

**Note on the role of domestic and external demand on
the process of premature deindustrialization**

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Abstract - For some authors (Rodrik, 2015 and 2017), deindustrialization is premature in sub-Saharan countries. This implies that the period of industrialization has been too short, with too little job creation and growth to guarantee a development trajectory. This article studies the impacts of different demands (global/domestic) on industrialization. Our work shows that SSA countries suffer from premature deindustrialization that is rooted in demand mechanisms and not just in supply mechanisms.

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INTRODUCTION

Several countries in sub-Saharan Africa (SSA) are now experiencing a phenomenon of premature deindustrialization: the industrial sector declines at the same time as the agricultural (reprimarization) or service sectors develop. For these countries, industrial declines are occurring at low levels, while the industrialization process takes little time. According to Rodrik (2013), for emerging and developing economies, “premature deindustrialization” offers little opportunity for dynamic long-term growth when it occurs over a short period of time (the turning point occurs in a few decades) and at low rates of industrialization. In particular, this phenomenon can be observed in Ghana, Kenya, Mauritius, Nigeria, Senegal, South Africa, Zimbabwe, etc. Manufacturing output as a percentage of GDP in Ghana for the period 1960 - 2011 was 19% at its highest level, in contrast to its lowest level of 8%. These maximum and minimum percentages were 13% and 6.5% for Kenya, 25% and 16% for Mauritius, 5.5% and 1.3% for Nigeria, 17% and 14% for Senegal, 24% and 15% for South Africa, and 15% and 7%, respectively, for Zimbabwe (Data source –UNSD).

Concerning the futures of developing countries, this point of analysis (premature deindustrialization) remains crucial, as many investigators argue that dynamic growth remains strongly associated with the development of the manufacturing sector and not that of the services sector (Kaldor, 1966; Ghani and O’Connell, 2014; Enache et al., 2016; Baumol, 1967; UNIDO, 2009 and 2018; Winters, 2010; MacMillan and Rodrik, 2011; Vries et al., 2013; Gelb et al., 2014 and Dercon and Gollin, 2014.). For these authors, it is manufacturing industries that allow rapid convergence towards developed countries because services generate few productivity gains (Baumol, 1967). Similarly, manufactured goods can be standardized and traded easily via international trade, which itself generates growth. Services are little affected by these phenomena because they are often nontradable, with low productivity and low technology (Ghani and O’Connell, 2014; Enache et al., 2016 and McCredie and Bubner, 2010).

Several explanations for this phenomenon can be found in the literature. For example, the rise in commodity prices over the last few decades has led countries to reprimarization. In explaining the difficult industrialization in developing countries, recent work has also highlighted the asymmetrical role of international trade (Bourguignon and Verdier, 2005; Galor and Mountford, 2008; Muendler, 2010; Chenaf-Nicet and Rougier, 2011 and Chenaf-Nicet, 2020), specialization in mining or oil resources and the development of new activities that seem too risky to entrepreneurs (Hausmann and Rodrik, 2003; Kangning and Jian, 2006; Dasgupta et al., 2008 and MacMillan and Rodrik, 2011). They also stress the shallow depth of the financial sector (Acemoglu and Zilibotti, 1997; Estrada et al., 2010) in addition to market rigidities, excessive regulation and limited adjustment capacity in developing countries (Hopenhayn and Rogerson, 1993; Bertola, 1994; Rodriguez and Rodrik, 2001; Boeri and Terrel, 2002; Bolaky and Freund, 2004; DasGupta et al., 2008; Chang et al., 2009 and Helpman et al., 2010). There are also empirical studies that highlight the mechanisms by which imperfect institutions affect productivity and capital accumulation (Hall and Jones, 1999; Acemoglu et al., 2005; Chenaf-Nicet, 2020). These points are related to financial development (La Porta et al., 1997 and 1998 ; Alfaro et al., 2004.), comparative advantages in trade (Dollar and Kraay, 2002; Costinot, 2009), and export diversification (Bénassy-Quéré et al., 2007). Authors also argue that weak protection of property rights can discourage investors (Engerman and Sokoloff, 1997; Acemoglu et al., 2003) and thus impose supply-side constraints on manufacturing sectors.

