Journal of Empirical Finance 38 (2016) 449–460

Contents lists available at ScienceDirect

Journal of Empirical Finance

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

The geography of the great rebalancing in euro area bond markets during the sovereign debt crisis☆

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ARTICLE INFO

Article history:
Received 28 May 2015
Received in revised form 23 November 2015
Accepted 5 January 2016
Available online 12 January 2016

JEL classification:
F34
F36
G15

Keywords:
Foreign investment
International capital flows
Euro area sovereign debt crisis
Gravity model

ABSTRACT

During the sovereign debt crisis investors rebalanced out of stressed and into non-stressed euro area countries, thereby contributing to the tensions in euro area financial markets. This paper examines the geographical pattern of this great rebalancing. Specifically, we test whether euro area and non-euro area investors adjusted their holdings of debt securities of euro area stressed and non-stressed countries disproportionately relative to benchmarks derived from a standard gravity model for portfolio choice. We find that non-euro area investors under-invested in stressed euro area countries, but did not over-invest in non-stressed euro area countries. As regards intra-euro area flows, we do not find evidence for a disproportionate slowdown of capital flows from non-stressed into stressed euro area countries. Instead, our results suggest that investors in stressed euro area countries disproportionately shifted capital into debt securities of non-stressed euro area countries. Finally, we find that both non-euro area investors' under-investment in stressed countries and stressed euro area investors' over-investment in non-stressed euro area countries ceased after the announcement of the ECB's OMT programme.

1. Introduction

The euro area sovereign debt crisis had a marked impact on cross-border investments in euro area debt markets. Heightened concerns about the sustainability of public finances in some euro area countries resulted in a rebalancing out of stressed and into non-stressed euro area countries that contributed to the fragmentation of euro area financial markets (see Figs. 1 and 2). However, little is known about the geographical pattern of debt flows to euro area countries during the sovereign debt crisis. In particular, it has yet to be explored whether the great rebalancing out of stressed and into non-stressed euro area countries has been a mere euro area phenomenon caused by euro area investors, or whether international investors likewise rebalanced their portfolios of euro area debt securities. Understanding the extent to which the great intra-euro area rebalancing, and ultimately the tensions in euro area financial markets, has been a 'domestic', i.e. intra-euro area, phenomenon has important implications, as the policy measures that would have been most adequate in each case in order to alleviate such excessive volatility are different.[3]

☆ This paper should not be reported as representing the views of the European Central Bank (ECB). The views expressed are those of the authors and do not necessarily reflect those of the ECB. We would like to thank Johan Duyvesteyn, Philip Lane, Frank Warnock, Livio Stracca and seminar participants at the ECB, the 2015 European Sovereign Debt Crisis conference in Monaco, the 2015 INFINITI conference in Ljubljana, the 2015 International Trade and Finance Association conference in Sarasota, the XVI Conference on International Economics in San Sebastian, the ADBI/ASEAN conference in Jakarta and the 2014 Renminbi World conference in Shanghai.

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[3] Stressed euro area countries include Italy, Spain, Ireland, Greece and Portugal. Non-stressed euro area countries include all other euro area economies with the exception of Luxembourg and Malta due to market specifics.

http://dx.doi.org/10.1016/j.jempfin.2016.01.003
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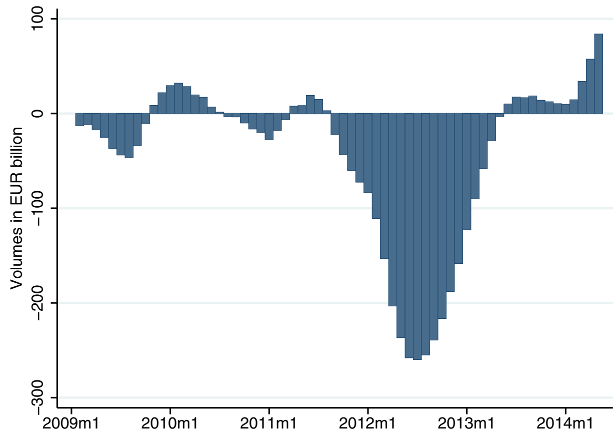

Fig. 1. Bond liabilities of euro area stressed economies.

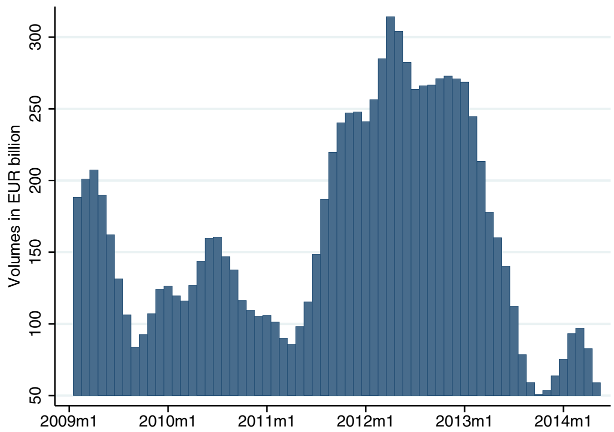

Fig. 2. Bond liabilities of euro area non-stressed economies.

On the one hand, if the rebalancing mainly reflected a 'domestic' phenomenon, official flows could offset 'sudden stops' of private capital flows from non-stressed euro area investors to stressed economies through an increase of Target balances. On the other hand, if foreign investors were the main driver of the observed portfolio adjustments residency-based capital flow management measures might be more effective from a conceptual point of view (see IMF, 2012).

This paper aims to shed light on the geographic patterns of capital flows that were contributing to the tensions in euro area financial markets during the sovereign debt crisis. In particular, we build on the literature on cross-border financial investment to compare actual changes in the portfolio allocation of foreign and domestic investors during the sovereign debt crisis to those a standard gravity model for portfolio choice based on informational frictions and transaction costs would predict. Using data from the IMF's Coordinated Portfolio Investment Survey (CPIS) between end-2009 and end-2011, we find that foreign (non-euro area) investors disproportionately reduced their holdings of bond securities of stressed euro area countries; however, foreign investors' under-investment in stressed euro area countries was not accompanied by an over-investment in non-stressed euro area countries' bond markets.[4] Similarly, we do not find evidence for an under-investment of non-stressed euro area investors in stressed euro area countries. Instead, our results suggest that investors in stressed euro area countries disproportionately shifted capital into debt securities of non-stressed euro area countries. This intra-euro area capital flight is likely to be among the main drivers of the excessive volatility in intra-euro area debt flows, the resulting tensions in peripheral debt markets and the fragmentation of euro area financial markets. Finally, we find that the under-investment by foreign investors in stressed euro area countries as well as the capital flight by investors in stressed euro area countries ceased after the announcement of the ECB's Outright Monetary Transactions (OMT) programme.

Our work is related to four strands of the literature. First, our paper is related to the literature on the patterns of cross-border portfolio flows during the global financial crises in 2007/08 (see Fratzscher, 2012; Milesi-Ferretti and Tille, 2011; Broner et al., 2013; Galstyan and Lane, 2013; Ghosh et al., 2014). In contrast to this literature, we focus on cross-border portfolio investment

[4] Throughout this paper, we use the terms "over" and "under-investment" as synonyms for shifts in a country's portfolio allocation which exceed or fall short of the predictions derived from a gravity model for international portfolio choice.