

## **A Literature Review of Human Capital and Educational Policies in the Brazilian's Educational System.**

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**ABSTRACT:-** The paper aims to contribute to the existing literature on the educational system of Brazil. The article delves into educational policies, compares relevant economic indicators with the aggregate trends of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Honduras, Mexico, Nicaragua, Panama, Peru, El Salvador, Uruguay, and Venezuela. The study is among the limited literature to examine Brazil's educational policies and compared them to the stated countries, making the paper of great value to economists, educationalists, and the economic development unit in Brazil.

### **JFL Classification**

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

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

### **I. OVERVIEW**

The nation of Brazil occupies about 50% of South America. It is the 5th biggest country by landmass globally and the largest country in South America (Google Earth (GE), 2019). With a population size of about 209.5 million people as of 2018, the country ranks 6th globally by population (World Development Index (WDI), 2019). Brazil is ranked 69th in the world and 7th in the Latin Americas in the 2018 Environmental Performance Index (EPI)--(Yale Center for Environmental Law & Policy (YCELP) 2018).

**Figure 1:**  
**Brazil on the continental map of Latin America**



**Author's creation (GE, 2019)**

**\*Gray-specific country of interest**

In the 16th century, Brazil was known for its sugar trade in the international market, but in the 17th century, the nation's sugar industry saw a downturn due to the rise of the Caribbean sector. In the 18th century, there was a gold boom in the country after the discovery of Minas Gerais. In the 19th century, the Brazilian economy experienced a coffee economic boom that led to rapid growth, making Brazil the primary global producer of coffee, producing an equivalent of 75% of the total global coffee production (Loman, 2014).

**Figure 2**  
**Economic Century Highlight**

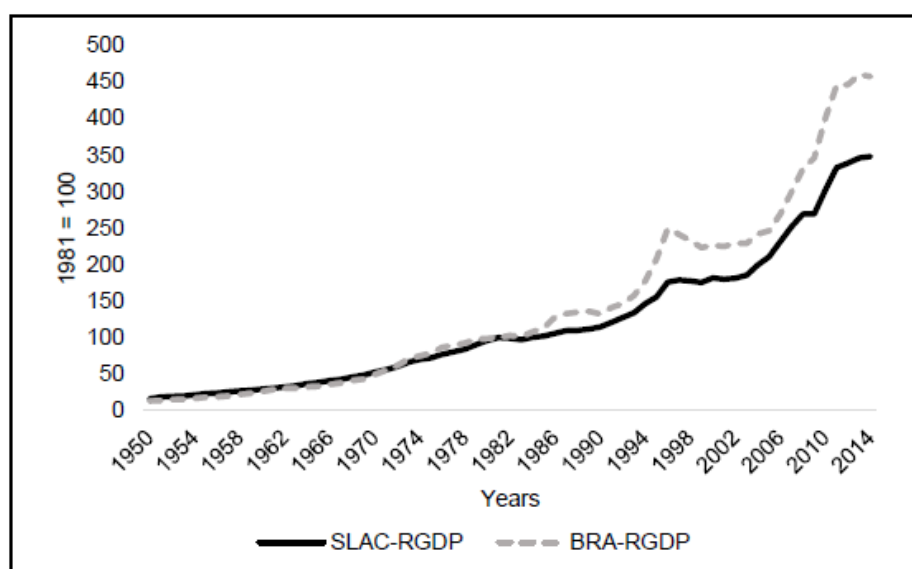
16 <sup>th</sup> Century rise of the sugar trade market
17 <sup>th</sup> Century rise of the Caribbean sector
18 <sup>th</sup> Gold boom (Minas Gerais)
19 <sup>th</sup> Coffee economic boom

**Author's Creation**

It is estimated that Brazil's export of coffee in the international market was equal to 10% of its total Gross Domestic Product (*GDP*). Due to the global recession, overproduction, and a fall in demand for the coffee price by 50% between 1929–1930, the Brazilian government found it hard to maintain the gold standard (Loman, 2014). In the study, the Selected Latin America and the Caribbean (SLAC) countries that will be studied as a comparison benchmark are Argentina, Bolivia, Brazil (excluded), Chile, Colombia, Costa Rica, Honduras, Mexico, Nicaragua, Panama, Peru, El Salvador, Uruguay, and Venezuela.

