

Globalization and Trade Integration in Developing Countries

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Chapter 7

Trade Competitiveness in Developing Countries

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ABSTRACT

This chapter explores the various dimensions of trade competitiveness in developing countries. After discussing various definitions of competitiveness, the importance of trade competitiveness is discussed in the context of developing countries with reference to the existing literature. Subsequently, major constraints that affect trade competitiveness, particularly macroeconomic conditions, institutional and business environments, and infrastructure, are discussed. Finally, recent empirical findings on trade competitiveness are summarized.

INTRODUCTION

Over the last quarter century, trade has been accepted as a central driver of growth and development for developing countries. The share of developing countries in trade flows has increased tremendously, now making up almost 40 percent of world trade. With this huge expansion of trade, international competition has greatly increased. In today's world, to be able to survive in global markets, developing countries need to stay competitive.

In general, competitiveness has been defined as the measure of a country's advantage in selling its products in international markets (Organisation for Economic Cooperation and Development [OECD], 2014). Nevertheless, the definition of competitiveness is not unique. For this reason, in the first section of this chapter, we present different perspectives on how to measure competitiveness. After that,

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with reference to the existing literature, we focus on the importance of trade competitiveness for developing economies. In this regard, the growth enhancing effect of trade, the impact of different trade policies on economic growth, as well as the link between productivity and exporting is discussed. Subsequently, major challenges for developing countries to maintain their competitiveness level in international markets are outlined. In this framework, the potential impact of macroeconomic instability, in particular focusing on exchange rate and inflation, is assessed. In addition to macroeconomic imbalances, other challenges related to institutional and business environments, as well as infrastructure are also presented. Finally, recent empirical evidence on various dimensions of trade competitiveness using firm-level micro data is discussed. This line of research is interesting, not only for understanding the dynamics of trade competitiveness in the context of developing countries, but also for developing policy recommendations.

BACKGROUND

Trade policy and its potential to enhance growth has been at the center of the economic debate since the Mercantilist view in the 17th century. Since that time, views have changed dramatically. In the early days, trade policies favoring “import substitution” were predominantly believed to achieve growth prospects. However, after the 1970s and 1980s saw the failure of import-substitution strategies, export promotion and outward oriented policies became popular instead.

Trade is a major element of economic growth and poverty reduction. In fact, the idea that trade is an engine for growth dates back to Adam Smith and David Ricardo. Adam Smith considers trade to be a positive-sum game. During the trading process, if countries specialize in the production of goods in which they have absolute advantages, all parties win (as cited in Moon, 2000). The other famous classical economist, David Ricardo, in his famous work “On the Principles of Political Economy and Taxation” also stressed the role of free trade in promoting efficiency and productivity in the economy. Ricardo, by building on Smith’s absolute advantage theory, claimed that all countries gain from free trade by producing what they are best at in comparison to other countries.

During the 17th and 18th centuries, before the free trade argument, mercantilism was the dominant economic philosophy. During this time, a large number of development economists favored the protectionist view with the aim of protecting domestic industries and jobs from foreign competition. Throughout this period, protectionist trade policies in the form of import substitution were dominant. In the context of this import substitution type of industrialization, it was argued that a country should attempt to reduce its reliance on imported goods through the domestic

production of industrialized products. Proponents of this view strongly believed in the protection of infant industries; nascent domestic industries that need protection against international competition until becoming mature and competitive. In this regard, foreign imports are replaced by local production.

The 1980's Latin American Debt crisis was a turning point in reshaping the policy debate favoring protectionism. Anecdotal evidence showed that import substitution policies, which were dominant in Latin American countries, were unsustainable. When contrasted with the strong trajectories of their East Asian counterparts, which had aggressively implemented outward oriented strategies, it was evident that the Latin American countries' growth trajectories were weak. Table 1 from Edwards (1993, p.1360) illustrates this sharp contrast between the growth rates of Selected East Asian and Latin American Countries. The solid growth rates experienced in East Asian countries which were conducting outward oriented strategies put protectionism and its impact on promoting growth into the center of discussion regarding trade policy.

The impact that trade policy has on promoting growth has been an important debate in the second half of the twentieth century. The vast body of empirical work that was conducted during the 1970s and 1980s emphasized the role of export promotion policies in promoting growth. Since then, it has been argued that export expansion contributes to economic growth by increasing the rate of capital formation and enhancing the growth of factor productivity (Kavoussi, 1984). These policies are now considered to be the best development strategies for developing countries.

Amongst the earlier and most well-known work, Michaely (1977), using a sample of 41 developing countries, reported a positive relationship between proportional per capita income growth and the proportional increase in the ratio of exports to GNP. His results document that this relationship was very strong for the 23 most developed countries in his sample. However, there was no relationship with the poorest countries in the study, implying that growth is only affected by export performance once countries achieve a minimum level of development. A subsequent study by Balassa (1978), based on a group of 11 developing countries that already had an industrial base, tested the hypothesis that export-oriented policies lead to better growth performance than policies favoring import substitution. The results of his study document a significant and positive relationship between economic growth and export performance. Chow (1987), based on a sample of eight Newly Industrializing Countries (NICs), shows that for the majority of these countries, there is robust bidirectional causality between the growth of exports and the development of manufacturing industries. These findings suggest that an increase in exports not only promotes the growth of national income but also leads to industrial development, thus supporting the export-led growth strategies. Tyler (1981) documents a significant positive association between economic growth and exports as well as various other

economic variables, including the growth of manufacturing output and investment, based on a large sample of developing countries. Similarly, Kavoussi (1984) shows that export expansion is associated with better economic performance for both low and middle-income countries. Kavoussi (1984) also stresses that the rise in productivity resulting from export expansion is an important cause of the positive correlation between the growth rates of exports and GNP.

