

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

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**ABSTRACT:** This article adds to the existing research on Nicaragua's education system by analyzing the country's education policies and comparing key economic indicators with those of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Honduras, Mexico, Nicaragua, Panama, Peru, El Salvador, Uruguay, and Venezuela. It is one of the few studies that examine Nicaragua's educational policies in relation to these nations, making it valuable for economists, educators, and policymakers focused on Nicaragua's economic growth. The empirical data and supporting literature cited in this study can be found in (Osiobe, 2019; 2020a; 2020b; 2020c). This is not a self-citation but provides an empirical and theoretical basis for the recommendations offered. As a result, this research makes an important contribution.

**JFL Classification**

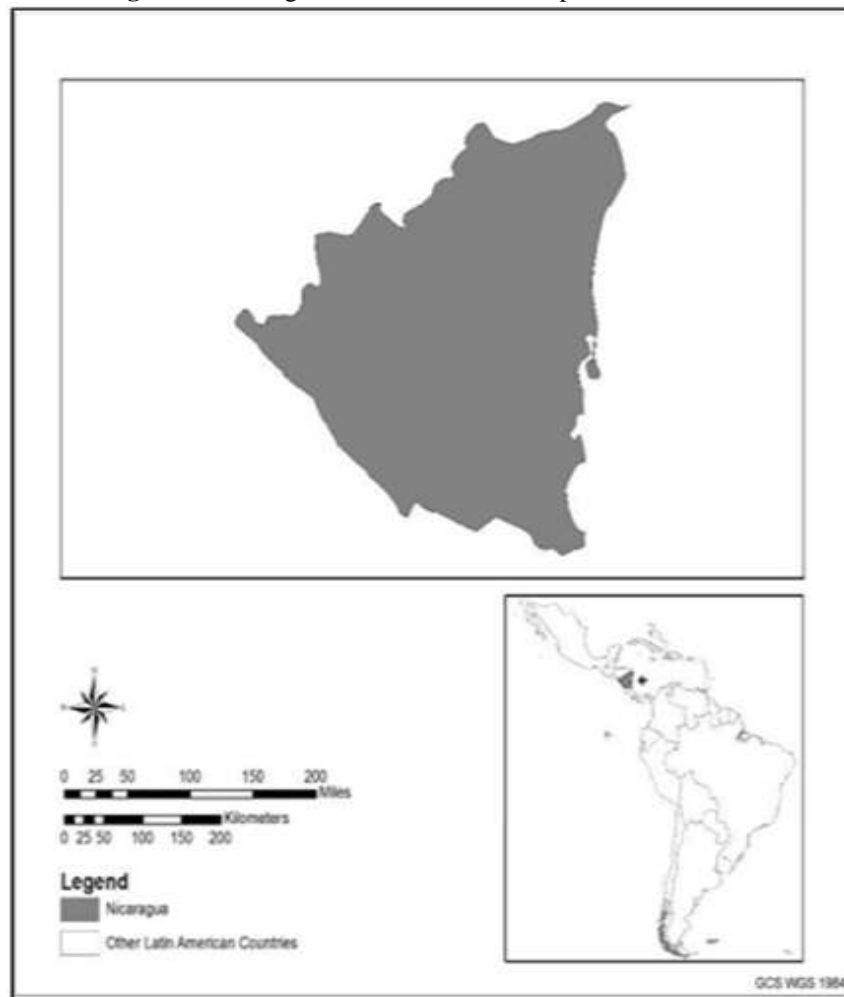
E10, I21, I24, I25, I28, O11, O12, O15

**Keywords:** Education, Economics, Growth, Development

### **I. INTRODUCTION:**

Nicaragua is named after Nicarao, a chief of an Indigenous tribe who lived near Lake Nicaragua during the 15th and 16th centuries. Situated in Central America, it is the largest country in the region by land area and ranks 96th worldwide. It is also the 9th largest Latin American country (Google (GE), 2019). With a population of 6.4 million, it holds the 110th position globally (World Development Index, 2019). In the 2018 Environmental Performance Index (EPI), Nicaragua ranked 97th worldwide and 14th in Latin America (Yale Center for Environmental Law & Policy, 2018). According to the Global Competitiveness Index (GCI), Nicaragua is placed 104th out of 140 countries (Schwab, 2018).

