Export Processing Zone Establishment in Brazil: Stimulating Sustained Export-Led Growth?
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<td>ABRAZPE</td>
<td>Associação Brasileira de Zonas de Processamento de Exportação</td>
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<tr>
<td>BRIC</td>
<td>Brazil, Russia, India, China</td>
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<td>CZPE</td>
<td>Conselho Nacional das Zonas de Processamento de Exportação</td>
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<td>ELG</td>
<td>Export Led Growth</td>
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<td>ELGH</td>
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<td>EPZ</td>
<td>Export Processing Zone</td>
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<td>EM</td>
<td>Emerging Market</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FEZ</td>
<td>Free Economic Zone</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>IDB</td>
<td>Inter-American Development Bank</td>
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<td>ILO</td>
<td>International Labor Organization</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IPE</td>
<td>International Political Economy</td>
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<td>IO</td>
<td>International Organization</td>
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<td>IRR</td>
<td>Internal Rate of Return</td>
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<td>IS</td>
<td>Import Substitution</td>
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<td>MERCOSUR</td>
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<td>MNC</td>
<td>Multinational Corporation</td>
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<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>PAC</td>
<td>Programa de Aceleração do Crescimento</td>
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<td>PPF</td>
<td>Possible Production Frontier</td>
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<td>SEZ</td>
<td>Special Economic Zone</td>
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<td>TFP</td>
<td>Total Factor Productivity</td>
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<td>TNC</td>
<td>Transnational Corporation</td>
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<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>WTO</td>
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Preamble

For a master student International Political Economy the topic of my thesis, Export Processing Zones in Brazil, might be a little unexpected due to its economic scope and specific focus. However, for me, in this topic all knowledge and interests that I obtained during my master program converge in this thesis: international trade theory, globalization, economic policy, country studies and sustainable development. The first ideas to write about Export Processing Zones (EPZs) I raised during a research seminar on Globalization, where we touched briefly upon this topic in an article about increased economic competition in the global South. When doing some research on the internet about these policy instruments for export promotion, I found a blog on the World Bank website with the title ‘Exporting is Easy, the Challenge is Making it Sustainable’ (by Jose Guilherme Reis, 2012) about EPZs in Macedonia. In this article the author puts forward the question of how these enclave economies can ever lead to sustainable export promotion, despite the global popularity of this policy tool. This question triggered my attention and I started to further investigate this topic. I decided that writing about EPZs would be an interesting challenge, due to the extensive academic debate about economic zones and economic development. I have chosen Brazil as a case study because the country is currently implementing EPZs in an attempt to boost its stagnated export sector. But as the article by Reis states: implementing EPZs is easy; the real challenge for the country is to make them sustainable.

With this research I hope to have made a modest contribution to the literature on EPZs and export-led growth, as well as to the literature on Brazil’s economic development and political economy. It has been a long and challenging trajectory from the beginning of the research to the final version of this thesis, but I am satisfied with the result. I also would like make use of this preamble to thank my thesis supervisor, mr. A.R.M. Gigengack, for his critical feedback and constructive inputs, which have significantly contributed to the quality of this research.
1.0 Introduction

Nowadays, they are impossible to overlook in both developing countries and developed economies: special economic zones or economic free zones. Since the 1960s these policy instruments for the promotion of trade and the attracting of foreign direct investment (FDI) have gained popularity and the current amount of these economic zones in the world is estimated at 4000 in more than 130 countries. The amount of zones and countries that possess similar economic zones is still increasing. One economic world power that until recently did not make use of this economic instrument, was Brazil. But despite the fact that the effects and the functioning of these special economic zones are disputed worldwide, Brazil also decided to follow the international trend of trade promotion and establish Export Processing Zones.

On April 9, 2009, Brazil’s former president Luiz Inácio ‘Lula’ da Silva signed an amendment to a law to approve plans for the establishment of 24 export processing zones (EPZs) in all geographic regions of the country. Officially, the creation of EPZs in Brazil was already planned and approved by a previous government in July 1988, when former president José Samey visited China on an official mission and returned with the idea that EPZs resembling the economic zones of China could help to solve Brazil’s balance of payment problems and stimulate regional development. However, there was no single export processing zone properly established after the approval of this first draft of legislation in 1988. Da Silva signed the amendment with the objective to give fresh incentives to the development of EPZ creation in Brazil. One of the main objectives of Da Silva’s economic policy was to seek export-oriented foreign direct investment (FDI) to contribute to higher value-added production and high-technology exports. In a time of declining exports, a stagnating domestic industrial sector and a loss of international competitiveness in especially manufacturing, the establishment of EPZs was meant to function as a tool to improve the position of Brazilian exports (Knowledge Sharing Program 2012: 70-90; Foreign Market Access Report 2010: 9).

Currently, Brazil is the world’s seventh largest economy in terms of GDP and the biggest economy in Latin America. Brazil has often been mentioned as one of the ‘BRIC’ countries, a term coined by Goldman Sachs to describe the four economies that are expected to be the world’s largest by 2050. In addition, it is the fifth largest country in the world in size and population, with almost 200 million inhabitants. Besides the large proportion of commodity exports due to its natural resource abundance, manufacturing counts for almost half of total exports due to Brazil’s developed domestic industrial sector. The services sector in the country is also growing in importance over the last two decades and continues to add more to GDP annually. The GDP of the country has marked
considerable growth since the start of the millennium, until the global economic crisis of 2008. In 2009, Brazil suffered a negative growth and a sharp decline in exports due to the global crisis (IMF country data 2009). Since then, GDP growth and exports have stagnated due to decreased world demand for commodities and declined international competitiveness of its manufactured products (Trading Economics, Brazil export; Baer 2014: 189; Cardoso 2009: 2-5). Brazil’s political economy is characterized by a long history of state-led economic policies, which shifted from import substitution after the Second World War toward more outward-looking, export promoting policies around the 1960s. While import substitution has been a paradigm for economic development in Latin America since the Second World War, a new conventional wisdom of export promotion started to gain popularity in Brazil around the 1960s. However, even during this paradigm shift the economy of the country remained relatively closed in comparison with other export-oriented countries; a heritage from the import substitution period. Brazil now has an export-oriented economy, so the development of the economy is closely tied to the development of its export sector. The export sector has always played a key role in the economic development of the country. Brazil’s share of world exports increased the last years from 0.94 in 1999 to 1.4 percent in 2012 (Baer 2014: 193). Brazil is the world’s largest exporter of soybeans, orange juice, raw cane, coffee and refined sugar (Trading Economics, Brazil export). Revenues on these products have contributed significantly to the growth of the country’s GDP during the last decades. Stagnation in exports, as in the present situation, significantly slows down the growth of the country.

Exports as an engine of economic growth, often accompanied by increased economic openness, has been a central topic in the debate on development economics since the 1960s. This shift toward more open economies in order to increase competition and encourage firms to produce for the international market has been key in policy recommendations to developing countries since then. This export-led growth, whereby a country gains directly from revenues of exports and indirectly from other beneficial effects of trade such as an increase in productivity, is the basis of the Export Led Growth (ELG) theory (Bhagwati 1988: 30). This theory became the basis of the new conventional wisdom of development economics, partly because of the Washington Consensus, and was diffused through influential international organizations such as the World Bank and the International Monetary Fund (IMF) (Maneschiöld 2008: 293). Despite the amount of criticism on ELG theory, a lot of economic policies from developing countries and middle income countries have been influenced by it. Although the economic policies of Brazil have never mentioned ELG theory specifically, the current government does focus on export enhancement to stimulate economic growth. When studying the political economy of Brazil, the ELG theory will function as a benchmark in this research to understand a country’s steps to implement export-promotion instruments such as EPZs.
It is interesting that an export-oriented country with a large domestic industry as Brazil has never before implemented free economic zones as an instrument to stimulate the export growth. Many other countries with a strong manufacturing sector in especially South-East Asia and Central America have implemented similar types of economic zones years ago, starting in the 1960s. On top of that, it is even more interesting to investigate if the implementation of EPZs in Brazil is likely to stimulate exports and generate economic growth in the long-term. In particular, if the country’s economy can profit from focusing on exports through for example increased labor productivity and enhanced international competitiveness, and if the EPZs contribute to this. This question will be the central topic of this research: if Brazil can secure sustained export promotion with the implementation of EPZs as export-promotion instruments. My thesis statement is that with the current framework of regulation the EPZs are not likely to meet their goals and will not contribute to the long-term growth of the economy. I will argue that another type of economic zone, Special Economic Zones (SEZs), that are better integrated with the economy and less focused on exports to foreign markets, have more chance of success, although they remain inferior to country-wide economic reforms that enhance the entire export sector.

This research is therefore structured as follows: In chapter 2 the ELG theory and its origins will be discussed, and also the criticism on this development paradigm. Then, I will describe the main characteristics of an EPZ, and I will give an overview of the debate on EPZs as policy instruments. After that it will be examined if EPZs can function as instruments to support ELG in a country. Chapter 3 will briefly describe the role of the state in the economic development of Brazil. It will summarize the history of the political economy of Brazil since WWII and clarify its shift from import substitution towards more outward-looking policies. Then I will discuss the motives of the state to restart the process of the establishment of EPZs, how these EPZs are being regulated and implemented, and how this fits in the political economy of the country. In chapter 4 I will then investigate whether EPZs are likely to have a significant long-term impact on the Brazilian export sector and if they can support ELG in the country. Furthermore, it will be discussed which policy measures are necessary to generate lasting export growth in EPZ. I will elaborate on my thesis statement and explain why the currently pursued EPZ policy is outdated, and why Brazil should implement SEZs that integrate with the rest of the economy. I will provide some policy recommendations that will increase the chances of success of the zones, although I will conclude that SEZs only form one aspect of economic development, that alone cannot bring sustained, lasting benefits to the export sector.

Research about this topic is relevant because Brazil is an important actor in the world economy and therefore its economic policies are worth examining. Its exports have a large impact on global trade
and world prices and the development of other Latin-American countries such as Argentina and Colombia are closely connected with the development of the Brazilian economy due to their interdependent economies (Vernengo 2003: 61). Brazil could function as the economic motor of the continent, but currently its economic growth is stagnated and too fragile to generate growth in the rest of Latin-America. In addition, in the extended literature about EPZs and ELG theory, relatively little is written on in what manner EPZs support ELG. This thesis will therefore make a modest contribution to the debate of EPZs as instruments for export promotion. It also adds to the literature of EPZs by providing a case study of the potential impact of EPZ on one of the world’s largest economies. Finally, some policy recommendations on a more sustainable manner of EPZ implementation, in order for EPZs to have long-term effects on a country’s export sector, will be discussed. EPZs have been a popular instrument to stimulate exports in developing countries over the last 30 years the amount of zones is still growing. It is therefore important to continue discussing them, and benchmark them against the model of integrated economic zones: Special Economic Zones. This research takes place within the scope of IPE, because it focuses on state-led economic policies concerning export- and trade promotion. I will build upon the line of thought of export-led growth theory but in a more critical and dynamic version: that export can bring a lot of benefits to a country like Brazil but that focusing on exports alone is insufficient to create sustained export- and economic- growth. In this way it can be seen as a modern version of the traditional thought on export-led growth, adapted to a quickly globalizing world where more than just a high export rate is necessary to become and to stay one of the major economic players.
2.0. Export Processing Zones and Export-Led Growth
As mentioned previously, this section will investigate if EPZs as instruments for export promotion support the achievement of export-led economic growth in a country. In other words; if the ideal functioning of EPZs in theory can generate economic growth in accordance with the export-led growth theory. This will provide the theoretical basis for further research in this thesis about EPZs and export promotion in order to achieve economic growth. To do so in a structured manner, I will first discuss the principles of the ELG theory and its criticism, as well as its place in contemporary development economics and international political economy (IPE). Due to the large amount of literature written about the ELG theory, I attempt to give a clear and concise overview of the intellectual debate on the ELG theory, its main intellectual influences, and its main principles and criticism. I will also clarify my own standpoint with respect to this theory. Secondly, I will elaborate on the definition and different characteristics of special economic zones and EPZs in particular, including the main arguments for the implementation of this policy tool. After that, arguments in favor and against the implementation of this export-promoting instrument will be discussed. Based on the findings of the preceding sub-sections, the last sub-section will cover the question if EPZs support ELG, or whether EPZs perhaps are an alternative method to achieve ELG, or a second best policy option for restructuring the whole economy in order to achieve ELG.

2.1 Export-Led Growth (ELG) Theory
In short, the ELG theory is based on the export-led growth hypothesis that postulates that an increase of exports or the expansion of the export sector generates economic growth, because exports function as one of the most important- or the main- determinant of economic growth (Medina-Smith 2000:1-4). It assumes a direct positive causal and empirical relation between export expansion and economic growth of a country (Balassa 1978: 181). ELG should not be confused with economic growth leading to export expansion. ELG theory assumes that export expansion is the determinant of growth and not the other way around. The ELG theory has been a central theory within the academic debate on development economics, especially in the last four decades. Nowadays, its role has slightly decreased due to the rise of several criticisms (which will be discussed later) and because due to globalization countries almost cannot avoid having to participate in global trade, which makes the ELG theory less relevant. However, it still forms an important strand in the literature on development economics. The theory can also be found within the scope of IPE due to the prominent role of the state in promoting outward-oriented policies. The development of the theory has a long historical tradition dating back to the first literature on openness, free trade and economic growth (Palley 2011: 3-7).
2.1.1 Historical Background: Openness and Free trade

The theoretical link between openness to trade, benefits from trade and economic growth dates back to the classical school of economic thought started by Adam Smith in 1776. He was the first to touch upon the global benefits from openness to trade, because this could lead to a global division of labor that would benefit all countries. In the nineteenth century his arguments for free trade were also already developed into an argument for export promotion, whereby colonizing countries started to exploit the resources of their colonies to export these, in order to increase their stock of gold conform the ideas of mercantilism (McCombie and Thirlwall 1994: 364). The work of Adam Smith was further developed by other nineteenth century political economists such as David Ricardo in 1817, who developed the theory of comparative advantage; in 1815 Robert Torrens who was the first author to write about comparative advantage and reciprocity in international trade and in 1848 John Stuart Mill brought forth ideas of economies of scale and opportunity costs in trade. All of the mentioned authors were opponents of the protectionist measures that occurred from mercantilism, the economic paradigm of that era. Ricardo et al. justified free trade on the basis of its possible benefits through international specialization and increased productivity, or, the comparative advantages of international trade (Kirschner 2009: 38-39).