Although export promotion was the dominant view in the literature during this time, there are a small number of studies, which cast doubt on the efficacy of export-promotion policies in fostering economic growth. Singer and Gray (1988) highlight the fall in external demand regarding the export-growth link. They document that when external demand is weak, the positive impact of outward-oriented policies

Table 1. Growth and exports in Latin America and East Asia: 1965-1989 (percentage distribution)

	Annual Rate of Growth of Real GDP		Annual Rate of Growth of Manufacturing		Annual Rate of Growth of Exports	
	1965-80	1980-89	1965-80	1980-89	1965-80	1980-89
Selected Latin American Countries						
Argentina	3.5	-0.3	2.7	-0.6	4.7	0.6
Brazil	8.8	3.0	9.8	2.2	9.3	5.6
Chile	1.9	2.7	0.6	2.9	7.9	4.9
Colombia	5.8	3.5	6.4	3.1	1.4	9.8
Mexico	6.5	0.7	7.4	0.7	7.6	3.7
Peru	3.9	0.4	3.8	0.4	1.6	0.4
Venezuela	3.7	1.0	5.8	4.9	-9.5	11.3
Latin America & Caribbean (Average)	6.0	1.6	7.0	1.5	-1.0	3.6
Selected East Asian Countries						
Hong Kong	8.6	7.1	n.a.	n.a.	9.5	6.2
Indonesia	8.0	5.3	12.0	12.7	9.6	2.4
Korea	9.6	9.7	18.7	13.1	27.2	13.8
Malaysia	7.3	4.9	--	8.0	4.4	9.8
Singapore	10.1	6.1	13.2	5.9	4.7	8.1
Thailand	7.2	7.0	11.2	8.1	8.5	12.8
East Asia (Average)	7.2	7.9	10.6	12.6	10.0	10.0

Source: Edwards (1993, p.1360).

disappear, particularly for poorer developing countries. They also argue that outward-oriented policies are not always an effective policy choice. Rodriguez and Rodrick (2000) find little evidence that open-trade policies (in the form of lower tariff and nontariff barriers to trade) are significantly associated with economic growth. Later work by Yanikkaya (2003) investigates the relationship between economic growth and a wide variety of trade-openness measures. These are divided into two categories: measures of trade volumes; and measures of trade restrictions. Unlike the vast body of empirical studies, while the results for various measures of trade volumes are generally consistent with the literature, Rodriguez and Rodrick's (2000) results illustrate that trade barriers are positively and significantly associated with growth. This suggests that trade barriers can actually be beneficial for economic growth.

The availability of firm-level data also presented the link between export participation and productivity. Amongst the earlier work, Aw and Hwang (1995), based on micro-level data on the Taiwanese electronic industry, documented that there are significant differences in productivity levels between exporters and non-exporters. With the increasing availability of longitudinal-plant or firm-level data, literature further documented the existence of considerable divergence in productivity levels among establishments in similar industries (Bernard & Jensen 1995, 1999, 2004a, 2004b; Baldwin & Gu, 2003). This evidence formed the foundation of the New-New trade theory, which was first presented in Melitz (2003). Within the context of the New-New trade model, cross-firm heterogeneity has been accepted as the major driver of international trade. In this framework, there exist barriers to engaging in export activity, and only firms with productivities above a certain level, called threshold productivity, are able to export. The recent literature on heterogeneous firms highlights that exporters are, on average, more productive, capital intensive, larger, and pay higher wages than non-exporters (Bernard, Jensen, & Lawrence, 2007). This line of literature has also documented that at an aggregate level, exporting contributes to productivity growth at industry level as well as at country level.

MAIN FOCUS OF THE CHAPTER

General Overview of Competitiveness

In general, competitiveness has been defined as a measure of a country's advantage in selling its products in international markets (OECD, 2014). However, no single definition of competitiveness has gained general acceptance in the literature. The concept of competitiveness is broad and multifaceted, including both price and non-

price factors, and can be analyzed at three different levels: national or macroeconomic level; sector level; or firm or micro-economic level.

Price-related factors that are used while measuring competitiveness are indices relating to the terms of trade, unit labor cost, and the real effect of exchange rates. An increase or appreciation of these factors often creates a cost disadvantage for domestic producers in international markets, which diminishes the countries' or firms' competitive positions. According to Lall (2001), this approach "assumes underlying structural factors, such as productivity, innovation, and skills, are constant or irrelevant and focuses on short-term macroeconomic factors that affect relative prices of national goods and services relative to other countries". In addition to price-related factors, qualitative measures, referred to as non-price factors, have often been considered when measuring countries' competitiveness levels. These include factors, such as technology, the performance of public institutions, the macro-economic environment, education, and the business environment.

