

A Literature Review of Human Capital and Educational Policies in Chile's Educational System

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ABSTRACT: The study contributes to the existing literature on Chile's educational system. It's among the limited literature to examine Chile's academic policies. It compares them to Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Honduras, Mexico, Nicaragua, Panama, Peru, El Salvador, Uruguay, and Venezuela, making the paper of great value to economists, educationalists, and the economic development unit in Chile.

Keywords: Education, Human capital, Economic Growth, Economic Development

JFL Classification

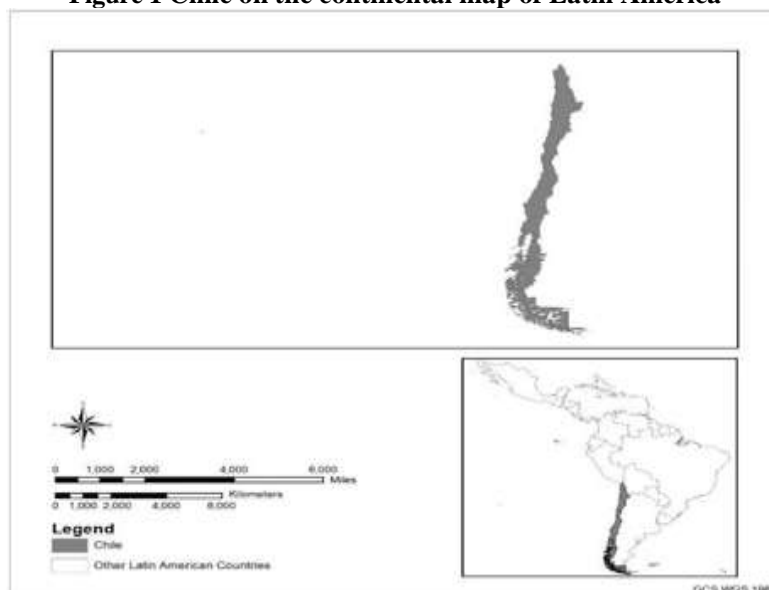
E10, I21, I24, I25, I28, O11, O12, O15

I. INTRODUCTION:

The Republic of Chile occupies a long coastal strip between the Andes mountains and the Pacific Ocean in South America. It is the 38th largest nation globally and the 7th largest country, and the longest country in South America (Google Earth (GE), 2019).

With 18.7 million people as of 2018, the nation ranks 62nd worldwide by population (World Development Index (WDI), 2019). Chile is ranked 84th in the world and 11th in the Latin Americas in the 2018 Environmental Performance Index (EPI)--(Yale Center for Environmental Law & Policy (YCELP) 2018). Chile, an emerging economy with a small elite who controlled most of the land, wealth, and political life. Compared to the country's regional neighbors, Chile has enjoyed a long and modest economic growth, development, and prosperity period. Making the country one of the most affluent nations in Latin America by most economic indicators, ranking 33rd out of 140 countries in the 2018 Global Competitiveness Index Report (GCI) (Schwab, 2018).

Figure 1 Chile on the continental map of Latin America



Author's creation (GE, 2019)