As a result, the discussion on the gains from trade has roots in the discussion on openness leading to more trade. Liberal policies that lead to deregulation and less protectionism have therefore been influential in the development of the ELG theory. Among the extended literature written on openness and growth, Krueger in 1974 and 1978 and Bhagwati in 1978 had a strong impact on the openness consensus by stressing the positive economic effects of liberalizing the economy. Liberalization of economies leads to deregulation and more openness because it reduces potential barriers to trade and stimulates a country’s import and export. By liberalizing the exchange rate and, if appropriate, allowing the currency to depreciate instead of overvaluing it, sectors of the economy become more competitive. This stimulates exports that in return benefit a country’s trade balance.

2.1.2 Trade and Growth

A large amount of contemporary literature on benefits from trade has a basis in the classical trade theories, but perhaps its most important legacy for the basis for contemporary international trade can be found in the work of the Hecksher-Ohlin-Samuelson comparative advantage theory.

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1 In the mercantilist view, trade was seen as a zero-sum game and therefore countries intended to increase their wealth via expanding the stock of gold through protectionist measures to trade, and exporting domestically manufactured products to foreign markets (Kirschner 2009: 38).

2 In short, a comparative advantage occurs if an individual, firm or country has the ability to produce goods or services for a lower opportunity costs than another country. Even if one country has an absolute advantage in producing all goods and services, countries can still gain from trade as long as their relative efficiencies differ.
(Samuelson 1948; Stolper and Samuelson 1941). It states that countries export the goods that use its abundant factors intensively, and import those which use its scarce factors intensively. These differences in relative factor endowments, lead to net global benefits from trade because countries can specialize in producing the goods that use their abundant factors intensively. The factor endowment model is therefore sometimes referred to as the modern theory of international trade, because it sees trade as a positive sum game and because it postulates that trade increases output growth through specialization. By focusing on growing productivity through specialization it influenced IPE and development economics toward more liberalization in trade and the specialization of production through global integration (Palley 2011: 3-4).

The assumption mentioned above, that trade leads to increased output growth via specialization, is also sometimes referred to as static gains from trade. However, openness to trade can also lead to other beneficial effects on the long-term growth of the domestic economy by mechanisms such as knowledge spillovers and technology transfers. By exporting to- and importing from- foreign markets firms are exposed to competitiveness and sophisticated products which stimulates productivity growth and therefore output growth; these are dynamic gains from trade. The dynamic gains from trade are based for example on the writings of Grossmann, Helpman and Krugman (1985). It involves a shifting outward of the possible production frontier (PPF) when trade leads to increased productivity, enhanced international investment and improved exploitation of economies of scale. Exports and openness play an important role in the dynamic gains from trade, because it broadens the total market for a country’s domestic producers, and exposes them to these positive externalities that are derived from foreign trade. So, focusing on trade and exports can result in enhanced output growth (Grossman and Helpman 1991: 518; Thirlwall 2000:6).

2.1.3 Exports and Growth: ELG

Kindleberger (1958: 85) was one of the first authors who specifically discussed the positive relation between export and economic growth by empirically examining several countries and their economic development and export sector. His assumption was based on export linkages and a country’s ability to transform and improve labor-intensive industries due to knowledge gained from international trade. He did not agree with the ‘Prebisch-Singer’ assumption that dependence on the export of primary products is relatively more vulnerable to cause declining terms of trade than manufactured products.¹ Kindleberger argued that developed countries often also export commodity products whereas developing countries are frequently exporters of manufacturing. Therefore he assumed that the countries that succeeded in diversifying exports and adapting to international market conditions

¹ According to the ‘Prebisch-Singer’ assumption, developing countries often export commodities and therefore they are more prone to price fluctuations than developed countries that export more manufacturing products
are the countries which benefit most from trade and exports. These ‘export linkages’ can function as catalysts for the economy and stimulate productivity and competitiveness, which results in economic growth and increased prosperity. His work on this topic was complemented by the findings of Chenery and Strout (1966: 679-681), who argued that there are almost no examples of countries which sustained a growth rate over the long-run that is larger than the growth of their exports, and that export growth is necessary to maintain economic growth.

ELG theory can be seen as a specific branch within the openness consensus and those agreeing with the benefits from trade. It is also suggested that the ELG theory emerged from this consensus, together with the successful outward-oriented policies of the newly industrializing Asian countries (NICs) which achieved rapid economic growth based on export-promoting policies. The high levels of economic growth of Singapore, Hong Kong, Taiwan and South-Korea in the 1960s stimulated by state-led outward-oriented policies, functioned as an important theoretical and empirical affirmation of ELG theory (Shirazi and Manap 2005: 472). Another reason for the impact of ELG theory was the fact that the other dominant development strategy of import substitution (IS) that many Latin-American countries pursued in the decades from the 1950s-1980s, had remarkably less success with respect to the economic development of the continent. This added weight on the academic standing of export-promotion strategies (Bhagwati 1988: 27). Inward-oriented approaches and protectionist measures were rejected and emphasis was put on export-led strategies.

The ELG theory was further diffused through influential international organization (IOs) such as the World Bank, the IMF and the WTO. Developing countries have been encouraged since the end of the 1960s to liberalize their markets and to open up to foreign imports and to export those products that could be produced relatively cheaply in the country (Oliveira 2001: 16). A lot of financial assistance, such as structural adjustment loans from the World Bank and assistance for debt relief from the IMF was conditional on developing country’s governments implementing liberal policies and opening up to trade (Palley 2011: 5). It was argued that freer trade would lead to net global benefits from trade, and the promotion of a country’s export would enable them to correct imbalances in the external sector and recover the domestic economy (Medina-Smith 2001: 3-6). Nowadays, ELG theory is still an important theory in development economics and IPE, but its role is less prominent than it was in earlier decades. However, the theoretical basis of the link between export growth and economic growth is still supported by many scholars and IOs and therefore still forms the basis of many export policies.

There are several ways in which ELG can be defined. The OECD argues that ELG is present if exports have a direct stimulating effect on the economy through benefits that occur via spillover effects, such
as knowledge spillovers and technology transfers (OECD 2007: 17). The World Bank defines ELG when exports have led to a significant increase in a country’s total factor productivity (TFP) that stimulates output- and economic growth. This is often supported by liberalizing policies such as the removal of trade barriers and liberalizing currencies (World Bank 1998: 253). Bhagwati (1988: 34) states that ELG is a concept ‘in which a country’s exports generates income expansion that is attributable directly to gains from trade’. Palley (2011:3) argues that ELG is ‘a development strategy aimed at growing productive capacity by focusing on foreign markets’. The mechanisms through which export expansion can have catalyzing effects differ per case and per country. Some examples of these mechanisms are knowledge spillover, improved use of technology and increased labor productivity. Another mechanism is the ‘external error-correcting system’ due to increased competition, which for example forces firms to improve their products when it results that they are inferior in the eyes of foreign consumers (Helpman and Grossman 1985: 2-5). Exporting also leads to a better allocation of resources, increased specialization, and enhanced economies of scale because countries are forced to operate more competitively. Increased exports also relax a country’s trade balance due to foreign earnings, and contribute to employment. An increase in foreign earnings and exchange as a result of increased foreign demand for a country’s products also allow other components of demand in the economy to grow faster, such as government expenditure. This further stimulates domestic demand and investments (Thirwall 2000: 7-8; Balassa 1978: 181-183).

In sum, achieving export expansion and securing export promotion can be beneficial because of the following mechanisms and benefits: i) the generation of capacity utilization; ii) improvement of the advantage of economies of scale; iii) enhanced labor productivity; iv) increased technological progress and the absorption of advanced foreign technology; v) improved and more efficient allocation of resources; vi) an increase of the country’s external earnings; vii) a contribution to the country’s trade balance; viii) an increase in a country’s TFP; ix) stimulated domestic demand (Medina-Smith 2000:4; Balassa 1978: 181; McCombie and Thirwall 1994: 365). Consequently, these mechanisms lead to output growth of a country. Output growth lies at the basis of economic growth.

Although international gains from trade and export expansion apply to all countries, the ELG theory applies specifically to developing countries. According to the theory, exports in particular benefit these countries by allowing them to maintain competitiveness and gain access to international markets, because the domestic markets are often too narrow to benefit from economies of scale. Export increases demand and therefore the supply potential of the country. It also functions as an important factor to relieve the balance of payment constraints that often limit the development of developing countries (Thirwall 1978: 365). Despite the fact that developing countries can gain most from an economic model based on ELG, more developed countries have also pursued economic
growth based on export performance. Germany and Japan in the 1950s and the East Asian NICs in the 1970s adopted the ELG strategy successfully, which resulted in extensive benefits from exports. This underscored the possibilities of export-promoting strategies, accompanied by pro-active governments (Palley 2011: 6). Export-promoting strategies can take the form of establishing free-trade regimes by linking domestic prices to the prices of the international market, providing the availability for export credit for outward-oriented firms, and via attempts to attract outward-oriented FDI via attractive corporate policies and economic free zones (World Bank 1992: 253). Thus, ELG can be pursued with both a laissez-faire approach, as with a state-led approach.

Lastly, the goal of ELG theory is to maintain long-term competitiveness of a country’s exports, in order to sustain economic growth rates. In order to do so, structural economic policies are required to support this goal. Exporting alone does not necessarily bring benefits to a country; a coherent framework of policy is needed to take advantage of export linkages such as foreign technology absorption and information exchange. Examples of these types of policies are investing in infrastructure and an enhanced regulatory framework for business (Kindleberger 1958: 85-88). This is an important note on ELG theory; solely increasing exports does not lead to increased prosperity without policies that enhance the adaptability of a country to absorb the potential spillover effects of exports. Furthermore, a country needs to have the capacity to produce products that meet world standard and that have competitive prices. If a country does not succeed in adapting to world demand and world prices, it will not be able to generate growth that is led by the export sector (Kindleberger 1961: 196-97).

Based on the discussion above, I take a position in this thesis that is in line with Kindleberger’s assumption: that increased exporting can function as an important engine of growth of a country, when the sector is of significant scope and capacity and when export policy it is integrated in a coherent structural economic policy framework. The state should therefore ensure that it provides policies aimed at the establishment of export linkages. Via the adaption to world demand and absorption of spillover effects that are derived from export expansion, a country can increase output growth. Via increased openness, trade and the attraction of FDI is stimulated which also bring positive spillover effects. For these reasons it can be beneficial for developing and even industrializing countries to focus on export and increase openness. I will therefore argue in the next section that as a country with a large supply base of industrial, intermediate, and commodity export, Brazil should focus on pulling the export sector out of stagnation and implementing liberal policies that increase openness to trade and FDI. However, ELG strategies should not substitute for domestic development policies, but rather complement these, due to the unintended effects that a too narrow focus on ELG can cause (which will be discussed next).
2.1.4. Criticism on the ELG Theory

As with every prominent theory, a lot of criticism has been written about it. ELG theory is no exception to this. I have made a selection of the criticism which is narrowed down to two strands: the ‘Robinson critique’ which is linked to the ‘Prebisch-Singer’ criticism, and ‘structural Keneyssian’ critique. These two strands have been chosen because in my opinion they provide the best criticism to explain why export promotion does not always lead to economic growth, and why the ELG strategies should be implemented cautiously with attention for domestic development. Furthermore, I believe that both strands of critique provide arguments that could clarify the less prominent position of the ELG theory today. It has to be taken into account that both critiques do not reject export as an essential pillar for economic growth, but rather state that a narrow focus on export promotion can lead to negative effects.

The first strand of criticism on the ELG theory consists of two elements that are related to the increased competition of export in manufacturing of developing countries; namely the ‘Robinson critique’ and the ‘Prebish-Singer’ critique. The ‘Robinson critique’ is the beggar-thy-neighbor critique from Joan Robinson in 1947, which stems from the experience of competitive devaluation in the 1930s. Related to the ELG theory it suggests that they crowd-out each other’s export by trying to export their way out of the demand shortage on the domestic market (Bleck 2000: 7-15). When all developing countries increase their exports significantly while (domestic) demand does not grow, this may result in a fallacy of composition with regard to their export. In addition, the ‘Prebish-Singer’ critique is based on the previously discussed work of both authors on the declining terms of trade. With respect to the current problem of declining terms of trade, the decreasing prices are no longer related to commodity prices, but to manufactured goods. This is due to the increasing world supply in manufacturing as many developing countries are industrializing (Sapsford and Singer 1998: 1653-55). The criticism on ELG is that if all developing countries are encouraged to expand their export in manufacturing, beggar-thy-neighbor and declining terms of trade issues are likely to arise.

The second, more recent strand of criticism of ELG is the structural Keneyssian critique, which is sometimes referred to as ‘domestic demand-led growth’ or ‘endogenous growth’ theory. This boils down to the following: that ELG only promotes superficial economic structures that deliver low quality growth, without establishing links that can lead to deeper prosperity. Because the focus lies on external markets, countries tend to under-prioritize developments rooted in the domestic market. This externally-focused development can therefore expose developing countries to increased south-south competition with results in wage suppression, low domestic demand and declining labor...
conditions (Palley 2002:4-5). Moreover, without domestic demand toward for products produced, production is extra vulnerable for fluctuations in world demand. Increased vulnerability does not contribute to sustained economic growth. Hence, in order to establish deeper domestic development a government’s focus should also be on the development of the domestic market, which ELG sometimes fails to do if the focus is too much on export.

Despite the criticism on ELG theory, it is still a widely accepted economic strategy for development. Moreover, a lot of developing countries and EM countries like Brazil still rely on their export sector to stimulate GDP growth. Therefore, export promotion is sometimes necessary in order to enhance economic competitiveness and attract foreign earnings and investments. One frequently used instrument to support export and attract outward-oriented FDI, are export processing zones (EPZs).

### 2.2 Export Processing Zones

This section will first explain the different concepts and definitions of economic zones, in order to distinguish their exact characteristics from an EPZ. This also includes some attention for on the functioning of these zones and the motives for their implementation. Then, I will discuss arguments in favor and against the implementation of EPZs as a tool for export promotion and economic development as well as the status-quo of the debate concerning EPZs. This will provide the necessary information on EPZs for the last sub-section, in order to answer the main question of this section.

#### 2.2.1. Types of Special Economic Zones

The term ‘export processing zone’ has been used already in this research, but it needs some clarification on what it is exactly and how it differs from other special economic zones (SEZs) or free economic zones (FEZs). The world’s SEZs vary from fenced-in industrial states where parts of multinational corporations (MNCs) enjoy tax breaks, to Mexico’s border cities with industrial production focused on export to the US, to metropolitan cities in China like Shenzhen which have been transformed from small fishing villages to major SEZs with millions of inhabitants (Farole and Akinci 2011: 1-9). All over the world there are currently different functional and spatial types of SEZs and FEZs emerging, which have grown especially in the last four decades due to the success of the Asian SEZs in generating economic growth. A distinction of the types of zones can be based on several aspects among which the size of the geographical area, by type of economic activity and by product destination (Granados 2005: 72). I will use this distinction because it provides a clear and coherent overview of the different types of zones.

