THE EFFECTS OF THE ECONOMIC CRISIS ON EUROPEAN FINANCIAL INTEGRATION AND ECONOMIC GROWTH

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Abstract
The process of European financial integration 2009-2010, amid the economic and financial crisis, the main reason for the decline being the protectionist measures implemented in some countries. The idea of research is to explore the relationship between European financial integration and economic growth in the countries of the European Union under the impact of the crisis. The purpose of this study is to analyze how the financial integration process has positively or negatively influenced economic growth under the impact of the economic crisis by analyzing previous studies on the subject. We noticed that the process of financial integration and economic growth under the influence of the crisis was discussed in many studies in the literature, most of them using different techniques and methodologies to quantify these phenomena by means of indicators be estimated.

Keywords:*financial crisis, financial integration, economic growth.*
JEL Classification *: F15, F36, G01.*

1. Introduction

The process of integrating financial markets began in the mid-1980s in the European Union with the goal of creating a single integrated internal market. The main measures implemented were:

- Banking Directives;
- Free movement of capital;
- Harmonization of deposit insurance;
- Introduction of the euro.

This process was slowed down during 2009-2010, amid the economic and financial crisis, the main reason for the decline being the protectionist measures implemented in some countries. Most studies conducted so far have shown that the economic and financial crisis has had a negative impact on the process of financial intrusion and economic growth.

Financial integration contributes to the development of the financial system by increasing competition, increasing stability, expanding markets and increasing the efficiency of financial intermediaries, resulting in lower brokerage costs and a more efficient allocation of capital.

Financial integration increases the depth and liquidity of financial markets and thus increases the resilience of the European financial system. It offers opportunities to diversify geographical risks and promote consumer incomes.

Measuring the level of financial integration in the EU Member States is one of the main concerns of policy makers as well as researchers in the field. Both the theoretical studies and the empirical conclusions indicate that the integration process contributes to the more efficient allocation of capital, which, in turn, supports economic growth.

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The purpose of this study is to analyze how the financial integration process has positively or negatively influenced economic growth under the impact of the economic crisis by analyzing previous studies on the subject.

2.Literature review

Guevara and Maudos (2012) conducted a study analyzing the impact of financial development and integration on economic growth since the introduction of the euro and the

implementation of the Financial Sector Assessment Program (1999), quantifying the differential impact of the financial crisis for the period 2008-2010.

According to Dabrowski (2010), the limited fiscal capacity of the European Union has proved to be the most critical constraint in responding to the global financial crisis in a coordinated way. The European Union does not have enough resources to save financial institutions and Member States in difficulty. This leads to a nationalization of rescue operations, which undermines the single European market and requires the involvement of the IMF especially for distressed states. The EU must also complement the missing European Single Market architecture (eg European financial supervision) and contribute to global consolidation and coordination of regulatory policies.

Furceri's goal (2012) was to assess the impact of financial crises on potential output. For this purpose, he estimated a self-regressive growth equation on an unbalanced panel in the OECD countries during 1960-2008. His results suggest that the emergence of a financial crisis negatively and permanently affects potential output. He found by its results that the financial crisis is estimated to lead to a decrease in production by 1.5-2.4% on average. Furceri also said that the impact of the financial crisis varies according to the structural characteristics of economies, such as openness, macroeconomic imbalances, financial growth and the quality of governance.

The article of Aloui, Aissa and Nguyen (2010) examined the scale of the global crisis and the contagion effects it induces by conducting an empirical investigation into the extreme financial interdependencies of emerging markets with the US.

Firdmuc and Korhonen (2009) analyzed the transmission of the global financial crisis to business cycles in China and India. The pattern of business cycles in emerging Asian economies generally showed a low level of synchronization with OECD countries, which was consistent with the decoupling assumption. Instead, however, the financial crisis has had a significant effect on economic developments in emerging Asian economies.

According to Visco (2013), the global financial crisis has been severe and has greatly affected various economies and in different ways. Central and Eastern European transition countries have not been excluded: their fairly rapid financial integration over the past twenty years has brought sustainable economic benefits, but has left them more exposed to global financial turmoil through links with banks in Europe Of the West, which have dominant holdings in the markets in the region. Financial stability has become a fundamental objective in policy making, and central banks are strongly involved in this effort.

Aizenman, Jinjarak and Park (2012) investigated the relationship between economic growth and international capital flows, classified as foreign direct investment, portfolio investment, equity investment, and short-term debt. They analyzed 100 countries between 1990 and 2010, when emerging markets became more integrated into the international financial system, both before and in the pre-crisis period. They have noticed that the relationship between growth and capital flows depends on the type of flows, economic structure and global growth patterns. The relationship between economic growth and short-term debt is zero before the crisis and negative during the crisis.