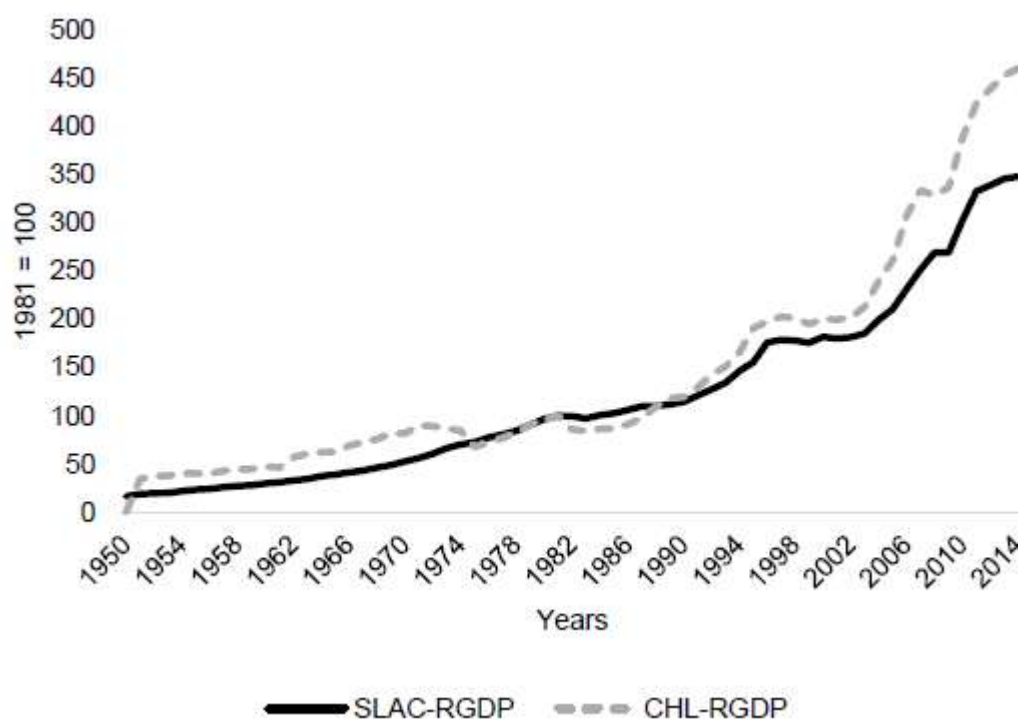
***Gray-specific country of interest**

In relation to education, this growing national prosperity has led to rapidly increasing enrollments at the tertiary level, which led to more economic opportunities in different sectors. In the study, the Selected Latin

America and the Caribbean (SLAC) countries that will be studied as a comparison benchmark are Argentina, Bolivia, Brazil, Chile (excluded), Colombia, Costa Rica, Honduras, Mexico, Nicaragua, Panama, Peru, El Salvador, Uruguay, and Venezuela.

Figure 2

A comparison of our SLAC $RGDPPP$ at chained (in Mil. 2011 USD (average)) with that of Chile (1950 – 2014) 1981 = 100



Source: (Penn World Tables (PWT), 2019).
Author's Creation

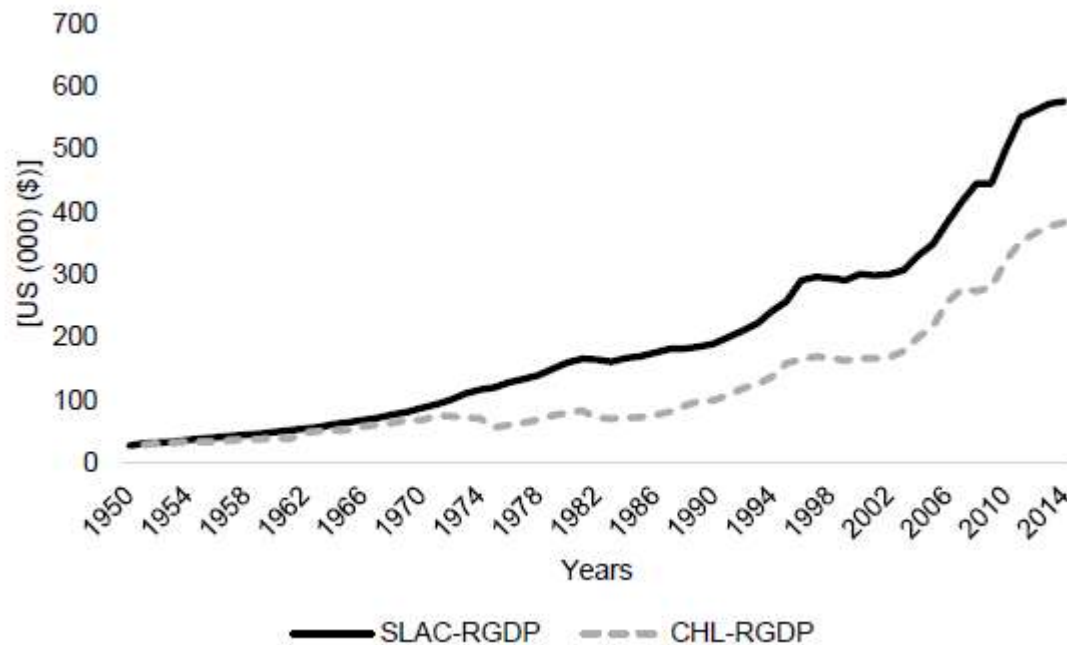
Figure 2 shows Chile's Real Gross Domestic Product purchasing power parity ($RGDPPP$) 1981 = 100 index from 1950–2014 compared to that of the SLAC's moving average from 1950–2014. Figure 2 depicts Chile marginally outperforming that of the benchmark moving average from 1952–1974, at par with the SLAC's moving average from 1975–1982, then slightly underperforming the moving average from 1983–1989, and outperforming the SLAC's moving average from 1990–2014. This implies when the numbers in Figure 3 are converted to an index of 1981 = 100 to measure the change in the value of their $RGDPPP$ to see the direction of production in the economy, the nation of Chile outperforms that of the SLAC by a significant margin on aggregate.