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4 This erosion of wages and labor standards is also often referred to with the term ‘Race-to-the-bottom’, whereby countries face a downward pressure on their regulation and laws due to increased pressures from competition (see for example Mosely 2005, 2008).
In general, four different types of zones can be distinguished based on those particular factors\(^5\)(see Table I): i) A Free Trade Zone, or commercial-free zone, is an area that is geographically defined for the permission of unrestricted flows of trade; ii) A traditional EPZ has the objective to promote manufactured exports with a market focus on export; on average only less than 20% of the goods produced are destined for the domestic market; iii) A hybrid EPZ resembles the traditional EPZ, but only part of the geographic industrial area is EPZ; the other production takes place for the domestic market; iv) The Special Economic Zone or Freeport is designed to ease governmental restrictions on trade flows, and is characterized by an integrated development with the rest of the economy. They were often designed not just to promote exports, but to gradually open up the economy toward freer trade, or function as experiment for new trade policies without exposing the entire country to new regulation (Chen 1995: 594-98; Farole and Akinci 2011:2-8).

<table>
<thead>
<tr>
<th>Type of Zone</th>
<th>Size – in hectares</th>
<th>Market destinations</th>
<th>Activity</th>
<th>Development Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Trade Zone (FTZ)</td>
<td>&lt;50</td>
<td>Domestic &amp; Re-export</td>
<td>Trade, Entrepôt</td>
<td>Support Trade</td>
</tr>
<tr>
<td>Traditional EPZ</td>
<td>10-500</td>
<td>&lt;80% export to foreign markets</td>
<td>Manufacturing or other processing</td>
<td>Promotion of export manufactured goods</td>
</tr>
<tr>
<td>Hybrid EPZs</td>
<td>&lt;100; only part is EPZ</td>
<td>Foreign &amp; domestic</td>
<td>Manufacturing or other processing</td>
<td>Promotion of export manufactured goods</td>
</tr>
<tr>
<td>Freeport/SEZ</td>
<td>&gt;1000</td>
<td>international &amp; domestic export</td>
<td>Multiuse; manufacturing, services, trade etc.</td>
<td>Integrated (export) development</td>
</tr>
</tbody>
</table>

Table I: Different Type of Economic Zones

In this thesis I discuss mostly the traditional EPZ, because these are specifically designed to promote manufactured exports with a foreign market destination. Moreover, the economic policy of Brazil is aimed at the creation of specifically the EPZ type of zone and not on other types of economic zones (Granados 2005: 73).

2.2.2. EPZS: Definition, characteristics and goals

An EPZ is a specific economic zone, in an isolated geographical area of around 10-500 hectares, where the main activity is manufacturing and processing of goods for foreign market destinations.

\(^5\) Other economic zones such as enterprise zone, information processing zone and financial services zones are left out of this enumeration because here the focus is on type of production in special economic zones.
The zone is being treated as outside the customs territory of a country, therefore they can offer a liberal regulatory environment, tax incentives and free trade conditions to firms. The International Labor Organization (ILO) defines EPZs as ‘an industrial zone with special incentives to attract foreign investment, in which imported materials undergo some degree of processing before being exported again’ (ILO 1998). According to the OECD, around 4000 EPZs can currently be counted in 130 countries around the world, employing an estimated 68 million of workers. In general, there are two different motives for EPZ implementation to be distinguished in countries; one where EPZs are implemented with the hope that they function as an ‘engine of growth’ for the economy, and one where a country already has a strong industrial base but want to provide extra stimulus to export sectors, like the NICs in Asia (Madini 1999: 18). In developing countries, the first type is often the motive behind the policies, whereas Brazil’s policy plans coincide more with the second motive of implementation.

The motives and goals for the implementation of EPZs are often relatively similar, although the characteristics and manners of implementation differ among countries. In sum, the main characteristics of EPZs are that they are special industrial areas with production focused on export to foreign markets, and regulations aimed to attract outward-oriented FDI (Granados 2005: 73). According to the World Bank, all zones share at least five common features: i) They allow duty-free imports of raw and intermediate inputs as well as capital goods for production aimed at exports; ii) Long-term tax concessions are provided to firms such as tax holidays for the first several years; iii) Infrastructure and communication services often more advanced than in the rest of the country because the government invest in zone infrastructure; iv) Within the zones specific laws are prevail that for example oblige firms to export at least 80% of their production to foreign markets. Often firms do not pay taxes over exports, but to sell products to the domestic market they have to pay import taxes. Other laws such as labor laws tend to be more flexible in EPZs; v) FDI plays a prominent role in the zones and most firms are foreign firms or joint-ventures. There is no limitation on foreign ownership of firms (Madini 1999: 15). In addition, another common characteristic according to the OECD is that the zones often possess export promotion services such as sales and marketing support, export credit services and business advisory service (OECD 2007: 17).

The main goal of EPZs is the promotion of non-traditional exports, the diversification of the export-mix and the attraction of export-oriented FDI. By non-traditional exports is meant that a country tries to add value to its traditional export products, commodities or raw materials, or that they aim to attract new types of industries in order to diversify their export-oriented industry. (Granados 2005: 88). Furthermore, outward-oriented FDI is attracted in order to generate foreign earnings and positive spillover effects such as increased labor productivity and advanced use of technology
(Schrank 2001: 223). This knowledge-spillover from foreign firms is meant to have stimulating effects on the rest of the economy through backward and forward linkages. Backward linkages among others exist when growth of one industry leads to growth or improvement in another industry that supplies material for its productive activities. An example is the purchasing of raw or intermediate goods on the local market by foreign firms for further processing. Forward linkages exist when increased activities of one industry leads to growth in other industries that use its output as input. Examples of forward linkages are training of skilled workers, transfer of marketing and ‘export know-how’ and technology transfers. Foreign firms that produce capital- or intermediate goods that can be purchased relatively cheaply by domestic firms is another example of how forward linkages can occur. The spillover effects of new ideas and market knowledge on how to export and which products to supply is often weak in developing countries, and EPZs can potentially fill that gap (Johansson and Nilsson 1997: 2116-18). Another important objective is the direct generation of jobs and the alleviation of unemployment (Madini 1999: 15). Because jobs in EPZs are mostly labor-intensive low-skilled jobs, a large part of the population is capable of working in these zones and countries with an abundant labor force can use this comparative advantage. Moreover, EPZs can also be established as a tool for the development of relatively less developed areas, by stimulating industrialization of these regions through investment in infrastructure and attracting firms to the area (Granados 2005: 76).

2.2.3. Academic debate on EPZs

Due to the expansion of EPZs as policy tools, much has been written about the (potential) effects of EPZs on economic development. The discussion often has a narrow emphasis on the economic effects on the development for a country, and not on the social and environmental effects. In this thesis the focus also lies on the potential economic consequences of EPZ implementation due to the economic scope of this thesis and limited space to cover all aspects of EPZs. I will therefore only provide a concise overview of the economic arguments in favor- and against the implementation of these zones. It should be kept in mind that the effects of EPZs differ per case and per country and that therefore it is difficult to generalize this policy instruments.

Because of the opportunities provided by EPZs, they can function as a strategy to stimulate economic activity in a country and create positive spillover effects on the rest of the economy (OECD 2007: 16). Other studies, for example by neoclassical schools of thought, also postulate positive effects on a country’s GDP due to the implementation of EPZs through increased competitiveness of firms and products. This occurs via enhanced productivity as a result of exposing firms to international competition. Some studies with a cost-benefit approach, calculating the costs of the investment to create an EPZ and the total benefits that it generates within a specific time-frame, mostly confirm the
positive net gains of EPZs (Granados 2005:87-99; Warr 1989: 67-75). In addition, some studies find that EPZs can generate positive spillover effects on the rest of the economy by the building of human capital, which leads to growth in per capita output. This knowledge capital can generate a higher self-sustained growth rate through skill acquisition, which are characterized by increasing returns from knowledge as opposed to physical capital goods (Sengupta 1998: 12-14).

However, other scholars have argued that EPZs are only a temporary solution to the structural economic challenge of adapting and reforming the entire economy. A lot of other measures are required to generate lasting economic growth and competitiveness such as liberalization, investment in adequate infrastructure and improvement of the regulatory framework for business in a country, these cannot be provided just through the establishment of EPZs (Granados 2005: 78). In addition, EPZs sometimes tend to result in an enclave economy with no linkages or spillover effects with the domestic economy. According to Rodrik (1999:45), EPZs can function to gradually open up economies in a ‘dual track’, whereby the zones function as experiments with liberalizing policies. In China for example, economic zones functioned to gradually open up some parts of the economy and experiment with outward-oriented policies. Jéquir (1988: 45-48) underscores this, stating that EPZs are a ‘rather painless instrument’ to shift toward a more open and export-oriented economy and deal with competitive pressures. Other authors, among whom Virgill (2009: 163-83), argue that there is a chance that EPZ can lead to a reform delay for the overall economy instead of a tool of development.

If any consensus can be derived from the literature, it is that EPZs are an inferior option to overall economic and regulatory reforms in a country. They function best as an integral part of further economic reforms that stimulate export promotion (Watson 2001: 3-5; Madini 1999: 17). When implemented as a part of an integrated overall economic policy, they can function as a bridge to structural transformation (Schrank 2005: 798-800). When country-wide reforms are too difficult or time- and money- consuming to implement, EPZs can have a stimulating effect on the rest of the economy, but do not guarantee any catalyzing effects on the economy. According to Madini (1999: 18-20), who provided an exhaustive overview of arguments for and against EPZs based on extensive empirical research and data, EPZs should rather be perceived as one factor among other engines of growth in a country. When EPZs are implemented as a policy tool with a broader policy framework of liberalization and export promotion, they are most likely to generate beneficial effects. Nevertheless, it will remain difficult to investigate the effects of individual EPZs on economies, because there is an extended variety of methods to measure the effect of EPZs, and because one cannot know what the situation would have been without EPZs (Schrank 2005: 225).
Criticism on EPZs

Criticism on this policy instrument can be found among others in economic theory. Hamada (1974:226-40) for example argued based on economic models that EPZs lead to the establishment of specialization that is contrary to the country’s real comparative advantage according to the Hecksher-Ohlin model, and therefore reduces the country’s overall output and income. When a country intends to increase its non-traditional exports, there is a chance that this goes against its comparative advantage. Others state that the removal of one economic distortion, tariffs, is replaced by another, by some form of export subsidies which also distort the economy (Roubaud 2005: 785). Jauch (2002:103) argues based on empirical research that EPZs often result in an enclave economy with low levels of skill acquisition by unskilled-workers and no technical or knowledge spillovers to the rest of the economy. In addition, criticism on this topic points out the small amount of foreign earnings due to foreign ownership of the firms, the marginal net effect on exports, the loss of tax income for governments by providing tax holidays to firms, the small contribution to employment, and the relatively low wages and labor law implementation (Madini 1999: 21-46). These are possible negative consequences that can occur in any case when EPZs are implemented in a non-coherent manner with the rest of the economic- and social policy of a country. Although much more can be written on the debate concerning EPZs, the discussion will now continue to the last part of this section, which will answer the first sub-question of this research.

2.3 Supporting export-led growth?

After having discussed both ELG theory and the main aspects of EPZs, it is now possible to discuss if EPZs support EGL. This is an interesting topic to investigate because although it is often mentioned that EPZs are implemented as a result of ELG strategies, not that much has been written about whether they support ELG or not. This question will now be examined in order to provide a basis for later reasoning in this thesis about the role of EPZs on the revival of Brazilian exports.

The first part of this section mentioned that ELG is present whenever a country directly gains from exports, and that exports form the main engine of growth in a country. In order to achieve ELG, it is necessary that exports form the main driver of economic growth and that the export rate is growing equally or faster than GDP growth. Furthermore, the following positive spillover effects should be derived from export: capacity utilization, improvement of economies of scale, enhanced labor productivity, increased technological progress, efficient allocation of resources, increase in external earnings, growth of a country’s TFP, and enhanced savings. In addition, the ultimate goal of ELG is to sustain the long-term competitiveness of a country’s exports, so a certain integrated framework of policies is required in order to secure backward and forward linkages with the export sector and the rest of the economy. In order to support ELG, EPZs as policy tools for export promotion need to
generate at least the majority of these effects and have a significant impact on the country’s export growth in both the short- and the long-term (Medina-Smith 2000:4; Balassa 1978: 182; McCombie and Thirlwall 1994: 365).

When at first glance looking at the objectives of EPZs as discussed previously, a lot of commonalities with the aims and positive externalities of ELG can be discovered. The most relevant ones are the promotion of non-traditional exports, the generation of foreign earnings, enhanced infrastructure and export services, the attraction of outward-looking FDI, the diversification of exports and the positive spillover effects from FDI such as increased labor productivity and the use of enhanced technology. Would all objectives of EPZs be met, a country’s export growth would be supported through the positive incentives that EPZs offer for the entire economy, if they are able to maintain generating these in the long-term as well. However, this is limited to a theoretical optimal situation and there is no guarantee that when an EPZ is established it will accomplish these objectives, or that its implementation will have a significant influence on a country’s export growth. Also, due to the limited possibilities for forward and backward linkages to occur between the EPZ and the domestic economy the positive effects are likely to remain limited to the zones. And, as mentioned earlier in the discussion on EPZs, they have had a mixed record of success in achieving the objectives (Farole and Akinci 2011: 4-9).

