POLICY BRIEF

The Effect of Intra-African Immigration on Productivity in Africa

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Abstract

Contrary to popular belief, many Africans who migrate stays in Africa. In a context of low trade openness between African countries and high differences in the prices of goods and factors, intra-African immigration could theoretically play an important role. This paper aims to study the impact of intra-African immigration on labour productivity in Africa, as well as its macroeconomic and sectoral components. Empirically, I rely on a panel of 187 countries, including 53 African countries, over the period 1990–2019, and a gravity-based 2SLS approach to deal with endogeneity. The results show that intra-African immigration has a

positive, significant, and robust impact on labour productivity in Africa. This impact is greater than the effect of immigration in a global sample, and essentially passes through the improvement in total factor productivity and capital efficiency. While immigration tends to deteriorate capital productivity in the world sample, intra-African immigration improves capital productivity in Africa. Furthermore, the results reveal that the service sector is the one that benefits from the positive effect of intra-African immigration in Africa.

Introduction

The continued rise in international migration following the acceleration of globalization that has taken place since the early 1990s has led to increased interest in studying the impact of migration on economies. However, research has mostly focused on developed economies for which migration flows from developing countries are perceived as a supply shock on the labour market, requiring adjustments in the economy (see, among others, Coleman & Rowthorn, 2004; Card, 2005; Bentolila *et al*., 2008; Peri, 2012; Akay *et al.*, 2014; Ottaviano *et al*., 2018). Studies of the consequences of this dynamic of migration for sending countries are less numerous and have mainly focused on the impact of migrant remittances (see, among others, Adams & Page, 2005; Combes & Ebeke, 2011; Adams & Cuecuecha, 2013; Konte, 2016; Asatryan *et al.*, 2017). This abundant literature is also silent on the impact of migration between developing countries, despite the importance of the latter in the structure of international migration. Gnimassoun (2020) addressed this question for African countries by studying the impact of intra-African immigration on incomes in Africa, and showed that, although intra-African integration positively impacts per capita income, the effect passes only through intra-African migration, with intra-African trade having no significant impact.

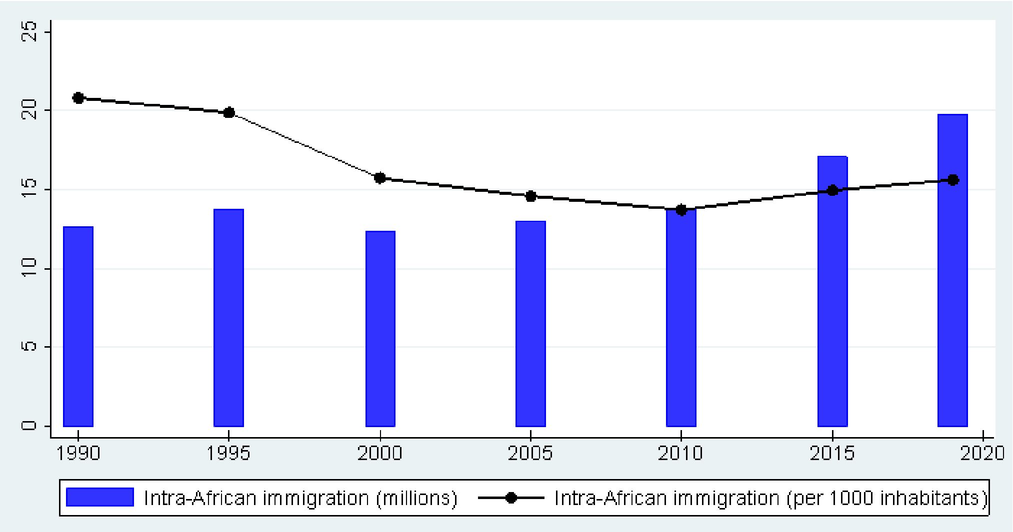
In this study, I go further by analysing the impact of intra-African immigration on labour productivity and its macroeconomic and sectoral components in Africa. The reasons underlying this investigation are threefold. First, the architecture of international migration clearly shows that it is dominated by greater mobility of the working-age population. Consequently, the labour market is supposed to be directly impacted by immigration, hence the relevance of this study to an analysis of the impact of migration on labour productivity. Second, intra-African migration may have a different effect on productivity compared with developed countries because of its different composition. Indeed, this migration is, above all, linked to the structure of African economies and is largely agricultural or related to the tertiary sector. Thus, intra-African migration involves less highly qualified people given the small size of the industrial sector and the low economic complexity in most African countries. Third, the Heckscher-Ohlin theory suggests that, with free trade there is no incentive to migrate due to the equalization of factor prices, including wages, and that migration will have no impact on labour productivity. In a context where trade is far from free, such as within Africa, immigration could have a positive impact on income per worker. Moreover, considering the relatively lower level of intra-African trade, one can expect that intra-African immigration will have a relatively greater impact on income per worker. Fourth, following the neoclassical theory of international factor mobility, labour tends to move from low real wage/productivity countries to higher wage/productivity countries. Although the theory predicts the equalization of factor returns/productivities in the very long run, it predicts, during adjustment or in the medium term, rising returns in the origin/emigration countries and decline of returns in the destination/immigration countries. However, real national and per capita incomes rise in both countries. On this basis, a positive impact of immigration on productivity can be expected in the medium term.

