

FINANCIAL INTEGRATION AND ECONOMIC GROWTH IN EUROPE

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Abstract

This study examines the impact of financial integration on economic growth in the case of 31 European countries over the period from 2000 to 2021 using dynamic panel data models. The estimation results

1. Introduction

Financial market integration is a central topic in international finance and in the analysis of the linkages between different financial markets. Numerous studies have provided evidence on one of its key aspects, namely the extent to which international financial markets co-move and asset returns are interdependent (see, e.g., Kim et al., 2006; Graham and Nikkinen, 2011). An equally important issue is the impact of financial integration on economic growth. Theory has identified various possible channels, both direct and indirect, through which the former can boost the latter (see Kose et al., 2003). The direct ones include increasing domestic savings in countries with a lower capital stock; reducing the cost of capital through a more efficient global allocation

of interest depends on country-specific characteristics (such as the level of financial development or the quality of institutions) by incorporating suitably defined interaction terms into the model.

The layout of this paper is the following: Section 2 describes the data and the methodology; Section 3 presents the empirical results; Section 4 offers some concluding remarks.

dummy which is equal to 1 during the Global Financial Crisis (GFC) of 2007-2009 and zero elsewhere; TRD_OP trade openness; SCHOL- secondary school rate enrolment ratio; WGI World Governance Indicator; COVID a Covid-19 pandemic dummy which is equal to 1 during 2020-2021 and zero elsewhere; DCPS domestic credit to the private sector as a percentage of GDP. These data have been obtained from the World Development Indicators (WDI) and World Governance Indicators (WGI) Data Bank of the World Bank (see Table A2 in the Appendix for details).

The empirical analysis is carried out by using the following dynamic panel data framework:

As already mentioned, our focus is on the impact of financial integration on economic growth in the case of European countries, more precisely we are interested in establishing what type of assets or liabilities affect economic growth. For this purpose we estimate three model specifications: in the first one two aggregate measures of financial integration are used, whilst the second and third one include respectively four and six sub-categories of financial integration to shed further light on its effects on economic growth.

The first dynamic model, which includes two aggregate measures of financial integration (TAS and TLB), is specified as follows:

In the second dynamic model we consider instead four different sub-categories of financial integration (EQFDL, DBL, EQFDA, DBA) in order to establish which types of assets or liabilities have a greater impact on economic growth:

2.3 The Financial Integration Economic Growth Relationship and the Quality of Institutions

The quality of institutions could also affect the relationship under examination. To analyse its possible impact we introduce an interaction term between the various measures of financial integration used and an index for individual countries constructed by Kaufmann et al. (2010), which is available from the World Governance Indicators Data Bank of the World Bank; it includes six dimensions of governance (namely, voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, control of corruption), and its value ranges

The above models are estimated using yearly data for the period 2000-2021 for 31 European Countries. ¹ In all cases we employ the system GMM estimator developed by Arellano and Bover (1995), which combines a regression in differences with one in levels. The consistency of this estimator depends on the validity of the instruments used in the model as well as the assumption that the error term does not exhibit serial correlation. The instruments are chosen from the lagged endogenous and explanatory variables. In order to test the validity of the selected instruments, we perform the Sargan test of overidentifying restrictions proposed by Arellano and Bond (1991).

3. Empirical Results

The GMM estimates for the various dynamic panel data models are displayed in Tables 1-3. In particular, in Table 1 column (1) reports the growth regression results without any financial integration variables, column (2) those based on the aggregate financial integration measures (TAB, TLB), and column (3) and (4) those obtained by using the disaggregate measures.

¹ The list of countries is displayed in Table A3.

It can be seen that the estimated impact of financial integration on economic growth varies depending on the measure used. Specifically, FDI and equity liabilities (EQ-FDA) appear to have a positive and significant impact on economic growth, while the positive effect of debt liabilities is statistically insignificant. The former finding can be explained by the fact that through FDI technology, knowledge and managerial skills are transferred to the host country, thereby increasing its competitiveness and productivity - FDI can create new jobs, increase income and generate tax revenue, and thus boost economic growth. By contrast, FDI, equity assets (EQ-FDL) and debt assets do not seem to contribute significantly to economic growth in the countries holding them, a potential explanation being that investment abroad may lead to a decrease in domestic production (Osada and Saito, 2010). Finally, the coefficients on the control variables are mostly significant and have the expected signs - in particular, trade openness, schooling, financial development and good governance have a positive sign, whilst the GFC and Covid-19 pandemic dummies have

Table 2: GMM Estimates for the

In the following discussion we mainly focus on the key variables of interest. On the whole, the evidence suggests that the impact of financial integration on economic growth depends on the level of financial development, and again that it var

Table 3: GMM Estimates for the Financial Integration-Economic Growth Relationship Taking into Account the Quality of Institutions

Variable	(1)	(2)	(3)
	GRR	GRR	GRR
L.GDPC	-0.156 (8.32)***	-0.127 (6.93)***	-0.144 (7.35)***
EQ-FDA	0.002 (0.84)		-0.007 (0.51)
DBA	-0.001 (0.59)		-0.019 (1.13)
EQ-FDL		0.009 (4.71)***	0.021 (1.79)*
DBL		0.006 (0.95)	0.009 (1.17)
TRD-OP	0.036 (6.85)***	0.023 (4.35)***	0.028 (4.42)***
CPI	-0.004 (0.05)	-0.013 (0.16)	0.031 (0.37)
CRISIS	-0.021 (2.54)***	-0.026 (5.44)***	-0.023 (4.84)***
COVID	0.004 (0.71)	- 0.005 (0.73)	-0.009 (1.85)*
GOV-EXP	0.013 (3.55)***	0.014 (3.78)***	0.012 (3.02)***
DCPS	0.005 (1.83)*	0.002 (0.32)	0.001 (1.14)
SCHOL	0.123 (6.21)***	0.105 (5.46)***	0.101 (4.72)***
WGI	0.066 (6.02)***	0.099 (6.03)***	0.079 (4.67)***
WGI x EQ-FDA	-0.004 (1.22)		0.015 (1.31)
WGI x DBA	0.003 (0.89)		0.025 (1.51)
WGI x EQ-FDL		0.011 (5.29)***	0.026 (1.95)*
WGI x DBL		0.008 (1.30)	0.014 (1.78)*
Constant	0.640 (8.68)***	0.591 (7.91)***	0.640 (8.28)***

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possible presence of nonlinearities in the financial integration – economic growth relationship is in fact an important issue which will be investigated further in future work.

References

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Arellano, M., and Bond, S. R. (1991). Some tests of specification for panel data: Monte Carlo evidence

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Table A3: List of Countries

Countries			
Austria		Latvia	