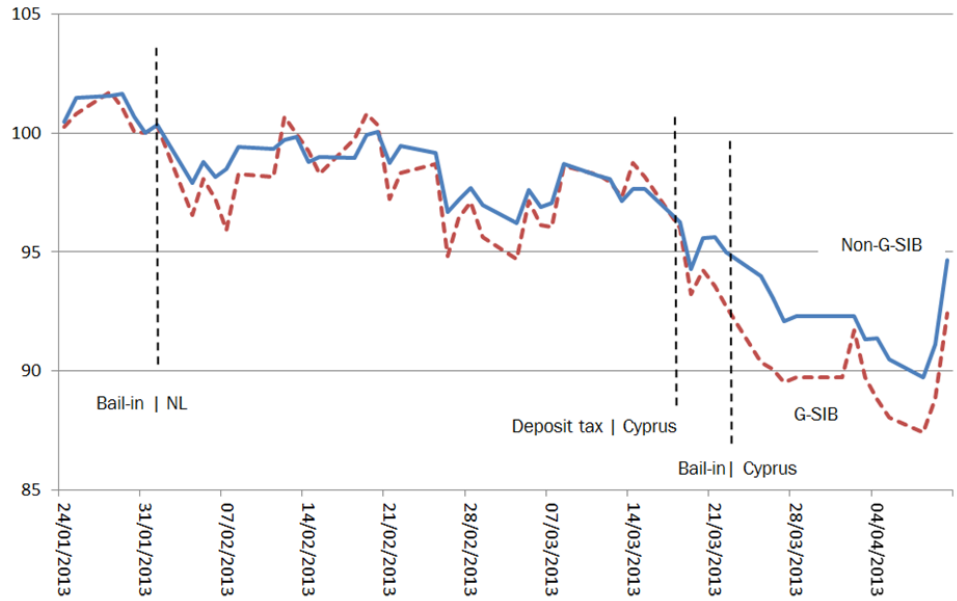

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Figure 5a. Proposal of a Deposit Tax in Cyprus | CDS Spreads

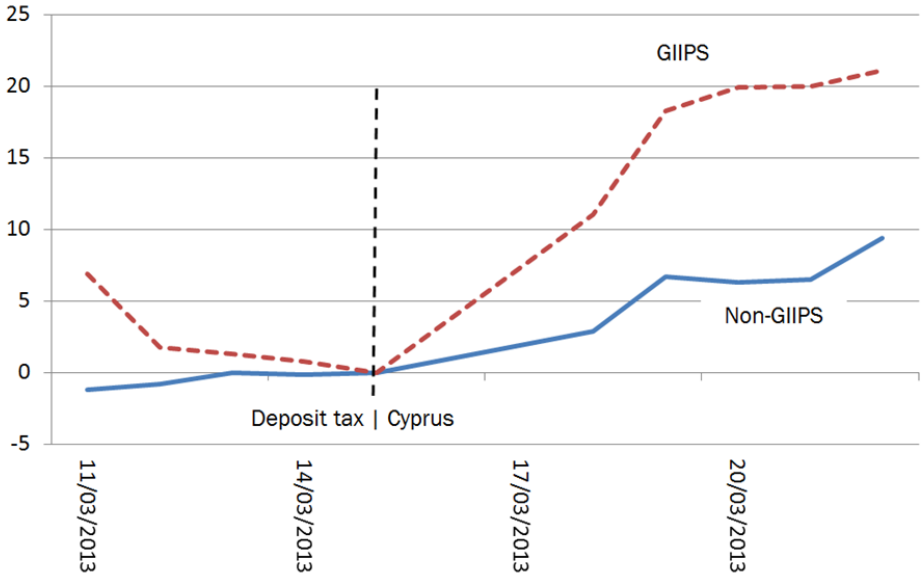

Figure 5b. Proposal of a Deposit Tax in Cyprus | Stock Prices

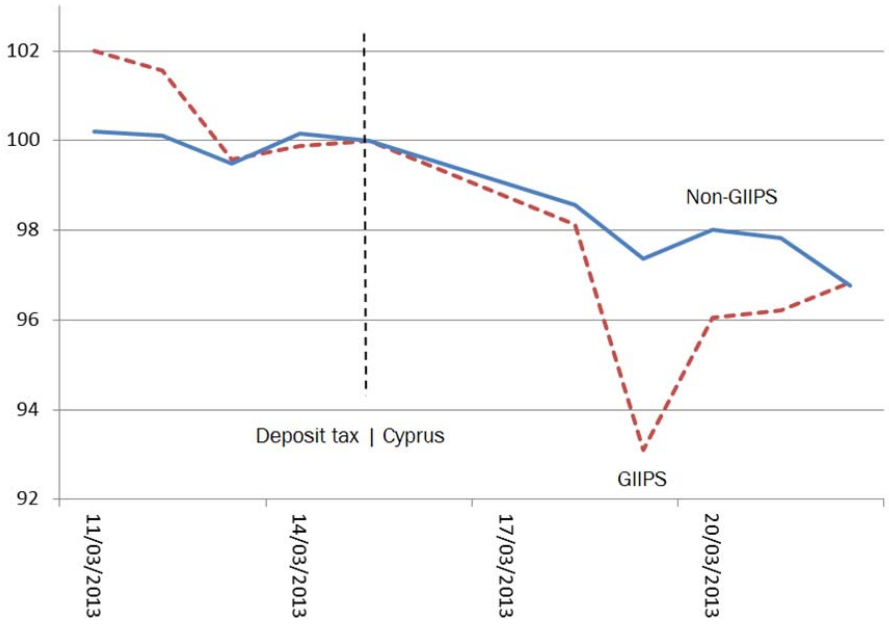

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Figure 5c. Proposal of a Deposit Tax in Cyprus | CDS Spreads

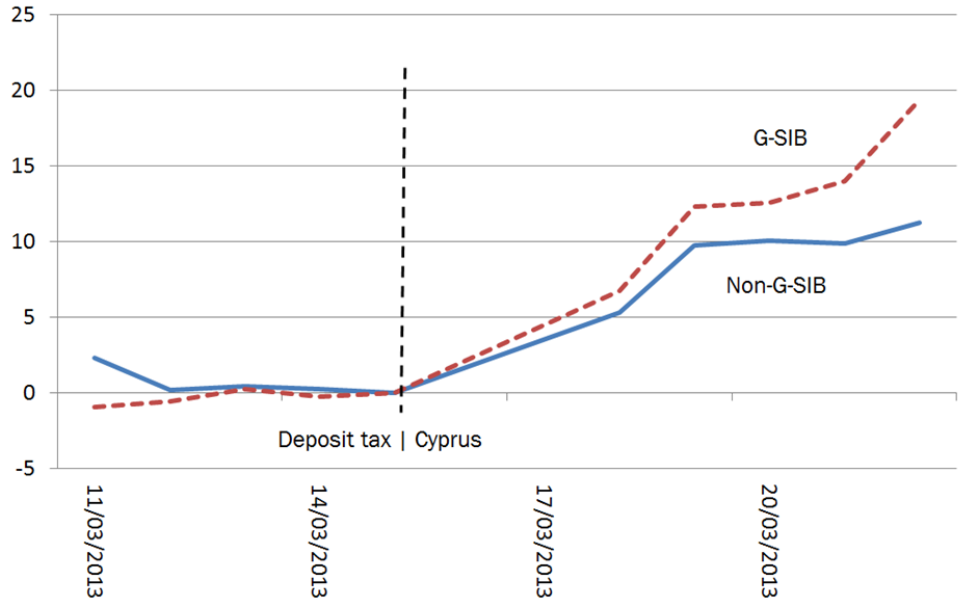

Figure 5d. Proposal of a Deposit Tax in Cyprus | Stock Prices

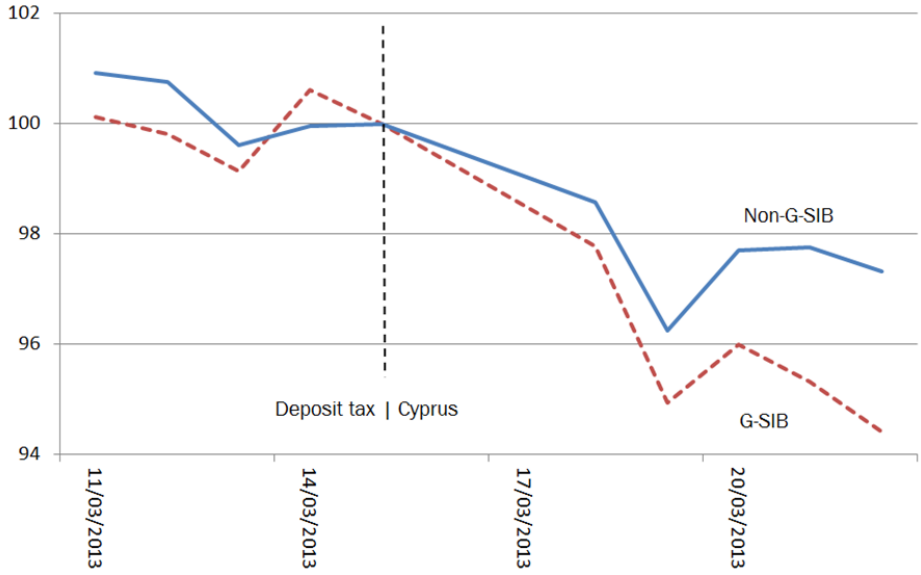

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Figure 6a. Bail-in in Cyprus | CDS Spreads