Grabel (2003) argued that neo-liberal financial integration introduces the risks to emerging economies - value, flight, fragility, contamination and sovereign risk. The paper examines whether these policies mitigate the risks and whether these policies crisis in Asia (and its transmission).

According to Crotty (2009), the crisis took the form of cycles in which deregulation, coupled with rapid financial innovation, stimulates strong financial booms that lead to crises. This paper looked at the structural failings in the financial system that have stimulated the crisis and also the prospects for financial reform.

Valiante (1988) stated in his study that, following the crisis, capital markets in Europe appeared to be more clearly underdeveloped compared to the sophistication and maturity of the European economy. This evolution was manifested in two directions which Have aggravated the crisis. Firstly, insufficient financial integration has drastically limited the ability of cross-border

financial transactions to equalize shocks. Secondly, as the banking system has become incapable of providing an adequate amount of funds at a reasonable cost, the European economy has encountered serious financing problems with unavoidable macroeconomic consequences. Guevara and Maudos (2010) aimed at analyzing the process of financial integration in Europe and its impact on economic growth since the introduction of the euro in 1999. Another important point of the paper is the focus on how the financial crisis Which began in 2007 has affected integration and economic growth. The results illustrate that a significant part of financial development can be attributed to progress in integration.

According to Hodson and Quaglia (2009), the global financial crisis is an extraordinary opportunity for those studying the European political economy. First, it provides a unique natural experiment for understanding the functioning of economic and monetary union in a world of intense but incomplete financial integration at regional and global level. Secondly, it provides a case study on the EU's ability to provide coordination policies in the country and abroad, in the absence of more centralized decision-making. This article tried to outline the global financial crisis by placing it in an intellectual and historical context.

Inklaar, Guevara and Maudos (2012) found in their study that, following a financial crisis, investment declined more in countries with a higher degree of risk aversion, which may be informative for assessing post-crisis economic performance .

Zettelmeyer et al. (2009) showed in his study that the ownership of foreign banks was an important factor in mitigating the decline in production, and that more than half of the variation in the decline in capital outflows can be explained by a group of macroeconomic vulnerabilities. Yang et al. (2003) showed in his study that in the case of Asia, both long-term co-integration and short-term causal links between these markets were strengthened during the crisis and that these markets were generally more integrated After the crisis before the crisis. They have noticed that the degree of integration has changed over time, especially during periods marked by the crisis.

Taylor (2009) conducted an empirical investigation into the role of governmental actions and interventions during the financial crisis that broke out in 2007. He stated in his study that the classic explanation of financial crises is that they were caused by several times of monetary excesses.

Halil (2016) examinded in their study the impact of the global crisis on access to finance. He showed that that the global crisis only had a marginally significant impact on access to finance.

Bâldan (2016) examined in their study the impact of the economic crisis on population's consumption in Romania. She found that the economic and financial crisis determined a change in the income distribution towards the products and services necessary for everyday life.

3. Data and methodology

Due to the topic that is considered to be of interest, the purpose of this study is to observe, through the analysis of previous studies on the subject, the answers to the following questions:

1. What are the most appropriate methods for analyzing the relationship between the financial crisis, European financial integration and economic growth?

2. What are the most commonly used indicators for analyzing the relationship between European financial integration, the financial crisis and economic growth?

By answering these questions, we will know in later research what we can improve, bring about the statistical method, the variables used, in order to achieve results that clearly show the relationship between financial integration and economic growth in terms of crisis.

Content analysis is a method used to describe and analyze the content of communications, to observe and analyze the common elements found in several studies, demonstrating their importance. For this analysis, I have used in the Literature review a number of 16 articles on this theme from 1988 to 2013, written by well-known authors and published in well-known specialist journals, and I chose to analyze 10 of them, We considered representative in terms of the methodology and variables used in the analysis.

4. Results

In order to be able to carry out the analysis, we made a table with the main elements of the studies under consideration.