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

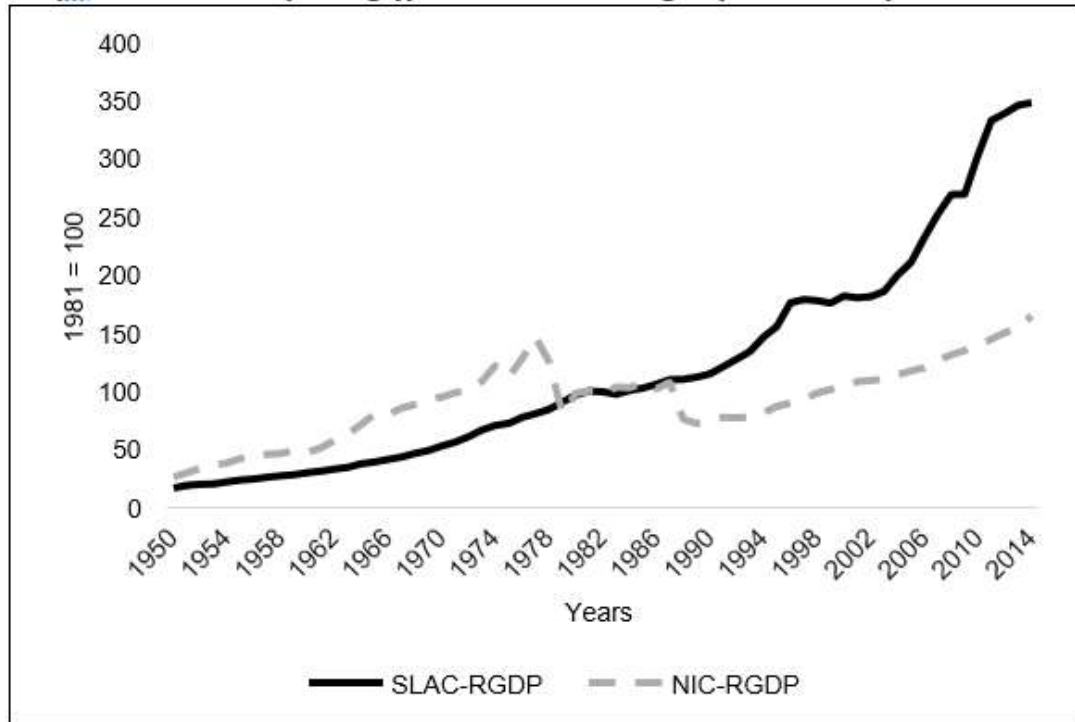


**Author's creation (GE, 2019).  
\*Gray specific country of interest**

Nicaragua is the poorest country in Central America, facing widespread underemployment, poverty, and external debt. Its most productive sector is agriculture, which mainly produces bananas, sugarcane, cotton, corn, rice, coffee, and sesame. The country does not hold an absolute or comparative advantage in any international markets. While Nicaragua's economy is primarily agricultural, its history of autocratic rule and regional instability has caused most settlement and economic activities to concentrate in the western part of the country. The main sources of foreign income are remittances from citizens abroad and aid from NGOs, though tourism revenue has recently risen. The study will compare Nicaragua with Selected Latin America and the Caribbean (SLAC) countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Honduras, Mexico (excluded), Panama, Peru, El Salvador, Uruguay, and Venezuela.

