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**FEASIBILITY STUDY: SINGAPORE AS A
TRADE PARTNER FOR ECUADOR**

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DEDICATORY

I dedicate this study to my grandparents Tobias and
Carmen, who are not with me today, but always
wanted to see their grandson become a professional.

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Estudio de viabilidad: Singapur como socio comercial del Ecuador

Resumen

Singapur es una ciudad-estado del sudeste de Asia que empezó siendo un productor de juguetes con mano de obra no calificada y sumergido en la pobreza, pero con el paso del tiempo y a pesar de dificultades, han logrado desarrollar su economía y generar talento humano, muy cotizado en la industria de servicios, gracias a la aplicación de eficientes cambios en sus políticas. El presente artículo de investigación analiza las variables de crecimiento de Singapur (económica, política y social) a través de una revisión de la literatura por medio de la metodología de los siete pasos de Onwuegbuzie y Frels, con el fin de determinar si es un potencial socio para Ecuador. Se concluye que efectivamente Singapur puede ser un socio estratégico dado a su especialización en servicios, apertura comercial y capacidad de atracción de inversión extranjera directa (IED) seguido del potencial que podría alcanzar la industria agrícola y manufacturera ecuatoriana en el mercado singapurense.

Palabras clave

- Singapur; comercio exterior; política comercial; política pública; Ecuador

Feasibility study: Singapore as a trade partner for Ecuador

Abstract

Singapore is a city-state in Southeast Asia that started as a toy producer with unskilled labor and immersed in poverty, but with the passage of time and despite difficulties, it has managed to develop its economy and generate highly valued human talent in the service industry thanks to the implementation of efficient policy changes. This research article analyzes Singapore's growth variables (economic, political and social) through a literature review using Onwuegbuzie and Frels seven-step methodology, in order to determine if it is a potential partner for Ecuador. It is concluded that Singapore can indeed be a strategic partner given its specialization in services, trade openness and ability to attract foreign direct investment (FDI) followed by the potential that the Ecuadorian agricultural and manufacturing industry could reach in the Singaporean market.

Key words

- Singapore; foreign trade; trade policy; public policy; Ecuador

Feasibility study: Singapore as a trade partner for Ecuador

1. Introduction

Singapore is a city-state in Southeast Asia, it is located between Indonesia and Malaysia. Despite being a small island country -its surface is only 716 km²-, it has approximately 5 435 000 inhabitants (Singapore Department of Statistics, 2021), and it is the third most densely populated country in the world. Various languages are spoken, such as Malay, Mandarin, Tamil, and English for business.

Singapore is one of the most solid economies in the world. Some of the reasons are: it is the number one country in political and operative stability, it is the most competitive economy in the world; it is the fourth country with most foreign direct investment (FDI); it has very a low corruption index, public institutions' transparency is high; it has a judicial system that offers judiciary certainty to national and foreign investors, and its fiscal and monetary policy is very solid. All of these variables define Singapore as a low risk economy (Singapore Economic Development Board, 2020).

In spite of being a small nation, its constant economic growth and industrialization between 1960 and 1990 have allowed Singapore to be considered as one of the “four Asian tigers” alongside with Taiwan, Hong Kong and South Korea. One of Singapore's development pillars has been a commercial policy focused on exporting and attracting foreign direct investment (FDI) (Franco Herrera, 2013)

Singapore began offering unskilled human capital. Later, the government decided to change its investment attraction policy in 1990. Thus, it focused on transforming Singapore into a capital-intensive economy, followed by the adaptation of unskilled labor to fulfill the needs of foreign companies with high performance standards. Due to this, the National Council of Salaries raised the workforce cost, with the purpose of stimulating the formation of skilled labor. Singapore encouraged the policy of adapting to the techniques of foreign companies to the national ones and thus learning and developing its own techniques.

With this information, one can note that Singapore has had success in the application of its public policy, being the commercial policy one of the most important. Therefore, Singapore's main development characteristics are highlighted in this work of research.

1.1 Objectives

In this research, the general objective has been defined to be the determination of whether Singapore is a strategic commercial partner for Ecuador. Additionally, three specific objectives have been added. The first is to analyze the economic, social and political spectrums of Singapore. The second, to compare commercial policies between Singapore and Ecuador in order to contrast the differences. And the third, to analyze the current accounts of both countries, as well as possible future commercial agreements.

1.2 Theoretical framework

Singapore has had an opening orientation since its foundation in 1965, when Singapore's first Prime Minister, Lee Kuan Yew, mentioned that international cooperation in social, cultural, and economic matters were key to a nation's development, even labeling autarchy as “an old fashion with harmful effect” (Henk, 2014). That is why, when in 1966, Singapore was asked about the possibility of becoming part of the Association of Southeast Asian Nations (ASEAN), there was clear interest, and later Singapore did become a member in 1967.

ASEAN was created due to four reasons according to Zhainara Isakova and Marat Assemblages (2018), which were:

1. To protect from that time's communist regime (1960)
2. Willfulness of political leaders

3. Geopolitical luck, since thanks to the Cold War, the USA supported ASEAN, which led to a greater approach to world powers
4. Market oriented economic policies, mimicking South Korea or Japan

According to Yew (2016), Singapore was the pioneer in the regional bloc in supporting the compliance of the economic objectives in the group through commerce liberalization policies. It began with a 10% tariff reduction in certain products. This goal was met in 1992 with the creation of the “ASEAN Free-Trade Area” (AFTA), which even proposed to reduce to a 0% tariff until 2010.

Singapore has benefitted from this integration, among others, in the following ways: its life standards have risen, poverty has been reduced, and it's the ASEAN member that attracts the most FDI. ASEAN's lead has been taken mainly by the most developed countries: Singapore and Brunei. That is why the bloc seeks to extend its economic cooperation at a regional level (Öncel, 2017).