Due to the nation's robust macroeconomic framework, the country was able to crush the effects of a volatile international context and reduce the number of people living in poverty (on 5.5 USD per day) from 30% of the total population in 2000 to less than 6.4% in 2018 (WDI, 2019). Because of the country's large cities and industrial centers, the nation attracts a steady flow of internal migrants. Most of the migrants move to the central business district of Santiago, which is the capital of the country, while the rest head to smaller cities like Concepción–Talcahuano, and Valparaíso–Viña del Mar. These migrants come from the rural regions of the Central Valley and some from north-central Chile. In recent years, Chile has seen an outflow of migrants to Punta Arenas, Lake District, and Argentina, where Chileans work in the mines.

Figure 3

A comparison of our SLAC $RGDPPP$ chained (in Mil. 2011 USD (Average))

with that of Chile (1950 – 2014)

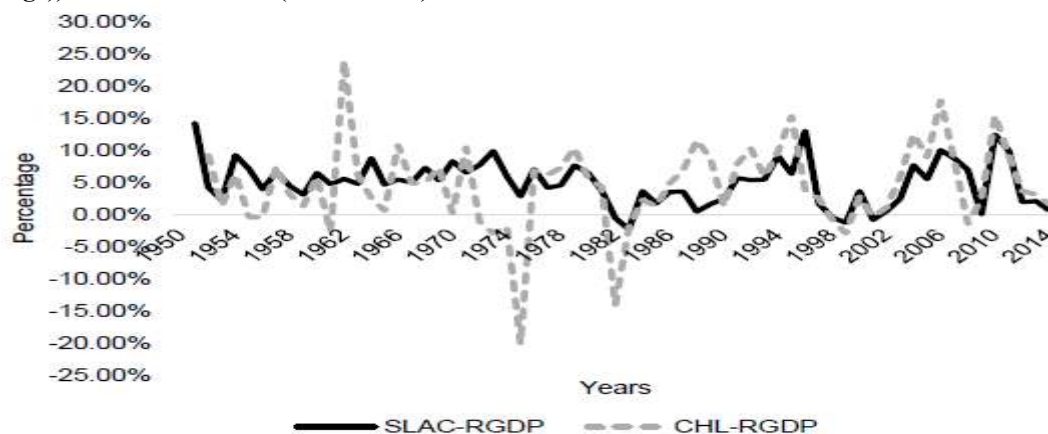


Source: (PWT, 2019).
Author's Creation

Figure 3 shows Chile's *R G D P p p p* actual numbers as it compares to that of our SLAC's moving average from 1950–2014. Figure 3 depicts Chile underperforming that of the benchmark moving average from 1950–2014. The Chilean economy is primarily based on agricultural, fishing, forest, and mining natural resources. Historically, the nation developed based on agriculture and the exportation of mineral resources. Today, the Chilean economy is dependent on the importation of manufactured products while resources and factors of production like, but not limited to, land, wealth, and power are concentrated in the hands of the elite few in society. During the 19th century, Chile's economy grew based on agricultural export, nitrates, and copper. After the nitrate market crashed during World War I, Chile's economy took a downturn that led the country to a depression. These events prompted Chile to adopt some socialistic programs that furthered the government's control of the economy.