**Figure 2:**

A comparison of our SLAC side *R G D P p p p* at chained (in Mil. 2011 USD (Average)) with that of Nicaragua (1950 – 2014) 1981 = 100



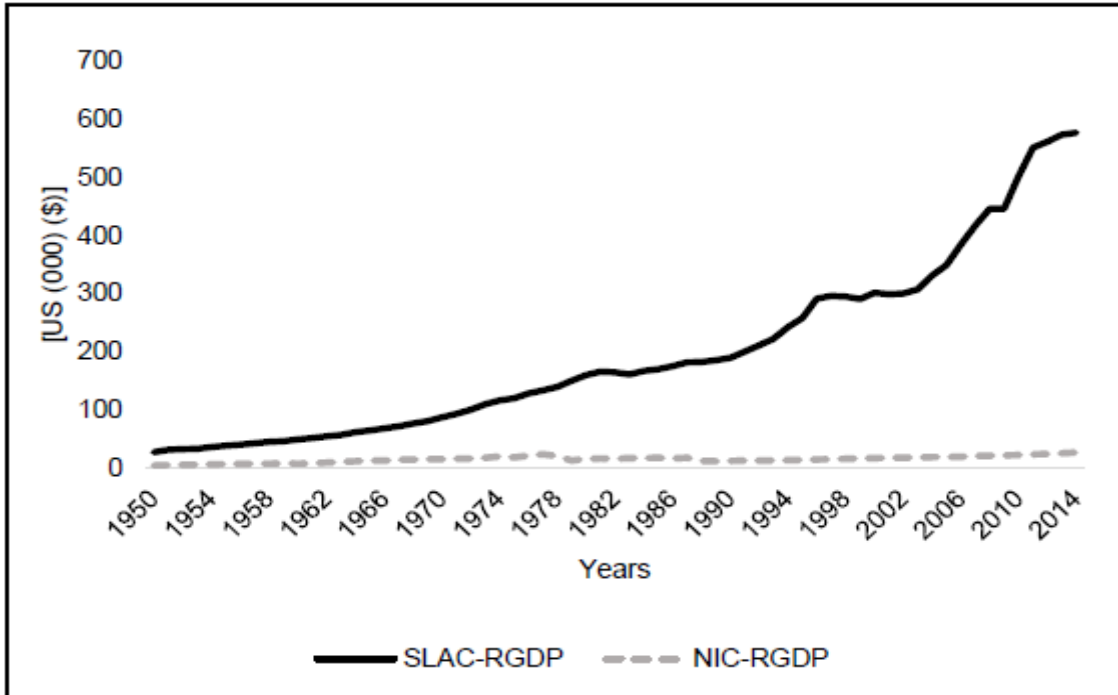
**Source: (Penn World Table (PWT, 2019).  
Author's creation**

Figure 2 illustrates Nicaragua's Real GDP Purchasing Power Parity (*R G D P p p p*) index, set to 1981=100, spanning from 1950 to 2014, compared against the SLAC moving average. The figure indicates that Nicaragua outperformed the benchmark moving average from 1950 to 1979, matched it from 1980 to 1987, and underperformed from 1988 to 2014. When the data in Figure 3 are adjusted to an index with 1981=100, tracking changes in the *R G D P p p p* value and economic output direction, it reveals a significant decline in Nicaragua's progress over the period 1950–2014.

The main potential for economic growth lies in the agricultural sector. However, energy, tourism, manufacturing, construction, mining, and consumer goods and services also have the growth potential to support and foster economic development. At a point, Nicaragua's economy was ranked as one of the fastest-growing economies, with Foreign Direct Investment (FDI) flowing into the country. The 1972 earthquake disaster led to many of the nation's economic problems as it tries to boost its commercial and industrial activities.

**Figure 3:**

A comparison of our SLAC *R G D P p p p* at chained (in Mil. 2011 USD (Average)) with that of Nicaragua (1950 – 2014)