When it comes to foreign trade, Singapore's participation is evidenced with the exportation of all kinds of goods and services, like: commercials, transport, financial, information and computer, intellectual property fees, and insurances. These goods and services summed up to over 187 billion USD in 2020, representing around 70% of Singapore's GDP (TradeMap, 2022). Besides, Singapore has 15 bilateral commercial agreements with countries from different regions, such as: The United States, China, the European Union, Australia, etc.

Regarding the Asia-Pacific Economic Cooperation, which Singapore belongs to, there is an attachment to some Latin American countries, in order to seek economic growth, technical cooperation, and a facilitation in trade. However, there is an even further attachment to the members of the Pacific Alliance (Mexico, Peru, Colombia, and Chile), since a trade agreement has been signed between both parties, making Singapore an associate state. Ecuador finds itself soon to enter the Pacific Alliance, which would create the possibility of becoming closer to Singapore. Until 2022, there hasn't been a remarkable relationship. Singapore is not in the top 25 commercial partners of Ecuador (TradeMap, 2020).

Singapore not only focuses on commercial development, but also on environmental development. As a matter of fact, 40% of its surface is covered by green areas. Since 1963, Singapore's Prime Ministers have kept the idea of having a clean, green city, in order to boost foreign investment attractiveness, next to a proud Singaporean generation of living in a nice environment based on solidarity with its country (Rowe & Hee, 2019)

There was an idea of converting Singapore into a tropical garden city. Singapore even motivated a “green competition” between ASEAN leaders in 1970. To accomplish this, the Prime Minister used to plant trees in community centers; he also used to impulse plantation campaigns. Over one million of palm trees, bushes, and trees were planted, which generated pride. Later, cigarettes were banned, as well as the importation of chewing gum, since it polluted the environment and created additional cleaning costs. Penalty fees were imposed to those who didn't follow those rules.

Since 2008, green construction has been mandatory in this country. This is why it's common to see buildings with herbage all around them. Therefore, it is noticeable that environmental architecture is present in Singapore. A good example is Jewel Changi airport, which combines natural elements like water and light with green spaces (Alonso, 2021).

Singapore is an interesting country when it comes to successful public policies, mainly in international trade since its commercial policies models have stood out not only in the region but in the world. This is why it is necessary to make a deep exploratory study on Singapore's development, since this may provide an answer to whether it could be a good trade partner for Ecuador or not.

3. Methods

This work seeks to create an exploratory study with qualitative methods through Onwuegbuzie and Frels (2016) Seven Step methodology for an adequate literature review, which is illustrated in figure 1. This process involves three phases: exploration, interpretation, and communication.

Exploration Phase

1. Exploration of Beliefs and Topics

The exploration was carried out through an investigation protocol with the proposal of objectives, a research question, problem, etc. Thanks to this, the viability of Singapore as a commercial partner for Ecuador is proposed as the research topic.

2. Initiating the Search

For this research, the information is obtained through academic articles from electronic databases. However, due to access availability, only the following digital libraries are used: Scopus, EBSCO, and Redalyc.

3. Storing and Organizing Information

For the execution of this step, a matrix is created in Excel, which contains scientific articles separated in spreadsheets from every one of the digital libraries previously mentioned. It's worth mentioning that spreadsheets with information from books, magazines, international organizations report, and public institutions are also added.

In the Excel document, every article is given a code. The code has [S] as initial reference, followed by a number, [001] for the first article, [002] for the second, and so on and so forth, giving a total of 101 articles.

Additionally, columns with the following information are added: article title, DOI, and abstract. This allows to validate the most relevant articles for this research.

4. Selecting/Deselecting Information

This step of research is valuable since it helps with the selection of primary studies that contain relevant information. The excluded articles are:

- Academic articles that the title or abstract aren't from the subject
- Incomplete parts of books and conferences
- Short academic articles (less than 4 pages)
- Academic articles in languages other than English or Spanish

The included articles are:

- Academic articles with relevant information of Singapore in economic aspects, social, or political matters
- Academic articles with relevant information of Singapore in economic political aspects
- Academic articles with relevant information of Singapore in social aspects.

5. Expanding the Search to include one or more MODES

According to Onwuegbuzie and Frels (2016), in order to expand the search, more sources are considered, such as **Media**, **Observations**, **Documents**, **Experts**, **Secondary Data**. For this purpose, this research will be reinforced with the support of secondary sources, specifically TradeMap statistics and information from the World Trade Organization (WTO) in order to analyze trade balances and trade policy reviews.

Interpretation Phase

6. Analyze and Synthesize Information

Once the articles have been chosen through the inclusion-exclusion criteria, a spreadsheet with the following variables is created: economy, public policy, commercial policy, social control. Consequently, once the articles have been read, each column is filled in order to segment each work into the previously mentioned variable it belongs to.

3.1 External applications of the methodology

There are different studies, with positive results, where this methodology has been used. For example, Rahiem (2020) used the methodology proposed by Onwuegbuzie y Frels (2016) to research on digital folklore in child education. Thanks to this method of research, the models used in education about disasters of first childhood that use digital folklore were able to be analyzed. This way, a way to improve child education in matters of creativity and attraction catastrophes was discovered.

In another example, Morris (2018) was able to explain the importance of expanding the search beyond traditional databases while using the Seven Step methodology. The conclusion showed that formal or informal interviews may work to enrich, inform, enlarge, and orient in a better way a research.

Therefore, the methodology proposed by Onwuegbuzie y Frels (2016) has proven to give relevant results in the generation of concrete reflections. Hence, the systematic literature review methodology is apt for this work of research.

Figure 1 “Methodology of the literature review”, seven steps for an adequate literature review.