The question that rises is if EPZs can deliver structural change and support of a country’s long-term export competitiveness. A key point in this process is if zones succeed in integrating with a country’s domestic economy (White 2011: 13). It is clear that in theory they could, if all objectives are met, but this does not seem to correspond with reality. Farole and Akinci (2011: 4-10) edited for the World Bank a book on economic zones and collected an extensive amount of empirical research and case-studies of countries with all types of economic zones and concluded that their functioning differs per case and per country and that the opportunities and challenges are also different per case. Some EPZs have become enclave economies. Some have succeeded in attracting outward-oriented FDI in the short term, but failed to sustain these when preferential trade policies were no longer applicable, or when labor costs had risen. Concerns have also been raised about the limited spillover effects of EPZs. The fragmented production and infrastructure can result in enclave economies that do not contribute to the upgrading of a country’s production base and TFP. According to White (2011: 14), the countries that have been successful in generating long-term profits from their EPZs are the ones that established conditions for ongoing exchange in technology, capacity, and investment. This includes continued exchange of skilled labor and entrepreneurs between the domestic economy and the zones, as well as investment by domestic firms, and the establishment of backward and forward linkages.
Backward linkages can be stimulated by exempting imports of materials by the domestic market from tariffs, to integrate these domestic suppliers in the value chain and establish supply linkages. It is therefore necessary that the required capital- or intermediate goods are already supplied on the domestic market, and that suppliers receive information and capacity building in order to meet the demands of the firms in the EPZ. Forward linkages can be stimulated by allowing more goods that are processed within the EPZs to enter the domestic market for further value-addition or consumption. These linkages can secure an integration of the EPZs with the local economy (Burgaud and Farole 2011: 177-80). Furthermore, it is necessary that the already country has developed some industrial base to absorb the spillover effects; an economy that is largely agricultural will not be able to benefit from advanced service technologies in EPZs, for example. Thus, there should be some form of coherence between the production in EPZs and a country’s economic structure. Therefore, from a policy perspective, the traditional model of EPZs will probably not always provide the necessary incentives for the integration in the domestic economy, due to its legal restrictions on exchange between the domestic economy and the zone and its promotion of non-traditional exports. Countries that have implemented SEZs instead of EPZs such as Taiwan have in general had more success in integrating the zones into the domestic economy, because they generate more opportunities for forward and backward linkages to occur (Chen 1995: 597-99).

In addition, it is more difficult for EPZs to support ELG in a large country than in a small country, simply because its effects will be relatively smaller on the economy. In Mauritius, a small country\(^6\) example, it was possible to establish multiple EPZs in the country and generate a large share of exports in EPZs. Because of their relatively large weight in the economy it was easier to establish effective long-term linkages with the domestic economy in a holistic economic policy (OECD 2007:24). In larger countries like Mexico and China, EPZs have definitely contributed to the outward-oriented industrialization and export growth in certain parts of the country, but the effects on the overall export growth and economy are relatively smaller. Therefore it cannot be indisputably stated that EPZs have contributed to ELG of the countries. This aspect will be of relevance in discussing the potential impacts of EPZs in Brazil later in this research. However, according to Schrank (2001: 235-240) an advantage of a large country that possesses EPZs is that they have more possibilities to establish economies of scale than small countries.

In sum, it can be argued that EPZs as policy instrument are a second-best option for restructuring the whole economy in order to achieve ELG and that they do not function as an alternative method to further reforms. EPZs seek to offer a temporary solution to a structural economic problem of low

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\(^6\) Mauritius is listed number 164 on the list of countries ranking by size.
export competitiveness and a protected or closed economy, but can function as a first step in liberalizing the economy. The optimal solution to enjoy the benefits from both export and openness is to liberalize the economy to create more openness to trade, improve the business and regulatory framework in order to attract outward-oriented FDI, and invest in export-oriented infrastructure that has linkages with both domestic markets as with foreign markets (Granados 2005: 78). ELG requires this type of policy to maintain long-term export competitiveness. EPZs can function as a step to structural transformation toward a more open, outward-oriented economy that can profit from exports, as long as they are implemented in a coherent policy framework to avoid the development of an enclave economy without backward and forward linkages with the domestic economy (Schrank 2001: 224-26; Madini 1999: 38-43).

2.4 Conclusion

This section aimed to discover whether export processing zones support export-led growth according to export-led growth theory. In sum, what can be concluded is that despite the fact that EPZs are widely used policy tools for export promotion, they do not guarantee an integrated approach for a country’s long-term export competitiveness, nor sustained economic growth. It is necessary to establish strong forward and backward linkages with the domestic economy to include domestic firms in the supply chain, and the domestic economy needs to possess the capacity to absorb potential spillover effects in order to benefit from the EPZs. Only when they can absorb spillovers can a country’s output growth be raised through EPZs. In comparison with SEZs, the traditional model of EPZs has less potential to support ELG theory due to its legal restrictions on backward and forward linkages. Moreover, although EPZs can contribute to a country’s export growth and provide outward-oriented incentives, the economic zones alone cannot provide a basis for ELG for the entire country without a coherent and supporting framework of structural economic policies. To sustain long-term export competitiveness and economic growth, the EPZs should be supported by liberalization that creates more openness to trade, country-wide outward-oriented policies and economic reforms that improve the business climate for (foreign) firms. Consequently, implementing EPZs remains in all cases inferior to country-wide economic reforms, but they can function as learning instruments to experiment with liberal policies, and function as a first step toward this goal. Only then a country can enjoy all benefits that can occur through openness and exporting.
3.0 EPZs and the Political Economy of Brazil

After having discussed if export processing zones support export-led growth, this section will now turn to the case study of Brazil’s plans to operationalize EPZs in the country. The conclusion of the last section, that EPZs serve as a second-best policy option to achieve ELG makes these considerations of the Brazilian government perhaps even more interesting. The main question that will be answered in this section is how the government’s plans to operationalize EPZs in the country can be explained by the country’s political economy. With political economy is meant that there is a focus on the political side of the economy; the fields where the state is able to implement certain policies in order to influence the market or the fields where state and markets converge.

In order to provide a clear explanation, first, a brief overview of the country’s history of main economic policies and the current political economy will be given in section 3.1. This will describe the shift from import substitution (IS) toward more outward-oriented policies, the role of the state remain strong. In section 3.2, the current status and structure of the Brazilian economy and its export sector will be discussed. This will also cover the strengths and the weaknesses of the export sector, which will later be of relevance for the last section of this research. Sub-section 3.3 will cover the plans to operationalize EPZs in Brazil including the political and legal background of these considerations. Some information and data on this topic was provided by the Brazilian National Council on Export Processing Zones (CZPE) via partly an interview with the executive secretariat. It will be shown that the EPZ program fits in Brazil’s tradition of state-led economic policies, but that they are a new tool for export promotion which is still in development.

3.1 From import-substitution to outward-oriented policies

Brazil has a history of state-led economic policies which shifted from IS after the Second World War toward more outward-looking, export-promoting policies after 1964. The IS policies were a response to a lack of external finance and isolated the Brazilian economy from the rest of the world, and were based on a belief that an intervening state was better than the free market (Cardoso 2009:5-6). High trade barriers, import prohibitions and an overvalued exchange rate were adopted to serve these policies. The country’s export mix consisted of a small number of traditional commodities, but the export sector was an important contributor to the country’s income. The IS period from around 1945-1964 caused distortions in the Brazilian economy leading to slow industrial growth and high prices for products due to domestic inflation, but also generated quite stable economic growth and supported the development of a broad domestic industrial base. After this period of growth, the

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7 Abbreviation derived from its Portuguese name, Conselho Nacional das Zonas de Processamento de Exportação.
8 The export mix of that timeframe consisted mainly of coffee, cocoa, sugar, cotton and tobacco.
economy lost its dynamism at the end of the 1950s because the domestic economy lacked competitiveness and the IS policies were exhausted. It resulted in stagnation, declining GDP growth and a weakly developed export sector, focusing solely on traditional exports. In order to develop the export sector, the military government of Da Costa e Silva in 1964 launched a policy program with outward-oriented policies and more openness to trade. An integral part of this program was the promotion of manufactured exports to diversify the country’s export mix, and the attraction of MNCs and FDI via the provision of tax exemptions. The cruzeiro\(^9\) was devalued to create a more competitive exchange rate and together with declining wages this helped to make the export sector more competitive. Manufactured exports increased from 22.7% to 31.4% of total exports, and, accompanied by high world prices for its commodity exports, this resulted in Brazil’s ‘economic miracle’ of 1967-1973 (Alarcón and McKinley 1992: 74; Baer 1989: 48, 76; World Bank Data: Brazil).

However, this period of growth came to an end when domestic demand did not grow fast enough to absorb domestic production, which made the economy vulnerable to fluctuating world demand. Furthermore, the growth of manufactured exports stagnated so the economic policies were in need of revision. In addition, Brazil was heavily dependent on the import of petroleum\(^10\) and the oil shocks of 1973 and 1979, which more than doubled prices, resulted in a negative trade balance for many developing countries including Brazil (Baer 1989: 96; Trading Economics: Brazil Trade Balance). In an attempt to maintain economic growth, the government started to borrow large amounts of foreign currency to invest in the domestic economy, which caused a sharp increase in foreign debt. The negative effects of the oil crisis on the trade balance forced the government to raise exports and lower imports. Exports grew, but their revenues mainly served to pay the foreign debt instead of stimulating economic development. When this debt-serving export expansion stagnated after the second oil shock, new attempts to increase the competitiveness of Brazilian exports through nominal exchange rate devaluation failed due to the high domestic inflation which kept the real exchange rate high. In the years that followed, the economy only started to recover around 1984 due to these unstable and high exchange rates. Growth occurred because the trade balance turned positive as a result of increased exports and because domestic consumption increased. In 1989, the election of president Collar marked the first shift from state-led economic policies and IS toward neoliberalism and deregulation focused on the private sector (Wylde 2012: 132). In the first years after his election, the liberalization of the economy caused huge inflation and another stagnation in exports. In 1999, the economy suffered from a severe crisis as a consequence of the Asian financial crisis in 1997 and the collapse of the Russian economy in 1998. Capital flight worsened the situation and the

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\(^9\) The Cruzeiro was the former currency of Brazil, and was replaced in 1986 by the Real.

\(^10\) Dependency on the import of petroleum was around 80% in the period 1970-1985 (Baer 2014: 76-80).
government was forced to devalue the Real. This triggered inflation but also stimulated export performance. However, exports remained less than 10% of GDP and the growth of exports as a percentage of GDP was not strong enough to significantly influence economic growth as it did during the years of the ‘economic miracle’ (Vernengo 2003: 62; Cardoso 2009: 18; Mahon 1992: 245; Trading Economics: Brazil Trade Balance).

The election of President Lula da Silva in 2002 brought a new era of state-led economic policies. Driven by export expansion and growth of the domestic industrial sector, the current account balance turned positive from 2003, mostly due to high world prices for Brazil’s commodity exports and increased global trade. The positive trade balance stimulated GDP growth which continued until the effects of the global economic crises hit the Brazilian economy around 2008-2009 (World Bank Data: Brazil GDP). Although Brazil recovered relatively quickly from the crises in comparison with other countries and emerging markets (EMs), Brazilian exports have since been affected by a combination of lower world prices, a decline in global demand and a slowdown of economic growth in other Latin American countries.11 Because Brazil has an export-oriented economy, a stagnation of export growth can significantly slow down the GDP growth of the country (Trading Economics: Brazil export; Cardoso 2009: 20).

Brazil possesses a relatively large and diversified export mix through its large domestic industrial base, and the export sector is of significant importance to its economy. However, what remains unanswered is whether we can speak of (periods of) ELG in Brazil. In the academic literature, views on this question vary. Some scholars such as Xu (1996) speak of ‘moderate’ ELG in Brazil because of the relatively high percentage of exports to GDP and the causation of export growth and the country’s GDP growth. Especially during the ‘economic miracle’ exports have played a key role in stimulating GDP growth (Alarcón and McKinley 1992: 74). However, other scholars such as Maneschiöld (2008) do not find ELG in Brazil due to the role of exports in serving the debt instead of GDP growth and the lack of spillover effects from exports. Furthermore, it can be argued that Brazil possesses a large domestic market and therefore the country is not mainly dependent on foreign markets to sell products and generate economies of scale. But apart from the different views on this theme, Brazil has an export-oriented economy due to its high percentage exports to GDP (see Figure I) and therefore it is dependent on a well-developed export sector in order to sustain economic growth.

11 The other Latin-American countries absorb around 40% of Brazil’s exports and so the developments of these markets influence the growth potential of the Brazilian exports.
Figure 1 illustrates export- and GDP growth in Brazil in percentage (of 100%) per year. From this graph no conclusions about ELG can be derived because it cannot capture causalities nor potential spillover effects between GDP growth and export growth. However, it shows the high percentage exports to GDP. Nevertheless, although ELG in Brazil is disputed and difficult to investigate because of all the factors that play a role in export-led growth and GDP growth, Brazil’s export sector has a potential to expand and generate positive spillover effects to the rest of the economy that can stimulate GDP growth. The percentage of export to GDP is also relatively high in comparison with other countries. This is due to Brazil’s large amount of natural resources and the developed domestic industry which stimulates the exportation of intermediate goods. The export sector has played an important role in the economic development of the country, and therefore can be of significant economic importance in the future if it can be stimulated by the right economic policies. The current economic policies aimed at the development of EPZs in Brazil are therefore an interesting topic to investigate. However, before turning to the plans of EPZ development in Brazil it is first instructive to illustrate the current economic performance of Brazil’s export sector in order to grasp the context of the EPZ plans.

Figure 1: GDP growth and export growth (in %) in Brazil 1999-2013 (Source: World Bank Data)
3.2 Current economic- and export performance

Although the existence of ELG in Brazil is disputed, its history of economic development in the last decades has always been closely related to its export performance. Exports accounted for around 11-14% of the country’s GDP in the period 2009-2013, after a peak of 16.4% in 2004 (World Bank Data: Brazil, Figure I). Despite its slowdown of GDP growth after the global crisis, Brazil is still the world’s seventh largest economy in terms of GDP and the biggest economy in Latin America (World Bank GDP ranking 2014). The country is the world’s largest exporter of soybeans, orange juice, raw cane and refined sugar. Furthermore, other exports such as ores and iron, coffee and raw sugar also compromise for a significant amount of total global export (see Figure II). The main source of export income during the current post-crisis period are minerals (around 25%), foodstuffs (13.8%) and vegetables (12.3%). Canuto et al. (2013: 2-8) calculated the concentration of Brazilian exports based on the Herfindahl-Hirschman Product Concentration Index and found that Brazil’s export mix is relatively diversified, although the degree of concentration is increasing. In addition, they found that Brazil exports to a relatively large number of foreign markets. This tends to reduce fluctuations in demand and also offers the potential to increase sales to these markets because the costs of reaching these markets are lower, through for example existing contacts and transport channels. Both factors are an advantage for the Brazilian export sector.

