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Government finances and bank bailouts: Evidence from European stock markets☆

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ABSTRACT

Using a sample of European banks and a series of events affecting governments' finances, we conduct an event study to examine whether there is a relationship between governments' fiscal difficulties and banks' stock returns. We find a significant reaction of banks' stocks to news concerning governments' finances. Banks' stock returns fall in response to a deterioration of governments' financial situation. We find little difference in the reaction between large and small banks. The evidence points towards all banks being equally likely to be bailed out. Our data are consistent with a policy during the Eurozone sovereign-debt crisis in which "no bank is too small to save".

1. Introduction

The financial crisis of 2007–2008 has highlighted the relationship between banks' finances and governments' finances. Difficulties at banks created substantial financial difficulties for governments. Concerns that governments might not have access to sufficient funds to bail out very large banks may have created other problems. The term "too big to save" (TBTS) has been

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coined to refer to banks which are sufficiently large that the government cannot feasibly bail them out. Iceland illustrates the extreme case of such banks, which had very large losses and deposits that were ten times Iceland's GDP (Flannery 2009).

Until recently, the relationship between government finances and bank bailouts has been largely ignored, most plausibly because it was not particularly important. Banks in the Eurozone in recent years expanded throughout the Eurozone with insurance provided by the country in which the banks' headquarters are located. As a result, the relationship between a bank's size and the size of its home country has been attenuated if not severed. The possibility of a mismatch between the insured deposits and other liabilities in a bank headquartered in a country and the government's access to funds at that scale is a real possibility.

As a consequence, a substantial literature has highlighted the relationship between government spending, taxes and debt and governments' ability to bail out banks (Allen et al., 2011, Bertay et al., 2013, Demirgüç-Kunt and Huizinga, 2013, Rime, 2005, Zaghini, 2014). The financial crisis of 2007–2008 and the ensuing recession weakened governments' finances, reducing funds that might be used to bail out banks. When a government's financial position is impaired, the probability of banks being bailed out lessens. Partly because of banks' scales as in Iceland and partly because of governments' financial difficulties for other reasons, larger banks might become too big to save (TBTS). If larger banks are less likely to be bailed out, then adverse developments in governments' finances will have less effect on those larger banks' stock returns.

Analyzing the relationship between governments' finances and banks' market values is an important issue in the aftermath of the financial crisis, particularly for distressed economies. The implications for regulatory policies, financial stability and the consequences for taxpayers due to bailouts in distressed economies make the subject important.

The purpose of this paper is to analyze the effect on banks' stock returns of announcements concerning governments' fiscal affairs which are likely to have an effect on governments' willingness and ability to bail out banks. We analyze stock returns for all listed banks headquartered in countries perceived as having financial difficulties — Greece, Ireland, Italy, Spain and Portugal — during the Sovereign Debt Crisis in Europe after the financial crisis of 2007–2008.

In general, we find that banks' returns decrease when announcements indicate that the governments' financial position is impaired. This is consistent with findings in Acharya et al. (2014): there is a significant financial relationship between banks and governments that arises mainly due to explicit and implicit government guarantees. Our results indicate that investors are indeed concerned about governments' ability to bail out banks. In general, the effect of these announcements does not significantly differ between large and small banks. Most of the evidence suggests that the market perceives all banks as too big to fail (TBTF) and markets still expect bailouts, as suggested by Dieckmann and Plank (2012).[1]

Our analysis has several advantages compared to the prior literature. Our sample of European banks includes systemic banks as defined by Demirgüç-Kunt and Huizinga (2013) and Bertay et al. (2013)) while maintaining reasonable comparability across countries. The time period and countries are those which gave rise to concerns about banks being too big to save. Using an event study to examine the relationship reduces concerns regarding endogeneity. The underlying events are news about governments' finances reflecting serious difficulties in the governments' overall budgets.[2] Finally, an event study provides a neat interpretation in terms of abnormal excess returns caused by the events.

The rest of the paper is organized as follows: Section 2 presents a literature review. Section 3 shows the empirical approach, data sources and develops the hypotheses to be tested. Section 4 presents the results and Section 5 concludes.

2. Literature review

Our paper contributes to the literature on too big to fail and too big to save problems, as well as to the literature on sovereigns and the financial sector. We summarize both strands of literature.

2.1. Market discipline, too big too fail and too big to save

"Market discipline" is a term used to summarize the relationship between the riskiness of banks' activities and the responses by holders of the banks' liabilities. Riskier banks have a higher probability of defaulting on their liabilities and a higher expected return compensates holders of those liabilities for this risk. As emphasized in the literature, this relationship limits the riskiness of banks' activities. In addition, market discipline is exercised by depositors when they withdraw funds due to perceived risk (Calomiris and Kahn, 1991).

Therefore, potential losses borne by holders of banks' liabilities are the basis of market discipline. However, when bailouts are expected, market discipline decreases or even vanishes. In particular, explicit or implicit deposit insurance transfers risk to the insurer and depositors no longer require a risk premium in exchange for risk nor do they run on banks (Baier et al., 2012, Demirgüç-Kunt and Huizinga, 2004).

Because of this change in relative prices with bailouts, banks increase risk taking and have an incentive to become big to fail (TBTF). O'Hara and Shaw (1990) test this hypothesis using an event study and find that shareholders from TBTF banks received a positive wealth effect when the Comptroller of the Currency announced that a set of large banks would not be allowed to

[1] This result that banks in the Eurozone are not too big to save from 2008 to 2012 does not imply that banks in some other time or place cannot be too big to save. The banks in Iceland were too big for Iceland's taxpayers to be willing to pay off the depositors.

[2] It is not possible to be certain that endogeneity is not a problem (Roberts and Whited, 2012).