Figure 4

A comparison of our LAC % change of *R G D P p p p* at chained (in Mil. 2011 USD (Average)) with that of Chile (1951 – 2014)



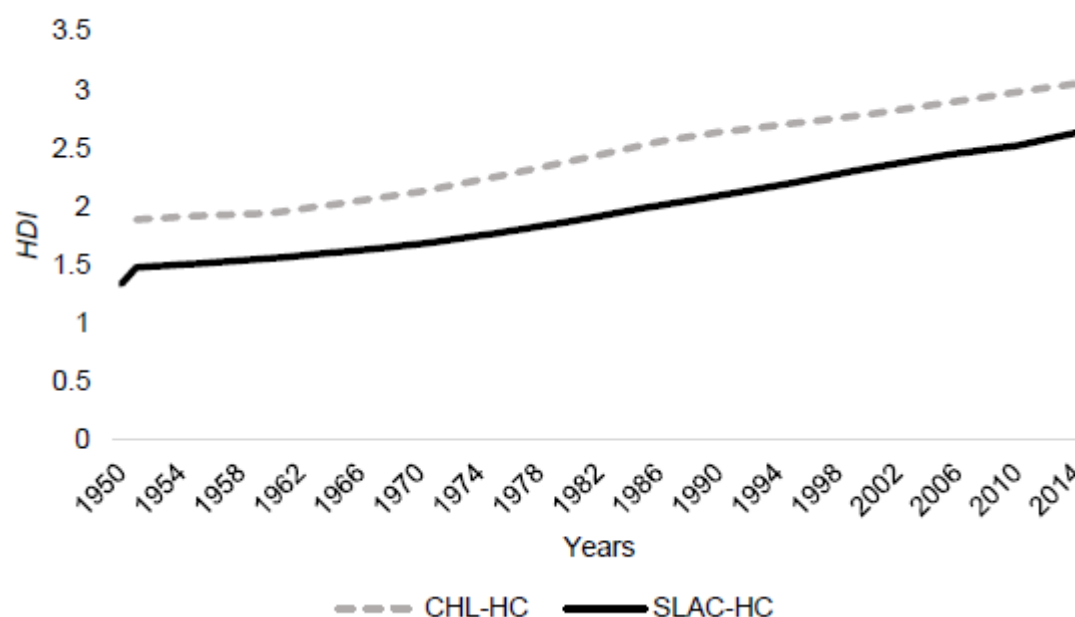
Source: (PWT, 2019).
Author's Creation

Figure 4 shows Chile to be more volatile than that of the SLAC. The volatility on the chart implies that Chile was more affected by economic shocks (positive and negative), especially when the changes came from

the agricultural sector. The development of a broader export-based economy improved Chile's economic growth and reduced the inflation rate in the 1990s (WDI, 2019). During the 1990s and to date, the country entered into many bilateral and regional trade agreements, which fostered economic growth and development in the region and further increased Foreign Direct Investment (FDI) in Chile's industries (Organization of American States (OAS), 2019).

By the early 21st century, the Chilean government had one of the most successful economies in South America. The economic implications of the 1990 Mercosur Free Trade Agreement (MFTA), a free trade market agreement created in the 1990s between six South American countries: Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay. MFTA to the nation extended to the educational systems; since the agreement impacts political relations, technology, and globalization. The Ministry of Education and Culture (MEC) is responsible for all the nation's educational system levels. Chile's economy faces severe economic issues, reflected in periodic high inflation, fluctuating trade policies, unemployment, and heavy dependence on a single primary export product, copper, in the international market.