**Figure 3:**

A comparison of our SLAC *RGDP<sub>ppp</sub>* at chained (in Mil. 2011 USD (average)) with that of Brazil (1950 – 2014) 1981 = 100



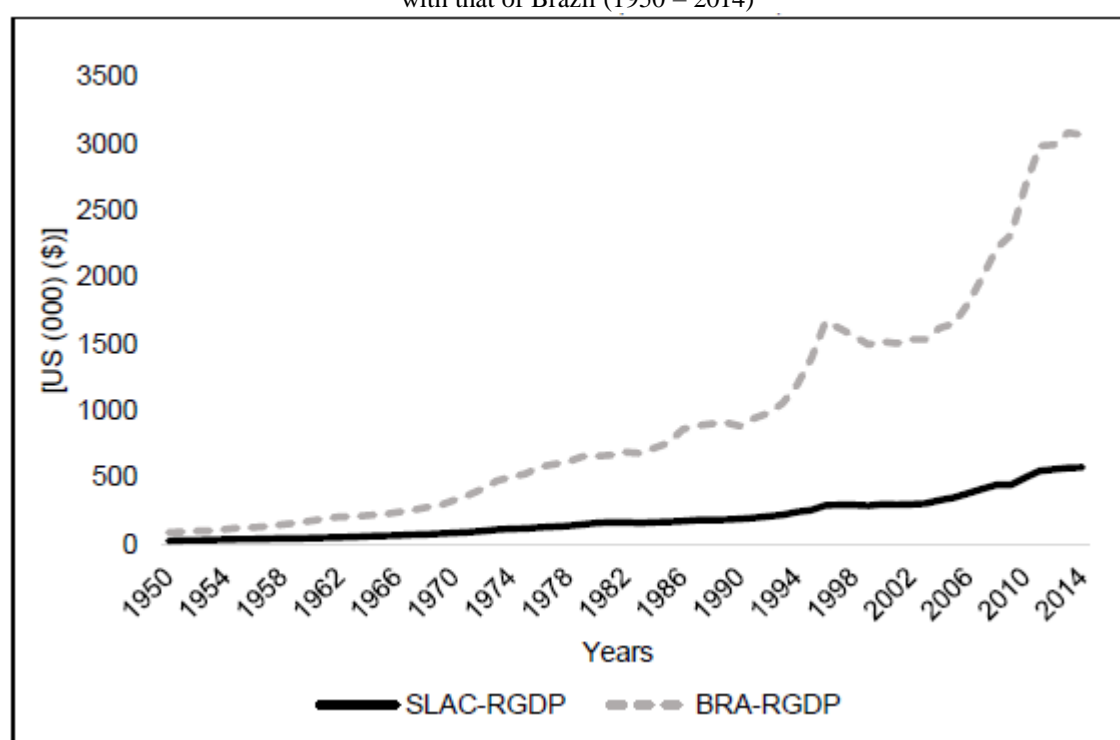
**Source: (Penn World Tables (PWT), 2019).**

**Author's Creation**

Figure 3 shows Brazil's Real Gross Domestic Product purchasing power parity (*RGDP<sub>ppp</sub>*) 1981 =