A common approach to measuring macro-level competitiveness is to build an index, which constitutes both price and non-price related factors. In this framework, competitiveness is measured as a combination of a set of factors, policies, institutions, strategies, and processes, that determine the level of sustainable productivity (World Economic Forum, Global Competitiveness Report, 2014). A well-known index for competitiveness is the Global Competitiveness Index (GCI) developed by Xavier Sala-i-Martin in collaboration with the World Economic Forum. The GCI includes over one hundred indicators belonging to 12 main groups, spanning from institutions, infrastructure, macroeconomic environment, education, and labor and goods market efficiency, to financial market development and innovation, all of which are closely related to the concepts that affect productivity and long-term prosperity

The realm of this chapter is to investigate the concept of trade competitiveness. Trade competitiveness deals with a country's (or sector's, or firm's) position, performance, and capabilities in the export markets (World Bank, 2014). When we measure "trade competitiveness", the conventional approach is to use indicators, such as the level of openness (total exports and imports in goods and services as a percentage of GDP), or the growth of exports over a given period (International Trade Centre [ITC], n.d.

). This type of quantitative measurement has the advantage of being accessible for many countries at a more disaggregated level (at either industry or product level), which enables us to analyze trade dynamics in more detail for a broader set of countries. However, taking into consideration metrics that are only based on exports and export performance is not sufficient when measuring trade competitiveness. Solid export performance does not always result in higher rates of GDP growth, therefore other measures, both qualitative and quantitative, such as interdependencies between imports and exports, international flows of capital, investment, and human

capital also need to be considered when measuring trade competitiveness (World Bank, 2014).

The World Bank has introduced a useful approach to measure trade competitiveness, known as the Trade Competitiveness Diagnostic (TCD). There are two components of the TCD, namely Trade Outcome Analysis and Competitiveness Diagnostics. Trade Outcomes Analysis presents a summary of trade performance and trade competitiveness, while Competitiveness Diagnostics focus on understanding the underlying policies and structural dynamics that shape observed performance. The first component, Trade Outcome Analysis, provides a quantitative and qualitative assessment of historic trade performance. This involves identifying four major channels through which a country's trade competitiveness can be measured. These channels are: (1) the intensive margin which measures the value of exported goods for existing products and markets; (2) the extensive margin which measures the value of exported goods for different products and markets¹; (3) the quality margin which represents the quality and sophistication of exports; and (4) the sustainability margin which measures the entry and survival of new exporters. The second component of the TCD is Competitiveness Diagnostics. In this component, market access, supply-side factors, and trade-promotion infrastructure are all considered. Market access focuses on the external trade policy environment, including tariffs and quantitative restrictions, which may facilitate or constrain exporters from entering and maintaining competitiveness in export markets. Supply-side factors cover factors that influence private-sector investment and participation in exports, and factor conditions that contribute to the cost and quality of production including land and infrastructure intermediate inputs. Trade promotion infrastructure, on the other hand, represents government interventions (such as export promotion policies and special economic zones) which are implemented in an attempt to address market failures.

Another useful index is the Trade Performance Index (TPI), which measures trade competitiveness. This was developed by the International Trade Centre (ITC). One major difference between the World Bank's approach and the TPI is that the TPI is based purely on quantitative metrics of export performance. Using several quantitative performance indicators, the TPI provides information on a country's general trade profile, current trade performance, and changes in recent export performance.

In addition to macro/country-level competitiveness, competitiveness can be analyzed at a more disaggregated level, such as at the level of firm or product. Porter (1998) argues that as wealth is created at the microeconomic level, then competitiveness can be ascertained from the point of each individual firm. Porter (2007) also stresses the importance of a broader set of factors for a healthy economy, which include sound macroeconomic, political, legal, and social circumstances. However, he states that while these conditions are necessary, they are not sufficient on their own. He, therefore, strongly advocates improvement at a micro level. According

to Porter (1998; 2007), company strategies and operating practices as well as the quality of the microeconomic business environment are extremely important. Even if macroeconomic, political, legal, and social reforms are present, these reforms will not be successful if there is no improvement at the microeconomic level.

Challenges to Competitiveness

Developing country exporters face several limitations that negatively impact their potential to engage in export activities. In particular, macroeconomic stability is an important factor for trade competitiveness, as exchange rates and inflation are major channels through which developing countries' trade competitiveness may be affected.

The exchange rate is an important determinant of trade competitiveness because, as a result of the depreciation of a domestic currency, the value of exported goods denominated in a foreign currency decreases, which subsequently results in an increase in foreign demand. This effect is often referred to as the competitiveness channel.¹ Although domestic currency depreciation is preferable due to its impact on the foreign value of domestic products in international markets, when analyzing the impact of exchange rates on export competitiveness, other channels play an important role. For example, the production processes of developing countries are highly dependent on intermediate goods which are often imported. This means that if currency depreciation occurs, the production costs of companies that rely on these imported, intermediate inputs increase. This leads to a cost disadvantage, which is referred to as the cost of production channel. This cost of production channel operates inversely to the competitiveness channel. Added to this, most developing countries suffer from high dollarization rates, which leads to the inability of these countries to borrow internationally in their own currency. Eichengreen and Hausman (2010) refer to this situation as "original sin", as when such a currency mismatch occurs, the subsequent currency depreciation results in an increase in the book value of debt which negatively affects firm-level financial variables.² This results in the need for the continued financing of sunk costs to increase exports, which then leads to a contractionary effect on exports, referred to as the balance sheet channel. If one considers the real exchange rate to be a measure of competitiveness, one should also take into account the competitiveness channel, cost of production channel, and balance sheet channel. Therefore, the total effect of the exchange rate on competitiveness is ultimately determined by the relative magnitude of the counterbalancing effects of these three channels. Literature examining the link between the volume of exports and real exchange rates show that, in general, exchange rates have an insignificant effect on trade volumes. However, studies using more disaggregated level, sectoral or firm level data, often find exchange rate depreciations have a significant (and positive) impact on trade volumes. Among these studies, Dekle and Ryoo (2007)

and Dekle, Jeong, and Ryoo (2009) document a significant relationship between export volumes and exchange rates. Similarly, Forbes (2002) examines the results of large devaluations on firms' performances, and finds that, on average, export sales increase by 4 percent, one year after each devaluation episode.