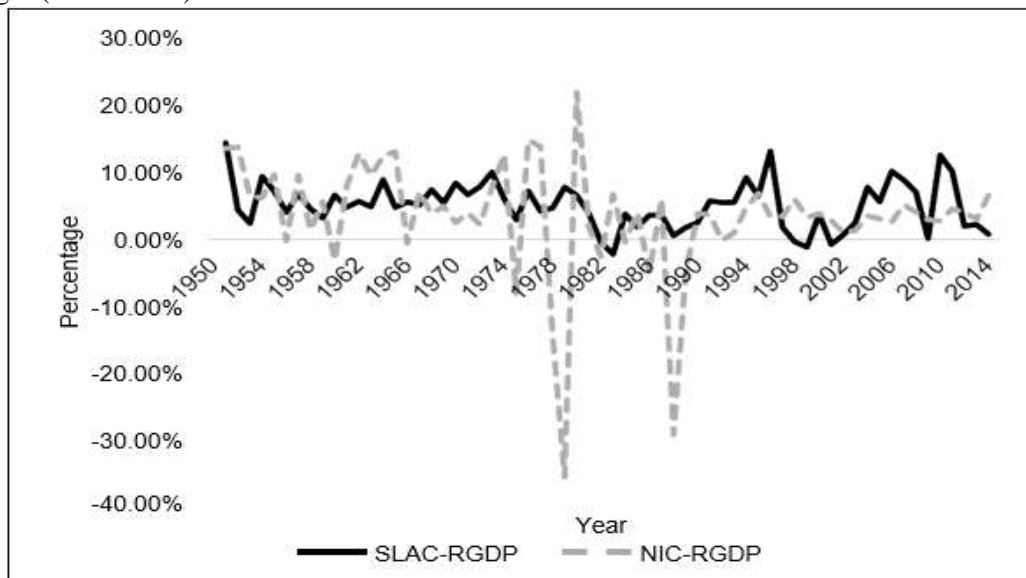
Source: (PWT, 2019).

Author's creation

Figure 3 displays Nicaragua's actual *R G D P p p p* figures, comparing them to the SLAC moving average from 1950 to 2014. The graph shows that Nicaragua's *R G D P p p p* remained relatively flat over this period, which is why the study uses a 1981=100 index. In the 20th century, renewed US aid and international lending helped control inflation, resulting in modest economic growth in some areas. However, austerity and structural adjustment policies reduced or eliminated many government welfare programs, further impoverishing the most vulnerable citizens. In 1990, to address illiteracy, the government enacted Law 89.

**Figure 4:**

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

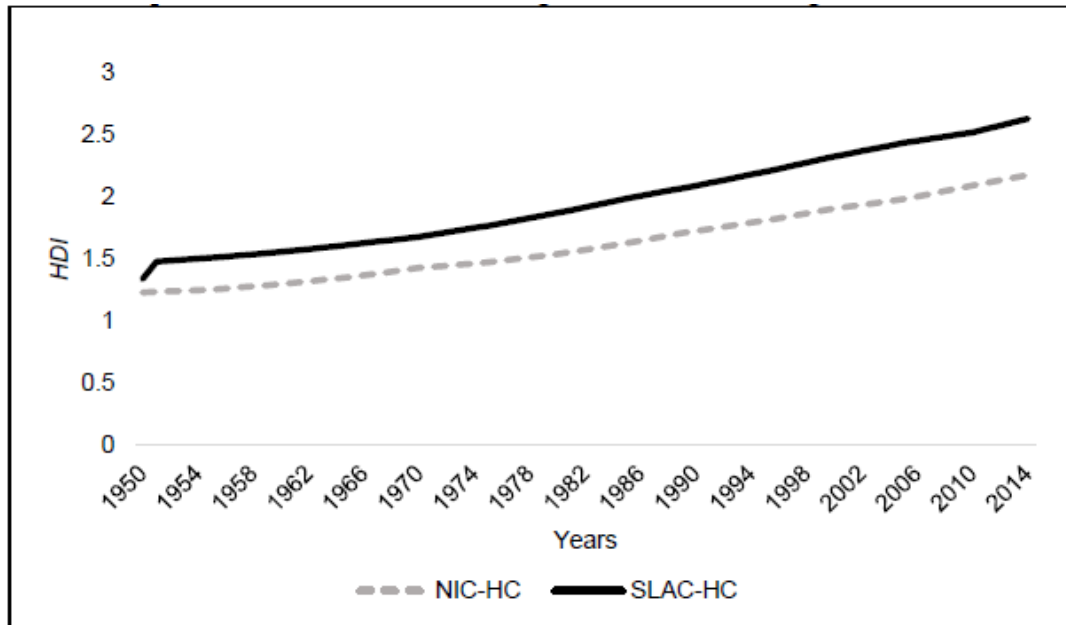


Source: (PWT, 2019).