Table no.1 **Main studies and methods used**

Name	Authors	Method used	Variables used	Sample	Period Analysed
Financial integration and economic growth:the impact of the crisis	Guevara, Maudos	Rajan and Zingales theory	financial development (at country level), financial dependence (at industry level).	53 sectors from 21 EU countries	1999-2008
The effect of financial crises on potential output: New empirical evidence from OECD countries	Furceri, Mourougane	Production function Cobb-Douglas	potential output, total factor productivity, capital stock, structural unemployment rate, number of hours worked / employee, elderly population.	30 OECD countries	1960-2008
Global financial crisis, extreme interdependences, and contagion effects: The role of economic structure?	Aloui, Aissa, Nguyen	Multivariate distribution function with uniform marginal distributions, Garch Model	5 stock indices	Brazil, Russia, India, China, US.	2004-2009
The impact of the global financial crisis on business cycles in Asian emerging economies	Firdmuc, Korhonen	Correlation coefficient	GDP	China and India	1993-2008
The impact of the crisis on financial integration in Central and Eastern Europe	Visco	Weighted average	Private banking loans, private sector debt securities, stock market capitalization (1996-2011), OTC market and exchange traded derivatives (1998-2012), gross stock of assets And external financial liabilities (1980-2007), international capital inflows (2003-2008), gross foreign debt (2002-2012)	Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovakia, Slovenia, China, Hong Kong, India, Indonesia, Korea, Malaysia, Philippine, Singapore, Taiwan, Thailand.	1996-2012
Capital Flows and Economic Growth in the Era of Financial Integration and Crisis, 1990–2010	Aizenman, Jinjarak, Park.	Correlation, cross-sectional regression, averages per year.	GDP / capita, private credit-to-GDP ratio, education, exchange stability measures, monetary independence, capital inflows (FDI inflows, FDI outflows,	100 countries	1990-2010

			portfolio investment, capital, short-term receivables) , exports and imports.		
Financial Crisis, Financial Integration and Economic Growth	Guevara, Maudos	Rajan and Zingales theory	annual growth rate of value added, financial development, financial dependency, added value.	53 sectors from 21 countries	1999-2008
The Impact Of The Financial Crisis On Financial Integration, Growth And Investment	Inklaar, Guevara, Maudos	Regression analysis, GMM	share of real investment in GDP, uncertainty avoidance index for euro area countries, financial crises.	74 countries	1970-2005
Understanding The Crisis In Emerging Europe	Zettelmeyer, Berglof, Korniyenko, Plekhanov.	Regression analysis	cross-border credit flows (calculated as a percentage of the banking assets in Q3 2008), foreign banks' ownership, credit rating, GDP, exports, external debt to GDP, corruption, private credit sector, Foreign direct investment, the weight of foreign banks in bank assets.	Emerging EU countries	1999-2009
Stock Market Integration And Financial Crises: The Case Of Asia	Yang, Kolari, Min.	Cointegrated autoregression vector (VAR)	12 stock markets (daily closing prices, 1662 daily observations)	Asia, USA, Japan.	1995-2001

Source: Author processing

As we can see in the previous table, most studies have used different methods and variables, so it is difficult to group them into certain categories. However, we can try grouping them according to a few features:

Category 1: Studies that used the theory of Rajan and Zingales.
Category 2: Studies that used regression analysis.
Category 3: Studies using variable stock indices.
Category 4: Studies that have used as value added variables, financial development and financial dependency.
Category 5: Studies that used the correlation coefficient method.

Table no.2 **Frequency of using statistical methods**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		32	69,6	69,6	69,6
	Regression analysis	3	6,5	6,5	76,1
	Correlation coefficient	2	4,3	4,3	80,4
	Multivariate distribution function with uniform marginal distributions	1	2,2	2,2	82,6

	Frequency	Percent	Valid Percent	Cumulative Percent
Production function Cobb-Douglas	1	2,2	2,2	84,8
GMM	1	2,2	2,2	87,0
Weighted average	1	2,2	2,2	89,1
Average years	1	2,2	2,2	91,3
Garch model	1	2,2	2,2	93,5
Rajan şi Zingales theory	2	4,3	4,3	97,8
VAR	1	2,2	2,2	100,0
Total	46	100,0	100,0	

Source: Author processing in SPSS

As we can see in the above table, statistical methods with a higher frequency are: regression analysis, correlation coefficient and Rajan and Zingales theory.

Table no.3 **Frequency of using variables**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	market capitalization	1	2,2	2,2	2,2
	government expenditure	1	2,2	2,2	4,3
	consumption	1	2,2	2,2	6,5
	corruption	1	2,2	2,2	8,7
	bank loans to the private sector	1	2,2	2,2	10,9
	financial crises	1	2,2	2,2	13,0
	external debt	1	2,2	2,2	15,2
	external gross debt	1	2,2	2,2	17,4
	external debt in GDP	1	2,2	2,2	19,6
	financial dependency	2	4,3	4,3	23,9
	financial development	2	4,3	4,3	28,3
	education	1	2,2	2,2	30,4
	exports	1	2,2	2,2	32,6
	capital flows	1	2,2	2,2	34,8
	cross - border credit flows	1	2,2	2,2	37,0
	imports and exports	1	2,2	2,2	39,1
	monetary independence	1	2,2	2,2	41,3
	uncertainty avoidance index for euro area countries	1	2,2	2,2	43,5
	stock indices	2	4,3	4,3	47,8
	international capital inflows	1	2,2	2,2	50,0
	Foreign direct investment	1	2,2	2,2	52,2
	exchange stability measures	1	2,2	2,2	54,3
	number of hours worked / employee	1	2,2	2,2	56,5
	OTC market and derivatives traded on stock exchange	1	2,2	2,2	58,7