![Figure II: Brazil’s export mix. (Source: OECD Observatory of Economic Complexity)](http://wits.worldbank.org/WITS/WITS/TradeIndicatorsHelp/TradeOutcomes_Help.htm)

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12 See Figure II
Currently, Brazilian exports suffer from a decline in global demand and sluggish economic performance of the rest of the South-American continent. Declining commodity terms of trade have also negatively influenced the export sector, which is still composed for a large part of commodities- or primary products. Despite a solidly growing domestic demand for these products and the rise of a domestic middle class, these factors decreased total exports which slowed down the growth of its economy (Canuto et al. 2013: 3-10). In 2012 the Real was devalued again, which had some positive effects on the competitiveness of exports whereby the percentage of exports to GDP grew by 1%. However, this was not enough to significantly stimulate economic growth. After the global crises, GDP growth was 0% in 2009, reached a peak of 8% in 2010, but declined to 3% in 2011 and 1% in 2012-2014 (World Bank Data: Brazil). According to economic forecasts by the OECD, GDP is expected to grow around 1.8% in 2015 and 2.5% in 2016 (OECD Economic Outlook 2014). Currently, services form the main contributor to Brazil’s GDP and the main sector of labor force occupation (68,5% and 71%), followed by industry (26,3% and 13,3%) and lastly agriculture (5,2% and 15,7%).

Interesting is that the most important export products differ from this overall economic structure; they consist mainly of minerals and agricultural products followed by intermediate industrial products. This is an interesting aspect concerning the role of EPZs and potential value-addition that will be discussed later in section 3.3 and 4.3.1. Declining commodity- and agricultural- terms of trade pose a threat to Brazil´’s export sector, as does the declining export of industrial products. An increase in the export of manufactured products and services could stimulate GDP growth as it has done in the past, and create a more stable and diversified export mix. However, besides demand-related constraints, the Brazilian export sector also faces some supply-side- and other constraints such as a low investment rate which need to be improved in order to strengthen the export sector.

Currently, according to various sources such as the World Bank and Canuto et al. (2013: 5-16), who made an analysis based on a variety of empirical data and comparative studies, the most important obstacles for export development in Brazil are: i) The low investment rate; ii) The lack of outward-oriented FDI; iii) High inefficiency- and transport costs; iv) An appreciating exchange rate and inflation; v) The stagnant labor productivity in comparison with relatively high wages (especially in the industry sector); vi) A low level of technological content and sophistication of the products exported.

Because the exported products have a low sophistication and technical content, this limits potential learning effects from exporting, as mentioned in the discussion of export-led growth theory in the previous section. Furthermore, with respect to both economic development and the improvement of its export sector, the country needs to improve investment in infrastructure in order to connect all parts of its total supply base and reduce transport costs, which are at the moment relatively high in
comparison with other emerging markets. This includes logistic services and other trade-related infrastructure. In addition, high (corporate) taxes also limit the country’s attractiveness for foreign firms (OECD 2007: 40-41; Canuto et al. 2013: 4-9; World Bank Ease of Doing Business Index 2013). The business climate in Brazil is also perceived as difficult for foreign investors, as is reflected by the fact that the country ranks 116 out of 178 on the World Bank’s Doing Business index in 2013. Brazil also ranks 123 out of 178 on the Ease of Starting a Business Index due to complicated tax- and labor codes, ever changing legislation and strong bureaucratic tendencies. An improved business climate could stimulate the attraction and maintenance of FDI (World Bank Doing Business Index 2013).

Another constraining factor is that Brazil’s economy is relatively closed in comparison with other BRIC countries and therefore it does not exploit all the potentials from international trade. The country is also relatively poorly integrated in global supply chains, which is partly due to its large focus on mineral- and commodity export. Furthermore, due to protectionist measures and tendencies stemming from the IS period, the country lacks an effective export policy to provide internal incentives for sales abroad. The attraction of outward-oriented FDI, better integration in global supply chains and more openness to trade could improve this (Canuto et al. 2013:9; Braga 2002: 1-2).

In sum, Brazil’s export sector has the potential to expand and contribute more to GDP growth, but it faces several constraints that decrease the competitiveness of the products and services exported. In line with the successful state-led economic policies of the past, some fresh and effective incentives are necessary to boost Brazil’s export sector. In a period of declining exports, a stagnating domestic industrial sector and a loss of international competitiveness, former President Lula da Silva signed an amendment to a law in 2007 in order to allow and stimulate the establishment of EPZs in Brazil. This amendment was not the first legislation concerning EPZs, but is the most recent incentive to stimulate the establishment and implementation of the zones. The next sub-section will briefly describe the process of EPZ development in the country.

3.3. Export Processing Zone development in Brazil

New efforts were made by the government of Da Silva around 2007 to re-establish export processing zones as instruments for export promotion. Former president José Samey was the first to raise the idea of economic zones in Brazil after an official visit to China in 1988. He first wanted to establish SEZs resembling those of China, but the ideas resulted in initiatives for the creations of EPZs aimed specifically at export promotion. The ideas for the establishment of this type of free zones were

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14. On this scale, the higher the number the worse the position of the country in international context.

15. China’s Special Economic Zones (SEZs) differ from the classic Export Processing Zones (EPZs) model. See chapter 1 for the different models in economic zones.
raised relatively late in Brazil in comparison with other countries with a large and developed domestic industrial base and manufacturing sector, such as the NICs. Also, in other Latin American countries such as in the Caribbean area, EPZs already existed and operated on large scale since the 1980s.

The first legislation on EPZs was laid down between 1988 and 1994 via Law 2.452/1988 by former president Samey. It provided the legal basis for the establishment of EPZs in certain geographical areas and the construction of the required infrastructure. However, despite the fact that the plans to establish these zones were officially approved by the government and the legislative base was built, no actual EPZ was established in this period. This was due to the legislation that lacked too many required features, such as a monitoring system for the approval of firms to enter EPZ or an organization to promote the EPZs to foreign firms. Another reason that the plans of 1988 never led to the actual establishment of EPZs was that the domestic industrial sector resisted the plans, fearing a comparative disadvantage through the fiscal incentives offered to firms in EPZs. Complaints arose especially from the Manaus Free Zone and the industrial sector in the developed South-East around Sao Paolo; these were the most developed industrial parts of the country (Foreign Market Access Report 2010: 9; Gari 2011:9). In response to this domestic resistance, EPZ legislation in Brazil has been subject to many changes and amendments which aimed to also protect the domestic industry. One example is Decree No. 6.634/2008 which restricts sales of products produced in the EPZs to the domestic market, in order to offset comparative disadvantages for the domestic industry. Only 20% of the goods produced in the zones is allowed to enter the domestic market, where they are subject to the regular import tariffs.

After some years of inactivity concerning the EPZs, the current regulatory framework of EPZs was embodied in Law-Decree no. 11.508/2007. It was officially signed into effect by former president Lula da Silva via the implementation of Decree no. 6.634/2008. Via this Decree, the National Council on Export Processing Zones (CZPE) was established, and state-led institutional support was provided to accelerate the process of zone implementation. This administrative body is responsible for the administration of EPZs and also deals with applications of firms wishing to enter an EPZ. It also functions as a monitoring system for the EPZs and provides guidelines for the policy of the zones in cooperation with the Brazilian Association of Export Processing Zones (ABRAZPE). Furthermore, the

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16 The Manaus Free Zone is a Freeport in the Amazon area, established in 1960 to relief the area from economic isolation. It is no EPZ but it does offer tax incentives to both domestic and foreign firms.

17 The ABRAZPE, to its Portuguese abbreviation Associação Brasileira de Zonas de Processamento de Exportação, is a non-governmental organization and lobbies for the establishment and enhancement of EPZs in Brazil.
Decree officially approved the establishment of EPZs over all geographical areas of the country, see figure III (Foreign Market Access Report 2010: 9; Gari 2011: 9-10).

According to the CZPE, which operates in accordance with national policies on industry and trade, the establishment of EPZs in Brazil has to serve the following goals: to attract investment, to foster technological innovation, to generate employment and income, to reduce regional imbalances, and to improve the social and economic development of Brazil. Overall, they should function to foster and maintain the competitiveness of Brazilian exports in conjunction with the broader economic policies of the country (Interview CZPE 2014). According to the ABRAZPE, they could also function to offset the lack of incentives offered for exports by Brazilian export policy, without using export subsidies or other practices that breach the international rules on export promotion of the WTO (Braga 2002: 2). The focus of the Brazilian EPZs is especially on the value-addition to primary goods.

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18 See figure III
19 See appendix [....] for overview of the legislation
for export. As mentioned in chapter 3.2, agricultural products add only 5.7% to GDP while 15.7% of the population works in this sector. Through value-addition in EPZs by for example packaging and labeling of the goods it is possible to generate more export earnings on locally produced goods and increase the comparative advantage of the 24 regions where the zones are being established. This can also create more jobs in the industry sector while upgrading commodities to intermediate- or final- goods. Locally produced goods can therefore improve their position in the global supply chain and stimulate regional development through the establishment of EPZs (CZPE website: Goals).

In order to reach these objectives, domestic industry and especially export-oriented foreign firms have to be attracted to the zones. In order to do so, the zones offer special incentives to firms which consist of exemptions for taxes and duties on domestic- and imported goods that are being processed in the zones. The import of services is also free from taxes. Furthermore, exemption of the need for licenses or authorization to import raw materials and capital goods are offered, with the exception of sanitary, security and environmental controls. There are also no limitations on foreign ownership of firms and on sales in foreign currencies. Likewise, firms can enjoy ‘tax vacations’ from income taxes up to 20 years in total. In return, if a domestic or foreign firm wants to establish itself in one of the zones, it has to export a minimum of 80% of its gross revenue sales abroad. Products that are sold on the domestic market are subject to the same regulation as products outside the EPZ, so for sales on the domestic market all the regular taxes have to be paid. In order to stimulate the reduction of regional imbalances, EPZs in the underdeveloped regions can offer even more incentives to firms to promote industrial activities in these areas. For example, EPZs in the Amazon region and the Northeast can offer extra exemptions to regional taxes and offer a longer period of ‘tax vacations’ for income taxes to foreign firms (Knowledge Sharing Program 2012: 104-108; CZPE website: Concepts and Definitions).

Although the regulatory framework for EPZ development and the attraction of firms is embodied in- and given new incentives by- the new legal framework, the development of EPZs in Brazil is still in various stages. It is estimated that within the coming 5 years half of the EPZs will be in full operation. At the moment, only the zones of Pecém and Acre have completed all pre-operational requirements and they are therefore in the most advanced stage of development (CPZE website: presentation). In order for an EPZ to function, a broad network of infrastructure is necessary such as fences which separate the EPZ from the other geographical space, (rail) roads to the zones and Federal Revenue Authorities. Moreover, a number of services have to be present such as export assistance services, management and monitoring agencies, and custom house projects. This is a lengthy and costly process for the government to accomplish, but in Brazil it is part of the broader infrastructure
development and growth acceleration program (PAC) (Knowledge Sharing Program 2012: 79-84).

This means the investments are made in line with broader national development policies. The finalization of the zones is therefore a state-led process. If the implementation process goes according to plan, Brazil will have 21 fully operating Export Processing Zones in 2019 that are spread over all geographical areas of the country.

3.4 Conclusion

To conclude, when looking at the history of Brazil’s political economy it is not surprising that in times of stagnation in the export sector the state has a strong role in the formulation and implementation of new economic policies in order to address this problem. Decreasing global demand for Brazil’s products and several supply-side constraints have led to the stagnation of exports and a loss of international competitiveness over the past years. By signing the latest amendment to the EPZ legislation the government aims to stimulate the implementation of the zones in order to boost exports, increase the value addition to the products and strengthen the place in the supply chain of the products being exported. Likewise it intends to stimulate regional development, while on the other hand keeping the domestic industry protected by only allowing a small percentage of the goods produced in the zones to enter the domestic market. Although the political economy of the EPZs in Brazil is in line with historical features of the country’s political economy, EPZs are a new instrument for export promotion in the country. Whether EPZs will be able reach the policy goals of the government and whether they are able to deliver long-term effects, will be discussed in the next section.

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20 PAC is the abbreviation of its Portuguese name the ‘Programa de Aceleração do Crescimento’.
4.0 Sustained Export Promotion in Brazil’s Export Processing Zones?

In this last section I will consider the question if EPZs in Brazil can promote a sustained manner of export promotion. In other words: if the implementation of EPZs can have significant, long-term stimulating effects on the export sector that boost the Brazilian economy as a whole. Taking into account the conclusions of the last sections, that EPZs cannot guarantee export-led growth but that it is a understandable attempt by the Brazilian government to follow the international trend to elevate the export sector with this export-promoting policy, this section will form the bridge toward my thesis statement: that the EPZs are not likely to have a significant long-term impact on the revival of Brazilian exports. They can rather function as learning instruments on how to achieve structural economic reforms in the country that stimulate the business climate, or to gradually open up the economy. Furthermore, I will argue why the traditional type of EPZs is an outdated model and why the establishment of special economic zones (SEZs) is a policy tool with more potential to improve the competitiveness of the export sector (see 2.2.1). Figure IV summarizes the relation between this chapter and the previous chapters in topics and theory; it shows that EPZs are not likely to lead to economic growth, but that SEZs have more potential to stimulate export growth and to function as a first step in implementing structural economic reforms that are required to sustain economic growth.

![Figure IV: Schematic overview Chapters, Topics, and Theory](image-url)

To do so in a structured manner, this section is organized in three sub-sections. First, in section 4.1 the potential advantages of EPZs for the Brazilian export sector will be investigated. Here it will become clear that EPZs can offset some of the constraints of the sector and that they offer a favorable environment for business in comparison with the rest of the country. However, in section 4.2 I will explain why EPZs will not have significant long-term effects on the export sector. A regional
division will arise in the likelihood of long-term success of the EPZs; the areas which already have a
developed industrial base are more promising to absorb potential spillover effects, whereas in the
underdeveloped regions the EPZs will be poorly integrate. In sub-section 4.3 it will be argued which
policy measures can increase the overall economic impact of the EPZs. I will provide some policy
recommendations on how the Brazilian government can improve the potential long-term impacts of
the EPZs on the Brazilian export sector.

4.1 EPZs and the Constraints of the Brazilian Export Sector

In order to discuss the potential long-term effects of EPZs on the export sector as a whole, it is also
necessary to investigate if they can meet some of the government’s goals and offer improved
conditions for export promotion. This sub-section will briefly analyze the constraining features of the
export sector and the manners in which EPZs could either offset these or fail to do so. Because there
are no academic sources written yet about the potential effects of EPZs in Brazil, this section is
mostly based on my own reasoning and insights that I gained through reading an extensive amount
of literature about the effects of EPZs. The supply-side constraints of the Brazilian export sector, as
mentioned in the last section, are: i) The low investment rate; ii) The lack of outward-oriented FDI; iii)
High inefficiency- and transport costs; iv) An appreciating exchange rate and inflation; v) The
stagnant labor productivity in comparison with relatively high wages; vi) A low level of technological
content and sophistication of the products exported. These constraints will be discussed in turn.

