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Does the ECB act as a lender of last resort during the subprime lending crisis?: Evidence from monetary policy reaction models

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A B S T R A C T

We investigate whether the ECB aligns its monetary policy with financial crisis risk in EMU member countries. We find that since the outbreak of the subprime crisis the ECB has significantly increased net lending and reduced interest rates when banking and sovereign debt crisis risk in vulnerable EMU countries (Greece, Ireland, Italy, Portugal, and Spain) increases, while no significant effect is identified for the pre-crisis period and relatively tranquil EMU countries (Austria, Belgium, France, Germany, and the Netherlands). These findings suggest that the ECB acts as a Lender of Last Resort for vulnerable EMU countries.

1. Introduction

The financial turmoil produced by the subprime lending crisis has been the most difficult challenge for the Economic and Monetary Union (EMU) since its inception twelve years ago (Trichet, 2010). The subprime lending crisis, triggered by significant reductions in leverage and prices in the U.S. housing market and intensified by global macroeconomic imbalances, insufficient banking regulation, and fast credit expansion driven by lax monetary policy, has brought many banks in the EMU to the verge of bankruptcy.[2] Recessions and national bank bailout plans amounting to hundreds of billions of euros

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[2] For excellent overviews of the causes and implications of the subprime lending crisis see, for example, Geanakoplos (2009, 2010) and Kouretas and Papadopoulos (2010).

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feed speculations about possible sovereign debt defaults in the most vulnerable EMU member countries – Greece, Ireland, Italy, Portugal, and Spain.

Several fiscal and monetary policy instruments can be used to address the problems of the banking and government finance sectors. Fiscal policy instruments include, for example, national bank bailout plans, supra-national bailout plans for governments or sovereign debt restructuring schemes. National bank bailout plans have been implemented in most EMU countries during the crisis and EU/IMF bailout plans for Greece, Ireland and Portugal rescued these countries from insolvency. For some overindebted EMU countries such as Greece, sovereign debt restructuring schemes are discussed, which may include haircuts or a lengthening of the maturity. Such orderly sovereign debt defaults may be a viable long-run solution for the debt problem. However, till now such restructuring schemes have no majority among European policymakers. Monetary policy measures of the European Central Bank (ECB) are used instead to address problems in the EMU banking and government finance sectors in the short run.[3]

We focus on the monetary policy instruments the central bank can use to address the financial problems in the EMU. A major cause of the subprime crisis is the significant reduction in leverage (due to higher collateral requirements) and the associated fire-sales of assets that lead to capital losses (Geanakoplos, 2009, 2010). By increasing the liquidity supply to banks the central bank may reduce the pace of deleveraging and the number of bank failures. The central bank can also purchase sovereign bonds in order to support sovereign bond prices (or, equivalently, reduce redemption yields on sovereign bonds) and help governments issuing sovereign bonds. Or the central bank can reduce interest rates in order to reduce the refinancing costs of banks and governments.[4] The question is whether the ECB implements these rescue measures for all EMU countries or whether countries leave the EMU and use a national monetary policy to implement suitable measures. Thus, given the financial vulnerabilities in the EMU the ECB basically has two alternatives. It can act as a Lender of Last Resort and bailout the banking sectors and governments of vulnerable member countries using monetary policy. Or, it can leave monetary policy unchanged (or does not adequately address the financial problems) at the risk that vulnerable member countries may leave the EMU to let national central banks do the job as a Lender of Last Resort.

Since the European Central Bank (ECB) implements a monetary policy for all members of the currency union, it cannot serve to stabilize all nations in the union at all times. Consequently, national monetary policy is not available as an instrument to buffer macroeconomic shocks.[5] While the benefits of being a member of the EMU (such as lower transaction costs and the absence of currency risk within the EMU) can be assumed to be relatively stable over time, the costs are time-varying. Especially in the vulnerable countries (Greece, Ireland, Italy, Portugal, and Spain) the costs of EMU membership have drastically increased during the crisis since national monetary policy cannot be used to cope with banking and sovereign debt problems.

Entering the EMU was so far considered as being irreversible. By substituting the national currency for euros at an "irrevocably fixed rate",[6] member countries loose their sovereignty over national monetary policy and had hitherto no legal means to reassert it. Many authors argue, however, that sovereign states *can* choose to withdraw from the EMU (Cohen, 1993; Scott, 1998; Buiter, 1999; Eichengreen, 2007). Polling data of the Eurobarometer suggests that a withdrawal from the EMU would be democratically legitimated in several vulnerable member countries. More than 50 percent of

[3] The ECB clearly opposes such sovereign debt restructuring plans as they would cause severe losses on the ECB's holdings of risky EMU sovereign bonds acquired since the start of the "Securities Markets Programme" in May 2010.

[4] Reductions in short-term interest rates controlled by the central bank may lead to lower yields of sovereign bonds as (for a given sovereign default risk premium) the risk-less interest rate component in the required rate of return of sovereign bonds is reduced.

[5] Macroeconomic shocks would not be a problem if the EMU formed an optimum currency area (for excellent surveys of the optimum currency area literature, see, for example, Mongelli, 2005; De Grauwe, 2007; Dellas and Tavlas, 2009). However, there is substantial evidence that the EMU is far from being an optimum currency area due to: low flexibility and convergence in labor markets (Obstfeld and Peri, 1998; Hughes Hallet et al., 2008; Dullien and Fritsche (2008); little progress in the convergence of business cycles (Giannone et al., 2008; Martin, 2001); and a divergence in inflation rates (Busetti et al., 2007; Lane, 2006). Due to these dissimilarities the subprime lending crisis has led to substantially diverging stabilization needs among EMU countries.

[6] Art. 123(4) Treaty Establishing the European Community (TEC).