The demand (domestic or foreign) in all the above mentioned analyses is marginal, and, apart from the work of Rodrik (2013, 2015), Subramanian (2014) and Chenaf-Nicet (2020), which correlate demand and structural change, there is, to the best of our knowledge, no in-depth theoretical analysis of the link between deindustrialization and demand. As Alia (2014) noted, the majority of studies have considered productivity growth in the industrial sector as the central channel for reallocating factors of production. Demand factors are then seen more as catalysts for industrialization. The work of Rodrik (2013, 2015) and Subramanian (2014) and the experiences of FICs and NICs thus support the idea that sustained demand, while not always driving structural change and the industrialization process, allows the latter to be self-sustaining and sustainable. It is therefore necessary to study in depth the role of these demands, particularly in the case of sub-Saharan African countries, which are often producers of agricultural products and raw materials and which are struggling to orient their structural change in favour of modern manufacturing sectors. However, the economic literature on structural change often presents the various determinants of structural change and industrialization, focusing on supply rather than on demand mechanisms.

Our objective is to discuss the elements that facilitate understanding of the difficult structural changes and the deindustrialization process not from the supply side but from the demand side. Two factors are of particular concern here. The first relates to the sizes of these countries' domestic markets, which may be too small to serve as bases for industrialization. Similar to the Asian Newly Industrialized Countries (NICs) of the 1960s, SSAs cannot anchor their strategy of structural change based on domestic demand for manufactured goods. Consequently, the process of structural change can be based only on external demand. However, the second factor is that world markets are decreasingly driven by demand for manufactured goods and increasingly by demand for services. The latter would ultimately prevent countries from developing their industries based on external demand due to a lack of opportunities (Rodrik, 2015).

The remainder of the paper is organized into two sections. We present a literature review on the place of domestic demand in the SC in the next section and then review the place of global demand in section two. Finally, we draw conclusions.

1. LINKS BETWEEN STRUCTURAL CHANGE AND DOMESTIC DEMANDS IN THE LITERATURE

As some theories show, structural change also depends on demand mechanisms. It is in the increase in income due to structural change and growth that the first impacts of demand on structural change can be identified. The well-known mechanism is given by Engel's law (1857), according to which the increase in income allowed by industrialization leads to a change in the structure of demand. Households consume more manufacturing and service products and a lower proportion of agricultural goods. This mechanism then reinforces the structural change in favour of the industrial sector.

Nevertheless, debates regarding structural change determinants are more longstanding. Kim (2015) thus indicated that already in "The Wealth of Nations", Smith (1776) stated that a greater proportion of the capital of any growing nation should be directed first to agriculture, then to manufacturing, and finally to trade. The reason cited by Smith (1776) for this three-step reallocation is that agriculture is the most important sector in the early stage of a country's development since food is the priority for a population's subsistence. After this stage, when it is no longer necessary to meet the survival needs of the population and as a country's productive capacities increase, the manufacturing sector can progress and become

more important. However, this process is not uniformly observed in all countries. One of the reasons suggested by Kim (2015), again referring to the work of Smith (1776), is that endogenous demand forces play a decisive role in the process of structural change. This point was taken up in the work of Chenery and Syrquin (1975), who classified the factors of structural change into two distinct categories: “universal factors”, which can explain the uniformity of certain models of structural change, and “group factors”, which rather explain their specificity.