100 index from 1950–2014 compared to that of the SLAC's moving average. Figure 3 depicts Brazil marginally underperforming the SLAC moving average between 1950–1970, and from 1971–1974, Brazil was at equilibrium with the moving average, and from 1975–2014, Brazil outperformed the SLAC moving average. This implies when the numbers in Figure 4 are converted to an index of 1981 = 100 to measure the changes in the value of their  $RGDP_{ppp}$  to see the direction of production in the economy, Brazil outperformed the SLAC by a significant margin. After World War II, as a member of the G – 15 (International Monetary Fund (IMF), 2019), Brazil implemented import-substituting industrialization as the country tried to become less dependent on commodity exports (Loman, 2019). In the 1970s, the nation experienced rapid economic growth and made a lot of investment in the manufacturing and infrastructure industry. This growth helped in the diversification of the country and led to the Brazilian Miracle (Loman, 2019). The country's economy grew by 0.2% in 2018 (WDI, 2019), and as an emerging market, its economy has benefited from its abundant natural resources, literate population Human Development Index (HDI) 75% (PWT, 2019), trade opening, and a diversified industrial base. The nation has a Gross Domestic Product per capita ( $GDP_{per\ capita}$ ) of 8,920 current USD, and the country has a  $GDP$  of 1.869 Tril. current USD (WDI, 2019).

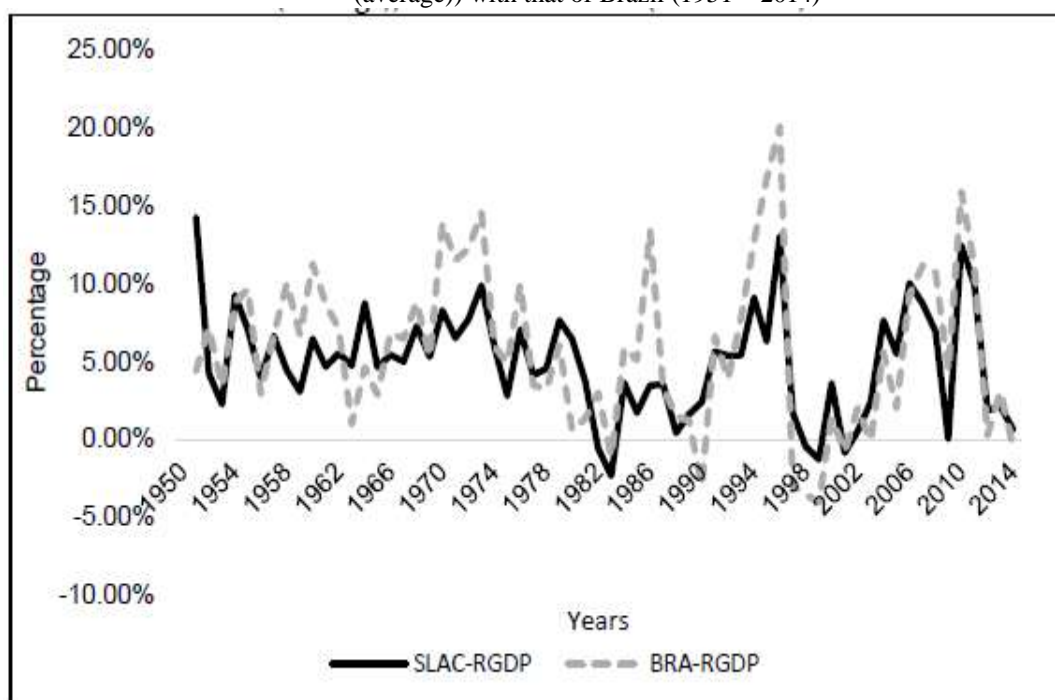
**Figure 4:**  
A comparison of our SLAC  $RGDP_{ppp}$  at chained (in Mil. 2011 USD (average))  
with that of Brazil (1950 – 2014)



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

Figure 4 shows Brazil's  $RGDP_{ppp}$  actual numbers as it compares to that of the SLAC's moving average from 1950–2014. The Brazilian economy is bigger than the SLAC's moving average, as seen in Figure 18. Brazil outperforms the benchmark moving average from 1950–2014.

