

学校编码: 10384

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厦 门 大 学

硕 士 学 位 论 文

资本流入、竞争力和资本市场表现的动态分析

DYNAMICS OF CAPITAL INFLOWS, COMPETITIVENESS
AND CAPITAL MARKET PERFORMANCE

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论文提交日期: 2016年3月

论文答辩日期: 2016年5月

学位授予日期: 年 月

答辩委员会主席: _____

评 阅 人: _____

2016年5月

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摘要

近年来，资本跨境流动的重要性日益凸显。由于能够带来效益，发展中国家都试图吸引更多资本流入。但是，资本流入也存在潜在的成本，而这些成本常常被忽视了。本文研究表明资本流入有可能弱化对外竞争力。同时，被弱化的竞争力与资本流入相互作用会对资本市场产生不利影响。本文使用 22 个发展中国家 1980 年到 2014 年的样本，利用长期实际均衡汇率模型（long run real equilibrium exchange rate model），通过计算混合组均值（PMG）来估计不同类型的资本流入——外商直接投资、证券投资、国外收益和国外援助如何影响竞争力。由此，我们计算出竞争力的度量指标，并用其评估竞争力如何与资本流入相互作用从而影响资本市场的表现。结果表明，证券投资、国外收益和国外援助会使实际均衡汇率显著上升，但不会削弱竞争力，因为它们倾向于降低对实际均衡汇率（RER）的高估。另一方面，更低的竞争力与更差的资本市场表现相关，尽管并不显著。外商直接投资和国外收益能显著改变竞争力弱化的负效应；证券投资流入改善了资本市场的表现，但未能改变竞争力弱化的负效应。

关键词：资本流入；竞争力；资本市场；实际汇率

ABSTRACT

Cross border capital flows have become increasingly important over the years. Developing nations try to attract more inflows mainly due to its benefits. However, capital inflows also have potential costs which are often overlooked. This study contends that capital inflows have the tendency of weakening external competitiveness. Also, weaker competitiveness could affect the capital market adversely, depending on its interaction with capital inflows. Addressing these issues, the study uses a sample of 22 developing countries between 1980 and 2014. A long run equilibrium real exchange rate (RER) model is estimated, using the Pooled Mean Group estimator, to evaluate how different forms of inflows – Foreign direct investment (FDI), portfolio investment, foreign income, and aid – influence competitiveness. Following this, competitiveness metric is calculated and used to examine how competitiveness interacts with capital inflows in affecting capital market performance. The results show that Portfolio inflow, Income and aid significantly appreciate the RER. However, these inflow components do not weaken competitiveness, as they tend to lessen RER overvaluation. On the other hand, lower competitiveness is associated with weaker capital market performance, although not significant. FDI and foreign income are able to significantly overturn this negative effect of weaker competitiveness. Portfolio inflow improves capital market performance but does not overturn the adverse effect of lower competitiveness.

Key Words: Capital Inflow; Competitiveness; Capital Market; Real Exchange Rate

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CHAPTER 1 INTRODUCTION

1.0 Background of the study

Economic or external competitiveness is essential for the growth and development of any developing nation. It fosters economic diversification, enables job creation, improves income growth and, in general, promotes poverty reduction. There are many factors that influence economic competitiveness, among which are labour productivity, the level of prices and costs in an economy and the quality of business environment. Similarly, there are different ways of assessing economic competitiveness. Mostly mentioned in the literature are labor productivity, real effective exchange rate (RER), equilibrium real exchange rate, unit labor cost, terms of trade, Balassa's (1964) index of revealed comparative advantage, and the World Economic Forum competitiveness index (see Naceur, Bakardzhieva, & Kamar, 2012).