The “universal factors” are essentially supply factors, such as access to capital markets, the state of technology or an increase in the skilled labour force. On the supply side, recent works, such as those of Herrendorf et al. (2014) and Alia (2014), and older works, such as those of Lewis (1954), Rostow (1959), Kuznets (1971), Chenery (1960), and Chenery and Syrquin (1975), have thus indicated that structural change is enabled by a process of reallocation of factors of production among the three sectors of the economy (agriculture, industry, and services) in a manner favourable to industry. In this framework, it is assumed that the most productive modern sectors – namely, those of manufacturing industries – attract labour, especially the most qualified, who then leave the less productive primary activities located in rural areas. Industrialization is accompanied by a rural exodus, strong urban growth and the emergence of a middle class. The modern manufacturing sector, which creates higher added value and more jobs, allows for higher income and thus allows more people to rise out of poverty.

There are three “group factors” that help to explain differences in the structural change pattern. First are the *size of the domestic markets* and then *the stage of development*, both of which impact the structure of domestic demand. Finally, there is *the abundance of natural resources*, which can lock a country into nonindustrial specialization. In Chenery and Syrquin's early work (1975), which gave demand a leading role, group factors can slow structural change, depending on the country. More recent work has also considered these factors but as having the potential to promote structural change. For example, Alia (2014) noted that other forces besides relative labour productivity (Ngai and Pissaradies, 2007), explain structural change, such as the sizes of domestic markets (Leukhina and Turnovsky, 2016), trade openness and global demand (Matsuyama, 1992), access to the international market and proximity to an already industrialized country (Breinlich and Cuñat, 2013), and finally differences in income elasticities (Kongsamut et al., 2001; Murphy et al., 1989).

Similarly, Van Neuss (2017), joining Alia (2014), indicated that if technology (Ngai and Pissaradies, 2007; Acemoglu and Guerrieri, 2008; Alvarez-Cuadrado et al., 2016), sectoral links between inputs and outputs (Berlingieri, 2014), and international trade (Matsuyama 2009; Autor et al., 2013; Uy et al., 2013) have definite impacts on structural change, the role of agents' preferences should not be neglected (Kongsamut et al., 2001; Foellmi and Zweimuller, 2008). Świącki (2013), who examined the channels that promote structural change, such as differences in factor costs between sectors and technological progress, emphasized agents' nonhomothetic tastes and international trade as driving forces of structural change (Van Neuss, 2017).

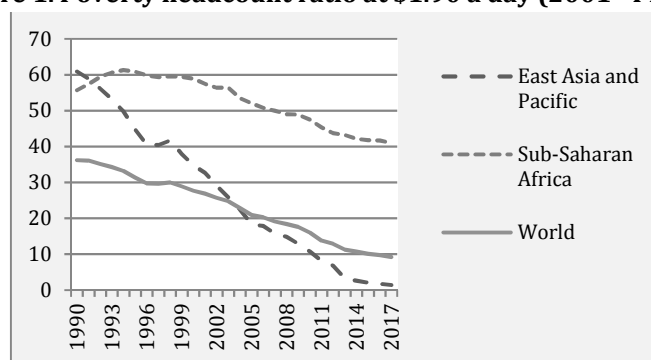
Here, we present these studies in greater depth to indicate the mechanisms that link domestic demand to industrialization.

1.1. Nonhomothetic preferences and differences in income elasticity

The process of reallocating economic activities between sectors may result from changes in the structure of demand, which is itself linked to changes in real income (Chenery and Syrquin, 1975; Murphy et al., 1989b; Kongsamut et al., 2001). If income increases, the demand structure changes. Thus, consumer demand for durable goods increases and demand for primary goods decreases.

Foellmi and Zweimuller (2008), who accounted for the nonlinearity of the Engel curve, described how demand changes with income and point out that the structural transformation occurs as a result of changes in consumer demand as households move out of poverty and become wealthier. In their work, they classified goods into luxury goods with high-income elasticities and necessity goods with low-income elasticities. They thus echoed the conclusion of Kongsamut et al. (2001) that changes in the structure of production are caused by differences in the income elasticity of demand for different goods. For Foellmi and Zweimuller (2008), this phenomenon increases as populations become richer. Indeed, in a poor society, most of the income is spent on basic commodities, especially food. As a result, most of the population works in the agricultural sector. However, the richer society becomes, the more consumers devote a growing share of their income to satisfy less-basic needs that are linked to the creation of employment opportunities in the manufacturing sector. Ultimately, the more mature a society becomes, the more consumers will demand goods that are produced by the service sector. The logic that demand is a driver of structural change therefore appeals to Engel's law, which states that the share of expenditure that is allocated to agricultural products will decrease as household income increases. Through this new demand, the production of manufactured goods must increase and accelerate structural change.