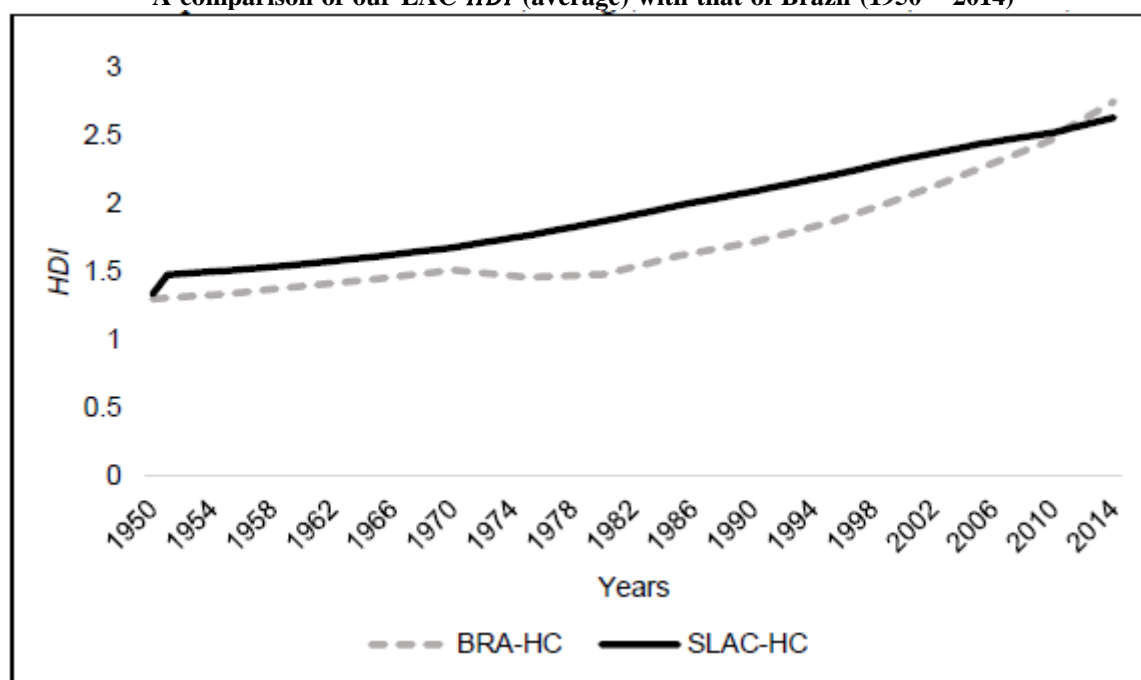
**Figure 5:**  
A comparison of our LAC % change of  $RGDP_{ppp}$  at chained (in Mil. 2011 USD (average)) with that of Brazil (1951 – 2014)



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

Figure 5 shows Brazil having a similar pattern but more volatile than the SLAC. Brazil's positive changes are usually more significant than the SLAC moving average, but the nation is at par with the negative changes in most cases. Due to the austerity program imposed by the IMF in late 1979, caused by adverse economic shocks, a 1985 bill was passed to foster growth in the country, and the economy rapidly grew in the '90s, which attracted billions of Foreign Direct Investment (FDIs) into the nation (Library of Congress – Federal Research Division (LoC—FRD), 2006). As of today, Brazil is ranked 72nd out of 140 countries in the Global Competitive Index (GCI) (Schwab, 2018). In Brazil, the state governments are responsible for administering and implementing elementary, primary, and secondary school education based on the national curricular guidelines set forth by the federal government and are complemented by the curricula set at the state and regional levels.

Figure 6:  
A comparison of our LAC HDI (average) with that of Brazil (1950 – 2014)



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

The nation's federal authorities regulate the higher-level educational system in Brazil through the Ministério da Educação (Ministry of Education, (ME)). The Brazilian education system is broadly divided into two systems. The basic education, known as *educação básica*, includes the early childhood education, which is called the *educação infantil*, and enrolls children aged 4–6 years old; elementary education, known as the *ensino fundamental*, enrolls children between the ages of 6–15 years; and secondary school, also known as the *ensino médio*, which enrolls children between the ages of 15–18 years. In Brazil, elementary through secondary level education is offered mainly by the public sector, although one can choose to take their child to a private school (WDI, 2017). The second system is higher education, which is known as *educação superior*.

