ScienceDirect

International Review of Financial Analysis
Volume 29, September 2013, Pages 70-78

# The short-run relationship between the financial system and economic growth: New evidence from regional panels

Paresh Kumar Narayan [a], Seema Narayan [b]

Show more

Share Cite

https://doi.org/10.1016/j.irfa.2013.03.012
Get rights and content

## Abstract

In this paper, we examine the impact of the financial system on economic growth for a panel of 65 developing countries. The novelty of our paper is that we examine these relationships for various regional panels. Our main findings are that while for the full panel of 65 countries there is evidence of financial sector-led growth, bank credit has a negative effect on economic growth. At the regional level, for the Middle Eastern countries evidence suggests that neither the financial sector nor the banking sector contributes to growth. Except for Asia, the role of financial sector development on economic growth is relatively weak. Finally, except for the Middle Eastern countries, clear evidence is found in favour of bank credit having a statistically significant and negative effect on economic growth.

## Introduction

The role of financial sector development on economic growth was first identified over 100 years ago by Bagehot (1873), who argued that the financial system played a crucial role in stimulating industrialisation in England by facilitating the mobilisation of capital. A related observation was later made by Schumpeter (1911). His idea was based on the relationship between the financial intermediary sector and the resulting allocation of savings to firms, which he perceived as having implications for productivity growth and technological change (see also Schumpeter, 1934).

There are several empirical studies that examine the relationship between financial sector development and economic growth. This literature can be divided into two branches.[1,2] One strand of this literature examines the impact of stock market developments, namely, market capitalisation, turnover ratio, and stocks traded on economic growth. The second strand of this literature focuses on the relationship between banking sector developments, namely, private credit and liquid liabilities, and economic growth. In the next section, we review these two strands of the literature. The main message from this literature survey is that there is strong support for the hypothesis that financial sector and banking sector (commonly referred to as the financial system in the literature) development promote economic growth. Within this branch of the literature, a sub-set of studies show that trade openness and export growth contribute to economic growth (see Lucas, 2009, Wacziarg and Welch, 2008). Motivated by these findings, some studies have begun to examine the relationship between finance and trade (see, for example, Baltagi et al., 2009, Bordo and Rousseau, 2012, Demetriades and Rousseau, 2011).

Our study contributes to this literature by examining the relationship between financial and banking sector developments and economic growth for a panel of 65 developing countries. Our study is different from the extant literature in three ways. First, we focus only on developing countries. While Anwar and Sun (2011), contrary to the literature, do not find evidence in favour of financial sector-led economic growth, their study is based on one developing country, Malaysia. Therefore, we extend the Anwar and Sun (2011) study by considering no fewer than 65 developing countries. Moreover, unlike previous studies (see Section2), we do not form a panel representing a combination of developed and developing countries. Our motivation for departing from the literature on this approach is as follows. Including both developed and developing countries in cross-section or panel data analysis of the impact of financial sector development on economic growth can lead to biased results in the sense that the developed countries on the panel may be responsible for the positive relationship between financial/banking sector development and economic growth. Thus, to generalise that financial/banking sector development stimulates economic growth in a panel including both developed and developing countries can be misleading because the positive relationship may simply be driven by the developed markets of the panel.

A second way our study is different is as follows. We, for the first time in this literature, divide the sample of 65 developing countries into regions. Thus, we form regional panels. For example, we have an Asian panel, a European panel, an African panel, a South American panel, and a Middle Eastern panel. The formation of regional panels is motivated by Narayan, Mishra, and Narayan (2011), who show that regional panels of countries have relatively more homogeneous financial indicators. The advantages of forming regional panels are twofold: (1) we are able to test the finance–growth relationship for a more homogenous group of countries; and (2) we are able to compare the finance–growth experiences of different regions.

Third, our study examines the short-run relationship between financial systems and economic growth. There are very few studies which have considered the short-run relationship; exceptions are Loayza and Ranciere (2006) and Kaminsky and Reinhart (1999). There are three factors that motivate us to undertake a short-run investigation: (a) data limitations, (b) the concern that averaging data leads to loss of information and prevents the estimation of a more flexible model capable of allowing parameter heterogeneity across countries (see Loayza & Ranciere, 2006), and (c) in the short-run the banking sector development, if over-liberalised, can have negative effects on economic growth, hence a short-run analysis allows us to examine this possibility.