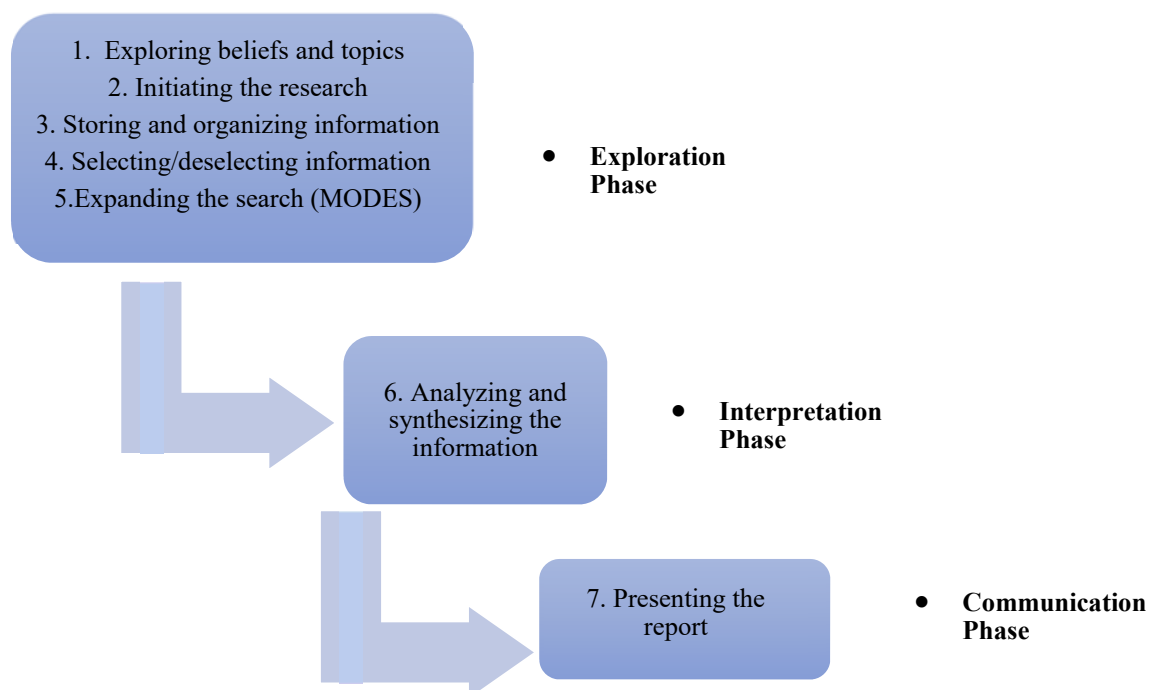


Figure 1 Source: Adapted from *Digital Folklore in Early Childhood Disaster Education* Rahiem, M. D. H., Rahim, H., Subchi, I., Zulkifli, Sururin, & Khalimi. (2020).

4. Results and Discussion

4.1 ECONOMY

4.1.1 Economic and development policy

With an inherited British tradition, Singapore's political leadership is controlled by the People's Action Party (PAP) which, with the aforementioned former leader Lee Kuan Yew, set out to transform the nation from a poor fishing village to a world-class city. In fact, Singapore started out as a toy manufacturer, but its productive focus took a major turn towards specialization in the technology industry and then to business and financial services. Several foreign companies established their Asian headquarters on the island, and that development brought, in turn, an influx of expatriate professionals. Today, 28% of the 5.3 million inhabitants are foreign-born (Portes, 2020).

Portes (2020) asserts that the determinants of Singapore's growth have been the creation of an efficient state apparatus free of corruption, aligned with commitments in key sectors with a focus on the private economy to guide investment in strategic sectors. Likewise, Singapore has not applied *laissez-faire* capitalism since the State has participated very actively in guiding its development.

The Singaporean development model is based on the following features according to Portes (2020):

- The efforts to avoid and eliminate ethnic conflicts among sectors of the population. The 74% of the population is from Chinese origin, 14% Malaysian and 9% Indian; the rest are from multiple nationalities. Interestingly, since primary and secondary school, students are told about respect and good coexistence between groups of different ethnicities. An example to enhance this trait is housing, since the State assigns it for the working class through State projects. In addition, housing is delivered through a deliberate policy of mixing that ensures that different ethnic groups must coexist in the same buildings or neighborhoods.
- Due to the low area available for the territory, Singapore imported sand to expand and improve the island. Sea plots were created by drying them, generating new land. Also, when Singapore ran out of water due to the price increased by Malaysia, the State promoted the creation of new recycling and salinization plants. Thanks to these policies, Singapore's economy has grown constantly.

In order to innovate, Singapore launched The Council for Skills, Innovation and Productivity (CSIP) in 2016 to guide the structural transformation of the country's economy. The CSIP responsibilities are promoting and driving industrial transformation and internationalization towards skills-based growth, innovation and productivity (Yuen Luk & Preston, 2020). Indeed, having Singapore as a trading partner is positive for economic growth such as the case of Malaysia (Wong et al., 2020).

4.1.2 Services and FDI

Regarding services, according to Tello (2016) there has been an exponential growth of services exports in APEC in recent years, especially in Southeast Asian countries. States are changing their import and consumption patterns of services, which has led to exponential growth in imports and exports (Tello, 2016). In fact, the Monetary Authority of Singapore (MAS) has adopted a policy of gradual appreciation against the dollar since 2004 and consequently exports have increased (Chew et al., 2018).

Financial, educational, health, communication, health, and business services are much more skilled labor intensive than manufacturing. So FDI in services requires skilled labor such as international banks or graduates from good universities (Chellaraj & Mattoo, 2019). Thus, over the past four decades, Singapore has rapidly reduced its skilled human capital gap against most industrialized countries by expanding higher education and attracting foreign talent. FDI in Singapore's service sectors has increased significantly over the past three decades. Eighty-nine percent of inward FDI in the manufacturing sector and 83.1 percent in the services sector came from industrialized countries. Services dominate inward and outward investment in both advanced economy countries and developing countries (Chellaraj & Mattoo, 2019); (Notley, 2019).