4.1.1 Investment Rate and FDI

The fact that Brazil suffers from a low investment rate and a low inflow of outward-oriented FDI,
affects the export sector because there is little financial capital available for investments, and the
sector loses competitiveness to countries with more FDI according to the conventional wisdom on
FDI and competitiveness (see section 2.2.2). Outward-oriented FDI is required to sustain the
development of the export sector through, among other things, technological upgrading,
demonstration effects and ‘export know-how’ (OECD 2007: 33-34). EPZs are designed in the first
place to compete with other countries for the attraction of outward-oriented FDI via the provision of
a favorable regulative climate for FDI, and this is what the Brazilian government aims for. When the
implementation process is finished they will facilitate the attraction of foreign investment, although
limited to inside the zones. This is partly beneficial for the export sector; within the EPZs the goal of
attracting more FDI will probably be reached and the benefits from FDI will occur, but it is not likely
that the overall export sector will profit from this because the FDI will be attracted solely to the
zones. Due to the current legislation concerning the EPZs, little exchange is possible between the
zones and the domestic market. Therefore the favorable spillover effects from FDI will probably not
occur outside the zones. This topic will be further discussed in section 4.2.1.
4.1.2 Inefficiency- and Transport costs

Other constraints to exports such as high taxes, a difficult business climate, weak infrastructure and low openness to trade, can be relaxed in EPZs. As mentioned previously in the sub-section on tax exemptions in Brazilian EPZs, (foreign) firms enjoy a lot of advantages in comparison with firms that operate outside the zone, for example exemption from income taxes. Such fiscal incentives offered in EPZs are an attractive possibility to avoid the relatively high corporate taxes in Brazil (Gari 2011: 11). Furthermore, problems concerning the relatively weak infrastructure are targeted because the government has to invest in trade-related infrastructure and services in the EPZs in order to make them a successful policy. The infrastructure in EPZs is aimed specifically at the promotion of exports, consisting of both physical infrastructure and of trade related infrastructure such as services for export promotion (Knowledge Sharing Program 2012: 78-79). If the CZPE succeeds in creating a solid administration for the approval of firms that want to start operating in the EPZs, as with other administrative tasks, the zones offer an opportunity to firms to avoid the relatively high inefficiency costs to start a business in Brazil. In general, it should be easier to do business and to start a business in EPZs; this gives (foreign) firms the chance to avoid inefficiency- and transport costs.

4.1.3 Exchange Rate and Inflation

In comparison with other emerging markets, Brazil has relatively high currency volatility, which increases exchange rate risks for companies, resulting in a decreased internal rate of return (IRR) on investments. The Brazilian monetary and fiscal policy has made a lot of progress concerning the stability of the Real, but there still exists a relatively high exchange rate risk due to the volatility of the currency (Baer 2014: 173). Because of this exchange rate risk it is difficult for the country to attract and to retain (foreign) investments. Furthermore, the Real has appreciated over the last five years which makes exported products relatively expensive and thus less competitive on world markets. Domestic law no. 11371/2006 limits the amount of foreign earnings that exporting firms in Brazil can possess, but this law is not applicable inside the EPZs. Moreover, firms in the zones are allowed to keep 100% of their export earnings in a financial institution abroad. Since firms operating in EPZs are allowed to keep 100% of the foreign currency earned through exports, they are not obliged to convert these earnings into Brazilian Reals or keep them in Brazilian financial institutions. This allows them to avoid exchange rate risk and to sell products in another currency (Gari 2011: 12). Exemption from this law implies less risk for foreign investors and exporting companies, and the freedom to choose in which currency they conduct certain transactions. This is an advantage of operating in EPZs in comparison with other parts of the country, which increases the attractiveness of the zones in comparison with other domestic locations.
4.1.4 Labor Productivity, Low technological content of the Products

Lastly, it is important to question whether EPZs will stimulate an increase in the export competitiveness of the Brazilian products and firms. This low competitiveness is mostly the result of relatively high wages in comparison with stagnating labor productivity, especially in the industrial sector (Cardoso 2009: 20-22). According to conventional wisdom as discussed in the first section, the inflow of FDI often leads to increased productivity due to knowledge and technology spillovers. This could also improve the content and sophistication of the products exported. Through exporting to developed countries workers are exposed to demanding consumers’ standards and they often work with advanced technology in foreign owned firms. However, there is no guarantee that solely the inflow of foreign firms in EPZs will lead to these spillover effects inside and outside the zones, and certainly not if there is no coherent policy framework to support spillover effects, such as obligatory training for workers (White 2011: 193-96). Furthermore, these supply-side constraints are the result of a broader, country-based problem of inadequate education that affects the whole workforce of the country. Combined with rising wages production becomes less competitive. Although inside the EPZs labor productivity may increase and the quality of the products exported can be raised, the effects on the overall export sector will be limited.

4.2 Sustained Export Promotion through EPZs?

At first sight the EPZs seem to offer improved circumstances for exporting firms that can offset some of the constraints of the export sector and can meet certain goals that are set by the government. The zones are attractive for foreign firms because they offer a favorable environment for investors and opportunities to avoid exchange rate risk, taxes and inefficiency costs. However, the effects are likely to remain inside the zones due to the specific regulation that is geographically strictly bound to the zones. This sub-section will turn to the question if the EPZs in Brazil can have a long-term, sustained influence on the Brazilian export sector as a whole. The definition of sustainable that is used in this respect is that there is continuing increase of competitiveness and a constant growth of value addition to the Brazilian exports, that take place on the supply-side through for example human capital accumulation and enhanced use of technology. The focus lies on the possibility of structural improvements through EPZs and not on the accomplishment of short-term objectives. About the accomplishment of the short-term objectives there is no doubt that the majority will be met (as seen in the last sub-section). The interesting aspect of the EPZ implementation plan is its (in)ability to deliver structural change and sustainable growth of the Brazilian export sector, that can stimulate the economic growth of the country. After all, in a time of stagnating economic growth and exports, this was one of the long-term objectives of Da Silva’s EPZ implementation plan.
A distinction can be made between direct effects and indirect effects from EPZs. Direct effects are easily generated: the creation of employment, the attraction of (outward-oriented) FDI, increased government revenues from exports and the diversification of exports. This corresponds with the short-term effects from EPZs mentioned in sub-section 4.1. But indirect effects are harder to identify. Examples of indirect effects are as knowledge spillover, skill upgrading of the workforce, technology transfers, backward- and forward linkages, demonstration effects and increased knowledge of international markets, and an upgrade in the supply chain. However, for EPZs to be able to function as catalysts for the export sector and the rest of the economy, it is necessary that EPZs generate especially these indirect effects (White 2011: 185). There are several reasons why I argue that in the current form the implementation of EPZs will not be able to deliver indirect benefits to the Brazilian export sector and economy as a whole. The most important reasons for this inability are: i) The current framework of regulation; ii) The ‘absorption capacity’ hypothesis; iii) Location effects and; iv) The business climate in Brazil.

4.2.1. Current Framework of Regulation

As mentioned in section 3.3, the EPZs will operate according to regulations that are documented in Law-Decree no. 11.508/2007. This offers multiple advantages to firms that are operating within the geographical area of the zones, and is specifically focused on export promotion of manufactured goods; 80% of the final products must be exported to foreign markets, and the CZPE will mostly intend to attract firms with a focus on the promotion of manufactured goods (Foreign Market Access Report 2010: 9). However, this current regulatory framework decreases the possible indirect effects of EPZs on the rest of the economy for various reasons.

First of all, because only 20% of the goods produced in the zones can be supplied to the domestic market, where they will be subject to high import tariffs, there are limited options for forward linkages to occur. Domestic firms’ possibilities to use the output of the EPZs as input for their business, is low. Besides, technology transfers and demonstration effects of ‘export know-how’ are restricted when it is difficult or expensive for domestic firms to purchase goods produced in the EPZs. When trade between the EPZs and the domestic economy is constrained, it is also not likely that the enhanced trade-related infrastructure inside the zones will expand to outside the zones, because foreign companies are not likely to invest in domestic infrastructure. Secondly, the current design of the traditional EPZs has a focus on the export of manufactured goods or simple value-addition to commodities, and less on the export of services or products with high-technical content. In this manner, skill upgrading of workers barely takes place and the success of the EPZs will depend a lot on the comparative advantage of low-skilled labor. This aspect of the EPZ strategy is difficult to sustain in Brazil because it does not have a comparative advantage in low-skilled labor due to the relatively
high real wages in comparison with other large manufacturing countries (Farole and Akinci 2011: 6; OECD 2007: 31-34).

In order to stimulate the integration of EPZs with the rest of the economy and to avoid them turning into enclave economies, the current regulatory framework should be relaxed. Currently it is too strict and this limits the possibilities of interaction between the zones and domestic firms. Because the focus is too much on manufactured exports, spillover effects like skill upgrading will take place on a significant scale. Implementing Special Economic Zones (see chapter 2.2.1 and 4.3.1) that allow more interaction with the domestic economy increase the chances of integration in the economy through forward and backward linkages. I will discuss this topic further in the next sub-section (4.3).

4.2.2. Absorption Capacity

According to Madini, the long-term success of EPZs is also dependent on the ‘absorption capacity’ hypothesis; the degree in which the host country of the EPZs is able to support- or benefit from the economic activities in the EPZs through the establishment of forward and backward linkages (Madini 1999: 30). Because Brazil has a large supply base of raw materials and a large workforce it should be possible to establish solid backward linkages with the EPZs. This also makes it possible to generate scale economies in production sectors where Brazil possesses a comparative advantage, such as sugar production. However, backward linkages also depend on the presence of physical- and business related infrastructure outside the zones and this is not sufficiently present in the country. The World Economic Forum ranked Brazil 114 out of 142 concerning the quality of the overall infrastructure and mentioned infrastructure as the biggest obstacle for global competitiveness in 2014 (WE global competitiveness Report 2013-2014: 134-135). Although the Da Silva government started the PAC-plan in 2007 to improve the infrastructure, many of the plans were delayed or ran out of financing, so improvements have been limited. Especially in the underdeveloped areas there is a lack of functional infrastructure, and because there is also a low level of industrialization these regions are less capable of generating economies of scale or supplying intermediate- or capital goods to firms in the zones. The possibility for pecuniary externalities to occur is lower in these areas (Knowledge Sharing Program 2012: 80). The absorption capacity for backward linkages will therefore be higher in the areas that already have a developed industrial base, such as the São Paulo region (OECD 2007: 40). This is also the case with forward linkages.

To establish forward linkages, the domestic industry should be capable of using the output of the EPZs as input for their business, and benefit from economic growth of industries in the zones. This feature is of course partly dependent of the type of industry that will be established in the zones and if related sectors already exist in the domestic industry or not. And when similar domestic firms
already exist in a particular sector, they need to have a certain level of sophistication in order to copy practices and learn from foreign firms in the EPZs, the so-called ‘demonstration effects’ and ‘export know-how’ (Schrank 2001: 227). Again the chances of establishing strong forward linkages and pecuniary- and technical externalities are higher in the industrialized areas in Brazil than in the underdeveloped areas, because they possess more absorptive capacity. The underdeveloped areas will only be able to supply raw materials and cheap labor to the zones.

4.2.3. Location Effects

Another determinant for the potential success of EPZs is the location where these are established because zones in rural areas with little access to human- and physical infrastructure tend to be less successfully integrated and less successful as catalysts (White 2011: 197). It is important that there is access to adequate infrastructure, and preferably that the zone is close to international ports and airports. Landlocked zones per definition have higher transport costs than zones that have direct access to international ports so this decreases the type of goods that can be produced; only goods with a high weight to value can be competitive export products in landlocked zones. The EPZs that are being established in the inlands of Brazil (the areas around Porto Velho and Manaus) will have higher costs due to their landlocked positions and less strategic access to airports and railroads. This forms a locational disadvantage for firms established in these zones. Figure V illustrates this, and especially the lack of railroads in these underdeveloped areas.

![Figure V: Transport Infrastructure in Brazil (Source: Ministry of Infrastructure, Brazil)](image-url)
Furthermore, if EPZs are established close to large consumer markets, like Mexico’s Maquiladoras on the border with the U.S., this is also a favorable determinant because it reduces transport costs and because there is usually a better exchange of information about consumer preferences. None of Brazil’s EPZs will be located geographically close to the world’s largest consumer markets: the U.S., Europe, and Japan, so information exchange is more difficult and transport costs are higher due to larger distances to the markets. Economic zones that are located far from large foreign consumer markets are therefore more dependent on the possibility of sales on the domestic market. Since these are limited to 20% of the total production of a company, the EPZs will have to compete for sales with other economic zones closer to the U.S., EU, and Japan. This is a locational disadvantage for Brazil as a country because various costs of reaching these markets are higher than zones that are located closer to them (Farole and Akinci 2011: 6).

Concerning the possibility to establish backward and forward linkages, the EPZs should preferably be established close to labor- and knowledge pools, such as Universities and large cities. In this manner they have easy access to human resources and they can generate agglomeration effects. Also for the potential outsourcing of work by firms in the zones this physical proximity to human capital is a requirement. Since the underdeveloped regions of Brazil have a relatively lower educated workforce, this will decrease the ability of value-addition and the capacity to establish forward linkages. Due to the absence of a developed industrial base these locations also have less potential to generate agglomeration effects. For the provision of raw materials to be processed in the zones, however, the zones in the Amazon region and the inlands have a more strategic position that can be profitable for firms seeking to use these as input. However, in general, zones in the developed areas can enjoy more location effects than the zones in the underdeveloped areas, due to increased chances of agglomeration effects (party due to better absorption capacity, see 4.2.2) and because the most developed areas of Brazil have direct access to ports and international airports21 (Watson 2001: 10; White 2011: 196; OECD 2007: 33-38). Table II gives a schematic and concise overview of the difference between the developed and underdeveloped areas and the probable extent of EPZ integration.

