



## Abstract

How do financial markets react to the disclosure of the list of Other Systemically Important Institutions by the European Banking Authority? With an event study of bank stock prices, we document that the immediate reaction of the stock market is negative. However, within a few days investors change their perception, both in the case of euro zone and non-euro zone banks. CDS spreads react similarly, increasing first before decreasing. Abnormal returns are more negative for large banks, those focused on traditional activities or that are state-owned, and in countries with less competitive banking markets or lower fiscal capacity. The existence of a capital buffer imposed to O-SIIs and its level, as well as the approach through which O-SIIs are selected, quantitative or based on supervisory judgments, have significant implications on market behavior on short and long run.

## Introduction

On April 25th, 2016, the European Banking Authority (EBA) disclosed the first official list of other systemically important institutions (O-SIIs). Selection of the O-SIIs follows guidelines established by the EBA after consultation with the European Systemic Risk Board (ESRB). The objective is to identify institutions within the European Union with a significant contribution to systemic risk at the national level.

Given the publication of this first list and considering its importance for both banks and policy makers alike, we examine how market participants reacted to the designation of the O-SIIs. In particular, we investigate how the publication of the O-SII list impacted banks' stock returns and CDS spreads and aim to establish if the new regulatory framework had a stigma effect, no effect or a safety effect due to the fact that the institutions must maintain a capital buffer and are henceforth subject to a tighter supervision (e.g., Morgan et al., 2014; Gorton and Ordoñez, 2016). Determining which effect dominates is relevant to assess if the decision itself to disclose the list is "optimal".

The authorities may be reluctant to publish the list as every designated bank may be deemed more likely to fail and be negatively affected, because creditors start charging higher rates or supplying less credit (Berger et al., 2016) or because customers stop demanding credit. On the other hand, by revealing the list of O-SIIs policymakers may help reducing the information asymmetry surrounding the banks and strengthen their capital buffers and compliance with specific regulatory measures (but this comes at a cost for the bank obviously). Also, O-SII designation may carry an implicit classification as too-big-to-fail (TbTF), and therefore also result in more risk-taking and moral hazard (Farhi and Tirole, 2012).

## Data and Methodology

To answer these research questions, we assess in a first stage the reaction of banks' stock prices and CDS spreads to the O-SII list announcement, employing an event study methodology. First, we study the day when the EBA published the O-SII list, i.e., April 25, 2016. Additionally, we examine whether there was a reaction on the days when the national regulatory authorities submitted the O-SII list to the EBA, henceforth "the national events". Finally, for a comparison with other designation events, we investigate the financial markets' reaction to the publication of the G-SIBs list by BCBS, the stress tests conducted by the EBA, and the inclusion of financial institutions in the Single Supervisory Mechanism (SSM) by the European Central Bank (ECB).

In a second stage, we assess the main drivers of bank stock cumulative abnormal returns, considering bank fundamentals like risk strategies and business models, as well as market characteristics and macro controls.

Our sample consists of a number of banks included in various lists on systemically important financial institutions published by supervisory authorities. For all these lists, we select the banks with available data on stock prices and CDS spreads on Thomson Reuters Datastream database.

## Results

The empirical findings show that overall the immediate reaction of the stock market is negative, i.e., there seems to be a stigma effect of being designated an O-SII. However, in the days surrounding the event, the investors change their perception, resulting in an increase in shareholders' wealth and thus consistent with a safety effect and holding for both euro zone and non-euro zone banks. Results for the CDS spreads confirm the outcome obtained using stock returns: we find an increase in CDS spreads and thus a higher cost for the banks initially. However, over a longer period the CDS spreads decrease.

As for the national events, the CAARs are negative across all windows, but slightly statistically different from zero. There is rather an opacity effect, that is, the events did not bring new information for the investors, and they waited for an official designation.

Table 1. Market reaction to the official O-SII list disclosure by EBA. Event study on stock returns.

Event window	[0; 0]	[1; 1]	[-3; 3]	[1; 5]
Full sample	-1.11	1.07	2.01	0.25
Euro zone banks	-1.35	1.08	3.18	0.60
Non-Eurozone banks	-0.73	1.07	0.18	-0.31
t-test	<b>-2.55***</b>	<b>2.47***</b>	<b>1.75*</b>	0.25
Boehmer test	<b>-5.81***</b>	<b>3.88***</b>	<b>2.48**</b>	<b>1.68*</b>
Corrado and Zivney rank test	<b>-1.71*</b>	1.50	0.78	0.26
Generalized sign test	<b>-3.37***</b>	<b>4.53***</b>	<b>2.08**</b>	1.53

Table 2. Market reaction to the official O-SII list disclosure by EBA. Event study on CDS spreads

Event window	[0; 0]	[1; 1]	[-3; 3]	[1; 5]
Full sample	130.46	-20.69	<b>-361.71</b>	58.21
t-test	<b>2.10**</b>	-0.33	<b>-2.20**</b>	0.42
Boehmer test	<b>4.25***</b>	-0.66	<b>-4.44***</b>	0.00
Corrado and Zivney rank test	0.72	-0.04	<b>-2.03</b>	-1.03
Generalized sign test	<b>3.08***</b>	<b>2.76***</b>	<b>-3.31***</b>	<b>2.12**</b>

Table 3. Determinants of banks' stock prices CAR for the official EBA event

Regressors	Short run: Stock CAAR [0; 0]	Long run: Stock CAAR [1; 5]
Buffer	<b>0.006**</b> (0.002)	-0.008 (0.005)
Supervisory judgment	<b>-0.012*</b> (0.006)	<b>0.042***</b> (0.007)
Size	<b>-0.004**</b> (0.001)	0.002 (0.003)
Non-interest income	<b>0.053*</b> (0.027)	<b>0.066*</b> (0.034)
State ownership	-0.001 (0.007)	<b>-0.032**</b> (0.014)
Bank level controls	YES	YES
Country level controls	YES	YES
Observations	54	54
R-squared	0.304	0.346

## Discussion

Our additional evidence suggests that the cumulative abnormal returns are not only driven by the event per se, but are also related to other relevant factors. On the event day, abnormal returns are more negative for banks with large size, with less non-interest income, and in countries with lower requirements regarding the level of CET1 capital buffer for O-SII-s and where the identification of O-SIIs is assessed through supervisory judgment. Following the event, CARs are lower for liquid FIs or those that are owned by state, where the banking market competition is reduced, and in countries where the government has less fiscal capacity to absorb the consequences of a bank failure.

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