The inward investment observed between 1984 and 1996, reflected the tendency of FDI to seek low-cost labor in Singapore. However, after 1996, FDI from industrialized partners seeking skilled labor increased with the increase in Singapore's skill endowment (Chellaraj & Mattoo, 2019).

4.1.3 Digital Economy

Singapore is leading the global evolution of the digital economy. It is overall the most connected nation in terms of cross-border movement of goods, services, finance, people and data. This ranking can be attributed, at least in part, to government policies. After the 1997 Asian financial crisis, the government increased its efforts to develop Singapore as a "knowledge economy" and as a regional hub for finance (Notley, 2019).

Consequently, the Singapore government aimed to develop a science-culture-business park to project a "knowledge and innovation economy". Thus, Singapore has the One-North district, an ecosystem full of companies and institutes focused on research and development (R&D). One-North has provided, through a public-private partnership, world-class research facilities and business parks for biomedical sciences, ICT, media, engineering, among others (Esmailpoorarabi et al., 2018).

Singapore has maintained global leadership positions in R&D so that it has achieved higher economic growth. However, a lower level of happiness/well-being has also appeared (Tou et al., 2019). R&D contribute to economic growth and economic diversity in part through their direct and indirect impact on science, technology, and innovation. Singapore's economic growth and economic diversity is related to R&D investments (Salman et al., 2020);(Tou et al., 2019).

The Singapore model clearly shows that GDP growth is strongly associated with the number of researchers (Salman et al., 2020) since 1996, the country has shown a steady increase in R&D expenditure from 1.32% (1996) to 2.16% (2014), with a peak in 2008 of 2.62% due to its increase in researchers from 2004 to 2014 (from 4.89 to 6.73 per million people).

4.1.4 Transportation, oil and gas industry

Another important aspect for Singapore's economy is the transportation sector because Singapore efficiently manages its ports, converting its maritime port one of the largest in the world (Shafique et al., 2020); (Portes, 2020). Singapore in fact, has a bidirectional relationship between its Gross Domestic Product (GDP) and transport. Therefore, Singapore's GDP causes the transport of goods and consequently the transport of goods generates GDP. In addition, there is a significant relationship between economic prosperity and freight transport. Singapore's economy will tend to continue to grow because of the close dependence on freight transport (Shafique et al., 2020).

In addition, thanks to Singapore's skilled labor force, the city-state has become an oil refining and petrochemicals center for its region. It is even considered a gateway to global production networks in the oil and gas (O&G) industry. Strategic partners such as Vietnam and Indonesia use Singapore as a gateway to markets and natural resources from other Southeast Asian countries (Breul et al., 2019). For example, if Vietnam acquires a rig for oil extraction, the rig goes through Singapore to assess that everything is found and working properly. Even in case the machinery fails, an expert is sent from Singapore to make the evaluation and determine if it is necessary to fix the inconvenience with a re-export to the island. The O&G equipment and services sector in Singapore generated USD 5.13 billion in 2015 (Breul et al., 2019).

4.1.5 Islamic finance in Singapore

Various types of finance are applied in Singapore whether western or Islamic. As emphasized in the study by P. Y. Lai & Samers (2017) which explains that IBF (Islamic Banking and Finance) is a form of finance management based on Shariah (Islamic legal system); also considered by many of its practitioners as a more "socially just" financial system than "conventional finance". IBF carries a number of bans, one of the most important is the prohibition against *riba* (interest). Other prohibitions, perhaps equally important, are *Gharar* (excessive risk, uncertainty), *maysir* (gambling). In addition, Islamic financial institutions (IFIs) should not invest in companies that trade in products, services or forms of entertainment considered *haram* (prohibition) (P. Y. Lai & Samers, 2017).

The IBF's growing interest and relevance in Singapore was boosted in order to expand Singapore's economic competitiveness as a financial center, It took advantage of the existing infrastructure to offer wholesale market activities in the capital markets and convince wealth management financial institutions to add IBF products and services to the existing set of activities (P. Y. Lai & Samers, 2017).

As the IBF sector became more strategically important to Singapore's role as an international and regional financial center, the government took a more proactive position to stimulate IBF activities (P. Y. Lai & Samers, 2017). MAS adopted market-oriented measures to shape the scope of IBF development through regulatory and tax revisions for IBFs such as *murabaha* financing, which is based on the acquisition of an asset by the bank to then resell the asset to another party, so that the amount added to the initial cost will be the profit (for the bank) and the *sukuk* (Islamic bond). In the end, under the Singapore Banking Act law, depositors were granted the same regulatory protection as anyone else (P. Y. Lai & Samers, 2017).

Due to Singapore's relationship with Islamic countries, is also adapting to the needs of its partners in order to attract investment from the Islamic population and generate, thus, greater conformity for investors in financial services.

4.2 POLICY

4.2.1 Innovation and educational policies

Education in Singapore is a fundamental pillar for development. Teachers in public schools must go to the National Institute of Education of Singapore (NIE) to obtain a certification that enable them to practice their profession (Tan, 2018).

According to Tan (2018) science is one of the key pillars of Singapore's economic growth because the innovation is encouraged. To help students learn science critically and creatively, the core science curriculum was formed from 2008. Science teachers had to reinvent themselves to ensure that students learn science content through questioning, exploration and test assessment, rather than simply memorizing what is written in books.

Due to the importance of the educational approach, science teachers apply the Science, Technology, Engineering and Mathematics (STEM) teaching system. The introduction of STEM thinking and problem solving in schools is very valuable, especially in the field of science and technology education because STEM principles are aligned to the development of 21st century skills enhancing critical, creative, and problem-solving thinking (Tan, 2018). As Singapore's economy transformed into high-tech exports and became knowledge-based, the economic policy played a key role in directing education policies (Peng and Phang, 2018).