Economic integration and financial globalization has catalyzed rising cross-border capital movement since the early 1980s. In developing countries, higher returns on capital have attracted substantial capital inflows in various forms – Foreign Direct Investment (FDI), portfolio investment, income from abroad, aid and remittances. Developing nations have also sought foreign capital to make up for capital short-fall in their domestic economies, which is believed to be an impediment to growth and development. Indeed, capital inflows are essential for developing and emerging markets. Viewed from a different lens, however, the trajectory of capital inflows could constrain the economic competitiveness of developing nations. Rising capital inflows can lead to real exchange rate appreciation, which could have detrimental effects on external competitiveness¹ (Corden, 1994). This suggests that the effect of capital inflows on developing nations' is not quite straightforward. Also, different forms of capital inflows may affect competitiveness differently.

Amongst the various indicators of competitiveness, real effective exchange rate (RER)² has been widely used in empirical analysis as an indicator of competitiveness (see Eyraud, 2008; Monfort, 2008). This approach, however, has obvious weaknesses. For example, as long as relative productivity rises faster than the percentage appreciation of the real effective exchange rate, competitiveness can improve even as the real effective exchange rate appreciates. Also, the use of real effective exchange rate as an indicator of competitiveness is mostly with respect to the short run, since

¹ See section 2.1.2 of chapter two for a detailed discussion of the dynamics of capital inflows and economic competitiveness.

² Real Effective Exchange rate is used as a measure of the Real exchange rate in this study. Thus both terms are used interchangeably.

long term competitiveness may be determined by resource endowments, technological change and policy variables (Naceur et al., 2012).

Therefore, to better capture economic competitiveness, RER would need to be examined relative to its equilibrium, which reflects a broad picture of the fundamental macroeconomic mechanism. In this regard, mere appreciation of the RER would not be categorized as loss of competitiveness; an overvaluation of the RER would (see Eyraud, 2008). RER is characterized as overvalued (undervalued) when it is higher (smaller) than its equilibrium level. The Equilibrium RER is, however, not readily observable. This is one of the reasons it has been scarcely used in the literature for assessing competitiveness.

Another relevant issue considered when assessing how certain variables affect competitiveness of nations is how improvements (decline) in competitiveness influence other salient economic variables or sectors, such as gross domestic product or the capital market. This kind of analysis is most apt when a variable that could potentially constrain competitiveness has the tendency of improving other economic variable of interest. For instance, as earlier noted, capital inflows may constrain competitiveness. Similarly, lower macroeconomic competitiveness could lower capital market performance³. On the other hand, higher capital inflows into the capital/stock market could raise capital market performance through the upward pressure inflows put on asset prices. This, then, suggests that the impact of declining economic competitiveness on capital market performance is not very clear. It may depend on whether the bolstering effect of capital inflows is lower/higher than the dampening impact of declining competitiveness.

1.1 Research Questions

In light of the discussion in the preceding section, this study sets out to examine how different kinds of capital inflows influence competitiveness in developing countries. Beyond this, the study will explore the hypothesis that decline in competitiveness may have an adverse effect on capital market performance, depending on whether the negative impact of lower competitiveness is outweighed by the positive impact of rising capital inflows. The specific research questions are as follows:

- How do different forms of capital inflows influence competitiveness in developing nations?

³ See section 2.1.3 of chapter two for a discussion of the channels through which loss of competitiveness could affect the capital market adversely.