Figure 1. Poverty headcount ratio at \$1.90 a day (2001 - PPP)



Source: World Bank database.

Thus, there is a body of work (Foellmi and Zweimuller, 2008; Kongsamut et al. 2001), that has emphasized differences in income elasticity to explain increased demand for manufactured goods when incomes rise. These scholars have argued that agents' preferences cause the income elasticity of demand to be less than 1 for agricultural goods, equal to 1 for manufactured goods, and greater than 1 for services. Thus, any income growth has a greater impact on the manufactured goods and services sectors and accelerates structural change.

Van Neuss (2017) also highlighted the nonhomothetic preferences that lead to the existence of a nonlinear Engel's law curve. He indicated that as income increases, the marginal rate of substitution among goods varies, leading to a reallocation of goods production across sectors. The production of goods with higher demand will be prioritized over other goods in less urgent demand (Foellmi and Zweimuller, 2008).

When we examine the evolution of poverty in sub-Saharan Africa, we see that this evolution remains unfavourable to a shift in household consumption from subsistence goods to industrial durable goods. At comparable levels in 1998, the poverty

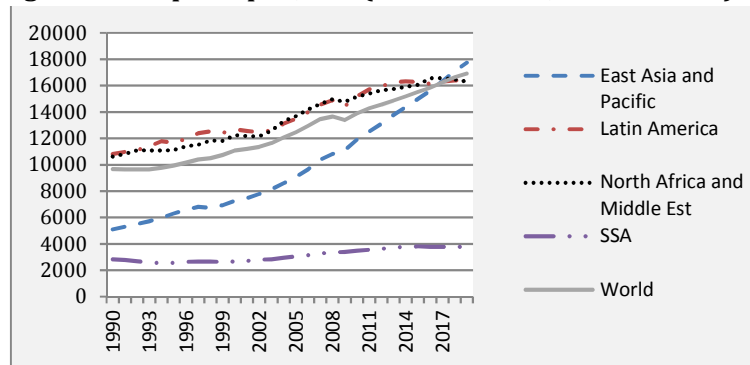
rate in SSA has declined little over the last decade and is at a high level (40% of the population in 2017), while that of Asia was only 1.5% in 2017 (Figure 1).

Extreme poverty and low income of a large part of the population are linked to the small sizes of the markets.

1.2. Domestic market size

The size of a domestic market is often considered one of the channels leading to structural change. For example, Ho (2015) showed in a theoretical model that population growth leads to an increase in manufacturing output relative to agricultural output. In his two-sector (agricultural and manufacturing), two-factor (labour and land) model, where agricultural production shows decreasing returns, the representative household considers agricultural and manufactured products as complementary. When the population increases, manufacturing demand increases relatively more than does agricultural demand. This phenomenon leads to an increase in the relative price of agricultural products. The result is an increase in labour in both sectors that reduces the marginal output in the agricultural sector (relative marginal output effect). According to this work, there is therefore a positive relationship between population size (or the increase in per capita income) and industrialization, whereas a small market can only slow the process. The large size of the domestic market (measured by population size or per capita income) is a catalyst for structural change.

Figure 2. GDP per capita, PPP (constant 2017, international)



Source: World Bank database.

Similarly, for Leukhina and Turnovsky (2016), the small sizes of domestic markets in developing countries, unable to absorb new supply, may explain the lack of structural change. This idea is similar to the older theoretical work of Krugman (1980), which showed that the larger the sizes of markets, the greater the ability of countries to diversify themselves and expand their manufacturing exports.

