The Journal of Economic Asymmetries 12 (2015) 41–51

Contents lists available at ScienceDirect

The Journal of Economic Asymmetries

www.elsevier.com/locate/jeca

The Euro-adoption effect and the bank, market, and growth nexus: New evidence from EU panels

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ARTICLE INFO

Article history:
Received 13 October 2014
Received in revised form 30 December 2014
Accepted 13 January 2015
Available online xxxx

Keywords:
Panel data
European Union
Economic growth
Banks
Stock markets
GMM estimator

ABSTRACT

This study investigates the financial system–growth relationships for a panel that includes the twenty-eight member states of the European Union (EU) for the period 1999–2012. Considering that the Euro currency is currently adopted by only seventeen member states, the originality of this paper lies in that it assesses, for the first time in related literature, the financial system–growth nexus by dividing the full EU28 sample in two new panels, the Eurozone panel and the non-Euro countries panel. The basic argument behind this sample split is that the Euro-adoption prerequisites closer and more centralized political, economic, fiscal and financial cooperation between the Eurozone members and therefore different relationships may exist, from a finance–growth perspective, due to greater sample uniformity. To assess these relationships, the differenced and the system Generalized-Methods-of-Moments (GMM) estimators are employed. The empirical findings derived from the full EU countries panel fail to support the bank-led growth hypothesis. However, stock markets are reported as weak but significant growth factors. From the Eurozone panel, strongly significant results are reported, documenting the contribution of the financial sector on growth. Finally, from the non-Euro countries panel, findings imply the significant negative impact of the banking sector on growth. Overall, these results could suggest that testing these relationships under the Euro-adoption criterion can indeed lead to different results. Policy makers should further improve the banking/financial regulatory framework, the credit allocation process and the banking competition in order for the financial system to promote EU's economic development in more efficient ways.

1. Introduction

During the last two decades, forces such as globalization, technological change, deregulation and integration have fundamentally transformed the European and global financial industry. The second Banking Directive, the creation of the European Monetary Union in 1999, and the approval and implementation of the Financial Services Action Plan (FSAP) by the European Commission gave new impulse to the creation of a single European financial services market. Moreover, the recent financial crisis is milestone in the financial transformation that has provoked immense debate on the circumstances under which crises arise. Thus, it becomes particularly significant to understand the finance–growth nexus, extracting conclusions mainly for the European economy in the new global framework.

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http://dx.doi.org/10.1016/j.jeca.2015.01.002
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The literature on the relationships between the components of the financial system, namely, the banking sector and the financial sector, provides exhaustive evidence that support the significance of the financial system–growth nexus. These studies date back to the early works of Bagehot (1873) on the relationships between the financial system and industrialization for the case of England, and Schumpeter (1911, 1934), who suggests that the financial intermediary sector plays a significant role to productivity growth and technological advance by the allocation of savings to firms.

Since then, the literature evolved with a rapid pace, especially during the last twenty years, and can be divided into two theoretical groups. The first group deals with the impact of stock market development on economic growth by employing proxies such as stocks traded, market capitalization and turnover ratio. The second group of literature concentrates on the relationship between banking sector developments, as measured by bank's credit and liquid liabilities, and economic growth. Regardless of the proxies and countries employed, both strands of the literature are in consensus that the financial system promotes economic growth, although presenting different characteristics and significance levels across regions/countries. Moreover, this literature further expanded by employing measures of trade, namely, trade openness (the sum of imports and exports) and exports documenting not only the significant impact of trade on economic growth (see Shahbaz, 2012; Georgantopoulos & Tsamis, 2011; Yanikkaya, 2003; Baldwin & Forslid, 1998) but also the linkages between financial development and trade (Bordo & Rousseau, 2012; Taylor & Wilson, 2011; Baltagi, Demetriades, & Law, 2009; Hur, Raj, & Riyanto, 2006).

This study focuses on the impact of financial and banking sector developments on economic growth for a full panel of the 28 European Union member countries (EU28). The contribution of this study to the related literature is threefold; first, this is the only study that focuses exclusively on the EU28 (Croatia became the 28th EU member state on 1 July 2013). Other studies deal with the financial system and growth nexus (see Section 2) either by employing data relating to a single European country or by using too many and mixed regional European panel data making it difficult to analyze in depth one particular region that presents similar financial attributes. Other studies include EU countries in panels mixed-up with other non-EU countries. Therefore, this study argues that EU member states, present different financial characteristics than non-EU countries, mainly due to the close economic and political cooperation that EU member states have developed. The EU operates through a system of supranational independent institutions and intergovernmental negotiated decisions by the member states. Some of the most prominent EU institutions are the European Commission, the Council of the European Union, the European Council, the Court of Justice of the European Union, the European Central Bank, the Court of Auditors, and the European Parliament. Although the EU is not a single country yet, a consolidated economic and political environment has been created for its member states and therefore scientific conclusions could be much more accurate dealing with these countries apart from other non-EU countries when employing panel data analysis.

The second contribution of this study is that for the first time in this literature, the full EU sample is divided into a panel of Eurozone countries and non-Euro countries. The European Economic and Monetary Union (EMU) is a term for the group of policies aimed at integrating the economies of all EU member states. Both the seventeen Eurozone states and the eleven non-Euro states are EMU members. However, a Member State needs to comply with a number of economic and fiscal criteria before being able to adopt the Euro as a national currency and become a full member of the Eurozone. Therefore, the Eurozone countries enjoy an advanced stage of not only economic and trade, but also monetary integration binding the Eurozone countries tighter to each other than the rest of the non-Euro countries that have not adopted the Euro currency. The Euro currency (€) is managed and administered by the European Central Bank (ECB) and the Euro-system, which is composed of the central banks of the Eurozone countries. As an independent central bank, the ECB has sole authority to set monetary policy. The Euro-system participates in the printing, minting and distribution of notes and coins in all member states, and the operation of the Eurozone payment systems. The 1992 Maastricht Treaty obliges most EU member states to adopt the euro upon meeting certain monetary and budgetary convergence criteria, although not all states have done so yet. The United Kingdom and Denmark negotiated exemptions, while Sweden, that joined the EU in 1995, after the Maastricht Treaty was signed, turned down the Euro in a 2003 referendum, and has circumvented the obligation to adopt the Euro by not meeting the monetary and budgetary requirements. However, all nations that have joined the EU since 1993 have pledged to adopt the euro in due course. To summarize, the Eurozone members present different characteristics from the rest non-Euro countries in three ways; (i) common monetary policy, since the ECB is the sole responsible entity, (ii) closer political cooperation through the Euro Group, and (iii) limited but significant fiscal integration, through the peer review of each other's national budgets, which can also be seen as a highly political act. Therefore, these characteristics of the Euro area can justify the separate treatment of the Euro-members apart from the rest of the non-Euro member states.

Third, this study investigates the short-run relationships between financial sector, banking sector and economic growth. There are very few studies (Narayan & Narayan, 2013; Loayza & Ranciere, 2006; Kaminsky & Reinhart, 1999) that deal with these short-run relationships. However, four factors could be numbered that motivate this study to focus on a short-run timeframe: (i) the rapidly changing economic environment; since the beginning of the EU in 1957, then called European Economic Community (EEC), when the six founding member states, namely, Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany signed the Treaty of Rome, numerous territorial, economic, political and social transformations have taken place, leading to a significantly expanded, and more stabilized and integrated European Union. Therefore, the risk of reaching to ambiguous and misleading results, could be higher when dealing with long period panel data, especially in the case of the EU, (ii) the concern that averaging data leads to information loss and rigid model that omits the