Figure 6 shows Brazil's HDI as it compares to that of the SLAC's, moving average from 1950–2014. Figure 6 depicts Brazil marginally underperforming the benchmark moving average from 1950–2010 and then slightly outperforming the set benchmark from 2011–2014. Brazil's HDI showed a steady upward trend, with a mean HDI of 1.73, a mean growth rate of 1.18%, and a range of 1.44. This implies that Brazil's HDI growth pattern underperformed that of our SLAC and then gradually started to outperform the SLAC moving average as the economic growth policies were implemented in the nation, hence leading to a higher return on education based on the schooling years (PWT, 2019).

### **Summary:**

#### ***Education Policy Orientation Main Findings:***

- The first nine years of the Brazilian education system (basic education) are compulsory and free.
- Portuguese is the predominant language used in the Brazilian educational system.
- In 2006, a constitutional amendment bill was passed, creating a fund for the development of basic education and appreciation of the teaching profession, allocating 18%–20% of the national tax revenue to the educational sector.

#### ***Policies That Moved the Country Forward:***

- The Brazilian constitution of 1988 states that the federal government should spend 18% of its resources on education. At the state and local governments, it is 25%.
- A 2009 constitutional amendment was extended for 13 more years in 2016, and under that same constitutional amendment, 18%–20% of national revenue was allocated to the educational sector.
- Preschool education is entirely optional, while primary and lower secondary education/basic education is compulsory and free.
- The ME was established to regulate the Brazilian education system.
- The ME rehabilitated some of the old National Institute for Education Research (NIER) as an office for education statistics and evaluation and established a National Fund for Basic Education (FUNDEF).
- The ME introduced the Plano Nacional de Educacao (PNE) program, aimed at increasing the number of free mandatory years of schooling in the country by 2024.
- In 2012, the Brazilian government directed 5.3% of the nation's *GDP* to the education sector and increased it to 10% by 2014.

#### ***Policy Implications and Recommendations:***

The descriptive analysis offers a ground view of the Brazilian economy and the role of education. 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, led to some economic implications that extended to the school systems since the agreement impacts political relations, technology, and globalization. The Ministerio de Educación y Cultura (The Ministry of Education and Culture (MEC)) is responsible for all levels of the nation's educational system (Relations Council on Foreign (RCF), 2019). The MFTA, the 2009 amended educational spending bill, and the free basic education policy in the country have played a significant role in economic growth and development. Nevertheless, these growth policies come with their own set of challenges as to how economic growth, development, and stability can affect Human Capital (*HC*) and Capital Stock Formation (*CS*).

- Legal laws, like the Brazilian constitution of 1988, state that the federal government should spend 18% of its resources on education, and at the state and local governments, that number should be 25%; in 2009, an amendment was made to the law, increasing the federal spending budget on education to 20%, which will come out of the country's national revenue account; in 2012, the Brazilian government passed a bill that allocated 5.3% of the nation's *GDP* to the education sector, and in 2014 it was increased to 10%. Although all these policies are good and have a positive impact on the national economy, it is recommended that the nation consolidate the source of the educational funds while deregulating the control of spending once the funds have been distributed to state and local authorities. This deregulation will ensure the education district will promote agendas that best fit the needs of their students and ensure that sponsored programs have direct positive impacts on their local economies.
- Preschool education in the nation is optional; it is recommended that this section of the educational system be mandatory and free to ensure a smooth transition into the primary education system.
- The rehabilitation of some old NIER by the ME has had a significant impact on the Brazilian economy; it is recommended that this program be linked to colleges and universities, hence ensuring funding for the local tribes in the region and marginalized in the country.
- FUNDEF, is one of the best policies carried out in the Latin Americas, particularly in Brazil. Because of the success it has had in the country; a similar program should be created in the nation that will address the low enrollment rate in colleges and universities.
- The introduction of the PNE program that aims to increase the number of free mandatory years of schooling in the country by 2024 is an excellent idea; the only recommendation will be to expand the



program to the secondary and tertiary educational levels.