As mentioned previously, price stability is another important factor involved in export competitiveness, as high and unstable price levels have a direct effect on real exchange rates. Empirical research has shown that this leads to high inflation which has a negative impact on exports. For example, Gylfason (1999), using data covering 160 countries from 1985-94, documents that high inflation has been associated with low exports and sluggish growth. In addition to the effects of the real exchange rate on inflation, Gylfason (1999) also stresses the distortive capacity of inflation on production, as it drives a wedge between the returns on real and financial capital as well as having a negative impact on real interest rates; this then negatively impacts savings and the quality of investment.

Developing countries frequently suffer from an unfavorable business climate. Dethier, Hirn, and Straub (2010) stress that a favorable business or investment climate is important for attracting investment, as well as for creating new opportunities for trade and access to new technologies. Similarly, Balchin (2008), based on data covering eight African countries, suggests that a country's business climate is closely associated with its probability for exporting. Dollar, Hallward-Driemeier, and Mengistae (2006), based on firm-level surveys on several developing countries, document that a sound investment climate has a positive impact on both exports and foreign investment.

Amongst the most notable, Hall and Jones (2001) bring attention to the concept of social infrastructure described as the set of institutions and government policies that determine the economic environment of a country. They believe that a country's long-term economic performance is determined primarily by the social infrastructure. That a country should have strong institutions has been widely stressed as being an important factor in the performance of international trade (Levchenko, 2007; Dollar and Kray, 2003). Levchenko (2007), using data on U.S. imports, examines the link between institutional quality and international trade. The empirical results provide evidence that institutional differences, measured by institutional dependence and institutional quality, are an important determinant of trade flows. Anderson and Marcouiller (2002) stress the role of corruption and imperfect contract enforcement in reducing international trade. Estimating a structural model of import demand, they document that poor institutions have a negative impact on trade similar to that of tariffs. Dutt and Traca (2010) investigated the impact of corruption on trade. Their results document that corruption has a negative impact on bilateral trade for the majority of countries, but when the level of tariffs is high, corruption can have a positive impact on trade. It is presumed this may happen as corrupt officials in high

tariff environments may allow exporters to avoid paying tariffs. Linders, Slangen, De Groot, and Beugelsdijk (2005), based on a sample of bilateral trade flows between 92 countries, found that institutional distance negatively effects bilateral trade through increasing transactional costs between partners from dissimilar institutional settings.³ The study also reports that if the institutional quality of importing and exporting partners increases, then the trade among them also increases.

Financial health has also been reported as an important constraint regarding the trading behavior of firms. Among firm-level empirical studies, Bellone, Musso, Nesta, and Schiavo (2010), using French data, found strong evidence that less credit-constrained firms self-select into export. Likewise, Forlani (2008) found that the probability for export was negatively and significantly affected by financial constraints in a panel of Italian firms. Muûls (2008) found the same with Belgian firms. Berman and Hericourt (2010) in their study using a large cross-country, firm-level database on developing and emerging economies, show that a firm's access to finance positively affects their entry decision into the export market. Manova (2013) also stresses the role of financial development in increasing a country's exports. Minetti and Zhu (2011), utilizing survey data from Italian manufacturing firms that provide a firm-specific measure of credit rationing, found that the probability for export is 39% lower for credit-rationed firms and that credit-rationing reduces foreign sales by more than 38%.

Finally, the quality of infrastructure, through its impact on transportation costs, has also been stressed as an important determinant of trade performance. Limao and Venables (2001) highlight the closer relationship between infrastructure and transport costs, especially for non-coastal countries. Their analysis, based on a data covering African trade flows, indicate that a low level of trade is largely associated with poor infrastructure. Wilson, Mann, and Otsuki (2005) investigated the impact of several trade facilitation measures, namely port efficiency, the customs environment, the regulatory environment, and service sector infrastructure on trade flows. They found that both the imports and exports of a given country increase with improvements to these trade facilitation measures. Similarly, Nordas and Piermartini (2004) and Francoise and Manchin (2013), reported that the quality of infrastructure is an important determinant of trade performance.

Empirical Literature on Trade Competitiveness

Elucidating the sources of export growth is important in order to understand which main channels affect a country's level of competitiveness. In a simple framework, a given country's export growth may result from the expansion of trade of existing products (the intensive margin) or entering new export markets or selling new products (the extensive margin). Literature examining the contributions of both

of these margins on export growth presents inconclusive results. Among existing studies, regarding the effect of the intensive margin, Amurgo-Pacheco (2008) opines that export growth is mostly explained by growth at the intensive margin. Similarly, Besedes and Prusa (2011) argue that developing countries should improve their performance in the intensive margin if they want to increase their exports. Their study shows the contribution of the extensive margin to export growth, in the form of establishing new partners and markets, only has a short-term impact on exports and a negligible impact on a country's long-term export growth. They therefore conclude that the extensive margin is only of moderate importance. However, a number of researchers argue the reverse. Hummels and Klenow (2005), report that for larger economies, it is the extensive margin, which accounts for 60 percent of exports. In addition, Evenett and Venables (2002) opine that a third of the growth of exports of developing countries between 1970 and 1997 could be attributed to the sales of existing exports to new trading partners. They refer to this expansion as geographic spread, which is dependent on the geographic and linguistic proximity between trading partners. These conflicting findings are often purported to be due to the differences in the measurement of these two margins.

