Journal of International Money and Finance 34 (2013) 102–113

Contents lists available at SciVerse ScienceDirect

Journal of International Money and Finance

journal homepage: www.elsevier.com/locate/jimf

Contagion during the Greek sovereign debt crisis

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JEL classifications:
G14
G15
E44
E63

Keywords:
Contagion
Euro crisis
Event study

A B S T R A C T

We examine the impact of news about Greece and news about a Greek bailout on bank stock prices in 2010 using data for 48 European banks. We identify the twenty days with extreme returns on Greek sovereign bonds and categorise the news events during those days into news about Greece and news about the prospects of a Greek bailout. We find that, except for Greek banks, news about Greece does not lead to abnormal returns while news about a bailout does, even for banks without any exposure to Greece or other highly indebted euro countries. This finding suggests that markets consider news about the bailout to be a signal of European governments' willingness in general to use public funds to combat the financial crisis. Sovereign bond prices of Portugal, Ireland, and Spain respond to both news about Greece and news about a Greek bailout.

1. Introduction

The European sovereign debt crisis became evident in 2010, starting with the reporting by the European Commission on January 8th that evidence had been found of severe irregularities in the Greek Excessive Deficit Procedure notifications.[1] Fig. 1 shows that throughout 2010 Greek interest rates rose to levels that made fiscal policy unsustainable, and were much higher than those of other euro area countries that got into trouble later on. As a result, in May 2010 the financial problems of Greece

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[1] In April 2009 Greece had projected general government debt for this year to amount to 99.6 percent of GDP. When Eurostat had lifted its reservation on the quality of Greek data on 15 November 2010, this figure had been revised to 126.8 percent of GDP.

0261-5606/$ – see front matter
http://dx.doi.org/10.1016/j.jimonfin.2012.11.006

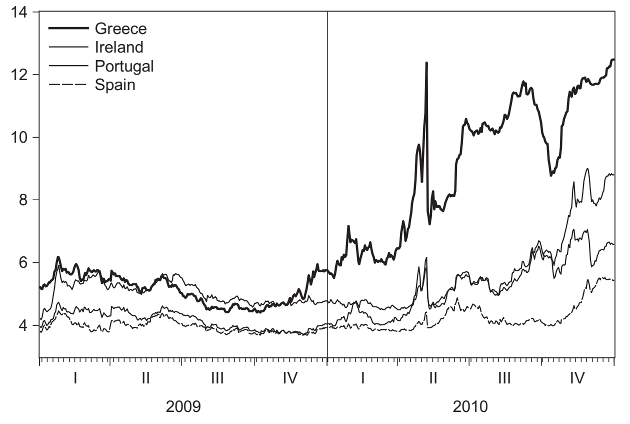

Fig. 1. Interest rates on 10-year government bonds during the Greek sovereign debt crisis.

became so severe that the euro countries agreed to provide bilateral loans for a total amount of EUR 80 billion to be disbursed over the period until June 2013. In addition, the International Monetary Fund financed EUR 30 billion under a stand-by arrangement.

An important motivation to provide financial support to Greece, despite the no-bailout clause in the Maastricht Treaty, was fear of contagion (see, for instance, Constâncio, 2011). It was feared that a restructuring of Greek debt could lead to a new banking crisis in the EU as several banks, notably in France and Germany, had a high exposure to Greece. In an April 2010 interview with the German magazine Der Spiegel, the German minister of Finance, Schäuble argues: "We cannot allow the bankruptcy of a euro member state like Greece to turn into a second Lehman Brothers. […] Greece's debts are all denominated in euros, but it isn't clear who holds how much of those debts. For that reason, the consequences of a national bankruptcy would be incalculable. Greece is just as systemically important as a major bank." In addition, policymakers were afraid that a Greek default would spillover to other highly indebted countries in the euro area. According to Cochrane (2010), however, the threat of contagion is greatly exaggerated: "we're told that a Greek default will lead to 'contagion.' The only thing an investor learns about Portuguese, Spanish, and Italian finances from a Greek default is whether the EU will or won't bail them out too. Any 'contagion' here is entirely self-inflicted. If everyone knew there wouldn't be bailouts there would be no contagion."

There is, as yet, surprisingly limited research on contagion in the current euro area debt crisis. Notable exceptions include Arezki et al. (2011), Missio and Watzka (2011), Afonso et al. (2011), and De Santis (2012). Arezki et al. (2011) examine contagion effects of sovereign rating news on European financial markets during the period 2007–2010. They find that sovereign rating downgrades have statistically and economically significant spillover effects both across countries and financial markets. Missio and Watzka (2011) use a dynamic conditional correlation model to study contagion in the euro area. Their results show that Portuguese, Spanish, Italian and Belgian yield spreads increase along with their Greek counterpart. Afonso et al. (2011) examine whether sovereign yields and CDS spreads in a given country react to rating announcements of other countries. They conclude that there is evidence of contagion, especially from lower rated countries to higher rated countries. De Santis (2012) argues that spreads on EU sovereign debt can be decomposed in three different factors, including one reflecting contagion from Greece.

As pointed out by Corsetti et al. (2011), there is however much disagreement among economists about what contagion is and how it should be tested for empirically.[2] For Kaminsky et al. (2003, p. 55), contagion is "an episode in which there are significant immediate effects in a number of countries

[2] See Pericoli and Sbracia (2003) for a survey. These authors distinguish between five different definitions of contagion that have been used in the literature but that have very different meanings and implications.