Implications of the O-SII designation – evidence from Germany

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Abstract

This paper investigates implications of the designation of national significant banks (O-SIIs) in Germany in June 2016. It looks whether being labelled as ‘systemically relevant financial institution’ impacts two measures of market reactions: deposit funding costs and bond spreads. Results show that being designated as O-SII increases the deposit funding cost advantage in the aftermath of the announcement. As to banks’ bond spreads the effect of the announcement is temporary. For about two days after the announcement market participants are willing to accept lower yields for O-SII bonds. These findings challenge the efficacy of the measures implemented to address the ‘too-big-to-fail’ issue.

Biography of the author

Ursula Vogel is Financial Stability Expert in the Directorate General Financial Stability at Deutsche Bundesbank. She joined Bundesbank in 2013 upon completion of her PhD in Financial Economics. Her policy work and research interests are in the field of financial stability, international banking, macroprudential policy and regulation.

On the issue

The global financial crisis of 2007-2009 highlighted the 'too big to fail'-issue which had existed for a long time. Implications of too big to fail are adverse effects on competition and moral hazard. To align risk taking and reduce the probability of government interventions and bail-outs, the financial reforms that were implemented in the aftermath of the crisis to address this issue include additional capital requirements for systemically relevant banks (SIFI-buffer) as well as a recovery and resolution regime. While globally significant banks (G-SIBs) were identified and regulated on the G20 level, national supervisory authorities are in charge of regulating other systemically important institutions (O-SIIs). Accordingly, on June 17, 2016 Germanys' Federal Financial Supervisory Authority (BaFin) announced those banks that had been identified as O-SIIs. 16 banks were categorized as O-SIIs by the national regulators and had to fulfil additional capital requirements from 2017 on.

This paper explores implications of the announcement of O-SIIs in Germany. It looks whether being labelled as 'systemically relevant institution' or not impacts market discipline. More specifically, it examines whether certain indicators for expected government bailouts, e.g. refinancing costs, develop differently for O-SIIs compared to other banks that narrowly 'missed' to be categorized as systemically relevant (potentially system endangering institutions – PSIs).

Differences in refinancing costs can stem from different sources. Banks with lower funding costs could be safer than others (because of their specific risk taking profile or because of more capital), or (implicit) government guarantees could be in place for certain banks. As this analysis focuses on a relatively short period around an unforeseen event, i.e. the public announcement of the O-SII designation, we can rule out the first reason. We argue that any possible changes in banks' funding costs around the event reflect the markets' perception of an implicit state guarantee as banks during the short time period covered by this analysis cannot substantially alter their risk profile and capital holding. As to the market reactions towards the announcement several alternative scenarios are possible:

- *No significant difference between the funding costs of O-SIIs and PSIs, neither before nor after the designation.*[1]
  This would indicate that market participants believed in the existing recovery and resolution regime (i.e. no too big to fail any more).
- *O-SII funding costs increase more (or decrease less) than those of PSIs in the wake of the designation.*
  This could hint to that markets believe that a bank will be liquidated in case of insolvency and consider the additional capital requirement as not adequate related to the riskiness of the bank. It might also mean that O-SIIs need to increase profit margins to build up additional capital (although only small increases in capital are required and the several months given to build up this capital).
- *O-SII funding costs decrease more (or increase less) than those of PSIs.*
  This might indicate that market participants perceive O-SIIs as less risky, maybe believing that still an implicit bail-out guarantee by the government is in place or central bank intervention is likely to happen for systemically relevant banks.

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[1] Funding costs might also differ to the same extent before and after the designation. This would indicate that the designation was fully anticipated by the market while at the same time no confidence in the existing recovery and resolution regime exists.

Hence, the implications of the O-SII designation on investors' perceived risks are to be explored empirically and that is what this paper intends to do. In this paper I study the implications of the designation of O-SIIs on two measures of market discipline: deposit funding costs and bond yield spreads.

On the O-SII designation

The designation of O-SIIs was based on methodology developed by the European Banking Authority (EBA) and national regulators. In December 2014 the EBA published guidelines on the criteria to determine O-SIIs. In line with the legal texts and the EBA guidelines German authorities computed scores to rank all banks in the German banking system according to various criterions and indicators with respect to their size, their importance including substitutability, their complexity and cross-border activity as well as their interconnectedness. An overall classification score was calculated as the simple average of four sub-scores with equal weights and based on the overall score banks are ranked according to their systemic relevance.