21 The metropolitan areas of Recife, São Paulo and Rio de Janeiro have the highest amount of inhabitants and possess the country’s most important industry and infrastructure. All three regions have large seaports and international airports.
**EPZ and regional integration**

<table>
<thead>
<tr>
<th></th>
<th>Underdeveloped Areas</th>
<th>Developed Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorption capacity</td>
<td>Low</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Transport costs</td>
<td>High</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Backward linkages</td>
<td>High potential(^{22})</td>
<td>Medium/High potential</td>
</tr>
<tr>
<td>Forward linkages</td>
<td>Low potential</td>
<td>Medium potential</td>
</tr>
<tr>
<td>Agglomeration Effects</td>
<td>Unlikely to occur</td>
<td>Likely to occur</td>
</tr>
</tbody>
</table>

*Table II: EPZs and Regional Integration*

4.2.4. Brazil’s Business Climate

General consensus exists about the need for effective governance of EPZs in order for them to retain FDI and become successful instruments for export promotion. The situation is likely to be determined not by the firms that operate in the zones, but by the manner in which the EPZs are managed from the host country, in this case Brazil. Poor governance without a focus on integration or links with national economic policies will decrease the chances for integration of the EPZs, and they will become more prone to turn into enclave economies. For integration to take place between firms in the zones and the domestic firms, it is therefore important that the government establishes a stable and predictable business environment in the entire country. For example, the hiring of local staff and entering into purchasing contracts with local firms should be able to take place without a lot of bureaucratic procedures and high transactions costs. It is also required that there is a reliable supply base with competitive prices and quality, which tend to be more difficult in countries like Brazil that have a history of import-substitution and protectionist policies. Besides, when it is difficult for foreign firms to start a business or to do business on the Brazilian market, it is less attractive for them to engage in business outside the economic zones. When domestic firms are subject to a lot of protectionist policies, it is harder for foreign companies in the zones to establish linkages (Granados 2005: 88; Farole and Akinci 2011: 7-9).

For EPZs to succeed and integrate, it is necessary that Brazil establishes a predictable, liberal business climate with stable fiscal and monetary policies in the entire country and not just in the EPZs. This can stimulate the integration process of the zones, because it reduces the regulatory differences between the areas (World Bank Premium Notes 1999). Liberal policies do not entail that the state should not play an active role in integrating the zones. When the government can stimulate

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\(^{22}\) The potential for backward linkages is high in both types of area only if firms can be attracted that use the locally produced goods as input.
interaction between the zones and the domestic market, for example by the creation of administrative bodies to assist foreign firms in sub-contracting to domestic firms, this can stimulate the creation of backward and forward linkages. This becomes more possible in a liberal regulatory environment. Furthermore, experience from the South-East Asian countries teaches that good governance of economic zones by the local government increases the integration process of the zones with the domestic economy (White 2011: 193).

Due to Brazil’s relatively poor position on the Ease of Doing Business Index, it is first necessary to improve the overall business climate in the country instead of focusing too much on making the zones a success. This is a big and protracted task for the government, but this is what the focus should be on. After all, for a big country like Brazil, the implementation of 21 EPZs will not help to solve the structural problems of the country that cause the bad position on the Ease of Doing Business Index and the stagnation of the export sector, although it might offset some constraints of the export sector (as seen in chapter 4.1). An improvement of this position on the Business Index will lead to the attraction of more FDI and the ability to better maintain and exploit the advantages of FDI. The EPZs can function as a learning instrument for business-friendly policies that the government can use to gradually open-up the economy and apply structural reforms such as lower tariffs. This approach was used among others in China with the implementation of the Shenzhen SEZ. It is a relatively easy and fast way of experimenting with policies that can later be implemented in a country-wide manner. In this way the zones can be a first step in an integrated movement toward a more open and business-friendly Brazil with more outward-oriented incentives (OECD 2007: 37). In the long run this will be more beneficial for the export sector than establishing 21 EPZs.

4.3 Policy to improve the role of EPZs in Brazil
According to White (2011: 185), who examined the possibilities of structural improvement through economic zones based on case-studies, successful economic zones are zones that are able to sustain development in the long-term, because they positively influence the production processes throughout a country’s entire economy. I have argued that only the short-term goals of Brazil’s EPZs program are likely to be met, but that the zones will probably fail in accomplishing the long-term goal of enhancing the export sector. This is due to their current, too strict regulation, a lack of absorptive capacity in the country’s underdeveloped regions, locational disadvantages such as distance to large consumer markets and high transport costs, and the overall business climate in Brazil. However, I do believe that the government can implement some additional policies that increase the chance of successful long-term integration of the zones. At the moment the EPZs are part of the national ‘growth and acceleration program’, the PAC, but this policy is mainly focused on the provision of
physical infrastructure in the underdeveloped North-East region (Knowledge Sharing Program 2012: 79-80). Different policy is needed for a more integrated implementation of the EPZs. I provide four suggestions that can improve the integration process of the zones and their chance to have a long-term impact: i) Implementing SEZs instead of EPZs; ii) Improve the ‘domestic endowment mix’; iii) A different focus on underdeveloped areas; iv) Connecting domestic and foreign business. With additional and effective policies the zones may be able to play a modest role as catalysts for the export sector, instead of functioning just as learning instruments or enclave economies focused on the achievement short-term goals.

4.3.1. From EPZ to SEZ

An important change in policy that should be made is the implementation of Special Economic Zones instead of Export Processing Zones. As already mentioned, EPZs are an outdated and unsustainable model that has a too narrow focus on the attraction of FDI and the export of manufactured goods. They allow too little trade with the domestic market which decreases the possibilities of establishing (forward) linkages, and this increases the possibility that the zones will turn into enclave economies. Furthermore they generate less spillover effects such as skill-upgrading of workers due to the focus on manufacturing. SEZ are more dynamic and focused on the export of both manufactured products and services with a higher technological content. Since services form the biggest contributor to GDP and employment in Brazil (see 3.2), it can be beneficial to attract foreign firms that are specialized in services to the zones in order to create jobs in the export of services and to stimulate spillover effects in this sector such as ‘export-know-how’. Due to their focus on the export of both manufacturing and services, SEZs seem to fit better in the economic structure of Brazil, and skill-upgrading has greater potential to occur. They also allow unrestricted trade flows with the domestic market, which stimulates spillover effects and especially forward linkages, because domestic firms can use more of this high-quality output. Table III, which is part of the table used in section 2.2.1 gives a clear overview of differences between EPZs and SEZs. (White 2011: 185-86; Farole and Akinci 2011: 6).

<table>
<thead>
<tr>
<th>Type of Zone</th>
<th>Size – in Hectares</th>
<th>Market destinations</th>
<th>Activity</th>
<th>Development Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional EPZ</td>
<td>10-500</td>
<td>&lt;80% export to foreign markets</td>
<td>Manufacturing or other processing</td>
<td>Promotion of export manufactured goods</td>
</tr>
<tr>
<td>Freeport/SEZ</td>
<td>&gt;1000</td>
<td>international &amp; domestic; no limits on export to domestic market</td>
<td>Multiuse; manufacturing, services, trade etc.</td>
<td>Integrated (export) development</td>
</tr>
</tbody>
</table>

Table III: Differences EPZ and SEZ
The SEZs in South-East Asia, especially in South-Korea and in Shenzhen, China, are praised for their integrated approach and how they have succeeded in stimulating economic development in the entire country. According to Schrank (2001: 227), who conducted a comparative analysis about EPZs in South-Korea and the Dominican Republic based on empirical data, in South-Korea the integration of the SEZs was the result of effective policies of the developmental state, accompanied by a forward-looking approach by the government that stimulated linkages between the zones and the domestic economy. The zones focused on the attraction of firms that produced products with a high technical content to stimulate learning effects. Due to the strong industrial base as heritage from the IS period, and the relatively educated workforce, it was possible for the domestic economy to absorb the spillovers from the SEZ. Together with an upgraded national education program and trade support between the zones and the domestic economy, the SEZs were able to integrate with the domestic economy and stimulate export growth and economic development. The example of the Dominican Republic, on the other hand, showed how EPZs turned into enclave economies enjoying low-skilled labor without adding much to the domestic economy because there was a lack of governance and long-term vision on the program.

Brazil has the potential to imitate the South-Korean model and follow this strategy of SEZ implementation due to several commonalities between the countries. Its political economy is characterized by a strong role of the state, like South-Korea, and effective state-led policies could play a big role in integrating the zones. Its domestic industrial base is quite developed due to a long IS period, and due to the size of the country and its human- and natural resources there is potential to deliver solid backward linkages, and maybe forward linkages in the future as well. However, first it is required that the current legislation is revised. Efforts should be made to attract services and firms that produce products with a high-technological content to the zones, or firms that can use input goods that Brazil can produce with a competitive advantage. Moreover, the economic zones should allow more than just 20% trade with the domestic market; this should be stretched to at least 40% to double the amount of sales on the domestic market, but unlimited trade flows are even more desirable in order to create forward linkages. In addition to that, the taxes on goods produced in the zones that enter the domestic economy should be eliminated (OECD 2007: 33-34). In the longer-term, firms in the zones could be moderately taxed (although imports- and exports should remain exempted) because the reliance on the tax-exemption model is outdated and the taxes are needed for investment in infrastructure and the establishment of linkages. The ABRAZPE is already making an

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23 The 40% rate allows more trade with the domestic market which increases the chance of linkages to occur, but still offers some form of protection to the domestic firms, another objective of the government.
effort to implement these changes in the new round of legislations, but they have not been included in the regulation yet (ABRAZPE homepage).

4.3.2. Improving the ‘domestic endowment mix’

It is not possible for governments that host economic zones to increase in the short- or medium term the overall absorptive capacity of the country; much depends on the sectors and industry that are already present in the country and if they match with the firms in the EPZs. However, it is possible to improve what Madini calls the ‘domestic endowment mix’, which consists of human capital, infrastructure, and preferential trade agreements (Madini 1999: 54). Such an improvement will increase the chances of EPZs integrating with the economy. The overall business climate can also be seen as part of this mix, bearing in mind that FDI can easily shift to other locations when insecurity exist or incentives phase out, but this topic has already been discussed in the previous sub-section (4.2.4). Concerning infrastructure, it was already mentioned that investments in physical and trade-related infrastructure are required to increase the success of an EPZ. This task is already adopted by the government and the CZPE and this will definitely improve the domestic endowment mix if it is completed timely and accurately. One important note to the establishment of infrastructure is that utilities such as water and electricity should not be subsidized by the government; subsidies could encourage non-rational use of these utilities that can undermine the country’s benefits from the zones (World Bank Premium Notes 1998).

It is, however, necessary that policy is developed to generate spillover effects that improve human capital development, such as demonstration effects, enhanced use of (advanced) technology, and learning effects such as skill upgrading. In this manner the ratio labor productivity to real wages can improve, which is necessary in Brazil with its relatively high real wages in comparison with stagnating productivity (see sub-section 3.2). Some examples of how this can be realized are: i) To oblige foreign firms to give yearly trainings for workers, and offer extra after-work courses for workers to be able to grow within the company such as management trainings; ii) The government could stimulate partnerships between the local universities and the firms in EPZs so that both can benefit from a knowledge exchange and so that students are exposed to the competitive aspects of business life. This was realized for the first time with the SEZ in Shannon, Ireland, with the University of Limerick. Today it is one of the longest partnerships between universities and business and it continues stimulating agglomeration effects in the region; iii) Human capital improvement can also be stimulated by exporting to more developed markets, the so called ‘learning by exporting’. The exposure to developed markets increases competition so firms are forced to increase production activity. This forces the workers to meet higher product standards and exposes them to new ideas of
demanding consumers. The government can assist in obtaining export contracts with these markets via the provision of business support offices (White 2011: 188, 193-97).

Another factor that can improve the domestic endowment mix (iv) is engaging in preferential trade agreements and regional trade agreements, because these can stimulate economies of scale, enlarge the market size and reduce barriers in cross-border trade and investment. This also stimulates backward linkages with other Latin American countries (Madini 1999: 69). Brazil is member of the MERCOSUR, which is a trading-bloc and customs union of states in South-America. Brazil has always had a leading role in the formation of the MERCOSUR since 1991 and it could attempt to increase the amount of free trade treaties between the MERCOSUR and third-parties such as the EU. The EU, for example, is Brazil’s first trading partner. Currently the EU and the MERCOSUR are negotiating a Free Trade Agreement, which can boost future opportunities for trade and investment (European Commission, Trade: Brazil). Brazil, as biggest economy of the MERCOSUR with the largest influence within this trading bloc, should exploit the possibilities of these type of treaties to increase trade possibilities, increase access to foreign consumer markets, and attract more foreign investments. Further deepening of the MERCOSUR could also increase benefits from trade treaties through for example the establishment of scale economies. Exploiting the possibilities of preferential trade agreements will be beneficial for the economic zones and the country itself because it provides opportunities for scale economies and because it enlarges the market for supply and sales.

4.3.3. A different focus for the Underdeveloped Areas

It is also advisable for the Brazilian government and the CZPE to make a distinction in the EPZ policy between the more developed zones and the zones in the underdeveloped regions. At the moment, the only distinction that is made in the policy is that firms in the EPZs in the underdeveloped regions enjoy more exemptions from taxes, and that there is extra investment in physical infrastructure to better connect these regions with the rest of the country (Knowledge Sharing Program 2012: 79-82). In the lesser developed regions, the focus should be on the establishment of solid backward linkages. The improvement of infrastructure is an important part of this, but it is important that suppliers are engaged in the supply chain. Administrative governmental bodies could assist in sub-contracting these domestic suppliers to ensure that fair contracts with the foreign firms are being closed. Providing assistance to domestic firms to help them build capacity to deliver a stable supply base can improve the success of backward linkages. It is also important that the CZPE aims to attract (foreign) firms that need the locally produced goods and materials for their input. In this manner the regions

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24 Mercosur stands for Mercado Común del Sur, and exists of Argentina, Brazil, Bolivia, Paraguay, Uruguay and Venezuela. Its associate states are Chile, Colombia, Ecuador, Peru, Guyana and Suriname.

25 The EU receives around 21.4% of its exports, mainly consisting of primary – and agricultural products.
can enhance their place in the global supply chain and profit from industrialization (OECD 2007: 34-40).

In the more developed regions the focus should be on the establishment of both backward and forward linkages, and on integration with the region’s industry to stimulate agglomeration effects. The government could, for example, assist in contracting domestic companies for the outsourcing of work. It can stimulate labor-circulation by putting a limit on contracts for managers and workers in the zones, so that after their contracts expire they can transfer their knowledge and product know-how to outside the zones. The transfer of technology can be stimulated by assisting domestic firms in the acquisition of technology used by firms in the zones, such as the right to use certain software or product design (White 2011: 188).