Author's creation

Figure 4 illustrates that Nicaragua is comparable to our SLAC regarding positive and negative reactions to economic shocks from 1950 to 2014, excluding the periods 1978–1980 and 1987–1991. Nicaragua's constitutional law grants its higher education institutions autonomy in academic, financial, and administrative matters. As a result, the National University Council (CNU) was created as the official body for advising and coordinating all colleges and universities in the country. Meanwhile, the Nicaraguan Ministry of Education (ME) handles higher education policies, implements national educational policies, manages state educational funding, and approves new colleges and universities. However, the CNU's role in quality assurance is limited to licensing new private universities. Consequently, universities in Nicaragua operate with near-complete independence, functioning without regulation from any federal quality assurance agency.

**Figure 5:**  
A comparison of our SLAC *HDI* (average) with that of Nicaragua (1950 – 2014)



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

Figure 5 illustrates Nicaragua's *HDI* compared to the SLAC moving average from 1950 to 2014. The graph shows Nicaragua consistently underperforming relative to this benchmark. While Nicaragua's actual *HDI* increased steadily over time, its growth rate aligned with the trend of the actual human capital index. This suggests that Nicaragua's *HDI*, which reflects the national literacy rate, remains below the SLAC moving average.

**Education Policy Orientation Main Findings:**

- Primary education is free and mandatory (not enforced) for all residents.
- Communities along the Atlantic Coast can choose to learn in their native language or Spanish.
- Under the nation's constitution, the education system has complete autonomy to develop and execute its policies.
- Spanish is the predominant language used in the school system.

**Policies that Moved the Country Forward:**

- Free and mandatory primary education for every family in the area.
- The country has a central organization, ME, that oversees all levels of its education system.

**Policies Implication and Recommendation:**

Despite notable advancements in Nicaragua's educational system, including but not limited to:

- The adult illiteracy rate has decreased to 5%.
- A net rise in the country's enrollment rate for primary and secondary schools.

The country's education system is confronting multiple challenges.

- Although enrollment rates have risen, dropout rates have also grown, particularly in rural schools. It is advisable for the Nicaraguan government to establish after-school and in-school programs to help lower dropout rates and motivate students to remain in school.
- The contrast between simply attending a class and truly learning is evident in the Nicaraguan school system, where students' results on regional assessment exams remain low.
- Preschool education quality is generally low, especially in rural communities across the country. It is advisable for the government to boost funding in these areas to promote learning.

#### **Contribution to Nicaraguan Literature on Human Capital and Economic Growth:**

This study enhances the literature on Human Capital (*HC*) and its influence on economic growth and development by examining key educational policies implemented by the Nicaraguan government and their impact on the country's *HDI* level. Research focusing on Nicaragua's economy includes works by Anderson et al. (2003), Leogrande (2010), Hartlyn & Morley (1986), Dore (1986), Pisani & Pagan (2003), and Wilson (2013). The relationship between *HC* and economic growth in Nicaragua has been theoretically explored by scholars such as Winters (1964), Abdulai & Eberlin (2001), Lane (2000), Zapata et al. (2010), Van den Berg (2017), Dijkstra (1999), Behrman et al. (1985), Rosati & Rossi (2001), Vanegas et al. (2010 & 2015), Bradshaw & Lineker (2003), Maluccio (2010), and Blau (1986). These theories generally agree that knowledge embedded in humans is vital for innovation, productivity, and economic growth, though this is not universally observed (Levin & Renelt, 1992; Benhabib & Spiegel, 1994; Temple, 1999). To draw specific socioeconomic conclusions and implications for Nicaragua, additional focused research on the nation's economy and the role of *HC* in its growth is necessary.

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