The study of the impact of intra-African migration is also of interest from a political point of view. African policy makers and institutions see intra-African migration as an opportunity for Africa, but they are also concerned about the challenges posed by certain forms of migration. For countries facing unexpected waves of migration, managing these flows can pose some challenges, or even difficulties, in making them mutually beneficial. However, when immigration meets a need in the host country, it can be beneficial for both immigrants and the host country. In the early 2000s, the Organization of the Council of Ministers of the African Union (AU) considered that it was necessary to develop a migration policy framework given the challenges posed by cross-border migration. This resulted in the development of the first African Union Migration Policy Framework for Africa (MPFA) in 2006 and then a revised version in 2016, supplemented by an action plan (2018–2030). The revised MPFA blends AU priorities, sustainable development goals, and international migration management policies and standards.

In addition, the statistic of intra-African immigration reinforces the rationale for this study. Indeed, if Africa is often distinguished by a strong emigration of its talents to developed countries (called the b*rain drain phenomenon*) then, contrary to popular belief, intra-African migration remains the most important component of African migration. According to United Nations migration data, African immigrants accounted for 78% of immigrants in Africa in 2015, although this proportion is lower than it was in 1990. Moreover, as Figure 1 shows, intra-African immigration has increased significantly since the early 2000s. Nevertheless, intra-African immigration remains relatively low compared with the African population. Indeed, for every 1,000 Africans in 2015, only 15 were African immigrants, although this rate is very heterogeneous between African regions and countries (see Table A2 in the appendix). Indeed, if West Africa has the highest intra-community immigration rate (more than 88%, because of an old and very proactive immigration policy), the regional immigration rate is 40% in Central Africa and less than 20% in Southern Africa.

Given Africa's development potential, intra-African immigration could be an alternative to emigration to developed countries. For this to occur, it must contribute to the emergence of this potential and allow Africans to have a better quality of life on the continent. Thus, a study of the impact of intra-African migration has important implications in terms of short-, medium-, and long-term economic policy strategy for policy makers. Moreover, to my knowledge, no study yet has been devoted to an examination of the effect of intra-African immigration on productivity and its components in African countries.

Figure 1: Dynamics of intra-African immigration



Note: Data come from the United Nations database. They are available by country pair from 1990 every five years.

The approach I use in this study is based on major contributions from the literature devoted to an examination of the factors that explain differences in productivity between nations (Hall & Jones, 1999; Caselli, 2005; Hsieh & Klenow, 2010; Peri, 2012; Ortega & Peri, 2014). The analytical approach relies on a conventional production function and its decomposition. It provides an adequate framework for studying the effect of intra-African migration on productivity and each of its main components, namely, human capital, total factor productivity, and capital intensity. Furthermore, I examine the impact of intra-African immigration on labour productivity by sector (agriculture, industry, and service). To properly assess the effect of immigration on the economy, it is essential to consider the possibility of a reverse causality between immigration and productivity. Indeed, migrants choose to settle in countries that have higher productivity and better employment opportunities. I, therefore, use a gravity-based two-step least squares (2SLS) approach to deal with this issue of endogeneity.

Labour productivity by sector of activity

One way to further analyse the impact of immigration on productivity is to study this impact by institutional sector of activity. The results of the impact of (intra-African) immigration on labour productivity by activity sector (agriculture, industry, and services) are reported in Table 3. According to these results, immigration has a positive and significant impact on labour productivity only in the services sector. This result could be explained by the fact that the tertiary sector is the one that has created the most opportunities for migrants. Indeed, across Africa, this sector is the only one that saw its share of GDP increase between 1990 and 2019 by 10%, while the other sectors saw their share drop in the same proportions. At the global level, the agriculture and industry sectors have seen their share of GDP drop by 18 and 14% respectively, while the share of services has increased by 9%. As before, the impact of intra-African immigration is quantitatively much greater than for the sample (more than three times). The results also show that trade openness exerts a negative effect on labour productivity in the services and industry sectors for the entire sample but has no significant impact for the sample of African countries. Investment positively and significantly affects labour productivity in the industry and services sectors regardless of the sample. Financial development and natural resource endowment have positive and significant impacts on labour productivity in all sectors regardless of the sample.