The balance of our paper proceeds as follows. In Section2, we provide a brief overview of the literature on the finance-economic growth nexus. In Section3, we discuss the theoretical motivation, and in Section4, we discuss the data, the empirical model, and the results. In the final section, we provide some concluding remarks.

---

## Section snippets

## Literature review

There is a large volume of studies on this topic. In this section, we only review selected recent studies that share some common features with the present study.

Levine, Loayza, and Beck (2000) examined the relationship between financial intermediary development and economic growth for a panel of 74 developed and developing countries, and for a cross-section of 71 developed and developing countries. For the panel data, they used the Arellano and Bond (1991) panel-GMM estimator. They found that…

## Theoretical considerations

In this section, we discuss the short-run theoretical association between financial and banking sector developments and the other determinants of economic growth, such as inflation, openness, and capital stock, considered in this study. The relationships discussed here are obviously also possible in the long-run. …

## Data

Our panel data set includes 65 developing countries.[4]…

## Concluding remarks

The goal of this paper was to revisit the financial development-economic growth nexus for developing countries divided into various regional panels, namely, Asian, European, African, South American, and Middle Eastern panels. Our empirical analysis is based on data for the period 1995 to 2011 and uses the differenced and system-GMM estimators. We use two proxies for financial sector development, namely stocks traded and market capitalisation, and we use domestic credit provided by the banking…

---

## References (62)


J. Zhang *et al.*
Financial development and economic growth: Recent evidence from China
Journal of Comparative Economics (2012)

J.-S. Yu *et al.*
Global and regional integration of the Middle East and North African stock markets
The Quarterly Review of Economics and Finance (2008)

R. Turk-Ariss
Competitive behaviour in Middle East and North Africa banking systems
The Quarterly Review of Economics and Finance (2009)

A.C. Stockman
Anticipated inflation and the capital stock in a cash-in-advance economy
Journal of Monetary Economics (1981)

S.V. Nieuwerburgh *et al.*
Stock market development and economic growth in Belgium
Explorations in Economic History (2006)

P.K. Narayan *et al.*
Do market capitalisation and stocks traded converge? New global evidence
Journal of Banking and Finance (2011)

R. Levine *et al.*
Financial intermediation and growth: Causality and causes
Journal of Monetary Economics (2000)

R. Levine
Finance and growth: Theory and evidence

R. Levine
Law, finance, and economic growth
Journal of Financial Intermediation (1999)

R.G. King *et al.*
Finance, entrepreneurship, and growth
Journal of Monetary Economics (1993)

View more references

## Cited by (88)

The impact of financial risk on green innovation: Global evidence
2023, Pacific Basin Finance Journal

Show abstract

Natural resources led growth and the role of financial development: Evidence from Next-11 economies
2022, Resources Policy

Show abstract

The impact of a dual banking system on macroeconomic efficiency
2022, Research in International Business and Finance

Show abstract

Bank credit and economic growth: A dynamic threshold panel model for ASEAN countries
2022, International Economics

Show abstract

The finance-growth nexus in Latin America and the Caribbean: A meta-analytic perspective
2022, World Development

Show abstract

International review of financial analysis: A retrospective evaluation between 1992 and 2020
2021, International Review of Financial Analysis

Show abstract

View all citing articles on Scopus

---

## Recommended articles (6)

Research article

### New return anomalies and new-Keynesian ICAPM
International Review of Financial Analysis, Volume 29, 2013, pp. 87-106

Show abstract

Research article

### Female directors and UK company acquisitiveness
International Review of Financial Analysis, Volume 29, 2013, pp. 79-86

Show abstract

Research article

### Financial dependence, global growth opportunities, and growth revisited
Economics Letters, Volume 120, Issue 1, 2013, pp. 123-125

Show abstract

Research article

### Heterogeneity in the growth and finance relationship: How does the impact of bank finance vary by country and type of lending?
International Review of Economics & Finance, Volume 31, 2014, pp. 275-288

Show abstract

Research article

### Is more finance better? Disentangling intermediation and size effects of financial systems
Journal of Financial Stability, Volume 10, 2014, pp. 50-64

Show abstract

Research article

Institutional quality thresholds and the finance – Growth nexus

Journal of Banking & Finance, Volume 37, Issue 12, 2013, pp. 5373-5381

Show abstract

View full text