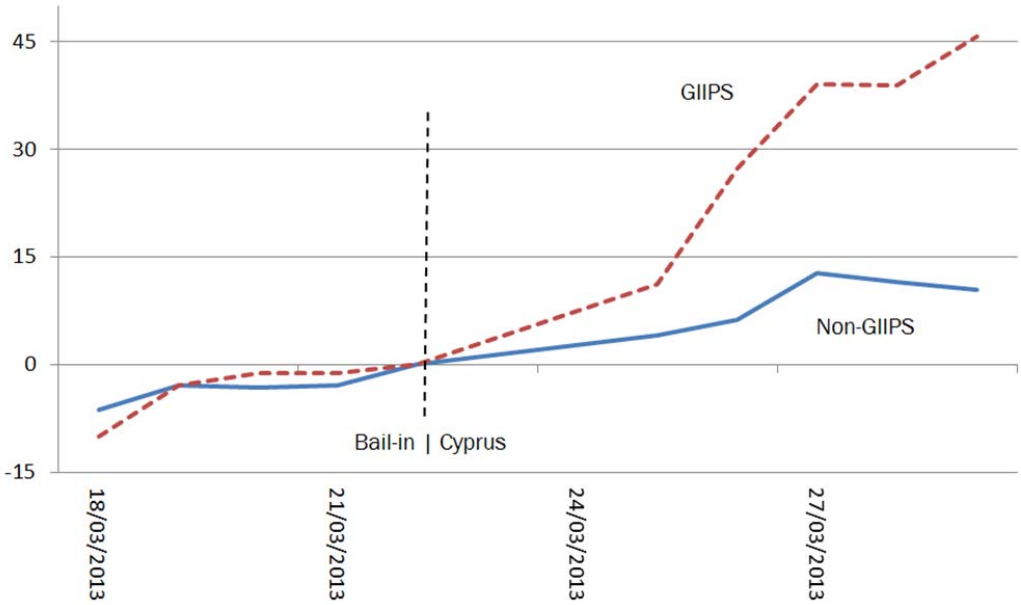

Figure 6b. Bail-in in Cyprus | Stock Prices

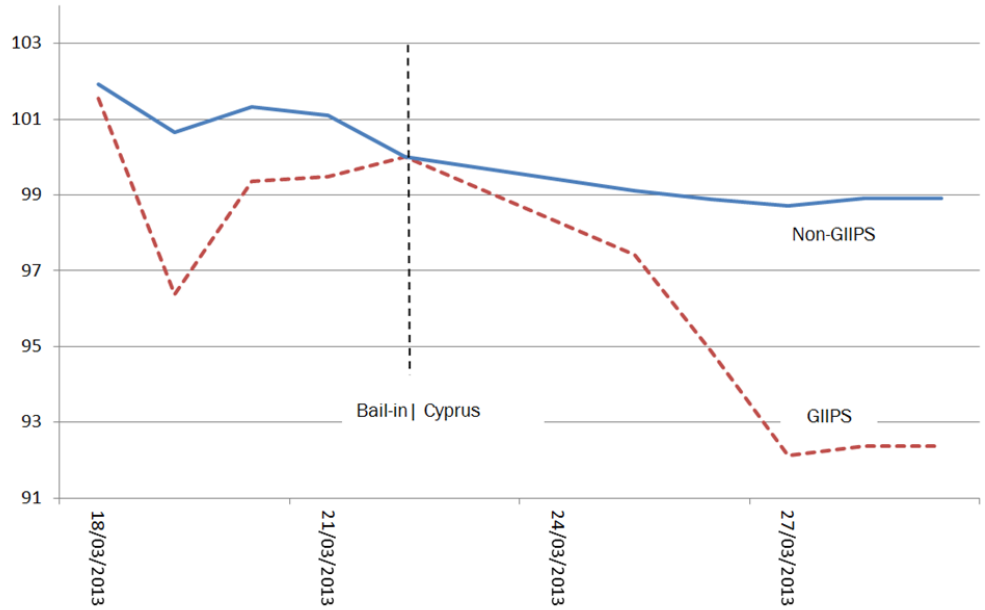

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Figure 6c. Bail-in in Cyprus | CDS Spreads

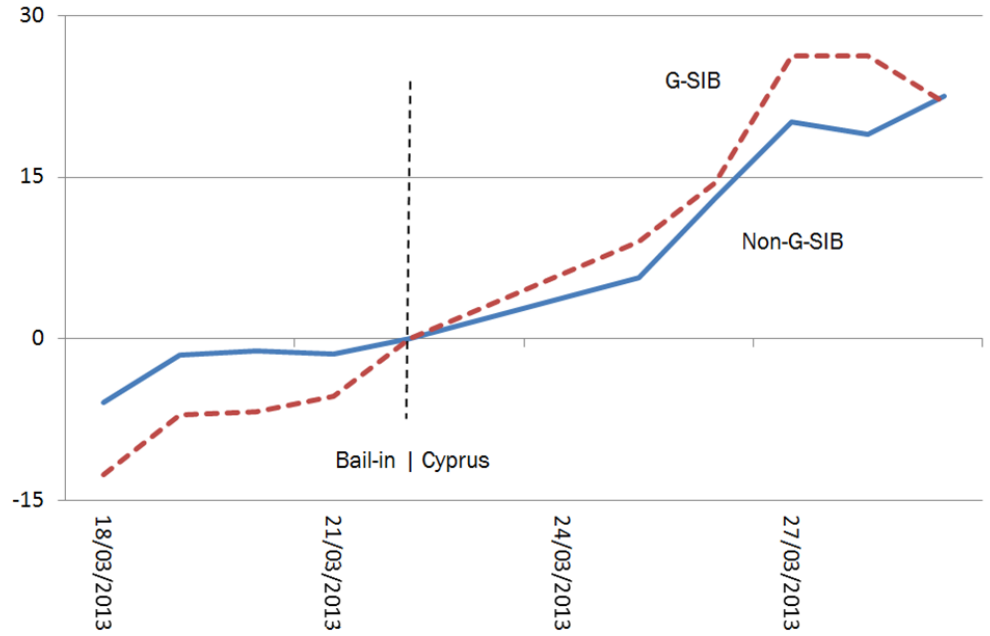

Figure 6d. Bail-in in Cyprus | Stock Prices

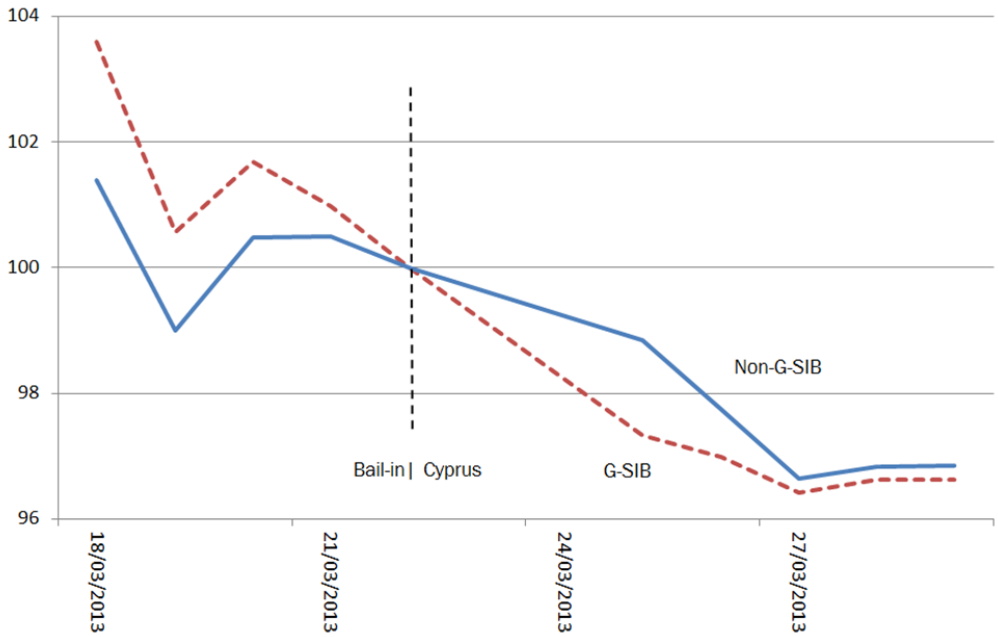

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Figure 7. Abnormal CDS Increase vs. Debt over GDP | Senior Bail-in Cyprus