According to Peng and Phang (2018) resources were directed to educational institutes to produce the quantity, quality and types of skills required by the economic strategy along with the needs of the companies that have been attracted. The percentage of the population with college degrees and the high number of the courses they enrolled in reflected the changes in the economy.

In the 2000s, the Singaporean government implemented policies to transform the country into a knowledge and innovation hub in order to enhance local capabilities as Singapore was dependent on the activity of multinationals (Rikap and Flacher, 2020). Specifically, "Science and Technology" plans were inserted since 2011 denominated as "Research, Innovation, Enterprise" plan. The plan is based on four research priorities: advanced manufacturing and engineering, health and biomedical sciences, services and digital economy, and urban and sustainability solutions.

Thanks to this, Singapore has two outstanding universities in the field of research, in fact, they are remarkably integrated into global innovation and knowledge networks, as both the National University of Singapore (NUS) and Nanyang Technological University (NTU), currently patent all their findings (Rikap and Flacher, 2020). The government even sought to attract world-class foreign universities to establish partnerships with NUS and NTU.

According to Rikap and Flacher (2020) Singapore has economic benefits since it started to become an innovation hub, as it attracted private investment in R&D both locally and abroad. Therefore, Singapore has deployed instruments to support business innovation, through a more effective competition policy, which has prompted companies to innovate recruitment strategies; this has incentivized entrepreneurs to improve and develop technologies, as well as more consistent efforts to encourage R&D investments and promote the capacity of the business sector (Zhang, 2020).

Following this, Singapore has strategically deployed liberal FDI rules to attract multinationals to transfer key production technologies to local enterprises and integrate their R&D activities more closely with domestic innovation. Singapore has a great innovation coordination policy (Zhang, 2020).

According to Zhang (2020) the balanced and coordinated formulation and implementation of innovation policies in Singapore has resulted from the coexistence of strong centralized bureaucratic structures. Industrial and innovation policies have been centrally formulated in key ministries, particularly the Ministry of Industry (MTI). The ministries have dominated the allocation of financial resources assigned for technology development, with the MTI typically managing more than half of these resources (Zhang, 2020).

Thus, most of these policies have been implemented through the joint delegation of specific tasks by the economics ministry to boards of directors, funding agencies, and other executive agencies. The close and extensive links between the state and firms have provided a set of checks and balances that have helped curb the indiscipline of policy implementers (Zhang, 2020).

Singapore has a development promoting institute which is specified in Breznitz and Ornston's (2018) study on the Agency for Science, Technology and Research of Singapore (A*STAR). It is a massive and prestigious organization, as it has a great potential to generate innovation policies, followed by the fact that its corruption levels are low and it has highly skilled officials (Breznitz and Ornston, 2018). A*STAR was created in 2001 and reconstituted from its predecessor, the National Science and Technology Board (NSTB), an agency designed to lead the industrial R&D capacity building (Breznitz and Ornston, 2018).

Likewise, with the development of a campaign called "Industry 21", it was pretended to transform Singapore into a "learning nation". In particular, policymakers decided to boost domestic R&D and the local business base to compensate the country's dependence on FDI (Breznitz and Ornston, 2018).

A*STAR invested in large research centers and technology parks, such as Biopolis, and established high-level research collaborations with multinational companies such as Nestlé, Procter & Gamble, and General Electric, which agreed to expand their R&D presence in Singapore in exchange for access to A*STAR's extensive research facilities and services (Breznitz and Ornston, 2018).

According to Breznitz and Ornston (2018) A*STAR has become an effective and reliable improver of existing technologies. It has successfully contributed Singapore's competitive advantage in existing industries, as reflected in the country's ability to attract increasing value-added FDI in established science industries. The share of FDI in GDP has continued to rise since A*STAR was created.

4.2.2 Digital economy policy

Singapore has an investment institute, Temasek Holdings, which has increasingly invested in the technology sector after being hit by the global financial crisis of 2007. Temasek has openly expressed the possibility of investing in new sectors, such as artificial intelligence and biotechnology; the 23% of its total investment portfolio is focused on the telecommunications, media and technology sector (Notley, 2019). Thus, the state has a notable financial participation in the growth of the data and ICT industries.

The government announced in 2014 a policy called Smart Nation that deployed a large number of sensors and cameras throughout the country so that the government can monitor everything from the cleanliness of public spaces, the density of crowds, and the precise movement of every vehicle registered in the country (Notley, 2019). In short, the Singapore government has taken a number of steps to develop the national digital infrastructure over the past few years.

4.2.3 Migration policy

In the late 1990s, the Singaporean government intentionally recruited a large number of foreign professionals to build the well-known knowledge economy (Zhan et al., 2020); (Rikap and Flacher, 2020). On the contrary, due to the influx of immigrants, Singaporeans showed some opposition towards the new inhabitants so that the government decided to restrict immigration in the last decade (Zhan et al., 2020).

Due to these reforms, Singapore does not admit immigrants with low-skill knowledge qualifications. Therefore, it is complicated for domestic workers or laborers to obtain permanent residency so they tend to seek to move due to this restrictive immigration policy that limits opportunities (Zhan et al., 2020).

However, academically prepared migrants with a high level of skills are also not guaranteed a permanent residency or the citizenship. In 2017, for example, there were approximately 650,000 skilled migrants and their families, and only 5% of them obtained permanent residency (Zhan et al., 2020).

Another important factor according to Zhan et al. (2020) is that Singapore's higher education sector is too small to provide employment opportunities for a growing number of PhD graduates. Many foreign students who have received advanced degrees and even working as educators and researchers in Singapore aspire to move to other regions.

4.2.4 Pension policy

According to Yeh et al. (2020) Singapore stands out for its different pension system that works with individually funded accounts that are financed by employers and workers. due to its ideology, there is a disaffection for public funding in social pensions (Yeh et al., 2020).