### ***Contribution to Brazil's Literature on Human Capital and Economic Growth:***

Although an aggregate economic indicator model was used in the study (see Figure 3 – 6), this study contributes to the literature on the role of *HC* in economic growth and development by highlighting the important educational policies passed by the Brazilian government and how these policies affected the *HDI* level of the Brazilian economy. Studies that have delved into Brazil's economy include (Barro, 1991; Agenor and Canuto, 2015; Nakabashi and Salvato, 2007; Postali, 2009; Bartlett, 2007; Van den Berg, 2017; Cravo et al., 2012; Bertola and Porcile, 2006; Lau et al., 1993). The theoretical and empirical relationship between *HC* and economic growth in Brazil has been studied by (Osiobe 2019; 2020; 2020b; & 2020c). The theoretical formulation of the relationship between *HC* and growth consistently predicts that knowledge embodied in humans is essential for innovation, productivity, and economic growth. However, this relationship does not hold in all cases; for example, (Quiggin, 1999 & 2002).

### ***Further Study:***

To analyze specific economic results and implications on Brazil's economy, further studies need to be done that focus mainly on the Brazilian economy and the relationship between *HC*, economic growth, development, and sustainability.

### **REFERENCE:**

- [1]. Agenor, P.-R., & Canuto, O. (2015). Gender equality and economic growth in Brazil: A long-run analysis. *Journal of Macroeconomics*, 43, 155-172. <https://doi.org/10.1016/j.jmacro.2014.10.004>
- [2]. Barro, J. R. (1991). Human Capital and Growth in Cross-Country Regressions. *The Quarterly Journal of Economics*, 407-443.
- [3]. <https://doi.org/10.2307/2937943>
- [4]. Bartlett, L. (2007). Human Capital or Human Connections? The Cultural Meanings of Education in Brazil. *Teachers College Record*, 109(7), 1613-1636.
- [5]. Bertola, L., & Porcile, G. (2006). Convergence, trade and industrial policy: Argentina, Brazil, and Uruguay in the international economy, 1900-1980. *Revista de Historia Economica-Journal of Iberian and Latin American Economic History*, 24(1), 37-67. <https://doi.org/10.1017/S021261090000046X>
- [6]. Bertola, L., & Porcile, G. (2012). Argentina, Brazil, Uruguay, and the World Economy: An approach to different convergence and divergence regimes.
- [7]. Cravo, A. T., Gourlay, A., & Becker, B. (2012). SMEs and regional economic growth in Brazil. *Small Business Economics*, 38(2), 217-230.
- [8]. <https://doi.org/10.1007/s11187-010-9261-z>
- [9]. Google Earth. (2019, 3 5). Google Earth. (Google) Retrieved 3 5, 2019, from <https://www.google.com/earth/>
- [10]. International Monetary Fund. (2019, 5 1). IMF Groups and Clubs. (IMF) Retrieved 9 13,
- [11]. 2019, from <https://www.imf.org/en/About/Factsheets/A-Guide-to-Committees-Groups-and-Clubs>
- [12]. Lau, A. L., Jamison, T. D., Liu, S.-C., & Rivkin, S. (1993). Education and economic growth some cross-sectional evidence from Brazil. *Journal of Development Economics*, 41(1), 45-70.
- [13]. [https://doi.org/10.1016/0304-3878\(93\)90036-M](https://doi.org/10.1016/0304-3878(93)90036-M)
- [14]. Library of Congress - Federal Research Division. (2006). Country Profile: Bolivia. Washington, D.C.: Library of Congress.
- [15]. Loman, H. (2014). RaboResearch - Economic Research. (Rabobank) Retrieved 9 13, 2019, from <https://economics.rabobank.com/publications/2014/january/brazils-macro-economy-past-and-present/>
- [16]. Nakabashi, L., & Salvato, A. M. (2007). Human Capital Quality in the Brazilian States. *Economica*, 8(2), 211-229.
- [17]. Osiobe, E. U. (2019). A Literature Review of Human Capital and Economic Growth. *Business & Economic Review*, 179-196.
- [18]. <https://doi.org/10.5296/ber.v9i4.15624>
- [19]. Osiobe, E. U. (2020). Human Capital and Economic Growth in Latin America: A Cointegration and Causality Analysis. *The Economics and Finance Letters*, 218-235. <https://doi.org/10.18488/journal.29.2020.72.218.235>
- [20]. Osiobe, E. U. (2020). Human Capital, Capital Stock Formation, and Economic Growth: A Panel Granger Causality Analysis. *Economics and Business*, 569-582.