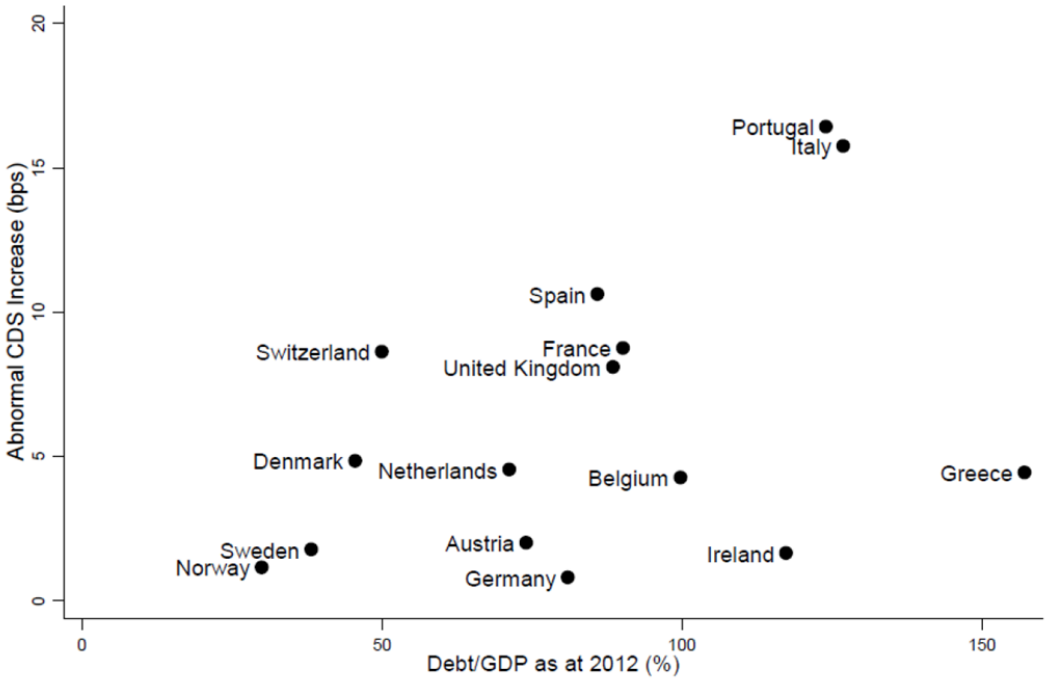

Figure 6 shows the country specific average increase of CDS spreads in response to the bail-in of senior debt in Cyprus on 25th March 2013. Countries are sorted in an ascending manner. Figure 6 depicts a scatter plot of the country specific average increase of CDS spreads on 25th March versus the debt over GDP level. Data for Debt over GDP is taken from the World Economic Outlook Database by the IMF as of April 2014.

Table 1: Event Overview and Newspaper Articles

Country	Date	Event	Article Headline in the FT - Europe Edition
Denmark	06.02.2011	Amagerbanken: Bail-in of senior debt	A senior haircut precedent in Denmark, 08.02.2011*
Spain	10.07.2012	Spanish bank rescue plan implies bail-in	Savers face losses in Spain bank rescue plan, 11.07.2012
	19.07.2012	German government backs rescue plan	Spain bailout-backed, 20.07.2012
	23.08.2012	Spain pushes national bank resolution-law	Spain bank rules push, 24.08.2012
Netherlands	01.02.2013	Nationalization of the SNS Reaal	Torrid week for European banks, 02.02.2013
Cyprus	11.02.2013	Eurozone Finance ministers: Bail-in as an option	Radical Cyprus rescue plan puts uninsured depositors in line of fire, 11.02.2013
	18.03.2013	Proposal in Cyprus to tax bank deposits	Cyprus in crisis over tax on bank deposits, 18.03.2013
	25.03.2013	Bail-in of senior debt	Eurozone shifts burden of risk from taxpayers to investors, 26.03.2013
EU / SRM	28.06.2013	EU Finance Ministers agreed rules of BRRD	EU bank rules deal, 28.06.2013
	09.07.2013	Presentation of the SRM proposal	Broad EU bank plan, 09.07.2013
	18.12.2013	EU-Council generally accepts SRM, doubts by the ECB	ECB to blow bank union blueprint, 19.12.2013
	20.03.2014	Provisional agreement on the SRM	Marathon talks seal EU bank union, 21.03.2014
	15.04.2014	EU Parliament backs commission's proposal on the SRM	EU banking reforms mark the biggest shake-up for 20 years, 16.04.2014
Portugal	04.08.2014	Creditor bail-in | Banco Espirito Santo	BES knocked on bail-in, 05.08.2014

Notes: The table shows all country-specific events according to the lead article of the Financial Times - Europe Edition, published on page one. Note that the event date and the date of its publication can differ from one day in between. This could be either due to a weekend or due to the fact that the decision about the regulatory issue was reached after markets closed. *The event in Denmark is the only case where the article was published on page 27 instead of the front-page of the Financial Times – Europe edition.

Table 2-a. Summary Statistics for CDS Spreads

BANK	COUNTRY	OBS	MEAN	STD	MIN	MAX	G-SIB	GIIPS	BANK	COUNTRY	OBS	MEAN	STD	MIN	MAX	G-SIB	GIIPS
BAWAG	Austria	640	-0.101	4.145	-26.850	26.930			BANCO POPOLARE DIE MILANO	Italy	640	0.198	10.799	-87.742	68.350		X
ERSTE GROUP BANK	Austria	640	-0.072	3.203	-20.976	19.480			BANCA NAZIONALE DEL LAVORO	Italy	640	-0.013	6.036	-29.000	43.140		X
RAIFFEISEN ZENTRALBANK	Austria	640	-0.134	3.785	-25.460	27.860			ING BANK	Netherlands	640	-0.090	3.866	-19.260	17.290	X	
KBC	Belgium	640	-0.100	4.432	-24.830	54.630			SNS BANK	Netherlands	640	0.158	8.957	-99.700	89.860		
DEXIA	Belgium	640	-0.003	8.356	-72.418	58.770			RABOBANK	Netherlands	640	-0.080	2.419	-12.040	12.702		
DANSKE BANK	Denmark	640	-0.107	3.753	-37.710	29.830			RBS N.V.	Netherlands	640	0.011	5.784	-35.790	31.510		
SOCIETE GENERALE	France	640	-0.078	5.851	-31.840	30.760	X		VAN LANSCHOT	Netherlands	640	-0.078	5.430	-39.084	77.690		
BANQUE FEDERATIVE DE CREDIT MUTUEL	France	640	-0.168	5.287	-44.690	44.820			DNB BANK	Norway	640	-0.043	1.728	-14.610	14.410		
BNP PARIBAS	France	640	-0.031	4.698	-20.760	26.090	X		BANCO COMERCIAL PORTUGUES	Portugal	640	-0.569	15.392	-125.880	77.340		X
CREDIT AGRICOLE	France	640	-0.046	6.096	-28.960	34.490	X		BANCO ESPIRITO SANTO	Portugal	640	0.128	13.728	-76.170	84.010		X
CREDIT LYONNAIS	France	640	-0.044	6.595	-32.400	33.490			BCP FINANCE BANK	Portugal	640	-0.589	17.461	-75.100	114.550		X
NATIXIS*	France	640	-0.058	3.362	-19.200	24.235	X		BANCO SABADELL	Spain	640	0.194	9.652	-73.105	66.620		X
BAYERISCHE LANDESBANK	Germany	640	0.027	3.671	-40.760	29.250			BANCO POPULAR ESPANOL	Spain	640	0.238	9.697	-59.006	68.930		X
COMMERZBANK	Germany	640	0.027	6.747	-41.190	100.520			BANCO SANTANDER	Spain	640	-0.018	9.285	-51.300	38.888	X	X
DEUTSCHE BANK	Germany	640	-0.027	3.789	-17.150	17.600	X		BANKINTER	Spain	640	0.274	9.611	-54.240	68.450		X
HSH NORDBANK	Germany	640	0.007	4.832	-39.330	39.370			BANCO BILBAO VIZCAYA ARGENTARIA	Spain	640	-0.077	7.976	-36.890	42.160	X	X
IKB	Germany	640	-0.205	4.472	-21.880	22.780			CAIXA D'ESTALVIS I PENSIONS DE BARCELONA	Spain	640	0.231	7.737	-48.900	57.820		X
LANDESBANK BADEN WUERTTEMBERG	Germany	640	-0.005	3.475	-19.690	39.720			CAJA DE AHORROS DEL MEDITERRANEO	Spain	640	-0.219	14.720	-126.408	92.350		X
LANDESBANK HESSEN THUERINGEN	Germany	640	-0.078	4.520	-33.400	35.650			SEB	Sweden	640	-0.100	1.729	-9.880	12.810		
NORD-LB	Germany	640	-0.026	3.930	-30.880	22.260			SVENSKA HANDELSBANKEN	Sweden	640	-0.059	1.422	-6.660	11.420		
PORTIGON	Germany	640	0.147	5.412	-44.210	59.810			SKANDINAVIA ENSKILDE BANKEN	Sweden	640	-0.211	3.018	-17.000	18.120		
UNICREDIT BANK (HVB)	Germany	640	-0.187	3.044	-17.919	19.980			NORDEA	Sweden	640	-0.048	1.644	-7.380	12.130	X	
NATIONAL BANK OF GREECE	Greece	640	-0.750	38.237	-312.450	374.720		X	SWEDBANK	Sweden	640	-0.081	2.294	-14.320	15.930		
ALPHA BANK	Greece	640	-3.518	39.048	-476.650	283.050		X	UBS	Switzerland	640	-0.149	3.098	-11.960	15.650	X	
BANK OF IRELAND	Ireland	640	-0.011	19.277	-102.260	212.450		X	CREDIT SUISSE	Switzerland	640	-0.080	3.078	-12.590	14.160	X	
BANCA ITALEASE	Italy	640	-0.036	8.321	-67.490	83.890		X	ROYAL BANK OF SCOTLAND	United Kingdom	640	-0.006	5.953	-35.790	29.620	X	
INTESA SANPAOLO	Italy	640	0.033	9.502	-33.900	40.838		X	BARCLAYS	United Kingdom	640	-0.006	4.292	-27.090	18.950	X	
MEDIOBANCA	Italy	640	-0.039	6.940	-41.270	75.760		X	THE CO-OPERATIVE BANK	United Kingdom	640	0.427	10.052	-64.010	187.079		
UNICREDIT	Italy	640	0.043	8.993	-40.220	42.710	X	X	HSBC	United Kingdom	640	-0.063	3.065	-12.120	17.020	X	
UBI BANCA	Italy	640	-0.163	7.152	-67.890	53.444		X	LLOYDS	United Kingdom	640	-0.111	5.301	-33.550	23.510		
BANCA MONTE DEI PASCHI DI SIENA	Italy	640	0.303	14.106	-55.751	98.707		X	SANTANDER UK	United Kingdom	640	-0.106	4.490	-29.950	39.770		
BANCO POPOLARE	Italy	640	0.118	12.186	-63.191	68.100		X	STANDARD CHARTERED	United Kingdom	640	-0.032	3.936	-18.600	25.260	X	
Total Observations CDS	40960																