Conclusion and policy implications

With the increase of globalization, migratory flows have been accentuated since the beginning of the 1990s. Thus, a strong emigration from developing countries to industrialized countries has been observed. This global trend sometimes hides the dynamics of regional migrations, which are often more structural and motivated by geographical, cultural, linguistic, or economic proximity. Africa is often singled out for the flight of its talents to Western countries, but the largest component of African migration is intra-African. The latter represents an important pillar of regional integration that is advocated on the continent for its economic and social development. Despite the interest shown by African authorities and institutions in strengthening African integration, including through the establishment of a regional migration policy framework, few studies have focused on the impact of intra-African migration.

Studies of the impact of immigration on productivity or on the unemployment rate and wages mostly have focused on developed countries, which are considered as the countries that experience the most immigration. In this paper, I studied the impact of intra-African immigration on labour productivity in Africa. To analyse the transmission channels, labour productivity is disaggregated into human capital, capital intensity, and total factor productivity. Furthermore, I examined the impact of (intra-African) immigration on labour productivity in the agricultural, industrial, and services sectors. In doing so, the contribution of this paper to the literature is threefold. First, it fills a gap in the literature on the impact of regional immigration in Africa, a particularly edifying contribution in a context of promoting African integration where migration is a key driver. Second, knowing the low level of intra-African trade, this paper considers a global sample of countries and examines whether the impact of intra-African immigration is relatively greater in line with the Heckscher-Ohlin theory of factor price equalization with free trade. Finally, more than previous studies on the impact of intra-African immigration on per capita income, this paper goes further by examining the impact of immigration on labour productivity as well as its macroeconomic and sectoral components.

Empirically, the study is based on a sample of 187 countries, including 53 African countries, covering the period 1990–2019. Distinguishing Africa from the whole sample enabled me to examine whether the impact of intra-African immigration is different. To deal with the endogeneity problem raised by the relationship between productivity and immigration, I used a gravity-based 2SLS approach. The empirical results show that intra-African immigration has a positive and significant impact on labour productivity in Africa, which is consistent with the international factor mobility approach. The larger effect of intra-African immigration than that of immigration for the entire sample seems consistent with the Heckscher-Ohlin theory of factor price equalization with free trade. The results also show that the positive effect of intra-African immigration passes through the improvement of total factor productivity and the efficiency of physical capital. Moreover, at the sectoral level, intra-African immigration positively and significantly affects labour productivity only in the services sector. The robustness analyses I carried out confirm all these results. Thus, it appears that intra-African immigration has played an important role in the relative development of the tertiary sector in Africa. Indeed, while the share of the added value of this sector in Africa's GDP was 46% on average in the 1970s, it rose to 53% in the 2010s, i.e., seven percentage points more according to United Nations Conference on Trade and Development (UNCTAD) data. Meanwhile, the share of the agricultural and industrial sectors declined by three percentage points each, to 15% and 32%, respectively, in the 2010s.

Altogether, the results of this paper have several policy implications. First, intra-African immigration is clearly emerging as a key driver of regional integration and economic prosperity in Africa. Therefore, immigration policies between African countries must be strengthened by removing the barriers that hinder the mobility of people. In this perspective, the establishment of a single African passport would be a good regional integration policy. Second, while the African Agenda 2063 emphasizes industrialization as the main driver of Africa's development and as a vehicle for African integration, the lack of significant effect of immigration on agricultural and industrial sectors raises some thoughts. Indeed, industrial policies in Africa should be thought out in a more inclusive manner for both national and foreign workers. To achieve this, Africa's industrial development should gradually shift away from the extractive sectors to embrace other areas of Africa's comparative advantage, particularly in a context where green transition is an absolute necessity. The promotion of small and medium-sized enterprises in the manufacturing, assembly, technology and digital sectors could be a promising path. Moreover, in a context where climatic shocks are likely to cause growing migratory movements across the continent, agricultural policies must also be designed for a more resilient and inclusive agriculture, taking advantage of technological and digital advances as well as natural resources such as solar energy. The African Union Migration Policy Framework for Africa (MPFA) should therefore build on this reflection by ensuring that Africa's migration policy is coherent with its agricultural and industrial development in a context of green transition.

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