However, it is obvious that SSA countries have narrow national markets since 28 of them are LDCs. Indeed, even if the total population of the zone increased by 117% between 1990 and 2017 (World Bank data), it is difficult to imagine that these countries can anchor solid industrialisation on the basis of population income as measured by GDP per capita.

Over the period 1990 - 2020, GDP per capita grew by 247% in Asia, 51% in Latin America, 53% in the MENA region and only 33% in Sub-Saharan Africa (Figure 2), and GDP per capita in SSA is today 4.5 times lower than that in Asia (World Bank data).

1.3. Urban growth rates and demand for services

All the work described above has attempted to explain the demand-driven mechanisms by which a certain structural change can occur: the change involving a decline in the agricultural sector and a growth of the industrial sector. However, other work, mainly empirical, has shown that in resource-rentier countries, industrialization may not take place because there is too great a demand for nondurable goods and services. Thus, in the case of resource-producing and resource-exporting countries, this is partially explained by the development of what Gollin et al. (2016) referred to as “consumer cities”. Indeed, in theory, industrialization should be accompanied by greater urbanization because workers leave unproductive agricultural activities for new industrial activities located in cities. This process is accompanied by an increase in income that allows households to consume more tradable industrial goods and services. Urbanization and industrialization go hand-in-hand, and cities that follow this pattern of development were called “production cities” by Gollin et al. (2016).

However, Gollin et al. (2016) and Chenaf-Nicet (2020) have shown that this link does not always exist in resource-producing countries. Urbanization is explained by a growing proportion of the population not seeking urban employment but purchasing nontradable goods and services, which are mainly found in cities. In some resource-producing countries, large urban areas are becoming “consumer cities” in which some households can spend their rent from primary resources. Urbanization and the growth of the service sector then go hand-in-hand. Ghana, Mozambique, Nigeria, Senegal, South Africa, Zambia and Zimbabwe are experiencing this phenomenon (Chenaf-Nicet, 2020). The service sector progressed at the same time as the deindustrialization of the economy was confirmed. However, it is the services sectors with low-skilled job and low value-added creation such as retail trade, that have grown.

Moreover, while the urbanisation rate is rising in SSA (40% of the population will live in cities in 2019, World Bank data), it is nevertheless resulting in a multiplication of disadvantaged neighbourhoods, with high population density and little infrastructure (World Bank Urbanization Report, 2017). Similarly, according to the World Bank’s Urbanization Report (2017), which compared the urbanization process in Africa with that observed in other developing regions in the past, the urbanization of the Middle East/North Africa and East Asia/Pacific regions had reached an urbanization level of 40%, but with per capita GDP of \$1,800 (in 1968) and \$3,600 (in 1994), respectively. In Africa, GDP per capita is only \$1,000, which leaves little room for a demand for durable industrial goods, while essential goods consumption or services demand (retail trade) is growing.

2. IMPACTS OF FOREIGN DEMAND ON STRUCTURAL CHANGE

Demand is also highlighted in empirical work on Asian NICs (the four dragons) to characterize their outward-oriented strategy. However, domestic and foreign demand do not play the same role, depending on the size of the country. Thus, according to Kasahara (2004), if it is possible to refer to the “flying geese strategy” developed by Akamatsu (1962) to describe the phenomenon of industrial development of certain economies in the course of catching-up, several versions must be considered according to the places and roles of the different demands. For Kasahara (2004), the first version of this strategy was the one devised by Akamatsu (1962) and applied not only by Japan in the 1960s and 1970s but also by a succession of small countries, such as the Republic of Korea, Taiwan, Singapore, Hong Kong, Malaysia and Indonesia. The model of economic development described by Akamatsu (1962) indicated that countries engage in a process of industrialization