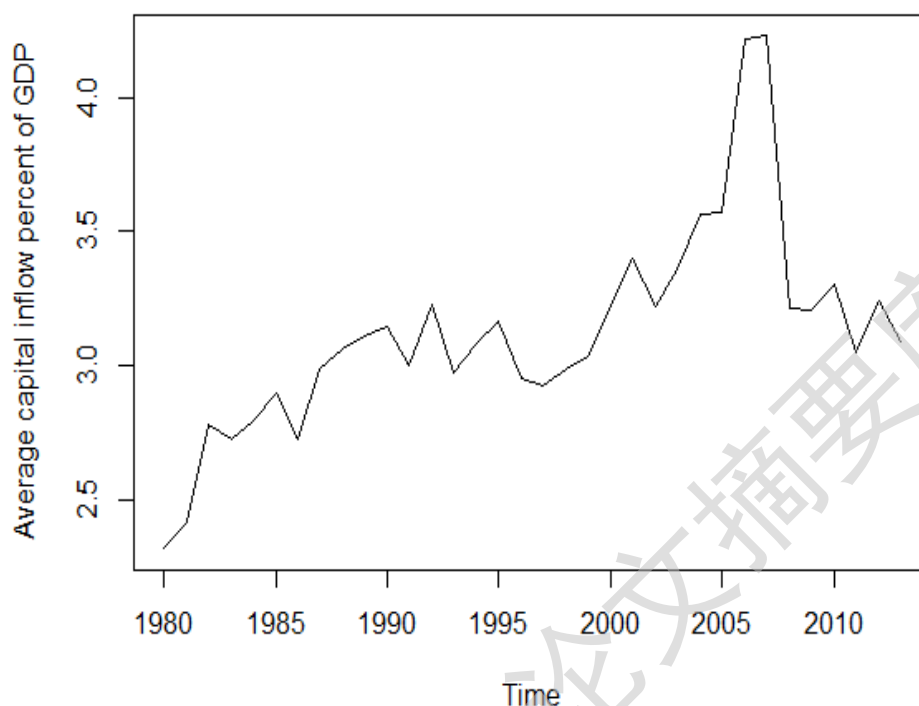
- What is the effect of competitiveness on capital market performance in developing countries?
- Does the effect of declining competitiveness on capital market performance depend on capital inflows?

1.2 Motivation

Capital flows have gained increasing prominence in today's global economy. And developing nations are getting more enamored with capital inflows, seemingly because of its patent benefits: capital formation, makeup for shortage of finance and risk diversification. However, capital inflows, as earlier noted and further discussed in section 2.1.2, have some potential costs which are often overlooked when assessing its benefits.

While the general view in developing nations is that capital inflows are good, and outflows – in some instances termed capital flight – are anathema, there is the possibility that this general perception masks the subtle divergent effects different forms of capital inflows could have on competitiveness. Indeed, some specific forms of inflows may be good for competitiveness and growth while some others might harm competitiveness, by contributing to the overvaluation of real exchange rate. As shown in figure 1.1 below, average capital inflow as a percentage of GDP into the sample of developing countries used in the study has risen over the years, with a decline around 2008 probably due to the financial crisis.

The persistent increase in these inflows suggests their increasing relevance to the developing countries. It might, however, be tempting to conclude that because developing nations tend to actively scout for inflows, then these inflows must be unambiguously good for their economies. Similarly, it might be sloppy to surmise that even when rising inflows are beneficial – not harming competitiveness – to developing nations, all kinds of inflows have this exact effect. Some aspects of the literature – see Naceur et al. (2012) for a summary of some of the theoretical discussions – agree with the contention that different kinds of inflows may affect developing countries differently. Therefore, identifying those kinds of inflows that strengthen competitiveness and those that weaken it (or do not have any reasonable effect), would be helpful in developing policies that will enable developing countries get the best out of globalization and financial liberalization.

Figure 1. 1 Capital Inflow trajectory

Note: Figures are based on average values for all countries used in the analyses. A description of the countries and criteria for selection is contained in section 3.3. Capital inflows include FDI, Portfolio investment, income from abroad, remittances and aid.

Source: Author's calculation based on data described in section 3.3.

Furthermore, capital market performance has become one of the key variables that signal the direction an economy is heading. Boom periods tend to coincide with strong performance in the capital market, while the obverse obtains during recessions. Capital inflows also often tend to be on the rise when the prospects of an economy are bright, and tend to reverse when the prospects are gloomy. Capital inflows are also a fillip to strong capital market performance. Now, since some kind of capital inflows could potentially reduce competitiveness, which in turn limits overall economic performance, it is reasonable that the effect of lower competitiveness and/or capital inflows on the capital market is not straightforward. The final upshot may depend on which of the individual effects dominate the other. Since no study has tried to explore this sort of dynamics in the literature, this study proceeds to do so.