GDP	3	6,5	6,5	65,2
the weight of foreign banks in bank assets	1	2,2	2,2	67,4
share of real investment in GDP	1	2,2	2,2	69,6
the elderly	1	2,2	2,2	71,7
total productivity	1	2,2	2,2	73,9
potential output	1	2,2	2,2	76,1
ownership of foreign banks	1	2,2	2,2	78,3
private credit ratio-GDP	1	2,2	2,2	80,4
annual growth rate of added value	1	2,2	2,2	82,6
Structural unemployment rate	1	2,2	2,2	84,8
Credit rating	1	2,2	2,2	87,0
private credit sector	1	2,2	2,2	89,1
stock capital	1	2,2	2,2	91,3
gross inventories of external assets and liabilities	1	2,2	2,2	93,5
Debt securities issued by the private sector on the domestic market	1	2,2	2,2	95,7
Annual added value	2	4,3	4,3	100,0
Total	46	100,0	100,0	

Source: Author calculations in SPSS

As we can see in the table above, the variables with the highest frequency are gross domestic product, stock indices, development and financial dependency.

Category 1 results: Studies that have used Rajan and Zingales's methodology have noticed that financial integration and financial development have been fundamental to recent growth, with the crisis triggering a regression of integration, demonstrating that, since the start of the 2007 crisis, And integration with economic growth declined by 0.06% for global financial development, of which 0.2% is for financial integration.

Category 2 results: Studies that used the regression analysis methodology have noticed that countries with a larger share of banks with foreign capital in the financial system tended to suffer lower credit losses during the crisis. Since foreign banks have contributed to the credit boom and the accumulation of external debt in Europe, the global effect of financial integration on the crisis in emerging Europe seems to have been mixed. While foreign banks had a stabilizing effect during the crisis, they took the form of neutralizing the imbalances they had created in previous years.

Category 3 results: Studies using exchange rate indices indicate that the results obtained in Asia highlight the fact that both long-term cointegration and causal links between stock markets have been strengthened during the crisis and that these markets were in Generally more integrated after the crisis than before the crisis. Also, an important implication of the results is that the degree of integration between countries tends to change over time, especially around the times marked by the financial crisis.

Category 4 results: Studies that used as value-added variables, financial development, and financial dependency were those who used the Rajan and Zingales theory as the method, the results of which were detailed above.

Category 5 results: Studies that have used the correlation coefficient method as a method have revealed a significant relationship between trade relations and dynamic correlations of GDP growth rates in Asian and OECD developing countries. The relationship between growth and delayed capital flows depends on the type of flows, economic structure and growth patterns of the world. They have found a significant relationship between foreign direct investment and economic growth. The relationship between growth and capital flows is weaker and less stable. Finally, the relationship between growth and short-term debt is zero before the crisis, and negative during the crisis.

Also, with the help of the Atlas program, I analyzed the 10 articles and I noticed, according to the table below, that the most widely used 9 words (financial, growth, integration, development, crisis, countries, economic, GDP, market), refer to the subject analyzed in this paper, which leads to the conclusion that the chosen studies are relevant to the studied topic.

Table 4 **Frequency of word use**

Words	Total count
financial	982
growth	719
crisis	564
countries	430
integration	426
development	385
market	381
gdp	342
economic	331

Source: Author calculations in Atlas

5.Conclusions

Financial integration affects many aspects of economic performance, especially increases investment rates, technology transfers, trade opening, stimulates internal development, financial system and economic growth. Financial integration is known as a potential source of macroeconomic instability.

In the future, financial integration should facilitate access to investment opportunities in less developed countries, increasing competition in these countries, and improving the efficiency of financial systems by reducing brokerage costs.

As a result of this study, we noticed that the process of financial integration and economic growth under the influence of the crisis was discussed in many studies in the literature, most of them using different techniques and methodologies to quantify these phenomena by means of indicators be estimated.

To answer the questions we sought for answers through qualitative queries, namely the content analysis of specialized papers, we can say that, as we have seen, the most commonly used methods were the correlation coefficient, the regression analysis and The theory of Rajan and Zingales, and as gross domestic product variables, financial development, financial dependency and gross added value.

Also, with regard to the results of the studies, obtained using different methodologies and variables, all converge to the idea that the phenomenon of the economic and financial crisis has directly affected the process of financial integration and economic growth, having a negative influence on them.

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