and integration into international trade in three stages. First, the country engages in a process of industrialization of low-tech manufacturing products that it has previously imported. In the second stage, it increases its production (learning by doing) by using domestic demand. Once it has sufficient control over the production and quality of the product, it then becomes an exporter, this time relying on foreign demand. According to Schmiegelow (1991), this development model helps to explain how the Asian region emerged by transferring comparative advantages and complementarities from Japan, South Korea and Taiwan via the relocation of productive segments. However, according to this author, the successes experienced, for example, by South Korea, are not fully explained by the theories of international trade but rather can also be explained by the intervention of the state, which has been able to implement strategies to enhance exports and import substitutes. In the case of large emerging countries such as China, this would rather be a second version of the strategy. Indeed, research has shown that if this country based its industrialization first on external demand, it is now looking for a new lease on life by attempting to conquer its domestic market to reduce its dependence on external markets and sustain its growth model and its structural changes (Artus and Xu, 2014).

Here, we present the theoretical elements of the debate on the place of foreign demand.

2.1. Trade openness and foreign demand

Openness to trade and capital flows, which accelerates the diversification of economies and technology transfers and, according to some, stabilizes the growth process, is often considered a structural change channel (¹ Artus and Xu, 2014). In a globalized world, if an agricultural sector is not productive, trade openness and access to new markets lead the labour force to the manufacturing sectors. Rodrik (2011) thus showed that internationalization accompanied by the removal of trade barriers creates pressure on local producers to bring themselves up to the standards of global competitors. However, if local firms are unable to keep up with global competition, they disappear, but those that manage to keep pace gain productivity. As a result, the opening up of trade increases competition and leads to productivity gains mainly in modern sectors, often manufacturing. Hausmann et al. (2007) noted that trade openness also allows access to new technologies and promotes structural change but only under the conditions of favourable institutions.

Chang et al. (2009) also considered the conditions under which trade openness can affect structural change. They stressed that international integration only exerts positive effects in terms of structural change if complementarities are established such as free entry of firms, labour mobility, investment in education and financial development. International trade can therefore boost productivity in sectors that are exposed to foreign competition. According to Van Neuss (2017), this then promotes income growth, which in turn influences the share of spending in the three sectors of the economy.

It can be noted that the initial context of a country, in terms of specialization, income, factor endowments or protectionist policies, is a determining factor in the more or less favourable impact of international trade. Indeed, according to Matsuyama (2009), international trade can have different impacts on the reallocation of factors depending on whether a country is protectionist or more open. Świącki (2013) showed in fact that rapid growth in manufacturing productivity leads to a decline in manufacturing labour in the case of closed economies, whereas the opposite situation is observed in the case of an open economy because manufacturing employment can grow through specialization according to comparative advantage.

Similarly, according to Galor and Mountford (2008), in high-income countries, income growth generated by international trade is used by the population to extend children's schooling (human capital investment). In low-income countries, this income supplement would allow populations to conceive more children. This would then delay the demographic transition of the poorest countries and explain the "Big Divergence". For Bourguignon and Verdier (2005), opening up to world trade, before protecting skilled labour-intensive activities, can lock poor economies into a low-level equilibrium due to a decrease in both the relative price of skilled labour and investment in human capital. Trade openness may thus discourage the allocation of skills in circumstances where specialization is less export-oriented (Muendler, 2010.). Similarly, a low level of trade diversification has been shown to reduce the impact of foreign direct investments (FDIs) on growth (Alaya et al. 2009; Balasubramanyam et al., 1996; Nicet-Chenaf and Rougier, 2011). These previous studies have confirmed the idea that poorly diversified economies face too few complementary factors and too little absorptive capacity to produce positive spillover effects.

Many studies therefore have shown that access to foreign markets cannot be a guarantee of perennial industrialization; this depends on the degree of insertion in global value chains, the proximity of major markets or the nature of global demand.