This policy is based on people accumulating retirement income in financial markets so social security funds are centrally or commercially managed. The Central Povinent Fund (CPF) is a privately managed scheme

and at the same time the key tool of the pension system in which workers must be compulsorily enrolled. The CPF covers mandatory retirement savings along with health care and housing. The CPF contribution rate was set at 17% for employers and 20% for employees (Yeh et al., 2020).

Thus, Singapore give a lot of value on work and as consequence there is a well-developed pension system, which is low in debt or crisis therefore its well managed.

4.2.5 Environmental policy

The Singapore government has been working to protect the environment since the late 1960s, but the greening of buildings did not begin to receive attention from policymakers until the early 2000s as an effective green urbanization policy initiative. Singapore adopted measures focused on sustainable environmental development through a certification for green buildings called the Green Mark Scheme (GMS). The GMS has led to a impressive increase in the number of green building certifications and has been exported to other countries as an alternative to existing eco-friendly building accreditation tools (Han, 2019).

According to Han (2019) the Singapore government has empowered the central planning agency to apply a technical approach to environmental governance. In addition, the Singapore government has shown a highly instrumental perspective towards environmental governance, viewing it as a way to achieve national progress and competitiveness. Through government support the Building Construction Authority of Singapore (BCA) has led the process of policy design, promotion and implementation, providing appropriate legal frameworks and reinforcing the MSG regime with complementary policy programs (Han, 2019).

4.3 SOCIAL

The PAP has won every general election since Singapore's independence in 1965 becoming one of the most dominant and oldest political parties in the world. The PAP had no rivals until the 1980s so it used this time to reshape politics and society with institutional and policy reforms to improve its effectiveness. According to Oliver and Ostwald (2018) the PAP has won every subsequent general election with at least 60% of the vote and in every election, there have been opponents, lack of fraud and violence towards other parties.

However, authors such as Abdullah and Kim (2020) detail that there are several institutional impediments that increase barriers to entry for the opposition, such as the party bloc voting system in the form of group representation constituencies (GRCs). Political parties must field four to six candidates to compete in a constituency. The ruling People's Action Party (PAP) has a distinct advantage because it can gather more resources to compete in such constituencies (Abdullah and Kim, 2020).

In Singapore there have been restrictions on the media, arrests without trial of opponents and the use of defamation lawsuits to silence critics, both in Lee Kuan Yew's mandate and in the current one (Henderson, 2016); (Abdullah and Kim, 2020).

On the other hand, Lim (2017) asserts that the Singapore government recognizes that regulation of the internet may have negative impacts for economic growth and innovation due to the contact with the international context would be set aside. However, there are controls in place that prohibit the entry of pages categorized as a threat to national unity and social values, such as pornography and material that incites either religious or ethnic conflicts. Interestingly, the Singaporean government once decided to restrict internet access to its civil servants in order to boost cybersecurity in government services (Lim, 2017).

4.3.1 Migrant labor scope

Authors such as Dutta (2020) or Abdullah and Kim (2020) mention that Singapore has experimented and perfected techniques of authoritarian repression through the invention of a state technique focused on disciplining labor and silencing dissent as a model of governance using "Asian values" as a framework.

Dutta (2020) mentions that workers are kept working in conditions with no access to citizenship pathways, no labor rights and no minimum wage, low paid migrant workers live in a climate of fear. The State is the key actor in the processes of extraction and exploitation

According to Dutta's study (2020) the situation of migrant workers is not visible to anyone in Singapore because the government applies authoritarian techniques in order to instruct workers to generate benefits to the "Singaporean model" of extreme neoliberalism.

The authoritarian neoliberalism present in Singapore is defined according to Dutta (2020) as "a set of legal, institutional and political processes to govern and moralize the individual, the family and the community, which resorts to techniques of surveillance and violence embedded in everyday life."

Migrant worker participation is silenced by a legal framework that criminalizes organizing, censorship and heavily regulates the presence of migrant workers in spaces of public participation through technologies of surveillance and policing (Dutta, 2020).

Therefore, the foreign labor force in Singapore suffers from several limitation especially those migrants who do not have a level of "skilled knowledge" in line with Singaporean rules. State intervention is crucial for a proper development of quality of life for the general population, so if the state does not care to solve it, things will remain the same.

4.3.2 Social control in religious territories

Woods' (2018) study explains that religious groups in Singapore tend to cross spatial boundaries because of the land limitation in the country. There is no ordinate regulation because it responds only to the actions of religious groups and the supply of land for such purposes is minimized, generating competition for space for religious practices. The approval of the Land Acquisition Act in 1966, resulted in the state having ownership over 85% of Singapore's land mass and therefore the formal religious landscape of this city-state is tightly regulated by the government (Woods, 2018).

The price of land differs according to the religious group, favoring the better financed religions. For example, between 2000 and 2010 a land cost Christian churches 50% more per square meter than Buddhist/Taoist temples, and for the Islamic religion, land for mosques were often sold three to four times below their real market value (Woods, 2018).

5.MODES

5.1 Trade Policy Reviews (TPR)

Table 1 presents the information obtained from the World Trade Organization (WTO) in respect of Trade Policy Review (TPR) summaries for Singapore for the years 2012 and 2021.

Singapore

Trade policy of Singapore 2012	Trade policy of Singapore 2021
Singapore is an open economy and an easier country to do business. Implemented a strategy to promote GDP growth and become a high-tech economy.	Singapore remains a very open economy, because of the country's trade in goods and services accounting for 320% of GDP. The change is attributed to transit trade, highlighting the country's position as a trade hub: in 2020, 55% of total merchandise exports were re-exports.
Singapore reduces the entry of foreign workers.	To deal against COVID-19, the government implemented the following measures: cash transfers and income support; wage subsidies; skills upgrading grants; real estate tax breaks; and tax relief on real estate.
Restrictions on FDI in broadcasting and media; legal services; and retail banking services.	The objectives of its trade policy remain unchanged. These are: to expand international opportunities for the country's established companies, to promote a predictable and equitable business environment, and to promote the development of a sustainable and equitable trade environment.