Notes: Data for CDS spreads is retrieved from Thomson Reuters (Datastream). The number of observations "OBS" for each bank is determined by the estimation window of 80 trading days plus the event window of 3 trading days for each event (excluding overlapping observations). "STD" stands for the Standard Deviation, "MIN" indicates the lowest and "MAX" the highest observed value within the sample. The column "G-SIB" displays whether the respective bank is considered as systemically relevant. *Natixis is the only listed subsidiary of the non-listed Groupe Banque Populaire Casse d'Epargne (Groupe BPCE); see also Bongini et al. (2015). The column "GIIPS" indicates whether a bank is located in Greece, Ireland, Italy, Portugal or Spain. See further methodological details in chapter 3.

Table 2-b. Summary Statistics for Stock Returns

BANK	COUNTRY	OBS	MEAN	STD	MIN	MAX	G-SIB	GIIPS	BANK	COUNTRY	OBS	MEAN	STD	MIN	MAX	G-SIB	GIIPS
ERSTE GROUP BANK	Austria	640	0.000	0.022	-0.164	0.067			UNICREDIT	Italy	640	0.000	0.026	-0.088	0.143	X	X
RAIFFEISEN BANK INTERNATIONAL	Austria	640	-0.001	0.023	-0.096	0.097			LLB	Liechtenstein	640	0.000	0.018	-0.073	0.070		
DEXIA	Belgium	640	0.004	0.130	-0.333	0.500			VP BANK	Liechtenstein	640	0.000	0.012	-0.052	0.049		
KBC	Belgium	640	0.001	0.026	-0.093	0.107			DNB	Norway	640	0.001	0.016	-0.107	0.073		
CENTRAL COOPERATIVE BANK	Bulgaria	640	0.001	0.027	-0.111	0.157			SPAREBANK 1 SR BANK	Norway	640	0.001	0.013	-0.053	0.059		
CB FIRST INVESTMENT BANK	Bulgaria	640	0.002	0.029	-0.241	0.269			ING GROEP	Netherlands	640	0.000	0.021	-0.074	0.108	X	
ZAGREBACKA BANKA	Croatia	640	0.000	0.018	-0.068	0.080			VAN LANSCHOT	Netherlands	640	0.000	0.018	-0.090	0.125		
KOMERCNI BANKA	Czech Republic	640	0.000	0.015	-0.058	0.074			BANK BPH	Poland	640	0.000	0.019	-0.079	0.097		
DANSKE BANK	Denmark	640	0.001	0.016	-0.094	0.067			BANK POLSKA KASA OPIEKI	Poland	640	0.000	0.016	-0.071	0.068		
JYSKE BANK	Denmark	640	0.001	0.015	-0.045	0.105			MBANK	Poland	640	0.001	0.018	-0.056	0.097		
RINGKJOBING LANDBOBANK	Denmark	640	0.001	0.008	-0.028	0.036			BANK HANDLOWY	Poland	640	0.000	0.020	-0.084	0.067		
SYDBANK	Denmark	640	0.001	0.013	-0.046	0.056			ING BANK SLASKI	Poland	640	0.000	0.017	-0.096	0.072		
AKTIA BANK	Finland	640	0.001	0.012	-0.064	0.071			PKO BANK POLSKI	Poland	640	0.000	0.014	-0.054	0.048		
POHJOLA BANK	Finland	640	0.001	0.018	-0.059	0.181			BANCO PORTUGUES DE INVESTIMENTO	Portugal	640	0.001	0.024	-0.084	0.134		X
BNP PARIBAS	France	640	0.000	0.020	-0.057	0.097	X		BANCO COMERCIAL PORTUGUES	Portugal	640	0.001	0.031	-0.130	0.269		X
CIC	France	640	0.000	0.009	-0.074	0.047			BANCO ESPIRITO SANTO	Portugal	640	-0.003	0.042	-0.421	0.197		X
CREDIT AGRICOLE	France	640	0.001	0.024	-0.080	0.087	X		BANCA COMERCIALA CARPATICA	Romania	640	0.001	0.021	-0.147	0.149		
NATIXIS	France	640	0.001	0.023	-0.122	0.225	X		BANCA TRANSILVANIA	Romania	640	0.001	0.015	-0.068	0.064		
SOCIETE GENERALE	France	640	0.001	0.023	-0.072	0.103	X		BANCO DE SABADELL	Spain	640	0.000	0.022	-0.075	0.139		X
COMMERZBANK	Germany	640	-0.001	0.024	-0.092	0.110			BANCO POPULAR ESPANOL	Spain	640	-0.001	0.027	-0.123	0.147		X
DEUTSCHE BANK	Germany	640	-0.001	0.018	-0.071	0.087	X		BANCO SANTANDER	Spain	640	0.000	0.020	-0.073	0.107	X	X
IKB	Germany	640	0.002	0.046	-0.128	0.336			BANKINTER	Spain	640	0.001	0.026	-0.072	0.139		X
QUIRIN BANK	Germany	640	0.000	0.023	-0.080	0.121			BANCO BILBAO VIZCAYA ARGENTARIA	Spain	640	0.000	0.021	-0.078	0.107	X	X
UMWELTBANK	Germany	640	0.001	0.022	-0.239	0.217			CAIXABANK	Spain	640	0.001	0.022	-0.100	0.169		X
AAREAL BANK	Germany	640	0.002	0.022	-0.065	0.100			NORDEA	Sweden	640	0.001	0.013	-0.058	0.056	X	
ALPHA BANK	Greece	640	0.001	0.054	-0.200	0.294		X	SEB	Sweden	640	0.001	0.014	-0.051	0.082		
BANK OF PIRAEUS	Greece	640	-0.002	0.058	-0.295	0.287		X	SVENSKA HANDELSBANKEN	Sweden	640	0.000	0.012	-0.077	0.043		
EUROBANK ERGASIAS	Greece	640	-0.003	0.074	-0.302	0.294		X	SWEDBANK	Sweden	640	0.001	0.015	-0.079	0.105		
NATIONAL BANK OF GREECE	Greece	640	-0.002	0.054	-0.268	0.272		X	BANQUE CANTONALE DE VADAOISE	Switzerland	640	0.000	0.011	-0.070	0.074		
OTP BANK	Hungary	640	0.000	0.018	-0.061	0.067			VONTOBEL	Switzerland	640	0.000	0.015	-0.055	0.103		
ALLIED IRISH BANKS	Ireland	640	0.000	0.047	-0.242	0.309		X	CREDIT SUISSE GROUP	Switzerland	640	0.000	0.017	-0.105	0.054	X	
BANK OF IRELAND	Ireland	640	0.000	0.036	-0.228	0.164		X	JULIUS BAER	Switzerland	640	0.000	0.015	-0.074	0.083		
BANCA CARIGE	Italy	640	-0.002	0.027	-0.173	0.129		X	LUZERNER KANTONALBANK	Switzerland	640	0.000	0.007	-0.031	0.042		
BANCA MONTE DEI PASCHI DI SIENA	Italy	640	0.000	0.039	-0.201	0.213		X	ST. GALLER KANTONALBANK	Switzerland	640	0.000	0.011	-0.050	0.051		
BANCA POPOLARE DI MILANO	Italy	640	0.001	0.031	-0.104	0.111		X	UBS	Switzerland	640	0.000	0.016	-0.077	0.073	X	
BANCA POPOLARE DI SONDRIO	Italy	640	-0.001	0.022	-0.072	0.095		X	VALIANT	Switzerland	640	-0.001	0.015	-0.104	0.060		
BANCA POPOLARE DELL' EMILIA ROMAGNA	Italy	640	0.000	0.030	-0.107	0.134		X	ZUGER KANTONALBANK	Switzerland	640	0.000	0.008	-0.031	0.054		
BANCO POPOLARE	Italy	640	0.000	0.032	-0.149	0.189		X	BARCLAYS	United Kingdom	640	0.000	0.021	-0.155	0.087	X	
CREDITO EMILIANO	Italy	640	0.001	0.023	-0.103	0.084		X	HSBC	United Kingdom	640	0.000	0.011	-0.035	0.047	X	
BANCA PICCOLO CREDITO VALTELLINESE	Italy	640	-0.001	0.026	-0.103	0.168		X	LLOYDS	United Kingdom	640	0.001	0.019	-0.061	0.084		
INTESA SANPAOLO	Italy	640	0.001	0.025	-0.096	0.126		X	ROYAL BANK OF SCOTLAND	United Kingdom	640	0.000	0.023	-0.115	0.108	X	
MEDIOBANCA	Italy	640	0.000	0.024	-0.094	0.089		X	STANDARD CHARTERED	United Kingdom	640	0.000	0.017	-0.164	0.071	X	
UBI BANCA	Italy	640	0.001	0.027	-0.092	0.088		X									