Figure 5
A comparison of our LAC *HDI* (average) with that of Chile (1950 – 2014)



Source: (PWT, 2019).
Author's Creation

Figure 5 shows Chile's *HDI*, compared to that of the SLAC's' moving average from 1950–2014. Figure 5 depicts Chile outperforming the benchmark moving average from 1950–2014. This implies that Chile's national literacy rate is higher than the benchmark moving average based on residencies' years of schooling and return to education. The educational system in Chile is one of the most privatized systems globally, both in terms of funding and total enrollments. A recent study done by the Organisation for Economic Co-operation and Development (OECD) and the WDI showed that public spending on higher education in Chile is the lowest as a percentage of Gross Domestic Product (*GDP*) compared to other OECD countries (OECD – Chile, 2018). On average, public universities in Chile receive over 80% of their operating budgets from external sources other than the government of Chile. As a result, the operating cost of the universities is moved to the student, leading to high tuition in public universities, meaning that the less affluent students face more challenges in covering the cost of going to school (OECD – Chile, 2018).

II. SUMMARY:

Education Policy Orientation Main Findings:

- The nation has eight years of free and compulsory basic education.
- Mandatory secondary education.
- Because of its robust education policies, Chile's university education is of considerable renown throughout Latin America.
- In 2015, the government committed 4.9% of its *GDP* to education.

Policies That Moved the Country Forward:

- The MEC in Chile is responsible for pre-primary, primary, and secondary curricula and standards.
- The primary and secondary education system is mandatory in the country.
- The Chilean government-sponsored programs—like the Corporación de Fomento de la Producción, Sistema de Medición de la Calidad de la Educación, and Inglés Abre Puertas—support the English-language learning, scholarship, and testing of its citizens.
- In 2015, President Michelle Bachelet passed an education reform that has strengthened the education system in the country.

Policies Implication and Recommendations:

From our descriptive analysis, one can identify the MFTA, the 2006 NEF bill, and the compulsory kindergarten through the primary free education system offered in the nation. These different sets of education growth policies provide enormous lessons that other economies can imitate. These lessons come with their own sets of challenges as to how economic growth, development, and sustainability strategies can affect Human Capital (*HC*) and Capital Formation Structure (*CS*) formation enhancement in an economy.

- Although notable efforts have been made to increase the influx of students into the primary and secondary education system, an OECD/ World Bank (WB) report on the nation inferred that the country still had a long way to improve the Chilean education system. It is recommended that the already exciting education programs provide chapters for low-income family loans, meal programs, and grant mechanisms to increase the percentage of rural demography into the education system.
- In Chile, the MEC is responsible for pre-primary, primary, and secondary curricula and standards. To ensure the quality of *HC*, there is a need for the Chilean MEC to analyze and adjust the relationship between the higher education system and the job market to achieve coherence between the skills that the system produces and critical areas of economic growth and development.
- The country's mandatory primary and secondary education system has led to approximately 40% of Chilean students enrolling in technical schools responding to students' varying interests. The education system should become more flexible to accommodate the students' needs.
- In 2015, the Chilean government committed 4.9% of its *GDP* to education. Still, the whole exercise of the right to education cannot occur unless substantive changes are made in teaching policies and curricula. It is recommended that the roles and training of teachers must focus on effective teaching and generating conditions that allow students to exercise the right to learn.

Contribution to Chile's Literature on Human Capital and Economic Growth:

Although an aggregate model was used as the benchmark measuring tool, in the study, this study contributes to the literature on the role of *HC* in economic growth and development by highlighting the critical educational policies passed by the Chilean government and how these policies affected the *HDI* level of the Chilean economy. Studies that have delved into Chile's economy include (Barro, 1991; Chumacero and Fuentes, 2004; Harald and Rodrigo, 2002; Contreras, 2003; Olavarria-Gambi, 2003; Marotta et al., 2007; Castaneda, 1999).

The theoretical formulation of the relationship between *HC* and economic growth in Chile has been studied by (Agiomigianakis et al., 2002; Chumacero, and Fuentes, 2004; Ibarra et al., 2000; Cavallo & Mondino, 1995; Kiran, 2014; Osiobe, 2020a, 2020b, & 2020c)). It is consistently predicted that knowledge embodied in humans is essential for innovation, productivity, and economic growth. However, this relationship did not hold in all studies (Bils and Klenow, 2000; Devarajan et al., 1996; Benhabib and Spiegel, 1994 & 2005; Temple, 1999).

Further Study:

To analyze specific economic results and implications on Chile's economy, further studies need to

be done that focus mainly on the Chilean economy and the relationship between *HC* and economic growth.

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