Through fiscal and non-fiscal incentives, the government encourage to seek investment in R&D in local businesses.	Policy in general is aimed at attracting foreign investment, with the most strategic sectors being in areas of R&D and services (applies restrictions in certain areas).
State participation in strategic sectors (electricity, telecommunications, transportation and ports)	Singapore had a high current account surplus, which accounted for 16% of GDP between 2016-2020
16 key sectors to increase productivity (construction; electronics; precision engineering; transportation engineering; general manufacturing industries; retail; food services; hotels; healthcare; information, communications, media and design; logistics and warehousing; administration and support services; accounting; financial services; process creation and maintenance; and social services.	Singapore has no mineral, oil or gas extraction industries, but is a major regional hub for oil refining.
Tariffs on only six lines: ("stout", "porter", regular and "ale" beers, and samsu and other types of samsu). Eliminated only with countries that maintain trade agreements.	A consumption tax (the goods and services tax) is levied on imported and domestically produced goods and services at a rate of 7%. This tax is levied on alcoholic beverages, tobacco products, motor vehicles, and domestic and imported motor fuels.
Singapore maintains a national single window system for customs procedures in order to facilitate trade.	Customs procedures are digitized and efficiently carried out through TradeNet, the national single window. However, the Networked Trade Platform (NTP) will gradually replace TradeNet.
Import bans mainly for health, safety and environmental reasons (chewing gum and motor vehicles with three years old).	Investment in broadcasting, national media, retail banking services, legal and accounting services, ports and airports, and residential real estate ownership are restricted.
Rice imports are managed through a strategic reserve for food security purposes.	Singapore signed seven new trade agreements during this period: the agreement between Singapore and Sri Lanka; the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP); the agreement between ASEAN and Hong Kong, China; the agreement between Singapore and the European Union; the agreement between ASEAN and Japan; the agreement between Singapore and the United Kingdom; and the Regional Comprehensive Economic Partnership Agreement (RCEP). The Singapore-Turkey agreement also started during this period.
The services sector is the most important sector in terms of contribution to GDP.	The service sector remains the most important sector (70% of GDP). Singapore is one of Asia's leading financial services centers for banking, insurance, securities and wealth management. Agriculture and fishing have a minimal impact on the economy as Singapore uses only 1% of its land for food production.
Singapore remains as an important shipping and air transport hub.	Singapore is also a regional and global shipping hub. It has one of the highest concentrations of international shipping groups and offers a wide range of maritime services including: maritime

	brokerage, ship management, legal and insurance services).
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Table 1 Sources: Based on World Trade Organization trade policy review summaries for Singapore for the years 2012 and 2021.

Table 2 will briefly detail Ecuador's trade policy in the years 2011 and 2019.

Ecuador

Trade policy of Ecuador 2011	Trade policy of Ecuador 2019
The Organic Code of Production, Commerce and Investment (COPCI) is created, with the Productive Transformation Agenda. This agenda emphasizes the importance of 14 productive sectors.	In 2017, the attraction and promotion of investment was declared a State policy. In 2018, the Law for Productive Promotion, Investment Attraction and Employment Generation started, which aims to boost and diversify the economy, as well as promote investment and employment.
The COPCI seeks to promote domestic production, trade and consumption of goods and services, as well as to strengthen and diversify exports, promote investment and gradually replace imports.	Ecuador has defined a negotiation agenda that will allow it to consolidate its main export destinations and the opening of new markets, the diversification of its export basket and, through the reforms undertaken at the national level foster a stable legal environment for the attraction of FDI.
The institution in charge of promoting exports and investments at the national and international level is PRO ECUADOR, which replaces the Corporation for the Promotion of Exports and Investments (CORPEI).	Regarding to trade facilitation, the "Ecuapass" customs system was implemented, integrating all trade modules and services to improve the facilitation and control of customs operations.
The objectives of PRO ECUADOR are: to promote Ecuador's exportable supply of goods and services by consolidating current exports and promoting the de concentration and diversification of exporters, products and markets. Strengthening of the exportable supply through investment that generates the production chain and innovation in technology.	From 2012-2017, the services trade balance has been in deficit. Exported services represented an average growth rate of 5.4%. Imported services had an average annual growth rate of 0.8%. The flow has been higher for the case of imported services for 2017 (3,296 million USD) compared to exported ones of 2,300 million USD.
FDI flows in Ecuador for the 2005-2010 period averaged US\$408.48 million per year.	In terms of FDI, between 2012 and 2015 there was a growth in FDI, with an average of 35%.
Mining activity accounts for 25% of total investment, while manufacturing industry and commerce represent 19% and 15% respectively. Most of the investment comes from Brazil, Panama, and Spain.	Thanks to a better performance of the national economy, for the period 2012-2017, the main FDI activity was the mining sector with a 47% share and an accumulated value of USD 2,254.28 million, followed by investments to manufacturing industry and trade with a 17% share. However, Ecuador continues to be one of the least attractive countries for investment due to legal and political uncertainty.

Table 2 Sources: Based on World Trade Organization trade policy reviews for Ecuador for the years 2011 and 2019.

Both States aim at investment as a fundamental pillar of development, but Singapore has managed to implement it efficiently while Ecuador has not yet matched its levels. Despite the attempt to improve its productive matrix through the COPCI, Ecuador remains one of the least attractive countries for FDI in Latin America. In addition, the strategic areas differ as Singapore targets the service industry while Ecuador targets the goods industry. Something very positive is the willingness of both countries to improve their trade facilitation, both Ecuador with "Ecuapass" and Singapore with "TradeNet". Another big difference is trade openness, as Singapore has signed many more trade agreements than Ecuador.