Total Observations Stock Returns 54400

Notes: Data for stock returns is retrieved from Thomson Reuters (Datastream). The number of observations "OBS" for each bank is determined by the estimation window of 80 trading days plus the event window of 3 trading days for each event (excluding overlapping observations). "STD" stands for the Standard Deviation, "MIN" indicates the lowest and "MAX" the highest observed value within the sample. The column "G-SIB" displays whether the respective bank is considered as systemically relevant. *Natixis is the only listed subsidiary of the non-listed Groupe Banque Populaire Casse d'Epargne (Groupe BPCE): see also Bongini et al. (2015). The column "GIIPS" indicates whether a bank is located in Greece, Ireland, Italy, Portugal or Spain. See further methodological details in chapter 3.

Table 2c. Summary Statistics for Cross Sectional Regressions

	CDS Increase	Debt over GDP	Average Common Equity	Average Assets	Net Income	CDS Level	Average Equity Ratio	Net Income Ratio
Obs	64	64	59	60	60	64	59	60
Mean	7.129	88.514	28,866	657,595	283	261.038	0.0485	-0.0015
Std	10.192	28.290	28,468	706,844	2,836	253.944	0.0206	0.0068
Min	-11.881	30.000	667	13,066	-9,162	68.007	0.0035	-0.0205
Max	61.212	157.180	103,138	2,825,319	9,649	1,490	0.1355	0.0080

Table 2d. Correlations | Data for Cross Sectional Regressions

	CDS Increase	Debt/GDP	CDS Level	Average Equity Ratio	Ln (Assets)	Net Income Ratio
CDS Increase	1					
Debt / GDP	0.3171	1				
CDS Level	0.196	0.6236	1			
Average Equity Ratio	0.1122	0.3077	-0.0209	1		
Ln (Assets)	0.1338	-0.2893	-0.3755	-0.3691	1	
Net Income / Average Assets	-0.1452	-0.5037	-0.6211	-0.0251	0.4641	1

Table 2c shows the summary statistics for variables used in cross sectional regressions. CDS Increase is taken from the event study results as of 25 March 2015 and stemming from Datastream (Thompson Reuters). All other variables are taken as of end of year 2012. Data for Debt/GDP is taken from the World Economic Outlook Database by the IMF. All other variables are retrieved from Bankscope.

Table 3. Abnormal Bank CDS Spread Differences | Creditor Bail-in Denmark

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Amagerbanken: Bail-in of senior debt	06-Feb-11	-1.369	0.064	-1.837	1.901	-5.311	0.648	-5.958
			[0.759]	[0.986]	[0.703]	[0.430]	[0.508]	[0.823]	[0.301]
	- Enlarged event window [0+1]		-2.437	2.270	-3.974	**6.244***	-10.691	1.745	-12.436
			[0.700]	[0.669]	[0.562]	[0.068]	[0.348]	[0.664]	[0.132]

Notes: The table show the results from SUR regressions using the daily first differences of bank CDS spreads as dependent variable. Abnormal differences in CDS spreads, displayed in basis points, are estimated on the basis of the constant return model, using an estimation window of 80 trading days. Each system of regressions includes 64 banks. The first number column “Full Sample” refers to the average abnormal differences of all banks at the respective event day. The column "G-SIB" displays the abnormal differences in banks CDS spreads of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the abnormal CDS spread differences of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the abnormal differences in banks CDS spreads of the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the abnormal differences of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal differences and the difference in abnormal differences between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 4. Abnormal Bank Stock Returns | Creditor Bail-in Denmark | Stoxx Global 1800

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Amagerbanken: Bail-in of senior debt	06-Feb-11	0.497	0.628	0.468	0.160	1.090	0.216	0.874
			[0.595]	[0.642]	[0.590]	[0.825]	[0.499]	[0.754]	[0.446]
	- Enlarged event window [0+1]		1.412	2.029	1.272	0.757	1.299	1.465	-0.166
			[0.286]	[0.289]	[0.301]	[0.461]	[0.570]	[0.133]	[0.919]

Notes: The table shows the results from SUR regressions using the daily returns of bank stock prices as dependent variable. Abnormal bank stock returns, displayed in fractions, are estimated on the basis of the market model, using the Stoxx Global 1800 benchmark index and an estimation window of 80 trading days. Each system of regressions includes 85 banks. The first number column “Full Sample” refers to the average abnormal return of all banks at the respective event day. The column "G-SIB" displays the abnormal banks stock returns of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the returns of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the differences in abnormal returns for the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the returns of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal returns and the difference in abnormal returns between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 5. Abnormal Bank CDS Spread Differences | Creditor Bail-in Spain

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Spanish bank rescue plan implies bail-in	10-Jul-12	-0.557	-3.224	0.315	-3.539	0.385	-1.038	1.424
			[0.924]	[0.612]	[0.959]	[0.452]	[0.972]	[0.794]	[0.868]
	- Enlarged event window [0+1]		-1.059	-2.909	-0.454	-2.454	-1.685	-0.721	-0.963
			[0.898]	[0.747]	[0.958]	[0.713]	[0.913]	[0.896]	[0.937]
[2]	German government backs rescue plan	19-Jul-12	-0.291	-0.280	-0.294	0.014	-0.998	0.071	-1.069
			[0.959]	[0.963]	[0.960]	[0.998]	[0.925]	[0.985]	[0.899]
	- Enlarged event window [0+1]		2.421	4.309	1.804	2.505	2.763	2.195	0.568
			[0.762]	[0.617]	[0.830]	[0.696]	[0.855]	[0.675]	[0.962]
[3]	Spain pushes national bank resolution-law	23-Aug-12	2.065	4.289	1.339	2.950	1.266	2.474	-1.208
			[0.710]	[0.497]	[0.812]	[0.452]	[0.904]	[0.495]	[0.883]
	- Enlarged event window [0+1]		1.786	12.974	-1.868	**14.842*** **	-7.253	6.264	-13.517
			[0.821]	[0.148]	[0.815]	[0.008]	[0.627]	[0.213]	[0.249]