2.2. Access to the international market and proximity to industrialized countries

Access to the international market and proximity to an already industrialized country are often seen as channels that influence structural change. Thus, within the framework of economic geography and for developed countries, we can cite the theoretical work of Helpman and Krugman (1985), followed by that of Behrens et al. (2014). Within an empirical framework and for OECD countries, there is, in particular, Davis and Weinstein's (2003) work, which showed that home market effects are important for a broad segment of OECD manufacturing. Regarding NICs, we can cite the work of Breinlich and Cuñat (2013), which used an indicator of centrality to markets to construct a simple linear model based on the hypothesis that developing countries in proximity to foreign markets experience greater demand for both agricultural and manufactured products. They showed that higher aggregate demand leads to higher wages, which drive local production into manufacturing when preferences are nonhomothetic and trade costs low. They thus explained that access to the international market and proximity to an already industrialized country are key factors in industrialization, particularly in the cases of Hong Kong, Singapore and Taiwan. These countries have thus benefited not only from their outward-looking trade policy but also from their proximity to the large Japanese market.

Shepard et al. (2016), who compared trade costs between developed countries and several developing countries, showed for countries located in sub-Saharan Africa (SSA) that trade costs are approximately twice as high as in the comparator markets (the UK and the USA), with the exception of South Africa¹. The study also showed that the main reason SSA countries are integrated into trade networks is for the agricultural sector. The United States and Great Britain are the source of demand for SSA's industrial products only in the textile and clothing sectors².

¹ In their study trade cost includes the full range of trade frictions, including tariff and non-tariff barriers, regulatory measures, standards, differences in cultural and legal institutions, as well as geographical and historical factors.

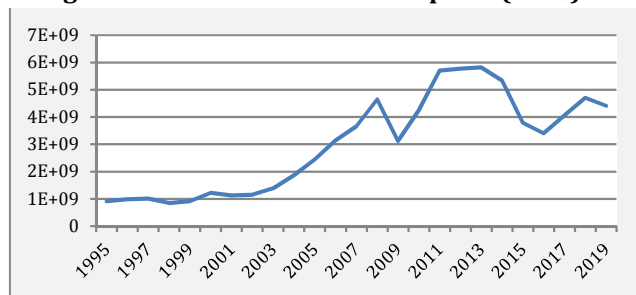
² For the United States, this can be explained by the signing of the preferential agreement: African Growth and Opportunity Act.

Allard et al. (2016) used a centrality index to show that sub-Saharan Africa remains the least integrated region in the world, with an average centrality of only approximately half of that observed in emerging economies. According to Allard et al. (2016), this partly reflects a relatively lower level of development than in other regions. However, even South Africa, the highest-income country in the region, has a relative position that is lower than those of other emerging markets, such as Brazil and Mexico.

2.3. Global demand for resources

The reallocation of factors towards more productive activities is not systematic when global demand locks a country into resource-based specialization and when new activities appear to be riskier (Hausmann and Rodrik, 2003; MacMillan and Rodrik, 2011). For example, Dasgupta et al. (2008) showed that the low impact of trade and FDI on employment in MENA countries can be explained by a high concentration of exports both in downstream activities, such as capital-intensive energy industries (refined gas, fertilizers and plastics), and in goods with low growth and low value added, as in the case of non-oil products. More recently, for China's resource-rich provinces, Kangning and Jian (2006) suggested that these factors are not conducive to economic development or industrialization because the resource sector concentrates too much capital at the expense of other sectors. Finally, we can mention that Sachs (2003) noted that many resource-producing developing countries have weak institutions that can neither counter rent capture nor ensure a redirection of profits from the primary sector to the secondary sector.

Figure 3. World raw material exports (Md \$)



Source: UNCTAD database.