5.2 Singapore and Ecuador trade balances

Trade balances (billions USD)	2016	2017	2018	2019	2020	2021
Singapore	46.809.172	45.562.893	41.136.956	31.377.978	45.086.457	50.837.197
Ecuador	608.974	-751.921	-1.376.125	-63.739	2.423.206	549.336
Singapore - Ecuador	6.702	50.462	64.272	62.609	26.549	14.055

Table 3 Source: Based on TradeMap statistics

Table 3 illustrates the trade balances of Singapore and Ecuador from 2016 to 2021. The first and second sections show the general trade balances and the third shows the trade balance between Singapore and Ecuador, being favorable for Singapore in recent years. It can be seen that Singapore has generated significant income thanks to its positive balances, while Ecuador has some fluctuations, with its best year being 2020. Although the amounts traded are relatively low compared to the main trading partners of each country, Singapore has imported from Ecuador mainly petroleum oils, cacao, seafood and curiously dragon fruit, which in the last three years has increased its exports. Ecuador purchases from Singapore aromatic hydrocarbon mixtures, pump parts for liquids, instruments and apparatus for measuring or controlling the pressure of liquids or gases, headphones and cardiac stimulators.

6. Conclusion

According to the research work carried out, it can be concluded that Singapore has generated development by focusing on three main variables: economic, political and social.

Economy

Due to the importance given to specialization in services, Singapore is highly dependent on them, with exports currently accounting for 70% of its GDP. As a country open to trade, attracting foreign direct investment in both manufacturing and service sectors is very important for Singapore's economic stability. Transportation stands out as one of the main services, as it has one of the most efficient seaports, which has allowed several ships to stop over to pick up containers. Likewise, the specialization of the oil refining industry and the assembly of extraction platforms have turned Singapore into a strategic gateway for nearby countries (Vietnam and Indonesia), so that significant amounts of money enter the country as a result of this great work.

Another crucial aspect related to Singapore's growth was its focus on being a "knowledge and innovation economy. As a world leader in R&D, science, technology and research innovation have made Singapore one of the strongest economies in the world. As stated by Salman et al. (2020), Singapore's GDP growth is related to its number of researchers and government support through investment in R&D development. Therefore, the city-state went from being a supplier of low-cost labor to a specialist in services with a highly valued and qualified human capital in various areas.

Policy

When talking about development in Singapore, one must mention its education and innovation policy. The implementation of the STEM system and the importance of producing qualified teachers make Singaporean children have a critical and not a memorize thinking. It is worth mentioning the investment in Singapore's most important universities NUS and NTU that have developed due to their R&D approaches. It is thus evident that Singapore has evolved its education system with a vision to the future in order to continue creating appropriate professionals for the labor market.

In order to protect national R&D, immigration policies in Singapore are restricted. Aiming to be the "knowledge economy", the doors to this Southeast Asian country are mainly open to highly skilled foreigners, who, even with extensive knowledge, are not easily granted permanent residency because they want to develop competent Singaporean professionals.

With a State concerned with the development of the research area, it has made institutions such as A*STAR stand out in the global innovation policy area, attracting value-added FDI in the process. State investment in biotechnology, telecommunications and artificial intelligence has increased thanks to the state investment arm (Temasek Holdings), therefore, Singapore's development towards industries of the future is on the right way.

On the other hand, the importance given to the pension system means that retired workers have no problem claiming their retirement amount. From another angle, there is the state's concern for environmental development, which has generated policies that promote both environmental protection and green construction, making Singapore the greenest country in Asia.

Social

State intervention in Singapore is highly questioned because of the way it enforces strict social control over its inhabitants. As mentioned above, the opening of immigration is aimed more at human talent in strategic areas of Singapore, so that other "not qualified" foreign workers are subjected to authoritarian repression and very questionable living conditions, with low wages and significant stress. As well as the social control exercised over religious, granting more benefits to some groups than others.

Thus, it can be seen that Singapore's development has been achieved through the synchronization of the three variables studied. It is important to highlight that this country has managed to get ahead despite having a geographically limited territory. If it were not for the intervention of the PAP, Singapore would not be among the best economies today. A highly contested government in terms of its methods of social control may not be to everyone's liking (especially the West), but despite the social control exerted on the Singaporean population, the people continue to vote for the PAP because of the credibility, followed by the political primacy of the PAP, which has generated a high-capacity state control capable of reshaping society, and voter preferences (Oliver & Ostwald, 2018). Singaporeans sincerely support the PAP either for economic performance, social stability, and efficient delivery of local services. The strict conduct along with the vision to constantly improve the country, despite questionings, has generated a successful knowledge and innovation economy.

Singapore-Ecuador relationship

With respect to Singapore's rapprochement with Latin America, specifically with Ecuador, it is worth noting that the trade policies of both countries seek to generate investment in two different industries, but differ in terms of attracting it. In addition, the level of commercial openness of Singapore has been higher since the State has always thought that international cooperation is a key pillar for development. Singapore has a focus on the production of services, so its agriculture (added with its lack of land) and fishing are not very developed and depend on imports. Thus, the trade balance between the two countries should increase because of Ecuador's importance in food production.

Having studied a country with great development such as Singapore, it can be considered a strategic partner for Ecuador for three main reasons:

- It is a country specialized in financial, technological and logistic services.
- It is a referent country in terms of attracting FDI and an important investor in developing countries.
- Country with a developed commercial openness and experience in international cooperation.

Due to Ecuador is a developing country, it would be of great importance to relate and cooperate with Singapore in order to promote ignored areas in Ecuadorian production (service sector). Both Singapore and Ecuador have considerable possibilities of becoming members of the Pacific Alliance, which is positive since a broad and diversified trade agreement would be reached. As a recommendation and with a view to the future, reaching a strategic partnership agreement would be optimal for Ecuador, since in addition to obtaining tariff preferences in goods and services; technological, social and educational cooperation would be enhanced with the help of a city-state that manages these variables efficiently, such as Singapore.

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