Notes: The table shows the results from SUR regressions using the daily first differences of bank CDS spreads as dependent variable. Abnormal differences in CDS spreads, displayed in basis points, are estimated on the basis of the constant return model, using an estimation window of 80 trading days. Each system of regressions includes 64 banks. The first number column “Full Sample” refers to the average abnormal differences of all banks at the respective event day. The column "G-SIB" displays the abnormal differences in banks CDS spreads of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the abnormal CDS spread differences of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the abnormal differences in banks CDS spreads of the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the abnormal differences of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal differences and the difference in abnormal differences between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 6. Abnormal Bank Stock Returns | Creditor Bail-in Spain | Stoxx Global 1800

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Spanish bank rescue plan implies bail-in	10-Jul-12	0.234	0.480	0.179	0.301	-0.820	0.735	-1.555
			[0.867]	[0.799]	[0.893]	[0.767]	[0.736]	[0.746]	[0.380]
	- Enlarged event window [0+1]		0.107	1.321	-0.167	1.488	-0.905	0.587	-1.492
			[0.957]	[0.622]	[0.930]	[0.303]	[0.793]	[0.688]	[0.553]
[2]	German government backs rescue plan	19-Jul-12	-0.120	-0.334	-0.071	-0.263	0.029	-0.190	0.220
			[0.929]	[0.851]	[0.956]	[0.786]	[0.990]	[0.846]	[0.901]
	- Enlarged event window [0+1]		-2.138	-3.568	-1.816	-1.752	-4.058	-1.227	-2.830
			[0.258]	[0.156]	[0.317]	[0.201]	[0.225]	[0.376]	[0.254]
[3]	Spain pushes national bank resolution-law	23-Aug-12	0.540	0.943	0.449	0.493	0.338	0.636	-0.298
			[0.668]	[0.606]	[0.700]	[0.6059	[0.879]	[0.496]	[0.856]
	- Enlarged event window [0+1]		0.077	-0.637	0.238	-0.874	0.448	-0.100	0.548
			[0.966]	[0.805]	[0.885]	[0.516]	[0.886]	[0.940]	[0.813]

Notes: The table shows the results from SUR regressions using the daily returns of bank stock prices as dependent variable. Abnormal bank stock returns, displayed in fractions, are estimated on the basis of the market model, using the Stoxx Global 1800 benchmark index and an estimation window of 80 trading days. Each system of regressions includes 85 banks. The first number column "Full Sample" refers to the average abnormal return of all banks at the respective event day. The column "G-SIB" displays the abnormal banks stock returns of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column "Non-G-SIB" shows the returns of the remaining banks, whereas "G-SIB vs. Non-GSIB" stands for the difference of these two subgroups. The column "GIIPS" shows the differences in abnormal returns for the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column "Non-GIIPS" shows the returns of the remaining banks, whereas "GIIPS vs. Non-GIIPS" stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal returns and the difference in abnormal returns between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 7. Abnormal Bank CDS Spread Differences | Creditor Bail-in Netherlands

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Nationalization of the SNS Reaal	01-Feb-13	3.137	3.304	3.082	0.222	7.603	0.852	6.751
			[0.439]	[0.382]	[0.479]	[0.935]	[0.367]	[0.683]	[0.325]
	- Enlarged event window [0+1]		**11.897****	**10.194***	**12.453****	-2.259	**25.964****	4.593	**21.371****
			[0.039]	[0.058]	[0.044]	[0.562]	[0.030]	[0.113]	[0.029]

Notes: The table shows the results from SUR regressions using the daily first differences of bank CDS spreads as dependent variable. Abnormal differences in CDS spreads, displayed in basis points, are estimated on the basis of the constant return model, using an estimation window of 80 trading days. Each system of regressions includes 64 banks. The first number column "Full Sample" refers to the average abnormal differences of all banks at the respective event day. The column "G-SIB" displays the abnormal differences in banks CDS spreads of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column "Non-G-SIB" shows the abnormal CDS spread differences of the remaining banks, whereas "G-SIB vs. Non-GSIB" stands for the difference of these two subgroups. The column "GIIPS" shows the abnormal differences in banks CDS spreads of the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column "Non-GIIPS" shows the abnormal differences of the remaining banks, whereas "GIIPS vs. Non-GIIPS" stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal differences and the difference in abnormal differences between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 8. Abnormal Bank Stock Returns | Creditor Bail-in Netherlands | Stoxx Global 1800

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Nationalization of the SNS Reaal	01-Feb-13	0.185	0.058	0.214	-0.155	-0.554	0.536	-1.090
			[0.849]	[0.966]	[0.817]	[0.854]	[0.748]	[0.461]	[0.405]
	- Enlarged event window [0+1]		**-2.533***	**-3.909****	**-2.223***	-1.686	**-4.398***	-1.648	-2.750
			[0.066]	[0.046]	[0.091]	[0.161]	[0.072]	[0.111]	[0.140]

Notes: The table shows the results from SUR regressions using the daily returns of bank stock prices as dependent variable. Abnormal bank stock returns, displayed in fractions, are estimated on the basis of the market model, using the Stoxx Global 1800 benchmark index and an estimation window of 80 trading days. Each system of regressions includes 85 banks. The first number column "Full Sample" refers to the average abnormal return of all banks at the respective event day. The column "G-SIB" displays the abnormal banks stock returns of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column "Non-G-SIB" shows the returns of the remaining banks, whereas "G-SIB vs. Non-GSIB" stands for the difference of these two subgroups. The column "GIIPS" shows the differences in abnormal returns for the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column "Non-GIIPS" shows the returns of the remaining banks, whereas "GIIPS vs. Non-GIIPS" stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal returns and the difference in abnormal returns between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 9. Abnormal Bank CDS Spread Differences | Creditor Bail-in Cyprus

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Eurozone Finance ministers: Bail-in as an option	11-Feb-13	0.348	-0.067	0.483	-0.550	2.448	-0.726	3.174
			[0.927]	[0.984]	[0.905]	[0.809]	[0.754]	[0.712]	[0.615]
	- Enlarged event window [0+1]		-0.832	-3.673	0.096	-3.770	2.504	-2.481	4.985
			[0.877]	[0.448]	[0.987]	[0.244]	[0.821]	[0.363]	[0.580]
[2]	Proposal in Cyprus to tax bank deposits	18-Mar-13	**6.5*** **	**7.019** **	**6.33*** **	0.689	**12.853*** **	**3.249** **	**9.604*** **
			[0.007]	[0.012]	[0.009]	[0.686]	[0.005]	[0.034]	[0.008]
	- Enlarged event window [0+1]		**11.967*** **	**12.767*** **	**11.705*** **	1.062	**21.717*** **	**6.819*** **	**14.897*** **
			[0.000]	[0.001]	[0.001]	[0.661]	[0.001]	[0.001]	[0.004]
[3]	Bail-in of senior Debt	25-Mar-13	**7.129*** **	**9.317*** **	**6.415*** **	**2.902** *	**12.533*** **	**4.365*** **	**8.168** **
			[0.002]	[0.001]	[0.006]	[0.084]	[0.005]	[0.003]	[0.019]
	- Enlarged event window [0+1]		**15.075*** **	**15.16*** **	**15.047*** **	0.114	**30.801*** **	**6.869*** **	**23.933*** **
			[0.000]	[0.000]	[0.000]	[0.962]	[0.000]	[0.001]	[0.000]

Notes: The table shows the results from SUR regressions using the daily first differences of bank CDS spreads as dependent variable. Abnormal differences in CDS spreads, displayed in basis points, are estimated on the basis of the constant return model, using an estimation window of 80 trading days. Each system of regressions includes 64 banks. The first number column “Full Sample” refers to the average abnormal differences of all banks at the respective event day. The column "G-SIB" displays the abnormal differences in banks CDS spreads of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the abnormal CDS spread differences of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the abnormal differences in banks CDS spreads of the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the abnormal differences of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal differences and the difference in abnormal differences between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 10. Abnormal Bank Stock Returns | Creditor Bail-in Cyprus | Stoxx Global 1800