4.3.4. Connecting Business

Finally, the government can pursue an active role in creating a network that facilitates the connection between the domestic firms (in- and outside- the zones) and foreign firms in the zones. As mentioned before, assisting foreign firms in sub-contracting domestic firms as suppliers or to outsource work can be an important catalyzer for the integration of the zones. If every zone would have a publicly owned administrative body, for example governed by- or in cooperation with- the CZPE, effective regional business support can be established that can intermediate and negotiate between domestic and foreign firms. The most optimal situation is the establishment of joint-ventures between firms inside- and outside- the zones, so that direct spill-over effects such as technology transfer and demonstration effects are the most likely to occur. Moreover, since domestic firms are not exempted from paying taxes, joint-ventures increase the country’s benefits from the zones (White 2011: 190-93). An additional option is that the government could stimulate strong domestic industries to locate themselves in the zones. In this manner the firms can increase their interconnectedness with global supply chains and get in contact with the practices of foreign firms. This facilitates the spill-over of demonstration effects and export know-how and the domestic firms can improve their global competitiveness.

4.4 Conclusion

To conclude, with the current legislation of the EPZ-implementation plan, only short-term objectives of the Brazilian government will be met. The EPZs are likely to generate some direct benefits from export and openness such as the attraction of FDI and export diversification, but they will not be able to deliver a sustainable form of export promotion. Country-wide, long-term benefits from the zones will not occur due to the regulation of the EPZs that limits exchange between the domestic market and the EPZs and due to the EPZ’s focus on manufacturing and some locational disadvantages. The
chances of long-term, structural success of the EPZ policy can be increased by changing the model to SEZs that allow more trade with the domestic market and have a broader focus than just the export of manufactured products. The underdeveloped regions of Brazil could benefit from backward linkages, while the developed regions have a chance to integrate the zones in the regional economy and generate agglomeration effects. However, also the SEZs implementation should be accompanied by structural economic reforms in order for them to function optimally. And above all, the focus of the government should not be too much on making the EPZs successful policy because improving the business climate and liberalizing the economy are the most important requirements for sustained economic growth. When these factors improve, the chances that Brazil can create successful special economic zones will increase significantly. Table IV gives a brief overview of the policy recommendations.

**Improving the Policy of the EPZ-plan**

<table>
<thead>
<tr>
<th>Current</th>
<th>Optimal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade domestic market</strong></td>
<td></td>
</tr>
<tr>
<td>Trade limited to 20%</td>
<td>Unrestricted Trade-flows</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td></td>
</tr>
<tr>
<td>Mainly manufacturing, low-skilled value-addition to primary products</td>
<td>Focus on high-technological content, production that uses local input</td>
</tr>
<tr>
<td><strong>Business Climate</strong></td>
<td></td>
</tr>
<tr>
<td>Protected, difficult</td>
<td>Liberal, business-friendly policy</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>Poor; PAC-plan delayed and insufficient budget to improve the situation</td>
<td>Enhanced public and private investment in infrastructure</td>
</tr>
<tr>
<td><strong>Human Capital</strong></td>
<td></td>
</tr>
<tr>
<td>Not likely to upgrade with EPZs</td>
<td>Trainings and policy to upgrade</td>
</tr>
<tr>
<td><strong>Trade Agreements</strong></td>
<td></td>
</tr>
<tr>
<td>MERCOSUR, limited amount of Free-Trade agreements</td>
<td>More Free-Trade agreements between MERCOSUR and 3rd parties</td>
</tr>
<tr>
<td><strong>Regional Policy</strong></td>
<td></td>
</tr>
<tr>
<td>No different policy for different regions</td>
<td>Specific policy per region</td>
</tr>
<tr>
<td><strong>Connecting Business</strong></td>
<td></td>
</tr>
<tr>
<td>No concrete policy</td>
<td>Business support and entities to connect foreign and domestic firms</td>
</tr>
</tbody>
</table>

*Table IV: Policy suggestions*
5.0 Conclusion

In sum, several conclusions have been drawn in this research that have contributed to the defending of my thesis statement: that with the current framework of regulation the EPZs in Brazil are not likely to meet their long-term goals and that they will not contribute to sustained export-led growth in the country. In the first chapter I have explained that the topic is of relevance due to Brazil’s economic potential and role in the international economy and due to the international trend of implementing economic zones for export promotion, although it is a disputed policy instrument. One suggestion for further research that I would like to make is research to the potential environmental and social impacts of EPZ implementation in Brazil. In this thesis I have not incorporated these topics due to the economic focus of the research because it takes place within the scope of IPE, and due to the limited space available, but it should not be forgotten that the impact of EPZs goes beyond just economic effects. It is advisable for the Brazilian government to continue to examine all effects of the EPZs in order to make a complete cost-benefit analysis of the EPZ program.

In chapter 2.0 it was concluded that despite the fact that EPZs are globally used policy tools for export promotion, implementing them does not guarantee an improvement of the country’s long-term export competitiveness, nor can they ensure sustained economic growth. Although EPZs can contribute to a country’s export growth and provide outward-oriented incentives, the economic zones alone cannot provide a basis for ELG in the entire country without country-wide economic reforms that stimulate openness and trade. In chapter 3.0 I have argued that the EPZ plans are an understandable step for the Brazilian government because the export sector suffers from both a decrease in global demand and supply-side constraints. Because Brazil has a history of state-led economic policies, of which some of them have been very successful, it is logical that the establishment of the zones is a public project initiated by the state. The last chapter, chapter 4.0, concluded that with the current legislation of the EPZ implementation plan, only short-term objectives of the Brazilian government will be met and that the chances of long-term, structural success of the EPZ policy can be increased by changing the model to Special Economic Zones. This can stimulate the integration of the zones with the domestic economy and deliver valuable spillover effects via forward and backward linkages, although the developed regions will be better able to absorb the spillover effects from the zones than the less developed regions. However, despite that with some additional and different policy the chances of success of the economic zones can be increased, I have argued that the focus of the government should not be too much on making the EPZs successful policy, but rather on improving structural economic factors such as the business-climate and infrastructure.
In short, it can be stated that Brazil’s government has two options concerning the implementation of the EPZ program. The first option is to use the zones as learning instruments to experiment with liberal policies and slowly expose its protected economy to international competition, which should be done with a long-term vision and accompanied by outward-oriented policies. In this case the zones can be a first step to gradually open-up the economy and increase benefits from openness and exports, but only if they are implemented in a coherent framework of structural economic policies. Together with efforts to improve infrastructure, labor-productivity and the overall business climate this manner of zone implementation can lead to sustainable improvements of the export sector and the economy as a whole. It is important though that the current plans are revised and that SEZs are implemented instead of EPZs, because this will lead to better integration with the domestic economy and therefore forward and backward linkages will occur more easily. This integration will provide more incentives and better examples on how to implement structural economic reforms.

The second, less advisable- but faster and easier- option is a focus on the EPZ program in order to make them successful policy instruments to stimulate exports and generate short-term benefits from outward-oriented FDI and exports. However, as discussed, without the advised changes in policy the establishment of EPZs will only have short-term effects on the export sector and therefore not all the goals of the government concerning the EPZ program will be met. Furthermore, the chance that the EPZs turn into enclave economies with no effects on the domestic economy is significant. It is therefore difficult to understand why the government is implementing the outdated model of EPZs, instead of implementing SEZs, because this significantly reduces the potential to reach all the goals. This may be an attempt to maintain the domestic industry protected, but in order to have a viable export sector Brazil’s domestic firms have to be exposed one day to some degree of international competition in order to improve their production process and increase their competitiveness. In addition, implementing EPZs may lead to reform delays or distract the government from the structural changes that have to be made to pull the export sector out of stagnation and generate sustained economic growth. This option therefore remains an inferior development plan.

Above all, it is important that action is undertaken timely by the government to pull the export sector out of stagnation. Only with a viable and competitive export sector the Brazilian economy can generate stable economic growth and recuperate its position in the world economy. It has become clear that solely the establishment of 21 EPZs is not the optimal solution to reach this objective and it is necessary that the current plan is being revised. As I mentioned in the preamble of this thesis: building EPZs is easy, the challenge is making them sustainable instruments for export promotion. And so it seems that the biggest challenge concerning Brazil’s EPZ program is yet to be faced.
Appendix I: EPZ Law in Brazil (Articles selected on relevance)

Full legal text available online: http://www.abrazpe.org.br/index.php/download/category/10-textos-legais

Presidency of the Republic
Civil House
Subchefia for Legal Affairs

Provides for the tax, exchange rate regime and Administrative Processing Zones Export, and other measures.

THE PRESIDENT OF THE REPUBLIC I know that Congress
National decrees and I sanction the following Law:

Article 1
It is authorized to create executive branch, Export Processing Zones (EPZ), subject the legal regime established by this Act, with the aim of reducing regional imbalances and strengthen the balance of payments and promote technology diffusion and economic development and share of the country. SPAs are characterized as free trade areas with the outside, intended for installation companies targeting production of goods to be sold abroad, and considered primary for purposes of customs control zones.

Article 2
The creation of SPAs shall be done by decree, which encloses its area, the view the proposal states or municipalities, jointly or alone.
§ 1
The proposal referred to in this article shall meet the following requirements:
I - indicating proper location with respect to access to international ports and airports;
II - evidence of the availability of the area designated to host the SPA;
III - proof of financial availability, considering including the possibility of contributions of resources from the private sector;
IV - proof of minimum availability of infrastructure and services able to absorb the effects of its implementation;
[...]

Article 3
The National Council is kept Processing Zones Export - CZPE, created by art 3. Decree-Law No.2 .452, 29 July 1988, with responsibility for:
I - analyze proposals for the creation of SPAs
II - approve the corresponding industrial projects
III - trace the top of the political orientation of SPAs for analysis of proposals and award of projects, CZPE take into account, among others that may be fixed in Regulation, the following guidelines:
[...]
IV - compliance with government priorities for the various sectors national industry and global economic policy, especially for the industrial, technological and foreign trade policies; (Writing provided by Law11,732, 2008)
V - priority for the proposed creation of SPAs located in area geographical privileged for export;
[.....]
Article 4
In the event of finding negative impact on national industry in connection with the sale of manufactured product for SPAs internal market, the CZPE may propose:
I - increase in the percentage of gross revenue from exports to the outside of the caput of article. 18 of this Law; or
II - sealing sales to the domestic market of manufactured product as SPAs for as long as the negative impact to the domestic industry lasts.
[.....]

Article 12
Imports and exports of the company authorized to operate in SPAs are subject to the following administrative treatment:
I - waiver of license or permit federal agencies with exception of controls health policy, safety concerns national and environmental protection, forbidding any other restrictions on production, operation, sale and import of goods and services other than those imposed by this Act; and
II - imports will be allowed only with the suspension of payment of taxes referred to in art. 6
This a Act of equipment, machinery and instruments, new or used, and raw materials, intermediate products and materials necessary for packaging industrial installation or to integrate the production process.
§ 1
the
The waiver permits or authorizations referred to in item I do not apply to exports of products:
I - to countries with which Brazil maintains agreements payment, which shall submit to the provisions and controls established according to the legislation in force;
II - which is subject to quotas applying to exports of the country, prevailing on the date of project approval, or that may be imposed later; and
III - subject to export tax.

Article 18
A legal person settled in SPAs make a commitment to earn and keep, per calendar year, revenue crude from exports abroad of at least 80% (Eighty percent) of its total gross revenue from sales of goods and services.
§ 1
The gross revenue from the caput of this Article shall be deemed after excluding taxes and contributions levied on sales.
§ 2
SPAs in the industrialized products when sold for internal market, shall be subject to payment:
I - of all taxes and charges normally incurred in operation; and
II - Import Tax and AFRMM relating to raw materials, intermediates and packing materials of origin them foreign employees, including interest and penalty lives, according to the law.
[.....]

December 27, 1996.
Brasilia, July 20, 2007;
Luiz Inacio Lula da Silva
Genro
Celso Luiz Nunes Amorim
Guido Mantega
Jorge Miguel
Appendix II: Interview CZPE

Brasilia, Groningen 11/07/2014

CZPE – Brazilian National Council of Export Processing Zones
Executive Secretariat

This Interview is conducted via e-mail. The answers of the CZPE are original and have not been subject to changes, nor corrected.

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Are EPZs somewhere captured in Brazilian economic- or export policy? If yes, where could I find this?

The Export Processing Zones (EPZs) will follow the guidelines established in Brazilians industrial policy and foreign trade (called Brasil Maior), with the aim to harmonize the activities of this regime with the characteristics of the industrial park located in the Country.

What were the motives of the government to establish a national council of EPZs, and what do they expect the results to be?

The EPZs was established in Brazil by Decree-Law 2.452/1988. At the time, this legal instrument authorized the Executive Branch to create EPZs by presidential decree. This normative has created also the Brazilian National Council of Export Processing Zones (CZPE). In 2007, the Decree-Law 2.452/1988 was repealed by Law No. 11.508/2007, which kept the jurisdiction of the Council to:

I - analyze the EPZ creation proposals;
II - approve the corresponding industrial projects;
III - establish the higher guidelines of the EPZ policy.

The main motive of the government to establish a national council of EPZs is because the foreign trade policy in Brazil is distributed among many Ministries. The expected result is to harmonize the different goals of each governmental branch in order to implement the Zones.

Does the government expect EPZs to play an important role in the revival of Brazilian exports?

Yes. The model of EPZ also aims to contribute to the efforts of Brasil Maior policy to increase the competitiveness of Brazilian exports. Furthermore, EPZs are alternative to adding value to primary production targeting foreign markets, a sector that Brazil is a global player.

I have read somewhere that the development of underdeveloped regions such as the North-West play a role in the establishment of EPZs. Do you think that EPZs will have a significant impact on the development of those regions, and why?

In Brazil, the EPZ are characterized as industrial areas intended for exports. The Brazilian EPZ goals are: (i) to attract new investments; (ii) to generate employment and income, and to reduce regional economic
unbalances; (iii) to foster technological innovation; and (iv) to improve the social and economic development of Brazil. The impact will depend on the industrial projects hosted by the EPZ. For instance, the biggest industrial project under construction in Brazil is a US 5-billion dollar steel mill and it is located in the Northwestern Region of the country. It surely will impact the region in a positive way not only because of job creation, but mostly because a regional development program is being implemented by this company.

Therefore, the Brazilian EPZ industrial projects can promote social and economic indicators to ensure regional development, which is one of the main objectives of the Brazilian EPZ model.

EPZs have a mixed record of success in Latin America, how does the government and how does the CZPE aim to secure success of these zones?

The success of the EPZ depends on the success of the industrial projects located inside it. The EPZ can higher the economic feasibility of projects because it lowers companies’ implementation and operation costs while it increases its competitiveness. CZPE aim to secure success of these zones based in rigorous sector and project analysis.
References


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