- <https://doi.org/10.31014/aior.1992.03.02.221>
- [21]. Osiobe, E. U. (2020). Understanding Latin America's Educational Orientations: Evidence from 14 Nations. *Higher Education Quarterly*, 249-260. <https://doi.org/10.31014/aior.1993.03.02.137>
  - [22]. Osiobe, E. (2025). A Literature Review of Human Capital and Educational Policies in Argentina's Educational System. *American International Journal of Business Management*, 86-93
  - [23]. Osiobe, E. U. (2020). A Literature Review and Overview of Performance Management: A Guide to the Field. *Sumerianz Journal of Business Management and Marketing*, 2617-1724.
  - [24]. Osiobe, E. U. (2021). An Overview of Argentina's Educational Policies. Abuja: The Ane Osiobe International Foundation.
  - [25]. Osiobe, E. U. (2021). An Overview of Bolivia's Educational Policies. Abuja: The Ane Osiobe International Foundation.
  - [26]. Osiobe, E. U. (2021). An Overview of Brazil's Educational Policies. Abuja: The Ane Osiobe International Foundation.
  - [27]. Osiobe, E. U., & Winingham, K. (2020). Why do Universities Create and Foster Business Incubators? *Journal of Small Business and Entrepreneurship Development*, 8(1), 1-12.
  - [28]. Osiobe, E. U., Malallah, S., & Osiobe, N. E. (2024). Enhancing Data Visualization Accessibility: A Case for Equity and Inclusion. *Engineering and Technology Quarterly Reviews*, 24-32.
  - [29]. Osiobe, E. U., & Hammood, W. A. (2025). A Literature Review of Juman Capital and Educational Policies in Boloivia's Educational System. *American International Journal of Business Management*, 39-45.
  - [30]. Postalì, S. A. (2009). Petroleum royalties and regional development in Brazil: The economic growth of recipient towns. *Resources Policy*, 34(4), 205-213. <https://doi.org/10.1016/j.resourpol.2009.03.002>
  - [31]. Quiggin, J. (1999). Human Capital Theory and Education Policy in Australia. *Australian Economic Review*, 32(2), 130-44.
  - [32]. <https://doi.org/10.1111/1467-8462.00100>
  - [33]. Quiggin, J. (2002). Human Capital Theory and Education Policy in Australia. *Australian Economic Review*, Volume 32, Issue 2. <https://doi.org/10.1111/1467-8462.00100>
  - [34]. Relations Council on Foreign. (2019, Jan 12). CFR. (Council on Foreign Relations) Retrieved 9 12, 2019, from <https://www.cfr.org/backgrounder/mercosur-south-Americas-fractionous-trade-bloc>
  - [35]. Schwab, K. (2018). *The Global Competitiveness Report*. Geneva: World Economic Forum.
  - [36]. Van den Berg, H. (2017). *Economic Growth and Development* 3rd edition. Singapore: World Scientific Publishing Co. Pte. L.td.
  - [37]. World Development Index Group (2019, June 11). The World Bank. (World Development Indicators) Retrieved 3 18, 2019, from <https://data.worldbank.org/region/latin-america-and-caribbean>
  - [38]. Yale Center for Environmental Law & Policy; Center for International Earth Science Information Network; World Economic Forum. (2018). *The 2018 Environmental*
  - [39]. *Performance Index*. Environmental Performance Index.

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