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	Eurozone Finance ministers: Bail-in as an option	11-Feb-13	-0.069	-0.081	-0.066	-0.015	-0.421	0.099	-0.520
			[0.944]	[0.954]	[0.943]	[0.986]	[0.806]	[0.893]	[0.691]
	- Enlarged event window [0+1]		0.586	2.165	0.230	1.935	0.834	0.469	0.365
			[0.671]	[0.274]	[0.861]	[0.115]	[0.732]	[0.654]	[0.844]
[2]	Proposal in Cyprus to tax bank deposits	18-Mar-13	-1.367	-2.080	-1.207	-0.873	-1.403	**-1.35****	-0.053
			[0.138]	[0.120]	[0.170]	[0.309]	[0.397]	[0.047]	[0.966]
	- Enlarged event window [0+1]		**-4.051*****	**-5.355*****	**-3.758*****	-1.597	**-6.703*****	**-2.793*****	**-3.91****
			[0.002]	[0.005]	[0.003]	[0.188]	[0.004]	[0.004]	[0.028]
[3]	Bail-in of senior Debt	25-Mar-13	**-1.496***	**-2.792****	-1.204	**-1.59***	-2.560	-0.992	-1.569
			[0.098]	[0.033]	[0.163]	[0.063]	[0.116]	[0.138]	[0.209]
	- Enlarged event window [0+1]		**-2.547****	**-3.259***	**-2.387***	-0.873	**-5.137****	-1.318	**-3.819****
			[0.047]	[0.080]	[0.052]	[0.471]	[0.026]	[0.165]	[0.031]

Notes: The table shows the results from SUR regressions using the daily returns of bank stock prices as dependent variable. Abnormal bank stock returns, displayed in fractions, are estimated on the basis of the market model, using the Stoxx Global 1800 benchmark index and an estimation window of 80 trading days. Each system of regressions includes 85 banks. The first number column “Full Sample” refers to the average abnormal return of all banks at the respective event day. The column "G-SIB" displays the abnormal banks stock returns of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the returns of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the differences in abnormal returns for the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the returns of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal returns and the difference in abnormal returns between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 11. Cross-Sectional Regressions | Bail-in Cyprus | All Banks

Dependent Variable: Abnormal CDS Increase as at 25th March 2013

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Debt over GDP | de-meaned	**0.116****	**0.141*****	**0.114*****	**0.0852****	**0.103*****	**0.0822***	**0.0834***	**0.0834***
	(0.023)	(0.000)	(0.000)	(0.022)	(0.001)	(0.082)	(0.058)	(0.066)
CDS Level | de-meaned		-0.00442	0.00600	0.0197	0.0112	0.0164	**0.0172***	0.0171
		(0.485)	(0.502)	(0.138)	(0.181)	(0.150)	(0.100)	(0.115)
(Debt over GDP) x (CDS Level) | de-meaned			-0.000176	**-0.000328***	**-0.000229***	-0.000250	-0.000255	-0.000255
			(0.141)	(0.068)	(0.052)	(0.131)	(0.105)	(0.108)
Ln(Average Assets)				**2.529****				
				(0.017)				
G-SIB					**4.477****	**4.815****	**4.761****	**4.773****
					(0.014)	(0.017)	(0.018)	(0.010)
Average Equity Ratio						11.60	10.75	10.73
						(0.875)	(0.878)	(0.880)
Net Income Ratio							34.51	33.80
							(0.881)	(0.889)
Supersized Banking Sector								-0.0430
								(0.982)
Constant	**7.222*****	**7.222*****	**8.036*****	**-23.62***	**7.166*****	6.187	6.300	6.303
	(0.000)	(0.000)	(0.000)	(0.051)	(0.000)	(0.244)	(0.204)	(0.215)
Observations	64	64	64	60	64	59	59	59
R-squared	0.103	0.110	0.125	0.185	0.158	0.155	0.155	0.155
Adjusted R-squared	0.089	0.081	0.081	0.126	0.101	0.075	0.058	0.039
SE clusters on Country Level	15	15	15	15	15	15	15	15

Notes: The table shows the results from cross-sectional regressions using the abnormal CDS spread increases as of 25th March 2013 (response to the senior bail-in in Cyprus) as dependent variable. Standard errors are clustered on country-level. P-values are displayed in brackets. Control variables are defined as follows: Debt over GDP stands for the country specific public debt divided by the gross domestic product in 2012; Average Equity Ratio is defined as Average Common Equity divided by average assets in 2012. Net Income Ratio is calculated as banks net income in 2012 scaled by average assets in 2012. Ln(Assets) stands for the natural logarithm of the average assets in 2012; CDS Level stands for the absolute values in CDS spreads as at 31st December 2012; G-SIB denotes a dummy equal to 1 if the respective bank is considered as sytemically important; Supersized Banking sectors indicates a dummy equal to 1 if the respective bank belongs to the Ireland, Switzerland or the United Kingdom. Series of Debt over DGP and CDS Level are adjusted for their mean, i.e. "de-meaned" Stars are to be interpreted as follows: * significant at 10 percent; ** significant at 5%, *** significant at 1%.

Table 12. Cross-Sectional Regressions | Bail-in Cyprus | Excluding Banks from Programm Countries

Dependent Variable: Abnormal CDS Increase as at 25th March 2013

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Debt over GDP | de-meaned	**0.149*** **	**0.0946***	**0.118****	**0.115****	**0.102****	**0.150****	**0.147****	**0.148****
	(0.003)	(0.059)	(0.024)	(0.042)	(0.016)	(0.031)	(0.045)	(0.040)
CDS Level | de-meaned		0.0219	-0.00289	0.0128	0.00639	-0.000247	-0.00680	-0.00534
		(0.401)	(0.828)	(0.584)	(0.630)	(0.990)	(0.795)	(0.838)
(Debt over GDP) x (CDS Level) | de-meaned			**0.00133*** **	**0.00121*** **	**0.00127*** **	**0.00151*** **	**0.00156****	**0.00159****
			(0.004)	(0.008)	(0.003)	(0.008)	(0.012)	(0.010)
Ln(Average Assets)				**3.164*** **				
				(0.007)				
G-SIB					**5.381*** **	**4.560***	**4.664***	**3.711***
					(0.000)	(0.057)	(0.061)	(0.098)
Average Equity Ratio						-90.89	-90.50	-93.90
						(0.392)	(0.458)	(0.418)
Net Income Ratio							-212.7	-176.6
							(0.340)	(0.445)
Supersized Banking Sector								**2.839***
								(0.076)
Constant	**6.434*** **	**6.434*** **	**4.104****	**-36.46****	**2.723****	6.839	6.624	6.489
	(0.001)	(0.000)	(0.017)	(0.015)	(0.043)	(0.219)	(0.280)	(0.268)
Observations	51	51	51	49	51	49	49	49
R-squared	0.155	0.194	0.323	0.444	0.374	0.401	0.409	0.418
Adjusted R-squared	0.137	0.160	0.280	0.394	0.320	0.331	0.325	0.319
SE clusters on Country Level	11	11	11	11	11	11	11	11

Notes: The table shows the results from cross-sectional regressions using the abnormal CDS spread increases as of 25th March 2013 (response to the senior bail-in in Cyprus) as dependent variable. Standard errors are clustered on country-level. P-values are displayed in brackets. Control variables are defined as follows: Debt over GDP stands for the country specific public debt divided by the gross domestic product in 2012; Average Equity Ratio is defined as Average Common Equity divided by average assets in 2012. Net Income Ratio is calculated as banks net income in 2012 scaled by average assets in 2012. Ln(Assets) stands for the natural logarithm of the average assets in 2012; CDS Level stands for the absolute values in CDS spreads as at 31st December 2012; G-SIB denotes a dummy equal to 1 if the respective bank is considered as sytemically important; Supersized Banking sectors indicates a dummy equal to 1 if the respective bank belongs to the Ireland, Switzerland or the United Kingdom. Series of Debt over DGP and CDS Level are adjusted for their mean, i.e. "de-meaned" Stars are to be interpreted as follows: * significant at 10 percent; ** significant at 5%, *** significant at 1%.