Developing countries' exports tend to be limited to a few products, which can result in volatile export revenues. It has therefore been argued that policies which support export diversification may create a more stable income inflow. Amurgo-Pacheco (2008) shows that the level of export diversification between developed and developing countries differs.⁴ The results of their study show that export diversification is on the rise among developing countries and, when comparing two different dimensions of export diversification (product and geographical), it is geographical diversification that actually matters more than product diversification.⁷

Another set of papers investigate the impact of specific economic policies on export performance in developing countries. For example, Martincus and Carballo (2008) investigated the effects of export promotion activities (EPAs) in Peru over the period 2001-2005. The authors stress that informational problems are more severe when firms attempt to expand along the extensive margin rather than attempting to expand along the intensive margin. The empirical results document that export promotion activities have been effective in increasing exports, primarily along the extensive margin. However, the study fails to identify any impacts of such policies on the intensive margins of exports. In a later study, Martincus and Carballo (2010) investigated the impact of trade promotion activities using disaggregated export data on Chilean exporters over the 2002-2006 period. The study highlights the fact that the impact of export promotion activities can differ over the distribution of export performance measured by the growth of exports for the intensive margin and by the growth of the number of countries and number of products for the extensive margin. For the intensive margin, the impact is mostly concentrated at the lower tail of the

distribution, while for the extensive margin, the impact is at the lower and upper ends of the distributions. Martincus and Carballo (2010) imply that smaller firms seem to benefit the most from export promotion actions. Seker (2011), using a dataset that comprises a wide set of countries with different income levels, investigated the link between investment climate and export performances. The study reports that regulatory quality, customs efficiency, quality of infrastructure, and access to finance is associated with increasing export performance. The study also reports a comparatively high impact on improvements in the investment climate on the export performance of countries that are relatively more constrained in access to foreign markets. This implies that for closed economies, efforts toward the development of a favorable investment climate should be an important policy objective in order to increase export levels and catch up with countries with liberal trade policies. Based on different country groupings, Hallaert, Cavazos-Cepeda, and Kang (2011) study attempts to measure the impact of binding constraints on trade expansion. Their study shows that in small and vulnerable economies, increasing the number and quality of roads has an important impact on trade and on economic growth. On the other hand, restrictive trade policies (measured by custom tariffs) seem to have a greater impact on the trade performance of landlocked countries, rather than coastal countries. For commodity exporters, the study reports that the tariff regime is a major constraint to trade performance.

In today's world, the dynamics of international trade is changing. With globalization, interconnectedness between economies has been increasing, and Global value chains (GVCs) play an increasing role in international trading activities. In this new set-up, the production process has been fragmented into separate countries. Existing research identifies that developing countries' participation in GVCs has been increasing in recent years. This is important, as much theoretical and empirical literature has documented that a country's participation in GVCs can improve its productivity performance. For example, Baldwin and Yan (2014), based on Canadian firm level-data found strong empirical evidence of a causal link between GVC participation and firm-level productivity. The study reports that Canadian manufacturing firms which joined the GVCs became more productive than those that did not. Similarly, Giovannetti, Marvasi, and Sanfilippo (2015) show that even small and less productive firms, if involved in production chains, can take advantage of the reduced costs of entry and economies of scale, and that this enhances their ability to export. Country-specific structural factors, such as geography, size of the domestic market and level of development, are found to be key determinants of GVC participation. Low import tariffs, engagement in regional trading agreements, logistics performance, intellectual property protection, the quality of infrastructure, as well as the quality of institutions (particularly for developing countries) are

major policy tools which are estimated to have strong impacts on GVC integration (Kowalski, Gonzalez, Ragoussis, & Ugarte, 2015).

SOLUTIONS AND RECOMMENDATIONS

As the constraints they face are numerous, maintaining trade competitiveness is a challenging task for developing countries. Obtaining a well-functioning institutional framework, financial development, an absence of corruption and crime, and a strong regulatory framework are key for developing countries in order to establish a favorable business climate for domestic and foreign investors. Moving into the fourth industrial revolution has had the effect of putting innovation and technology to the fore of these competitiveness efforts. Therefore, just as human capital, through its impact on innovative activity, is an important factor for competitiveness for developing countries, technology, too, is an important determinant for competitiveness.

Instead of building full supply chains, domestically developing countries have the option of joining GVCs to become competitive. Therefore involvement in global value chains will also bring economic benefits in the form of increasing productivity, advanced skills, and a more sophisticated and diversified export portfolio (Kowalski et al. 2015).

Finally, macroeconomic instability through its impact predominantly on prices may diminish a country's competitive position, thus a stable exchange rate and low inflation are key to help developing countries.