OSIIs	Overall O-SII Score	Buffer (to be build up stepwise between 2017-2019)	Included in deposit funding regressions	Included in bond yield regressions
Deutsche Bank	2,775	2	no	no
Commerzbank	845	1.5	no	no
UniCredit Bank	554	1	yes	yes
DZ Bank	429	1	yes	yes
LBBW	357	1	yes	yes
Bayern LB	306	1	yes	yes
Helaba	331	1	yes	yes
Nord/LB	234	1	yes	yes
DekaBank	153	0.5	yes	yes
VW Financial Services	145	0.5	yes	yes
HSH Nordbank	134	0.5	yes	no
WGZ Bank	120	0.5	no	yes
NRW Bank	119	0.5	no	no
ING-DiBa	116	0.5	yes	yes
Landw. Rentenbank	101	0.5	no	no
Landesbank Berlin	100	0.5	yes	yes

Subject to the EBA guidelines all banks with a score of 350 basis points and higher should be designated as O-SIIs. All other banks with a minimum score of 4.5 can be classified as O-SIIs on the national level based on discretion of national authorities. In Germany, all institutions with score values equal or higher than 100 were designated as O-SIIs. In addition, all banks with an overall score of at minimum 20 and up to 100 (incl. the subsidiaries and excluding the branches of foreign banks) were classified as PSIs (potentially system endangering institutions). Overall 16 banks were classified as OSIIs, 20 were classified as PSIs.

While it came at no surprise that Deutsche Bank as well as Commerzbank were among the group of nationally significant banks, the group of designated O-SII banks was bigger than expected as the threshold with a score of 100 was the lowest in the whole EU. In contrast to OSIIs, the status of PSIs is not communicated to the public and banks classified as PSIs were not informed about their score,

i.e. the banks neither know about their rank within the group, nor which other banks belong to the group of PSIs.[2]

Results

I compare whether market discipline (i.e. refinancing costs) is significantly different for O-SIIs after the designation than before the announcement and compared to PSIs. I apply a difference-in-difference (DID) as well as a regression discontinuity design (RDD) to explore this issue. The identification strategy relies on that banks do not really have control over whether they are classified as O-SII or PSI[3] as well as that the designation happened unexpectedly. I look at two measures of market discipline: deposit funding costs and bond yield spreads.

Deposit funding has on average a share of 40% in total assets for the banks in the sample and is generally cheaper the bigger and more systemically relevant a bank is. Results show that being designated as O-SII increases the deposit funding cost advantage in the aftermath of the announcement even more as it becomes less costly for banks once they are designated O-SIIs. This result is due to deposits from corporate that are more likely to actively manage their liquidity, not by households.

As to banks' bond spreads the effect of the announcement is temporary. When looking at yields of banks' bonds that are traded in the secondary market, I find that market participants' expectations have a relatively short term and temporary effect. The yield spreads of O-SII bonds are significantly lower (i.e. investors are willing to pay a higher price) for about two days after the announcement.

Overall results indicate that the funding cost advantage of systemically relevant banks still seems to exist and, moreover, seems to be reinforced by the designation of the O-SII classification by national regulators. However, several other measures of implicit government guarantees exist and deserve a careful further examination, for instance ratings.

Conclusion

The results of this paper in a way challenge the financial reforms that policymakers launched in the aftermath of the global financial crisis in order to reduce the competitive advantage of TBTF banks. Higher capital buffers were imposed and the supervision of systemically important banks was strengthened to reduce the probability and cost of failure and contagion. However, market participants seem to still believe in implicit guarantees, in particular once a bank has been designated as systemically relevant by regulatory authorities. Additional efforts therefore might be necessary to internalize too-big-to-fail related externalities.

Further, while the empirical analysis regarding this particular issue is limited by the overall setting (in particular the small number of banks), this analysis may lay some grounds for the overall evaluation

[2] Banks that were not classified as either - OSII or PSI - also do not know their scores.

[3] While for Deutsche Bank and Commerzbank it was foreseeable that they would be classified as O-SIIs, for most of the other banks it was not. This is underlined by an article published in Börsenzeitung in early March 2016, where about the sample of OSII banks in Germany as well as the individual buffers these banks might face, is speculated.

of macroprudential policy implications as well as for the communication of macroprudential and financial stability related issues. Firstly this approach shows that it might be useful to monitor over the whole policy cycle whether observed changes - in regulated entities and markets alike - are consistent with the objective of the respective regulatory reform. Secondly it underlines the relevance of communication of regulatory authorities on macroprudential issues.

At the current point in time a major interest in the evaluation of macroprudential policies that were initiated after the global financial crisis exists. While it is interesting and important to learn about the effectiveness of a macroprudential instrument (i.e. whether the identified risk was reduced or the systems' resilience was increased in case of a downturn) it is also relevant to study potential consequences of Macroprudential regulation. Results point at that not only the actual implementation but also regulation related news and events may have repercussions