Research in International Business and Finance 23 (2009) 339–348

Contents lists available at ScienceDirect

Research in International Business and Finance

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

Financial markets and economic performances: Empirical evidence from five industrialized economies

Sisira R.N. Colombage *

Monash University, Department of Accounting and Finance, Gippsland Campus, Northways Road, Churchill, Victoria 3842, Australia

ARTICLE INFO

Article history:
Received 16 March 2008
Received in revised form 27 November 2008
Accepted 10 December 2008
Available online 24 December 2008

JEL classification:
G15, E44, O16

Keywords:
Financial markets
Causality testing
VARs

ABSTRACT

This paper investigates the nature of the links between the development of financial markets and economic performances in five advanced economies. The vector error correction model (VECM) establishes the quantitative importance of long-run relationships among three financial variables and the real output. Granger's causality test then suggests short-run causality between financial markets and the real sector as well as the substitution effect of the individual sectors in the financial market of each country. The results support the supply-leading hypothesis that the development of financial markets spurs growth for all countries except for Canada. The demand-driven hypothesis is confirmed for Canada only in the short run.

1. Introduction

In the wake of the continued international integration of financial markets, numerous researchers and financial policy makers have been devoting their research efforts towards identifying a causal relationship between the real and financial sectors that has long been assumed by a significant part of empirical literature (Fink et al., 2004). Open market policies recognize that the role of the capital market is vital in achieving economic growth mainly by mobilizing financial resources to fund potential investment opportunities. Moreover, the significance of testing the existence of a causal relationship between financial and real growth is basically twofold. Firstly, a sound financial system allocates funds efficiently towards their most profitable uses. Second, it stabilizes consumption by allowing investors to diversify their investments effectively.

* Tel.: +61 3 5122 6644; fax: +61 3 5122 6524.
E-mail address: sisira.colombage@buseco.monash.edu.au.

0275-5319/$ – see front matter
doi:10.1016/j.ribaf.2008.12.002

Consequently, the importance of credit and stock markets in economic development has been extensively examined and analyzed in many instances, despite the fact that the role of the corporate bond market as an alternative source of financing investments has, to date largely been ignored. Only a handful of studies have focused on the contribution of the bond market to gross domestic product (GDP) growth of a country, although it is theoretically argued that the regulated bond market provides a direct approach to channel public savings towards productive investment even without a need of a financial intermediary and thereby encourages endogenous growth of the real sector. The reason for a lack of evidence in the nexus of the corporate debt securities market and the real sector may relate either to the non-availability or inadequacy of data as most countries in transition have just started promoting bonds in their markets. Nevertheless, some empirical investigations on a possible causal linkage between the bond market and the real sector have been conducted relating to advanced economies (Harvey, 1989; Fink et al., 2003).

The nexus of financial growth and economic growth go back to the theoretical conceptualization made by McKinon (1973) and Shaw (1973) highlighting a positive association between the growth of the financial sector and the evolution of the real economy which has received a tremendous empirical support from recent cross-country studies such as Rousseau and Wachtel (2000), and Beck and Levin (2002).

Fink et al. (2006) present evidence of a correlation between either stock or debt market growth and GDP growth for seven of the G8 countries (with the exception of Germany). They also found feedback between domestic credits and output as well as stock market growth and output growth for Japan. However, Favara (2003) stresses that growth in financial sector has no first order effect on GDP growth. DeBondt (2002) argues that despite their youth euro area, corporate bond markets are sufficiently informative for monetary policy and that the lag of bond spreads behind short-term interest rates, indicate properties for real economic growth.

Although the positive correlation between capital market growth and economic development has been established empirically, the causal relationship between these variables and their long-run equilibrium remains ambiguous. The fact that there exists a strong relationship between financial and economic growth does not necessarily imply a causal relationship. The relationship of these two ends may vary depending upon the circumstances of each country. A major problem concerning this issue is which variable precedes the other: Is financial growth a stimulus for economic growth or does economic growth energize financial growth? The evidence on causality may have strong bearing on economic policy makers whether in the form of uni-directional causality on either side (for example, real sector development to financial sector development) or no directional causality at all. Further investigation of these causality issues is therefore, of some importance.

Considering the facts, the main motivation of this paper is to examine the finance-growth nexus of five developed economies while reviewing the empirical evidence on how financial sector development contributes to uplifting development of the real sector in different market settings, and paying particular attention to possible causality between capital market development and economic growth. In this context, it is worthwhile to evaluate the literature on the impact that development of three major segments of financial structure of an economy (the credit market, stock market and bond market) have on economic development.

2. Empirical literature on finance-growth nexus

While very few empirical studies explore the relationship between the financial and real sector development directly, some studies, for example, Levine et al. (2000), Demirgüc-Kunt and Levine (1999), King and Levine (1993), and World Bank (1989) do focused on the relationship between real output growth and capital market development. The positive relationship between the development of the financial sector and economic growth, as predicted by endogenous growth literature, has received impressive empirical support in the recent past, particularly from cross-country studies. The above studies show not only the consistent relationship between finance and growth but also the strong predictive power of the aggregate measures of finance and growth over a period of 10–30 years while arguing that better financial systems stimulate faster growth in productivity by channeling society's resources to promising productivity-enhancing endeavors. Friedman and Schwartz (1963) explained