FUTURE RESEARCH DIRECTIONS

The impact of trade on generating growth is an extensively studied research topic in the context of both developing and developed countries. Firm-level micro-data from developing countries which has recently become available means it is now possible to extend the research by analyzing the sources of export growth from different angles. This will make this line of research very fruitful. Despite the availability of micro-data on exports and imports at firm or very disaggregated industry level, the comparability of the existing studies remains a challenge due to the differences in the data (units of analysis, sampling processes), the execution of the empirical model, or differences in the definitions of trade margins. Regarding future research, cross-country studies, with comparable techniques and data, will be useful to reconcile currently conflicting evidence in the literature.

CONCLUSION

In this chapter, with reference to the existing literature, the various aspects of trade competitiveness were investigated in the context of developing countries. It was highlighted that maintaining trade competitiveness is fundamental for developing countries given the positive impact of exporting on economic growth and productivity. However, developing nations face many constraints, which means they have a challenging task in maintaining trade competitiveness. Macroeconomic instability, particularly volatile exchange rates and high inflation, puts constraints on the competitiveness level. In addition, providing the main elements needed to form a favorable business climate, characterized by strong institutions, financial development, security, infrastructure, is hard for developing countries to achieve. Therefore, in order to establish a solid competitive framework, developing countries' governments must work on these areas in collaboration with the private sector. Challenges may exist but proper implementation of the necessary policies and structural reforms have the potential to contribute to the competitiveness level of developing economies.

REFERENCES

- Ali, R., Alwang, J. R., & Siegel, P. B. (1991). Is export diversification the best way to achieve export growth and stability? A look at three African countries (World Bank Working Paper No. 729). Retrieved from World Bank website: <http://documents.worldbank.org/curated/en/635281468774612514/pdf/multi0page.pdf>
- Amurgo-Pacheco, A. (2008). Patterns of export diversification in developing countries (World Bank Policy Research Working Paper No. 4473). Retrieved from World Bank website: <https://openknowledge.worldbank.org/bitstream/handle/10986/6447/wps4473.pdf?sequence=1>
- Anderson, J. E., & Marcouiller, D. (2002). Insecurity and the pattern of trade: An empirical investigation. *The Review of Economics and Statistics*, 84(2), 342–352. doi:10.1162/003465302317411587
- Aw, B. Y., & Hwang, A. R. M. (1995). Productivity and the export market: A firm-level analysis. *Journal of Development Economics*, 47(2), 313–332. doi:10.1016/0304-3878(94)00062-H
- Balassa, B. (1978). Exports and economic growth: Further evidence. *Journal of Development Economics*, 5(2), 181–189. doi:10.1016/0304-3878(78)90006-8

Balchin, L. (2008). Trade-related business climate and manufacturing export performance in Africa: A firm-level analysis. *Journal of Development Perspectives*, 4(1), 32–66.

Baldwin, J. R., & Gu, W. (2003). Export-market participation and productivity performance in Canadian manufacturing. *The Canadian Journal of Economics. Revue Canadienne d'Économie*, 36(3), 634–657. doi:10.1111/1540-5982.t01-2-00006

Baldwin, J. R., & Yan, B. (2014). Global value chains and the productivity of Canadian manufacturing firms (Statistics Canada Economic Research Paper No. 090). Retrieved from Statistics Canada website <http://www.statcan.gc.ca/pub/11f0027m/11f0027m2014090-eng.pdf>

Bellone, F., Musso, P., Nesta, L., & Schiavo, S. (2010). Financial constraints and firm export behaviour. *World Economy*, 33(3), 347–373. doi:10.1111/j.1467-9701.2010.01259.x

Berman, N., & Héricourt, J. (2010). Financial factors and the margins of trade: Evidence from cross-country firm-level data. *Journal of Development Economics*, 93(2), 206–217. doi:10.1016/j.jdevco.2009.11.006

Bernard, A. B., & Jensen, J. B. (1999). Exceptional exporter performance: Cause, effect, or both? *Journal of International Economics*, 47(1), 1–25. doi:10.1016/S0022-1996(98)00027-0

Bernard, A. B., & Jensen, J. B. (2004a). Exporting and Productivity in the USA. *Oxford Review of Economic Policy*, 20(3), 343–357. doi:10.1093/oxrep/grh020

Bernard, A. B., & Jensen, J. B. (2004b). Why some firms export. *The Review of Economics and Statistics*, 86(2), 561–569. doi:10.1162/003465304323031111

Bernard, A. B., Jensen, J. B., & Lawrence, R. Z. (1995). Exporters, jobs, and wages in US manufacturing: 1976-1987. *Brookings papers on economic activity. Microeconomics*, 1995, 67–119.

Bernard, A. B., Jensen, J. B., Redding, S. J., & Schott, P. K. (2007). Firms in international trade. *The Journal of Economic Perspectives*, 21(3), 105–130. doi:10.1257/jep.21.3.105

Besedeš, T., & Prusa, T. J. (2011). The role of extensive and intensive margins and export growth. *Journal of Development Economics*, 96(2), 371–379. doi:10.1016/j.jdevco.2010.08.013

Chow, P. C. (1987). Causality between export growth and industrial development: Empirical evidence from the NICs. *Journal of Development Economics*, 26(1), 55–63. doi:10.1016/0304-3878(87)90051-4

Competitiveness (In International Trade). (2014). In OECD Glossary of Statistical Terms. Retrieved from <https://stats.oecd.org/glossary/detail.asp?ID=399>

Dekle, R., Jeong, H., & Ryoo, H. (2009). A Re-Examination of the Exchange Rate Disconnect Puzzle: Evidence from Firm Level Data. University of Southern California mimeo.