CHAPTER 2 LITERATURE REVIEW

2.1 Theoretical Literature

This section contains the theoretical issues related to the concept of competitiveness and its measures, covered in section 2.1.1; a discussion of how capital flows and its components could influence competitiveness, covered in section 2.1.2; a discussion of the links between competitiveness, capital inflows and capital market performance, presented in section 2.1.3; and finally, approaches employed in modelling real equilibrium exchange rate – a measure relevant for our assessment of competitiveness – covered in section 2.1.4.

2.1.1 Competitiveness and its Measures

Economic competitiveness of nations has long attracted the interest of researchers and policy makers. Much of the involvement in this line of research is associated with the relativity of the concept of countries' competitiveness. According to Fagerberg, Srholec & Knell (2007) in many discussions of competitiveness, the overarching interest is not merely on absolute performance, but how well a country does relative to others. Aside its relativity, countries competitiveness is customarily bipolar – it relates to both the economic wellbeing of a nation's citizens, normally measured through GDP per capita, and the trade performance of the country. This duality of competitiveness and its relativity tend to make a straightforward definition a bit knotty. In this study, the term competitiveness refers to international/external competitiveness.

Fagerberg (1996) advanced a consensus definition of competitiveness of a country as the ability to secure a high standard of living for its citizens, relative to the citizens of other countries, now and in the future. The author further notes that this definition is not disconnected from trade. There are numerous other definitions in the literature. For instance, Gerni, Kabadayi, Yurttancikmaz & Emsen (2013) defines competitiveness as producing a good or service at relatively lower cost and higher quality than the rest of the world. Krugman (1994) defines external competitiveness as the ability of producing internationally competitive goods and services and to the capacity of ensuring satisfactory and continuously developing living standards. US Senate (1985) defines competitiveness as the degree to which a nation can, under free and fair market conditions, produce goods and services that meet the test of international markets while simultaneously expanding the real incomes of its citizens.

Several determinants and measures of economic competitiveness have been highlighted in the literature. Business Council of Australia (2008) notes that in industrial countries, the extent of a nation's competitiveness can be expressed in terms of institutional quality, human capital and the ability to develop technical knowledge. Technical knowledge affects competitiveness in three ways: First, by changing the structure and rules of competition; second, outperforming rivals through new production methods; third, having the potential to create new goods and services (Porter & Miller, 1985).

Gerni et al. (2013) states that one of the comprehensive measures of competitiveness is the Institute of Management Development index (IMD). IMD reflects a country's relative competitive strength. It is calculated by taking the average of four factors: Economic performance, including domestic economic performance, level of international trade, international investments, employments and price level; Government efficiency, comprising public finance, public policy, institutional framework, business legislation and social structure; Business Efficiency, reflecting financing, management attitudes and values of the business environment; Infrastructure, including physical, technological, scientific, health and educational infrastructure (see Salvatore, 2010; Gerni et. al., 2013). Other measures of competitiveness include terms of trade, Balassa's (1964) index of revealed comparative advantage, labor productivity; real wage growth; real returns on capital employed in industry; position in world trade and the World Economic Forum competitiveness index.

As pointed out by Fagerberg et al. (2007), some general factors that are of interest when discussing the wide differences in competitiveness across countries includes technology competitiveness, capacity competitiveness, price competitiveness, and demand competitiveness. Technology competitiveness captures the ability to compete successfully in markets for new goods and services. As noted in the literature, the problem with this aspect of competitiveness is that there is no available data which measures innovativeness directly. What exist are different data sources reflecting different aspects of the phenomenon.

Several approaches have been taken to capture technology competitiveness. Soete (1981) summarizes these measures to include two broad categories: technology input and technology output measures. The most widely used metrics in the technology input measure are R&D spending and scientific personnel. On the other hand, technology output measures include patent-based measures, innovation counts, and various measures of productivity (see Milberg, 1991; Wolff, 1995, Greenhalgh, Taylor & Wilson, 1994). Composite measures combining two or more of these

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