Table 13. Abnormal Bank CDS Spread Differences | Creditor Bail-in Portugal

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
	Anticipatory effect [-1]	01-Aug-14	**3.485***	3.268	**3.556***	-0.288	**8.103****	1.122	**6.98****
			[0.081]	[0.154]	[0.077]	[0.830]	[0.031]	[0.045]	[0.018]
[1]	Creditor bail-in | Banco Espirito Santo	04-Aug-14	-0.646	-1.384	-0.405	-0.979	-1.236	-0.344	-0.893
			[0.747]	[0.546]	[0.840]	[0.467]	[0.742]	[0.799]	[0.763]
	- Enlarged event window [0+1]		-2.257	-4.457	-1.538	-2.919	-3.575	-1.546	-2.029
			[0.426]	[0.170]	[0.589]	[0.126]	[0.501]	[0.407]	[0.630]

Notes: The table shows the results from SUR regressions using the daily first differences of bank CDS spreads as dependent variable. Abnormal differences in CDS spreads, displayed in basis points, are estimated on the basis of the constant return model, using an estimation window of 80 trading days. Each system of regressions includes 64 banks. The first number column “Full Sample” refers to the average abnormal differences of all banks at the respective event day. The column "G-SIB" displays the abnormal differences in banks CDS spreads of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the abnormal CDS spread differences of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the abnormal differences in banks CDS spreads of the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the abnormal differences of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal differences and the difference in abnormal differences between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 14. Abnormal Bank Stock Returns | Creditor Bail-in Portugal | Stoxx Global 1800

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
	Anticipatory effect [-1]	01-Aug-14	-0.115	0.540	-0.262	0.802	-1.140	0.372	-1.512
			[0.867]	[0.417]	[0.716]	[0.103]	[0.385]	[0.464]	[0.168]
[1]	Creditor bail-in | Banco Espirito Santo	04-Aug-14	-0.189	0.128	-0.260	0.388	-0.234	-0.167	-0.068
			[0.780]	[0.845]	[0.715]	[0.424]	[0.857]	[0.740]	[0.950]
	- Enlarged event window [0+1]		-0.648	0.004	-0.795	0.799	-2.521	0.241	**-2.762***
			[0.499]	[0.997]	[0.431]	[0.247]	[0.171]	[0.736]	[0.073]

Notes: The table show the results from SUR regressions using the daily returns of bank stock prices as dependent variable. Abnormal bank stock returns, displayed in fractions, are estimated on the basis of the market model, using the Stoxx Global 1800 benchmark index and an estimation window of 80 trading days. Each system of regressions includes 85 banks. The first number column “Full Sample” refers to the average abnormal return of all banks at the respective event day. The column "G-SIB" displays the abnormal banks stock returns of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the returns of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the differences in abnormal returns for the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the returns of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal returns and the difference in abnormal returns between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 15. Abnormal Bank CDS Spread Differences | Single Resolution Mechanism

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	EU Finance Ministers agreed rules of BRRD	28-Jun-13	2.358	5.229	1.420	**3.809***	4.184	1.423	2.761
			[0.458]	[0.178]	[0.644]	[0.058]	[0.454]	[0.509]	[0.488]
	- Enlarged event window [0+1]		3.170	5.112	2.536	2.576	4.092	2.636	1.456
			[0.482]	[0.354]	[0.561]	[0.366]	[0.606]	[0.378]	[0.798]
[2]	Presentation of the SRM proposal	09-Jul-13	-3.188	-5.640	-2.387	-3.254	-1.842	**-3.876***	2.034
			[0.315]	[0.144]	[0.437]	[0.102]	[0.743]	[0.070]	[0.612]
	- Enlarged event window [0+1]		-2.701	-2.160	-2.878	0.718	-3.259	-2.361	-0.897
			[0.548]	[0.694]	[0.509]	[0.799]	[0.682]	[0.425]	[0.876]
[3]	EU-Council generally accepts SRM, doubts by the ECB	18-Dec-13	-1.035	-1.402	-0.915	-0.487	-1.537	-0.779	-0.759
			[0.719]	[0.701]	[0.734]	[0.764]	[0.763]	[0.680]	[0.833]
	- Enlarged event window [0+1]		-3.123	-4.729	-2.599	-2.130	-5.532	-1.848	-3.684
			[0.444]	[0.361]	[0.497]	[0.356]	[0.445]	[0.480]	[0.475]
[4]	Provisional agreement on the SRM	20-Mar-14	**3.241***	**5.494****	2.505	**2.989****	3.805	**2.952****	0.853
			[0.092]	[0.021]	[0.179]	[0.022]	[0.281]	[0.023]	[0.753]
	- Enlarged event window [0+1]		2.866	4.002	2.495	1.506	4.187	2.141	2.046
			[0.293]	[0.236]	[0.345]	[0.417]	[0.403]	[0.236]	[0.596]
[5]	EU Parliament backs commission's proposal on the SRM	15-Apr-14	0.436	1.220	0.180	1.040	0.306	0.503	-0.197
			[0.826]	[0.605]	[0.926]	[0.419]	[0.935]	[0.696]	[0.945]
	- Enlarged event window [0+1]		-0.009	0.706	-0.242	0.949	1.070	-0.548	1.619
			[0.997]	[0.833]	[0.930]	[0.604]	[0.839]	[0.759]	[0.693]

Notes: The table shows the results from SUR regressions using the daily first differences of bank CDS spreads as dependent variable. Abnormal differences in CDS spreads, displayed in basis points, are estimated on the basis of the constant return model, using an estimation window of 80 trading days. Each system of regressions includes 64 banks. The first number column “Full Sample” refers to the average abnormal differences of all banks at the respective event day. The column "G-SIB" displays the abnormal differences in banks CDS spreads of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the abnormal CDS spread differences of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the abnormal differences in banks CDS spreads of the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the abnormal differences of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal differences and the difference in abnormal differences between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Table 16. Abnormal Bank Stock Returns | Single Resolution Mechanism | Stoxx Global 1800

	Event	Date	Full Sample	G-SIB	Non-G-SIB	G-SIB vs. Non-GSIB	GIIPS	Non-GIIPS	GIIPS vs. Non-GIIPS
[1]	EU Finance Ministers agreed rules of BRRD	28-Jun-13	-0.743	-1.510	-0.570	-0.940	-0.762	-0.734	-0.028
			[0.405]	[0.191]	[0.521]	[0.233]	[0.658]	[0.265]	[0.984]
	- Enlarged event window [0+1]		0.126	-0.101	0.178	-0.279	-0.063	0.216	-0.279
			[0.920]	[0.951]	[0.888]	[0.803]	[0.979]	[0.817]	[0.891]
[2]	Presentation of the SRM proposal	09-Jul-13	-1.004	-0.905	-1.027	0.122	-2.305	-0.387	-1.918
			[0.271]	[0.563]	[0.255]	[0.881]	[0.185]	[0.568]	[0.183]
	- Enlarged event window [0+1]		-0.496	-1.072	-0.366	-0.707	-3.228	0.801	**-4.029****
			[0.699]	[0.527]	[0.773]	[0.583]	[0.187]	[0.400]	[0.047]
[3]	EU-Council generally accepts SRM, doubts by the ECB	18-Dec-13	-0.189	-0.445	-0.132	-0.313	-0.562	-0.012	-0.550
			[0.798]	[0.619]	[0.862]	[0.640]	[0.668]	[0.985]	[0.626]
	- Enlarged event window [0+1]		-0.318	-0.229	-0.338	0.109	-0.174	-0.386	0.212
			[0.619]	[0.859]	[0.756]	[0.909]	[0.926]	[0.671]	[0.896]
[4]	Provisional agreement on the SRM	20-Mar-14	-0.683	-0.517	-0.720	0.203	-0.816	-0.619	-0.197
			[0.304]	[0.503]	[0.285]	[0.690]	[0.472]	[0.289]	[0.893]
	- Enlarged event window [0+1]		**-1.614***	-1.51	**-1.637***	0.127	-2.035	**-1.414***	-0.620
			[0.086]	[0.167]	[0.085]	[0.860]	[0.205]	[0.087]	[0.652]
[5]	EU Parliament backs commission's proposal on the SRM	15-Apr-14	**-1.378****	**-1.724****	**-1.3****	-0.424	**-1.957***	**-1.104****	-0.853
			[0.034]	[0.019]	[0.050]	[0.381]	[0.089]	[0.046]	[0.386]
	- Enlarged event window [0+1]		-1.023	**-1.865***	-0.833	-1.032	-0.433	-1.303	0.869
			[0.271]	[0.076]	[0.380]	[0.136]	[0.792]	[0.998]	[0.537]

Notes: The table shows the results from SUR regressions using the daily returns of bank stock prices as dependent variable. Abnormal bank stock returns, displayed in fractions, are estimated on the basis of the market model, using the Stoxx Global 1800 benchmark index and an estimation window of 80 trading days. Each system of regressions includes 85 banks. The first number column “Full Sample” refers to the average abnormal return of all banks at the respective event day. The column "G-SIB" displays the abnormal banks stock returns of the banks in the sample, considered as systemically important. The selection is based on the list of 28 systemically relevant institutions, published by the Financial Stability Board on 1st November 2012. The column “Non-G-SIB” shows the returns of the remaining banks, whereas “G-SIB vs. Non-GSIB” stands for the difference of these two subgroups. The column “GIIPS” shows the differences in abnormal returns for the banks, belonging to the countries Greece, Ireland, Italy, Portugal and Spain. The column “Non-GIIPS” shows the returns of the remaining banks, whereas “GIIPS vs. Non-GIIPS” stands for the difference of these two subgroups. The p-values in brackets correspond to the tests whether the average abnormal returns and the difference in abnormal returns between the given bank groups are equal to zero. All regressions include pre-event dummies in order to account for anticipation effects. The enlarged event window [0+1] shows the average cumulated abnormal differences of the event date t=0 and the following day t=1. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.