Dekle, R., & Ryoo, H. H. (2007). Exchange rate fluctuations, financing constraints, hedging, and exports: Evidence from firm level data. *Journal of International Financial Markets, Institutions and Money*, 17(5), 437–451. doi:10.1016/j.intfin.2006.04.001

Dethier, J. J., Hirn, M., & Straub, S. (2010). Explaining enterprise performance in developing countries with business climate survey data. *The World Bank Research Observer*, 26(2), 258–309. doi:10.1093/wbro/lkq007

Dollar, D., Hallward-Driemeier, M., & Mengistae, T. (2006). Investment climate and international integration. *World Development*, 34(9), 1498–1516. doi:10.1016/j.worlddev.2006.05.001

Dollar, D., & Kraay, A. (2003). Institutions, trade, and growth. *Journal of Monetary Economics*, 50(1), 133–162. doi:10.1016/S0304-3932(02)00206-4

Dutt, P., & Traca, D. (2010). Corruption and bilateral trade flows: Extortion or evasion? *The Review of Economics and Statistics*, 92(4), 843–860. doi:10.1162/REST_a_00034

Edwards, S. (1993). Openness, trade liberalization, and growth in developing countries. *Journal of Economic Literature*, 31(3), 1358–1393.

Eichengreen, B., & Hausmann, R. (2005). *Other People's Money*. University of Chicago Press. doi:10.7208/chicago/9780226194578.001.0001

Evenett, S. J., & Venables, A. (2002). Export growth by developing economies: Market entry and bilateral trade (Swiss Institute for International Economics and Applied Economic Research Working Paper). Retrieved from the Swiss Institute for International Economics and Applied Economic Research: <https://www.alexandria.unisg.ch/22177/1/setvend.pdf>

Forbes, K. J. (2002). How do large depreciations affect firm performance? (NBER Working Paper 9095). Cambridge, MA: National Bureau of Economic Research. Retrieved from the National Bureau of Economic Research. doi:10.3386/w9095

Forlani, E. (2008). Firms Credit Constraints and Export Propensity. Mimeo CORE/ Université Catholique de Louvain.

Francois, J., & Manchin, M. (2013). Institutions, infrastructure, and trade. *World Development*, 46, 165–175. doi:10.1016/j.worlddev.2013.02.009

Giovannetti, G., Marvasi, E., & Sanfilippo, M. (2015). Supply chains and the internationalization of small firms. *Small Business Economics*, 44(4), 845–865. doi:10.1007/s11187-014-9625-x

Goldberg, P. K., & Knetter, M. M. (1997). Goods Prices and Exchange Rates: What Have We Learned? *Journal of Economic Literature*, 35(3), 1243–1272.

Gylfason, T. (1999). Exports, inflation and growth. *World Development*, 27(6), 1031–1057. doi:10.1016/S0305-750X(99)00045-5

Hall, R. E., & Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *The Quarterly Journal of Economics*, 114(1), 83–116. doi:10.1162/003355399555954

Hallaert, J. J., Cavazos-Cepeda, R. H., & Kang, G. (2011). Estimating the constraints to trade of developing countries. (OECD Trade Policy Papers No. 116). OECD. doi:10.1787/18166873

Hummels, D., & Klenow, P. J. (2005). The variety and quality of a nation's exports. *The American Economic Review*, 95(3), 704–723. doi:10.1257/0002828054201396

International Trade Center (ITC). (n.d.). Trade Performance Index. Retrieved May 20, 2017, from <http://tradecompetitivenessmap.intracen.org/Documents/TradeCompMap-Trade%20Performance%20Index-Technical%20Notes-EN.pdf>

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2003). Governance Matters III: governance indicators for 1996–2002 (World Bank Policy Research Department Working Paper). Retrieved from World Bank website: <https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-3106>

Kavoussi, R. M. (1984). Export expansion and economic growth: Further empirical evidence. *Journal of Development Economics*, 14(1), 241–250. doi:10.1016/0304-3878(84)90052-X

Kowalski, P., Gonzalez, J. L., Ragoussis, A., & Ugarte, C. (2015). Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade-Related Policies (OECD Trade Policy Papers, No. 179). Paris: OECD Publishing. Retrieved from the OECD. doi:10.1787/18166873

Lall, S. (2001). Competitiveness indices and developing countries: An economic evaluation of the global competitiveness report. *World Development*, 29(9), 1501–1525. doi:10.1016/S0305-750X(01)00051-1

Levchenko, A. A. (2007). Institutional quality and international trade. *The Review of Economic Studies*, 74(3), 791–819. doi:10.1111/j.1467-937X.2007.00435.x

Limao, N., & Venables, A. J. (2001). Infrastructure, geographical disadvantage, transport costs, and trade. *The World Bank Economic Review*, 15(3), 451–479. doi:10.1093/wber/15.3.451

Linders, G. J., Slangen, H. L. A., De Groot, H. L., & Beugelsdijk, S. (2005). Cultural and institutional determinants of bilateral trade flows (Tinbergen Institute Discussion Paper No. 2005-074/3). Retrieved from the Tinbergen Institute: <http://papers.tinbergen.nl/05074.pdf>

Manova, K. (2013). Credit constraints, heterogeneous firms, and international trade. *The Review of Economic Studies*, 80(2), 711–744. doi:10.1093/restud/rds036

Martincus, C. V., & Carballo, J. (2008). Is export promotion effective in developing countries? Firm-level evidence on the intensive and the extensive margins of exports. *Journal of International Economics*, 76(1), 89–106. doi:10.1016/j.jinteco.2008.05.002

Martincus, C. V., & Carballo, J. (2010). Beyond the average effects: The distributional impacts of export promotion programs in developing countries. *Journal of Development Economics*, 92(2), 201–214. doi:10.1016/j.jdeveco.2009.02.007

Melitz, M. J. (2003). The impact of trade on intra-industry reallocations and aggregate industry productivity. *Econometrica*, 71(6), 1695–1725. doi:10.1111/1468-0262.00467

Michaely, M. (1977). Exports and growth: An empirical investigation. *Journal of Development Economics*, 4(1), 49–53. doi:10.1016/0304-3878(77)90006-2

Minetti, R., & Zhu, S. C. (2011). Credit constraints and firm export: Microeconomic evidence from Italy. *Journal of International Economics*, 83(2), 109–125. doi:10.1016/j.jinteco.2010.12.004

Moon, H. C. (2000). *From Adam Smith to Michael Porter: Evolution of Competitiveness Theory (Vol. 2)*. World Scientific.

Muûls, M. (2008). Exporters and credit constraints. A firm level approach (National Bank of Belgium, Working Paper No. 139). Brussels National Bank of Belgium (NBB). Retrieved from the NBB: <https://www.nbb.be/doc/ts/publications/wp/wp139en.pdf>

Trade Competitiveness in Developing Countries

Nordås, H. K., & Piermartini, R. (2004). Infrastructure and trade. (World Trade Organization Staff Working Paper ERSD-2004-04). Genève: WTO. Retrieved from the WTO: https://www.wto.org/english/res_e/reser_e/ersd200404_e.htm

Porter, M. E. (1999). The Microeconomic Foundations of Economic Development. In *The Global Competitiveness Report*. Geneva, Switzerland: World Economic Forum.

Porter, M. E. (2004). Building the Microeconomic Foundations of Prosperity: Findings from the Business Competitiveness Index. In *The Global Competitiveness Report 2003-2004*. Oxford University Press.

Rodriguez, F., & Rodrik, D. (2000). Trade policy and economic growth: A skeptic's guide to the cross-national evidence. *NBER Macroeconomics Annual*, 15, 261–325. doi:10.1086/654419

Seker, M. (2011). Trade policies, investment climate, and exports across countries (World Bank Policy Research Working Paper No. 5654). Retrieved from World Bank website: <https://openknowledge.worldbank.org/bitstream/handle/10986/3415/WPS5654.pdf?sequence=1>

Singer, H. W., & Gray, P. (1988). Trade policy and growth of developing countries: Some new data. *World Development*, 16(3), 395–403. doi:10.1016/0305-750X(88)90006-X

Tyler, W. G. (1981). Growth and export expansion in developing countries: Some empirical evidence. *Journal of Development Economics*, 9(1), 121–130. doi:10.1016/0304-3878(81)90007-9

Wilson, J. S., Mann, C. L., & Otsuki, T. (2005). Assessing the benefits of trade facilitation: A global perspective. *World Economy*, 28(6), 841–871. doi:10.1111/j.1467-9701.2005.00709.x

World Bank Group. (2014). Trade Competitiveness. World Bank Brief. Retrieved May 20, 2017, from <http://www.worldbank.org/en/topic/trade/brief/trade-competitiveness>

World Economic Forum. (2014). The global competitiveness report 2016-2017. Geneva: World Economic Forum.

Yanikkaya, H. (2003). Trade openness and economic growth: A cross-country empirical investigation. *Journal of Development Economics*, 72(1), 57–89. doi:10.1016/S0304-3878(03)00068-3

KEY TERMS AND DEFINITIONS

Export Diversification: Expansion of the range of products or markets of a country.

Export-Led Growth Strategy: Economic policy that aims to speed up the industrialization process of a country by exporting goods for which it has a comparative advantage.

Extensive Margin: Entering new export markets or selling new products.

Global Value Chain: Refers to the fragmentation of the production processes in different parts of the world.

Import Substitution Policy: A trade and economic policy that encourages replacing imports with domestic production in order to reduce foreign dependency.

Infant Industry: A newly established industry that is having difficulty in competing with existing competitors abroad.

Intensive Margin: Expansion of the trade of existing products.

Protectionism: The economic policy of restricting trade between countries through different methods including tariffs on imported goods, quotas, and other government regulations.

ENDNOTES

¹ Note that when analyzing exchange rate-trade relationship, it is important to distinguish between nominal and real exchange rates. In the developed countries, where inflation rates are low there is little difference between the real and the nominal exchange rates. However, in the context of developing countries, inflation is generally a major problem, therefore real exchange rates have to be taken into consideration. Real exchange rates are calculated as the product of nominal exchange rate (units of foreign currency per domestic currency) and the ratio of domestic price level to foreign price level.

² Currency mismatch occurs when foreign currency denominated debts are high and the income and assets are mostly denominated in domestic currency.

³ Institutional distance has been calculated based on the 1998 scores on Kaufmann, Kray, and Mastruzzi (2003) six dimensions of governance infrastructure quality.

⁴ Export diversification has been defined as change in the composition of a country's existing export product mix or export destination (Ali, Alwang, & Siegel, 1991).