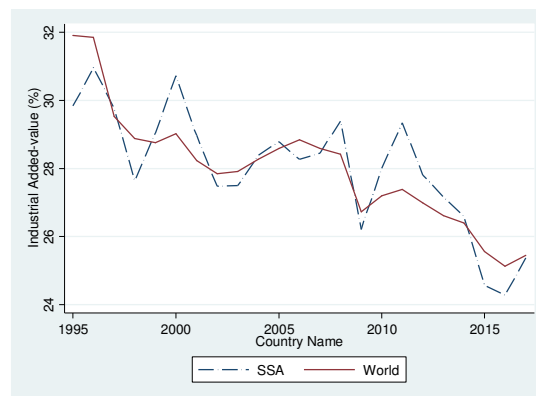
As seen in Figure 3, since the early 2000s, global demand for raw materials (as measured by world exports) has been growing steadily. Although from 2010 onwards this growth is decelerating, it remains at a high level. A very significant component of the increase in exports from sub-Saharan Africa between 2000 and 2012 has been in response to Chinese demand: 50% for minerals and 25% for crude oil (Chevalier and Le Goff, 2016). This growing demand, which has maintained the specialisation of the SSA countries in these sectors, is also accompanied by a rise in prices. Indeed, if we look at the primary commodity price index proposed by the IMF, we note that it increased by 230% between 1990 and 2013 and by 107% between 1990 and 2020. Chenaf-Nicet's work (2020) showed that over the period from 1984-2013, countries such as Angola, Congo, Guinea-Bissau, Liberia and Sierra Leone experienced an episode of reprimarization that can be explained by the rise in commodity prices in the 1990s. Favourable terms of trade for resource-producing countries have encouraged these countries to maintain their primary specializations.

2.4. Global demand for Services

The last hypothesis that can be explored is that of a world demand that is decreasingly directed towards goods production and increasingly towards services, and this leaves little opportunity for growth in the industrial sector, which then declines. Concomitantly, this process offers more opportunities for the service sector.

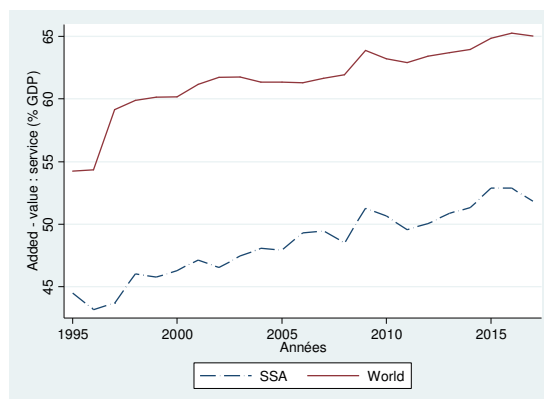
It can actually be observed that the productive structure of the SSA countries is indeed moving in the direction of deindustrialization and in a manner similar to the global trend. Figure 4 thus shows that the share of value-added industries as a percentage of GDP in this region and in the world has been steadily declining since the 1990s (Figure 4), while the share of services has been growing (Figure 5).

Figure 4. Industrial value-added share as % of GDP in the world and in SSA 1995-2014



Source: World Bank database.

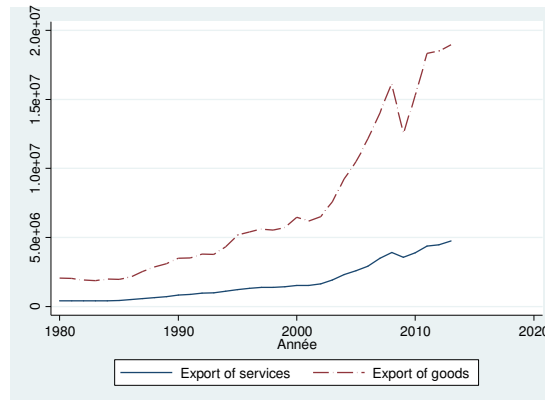
Figure 5. Service value-added share as % of GDP in the world and in SSA 1995-2014



Source: World Bank database.

Likewise, when we observe the evolution of global services exports (Figure 6), we can see that the growth of services exports is indeed sustained. It grew by 210% from 2000 to 2014, while merchandise exports grew by 193% over the same period (UNCTAD data).

Figure 6. World exports of services and goods (millions of US dollars) 1980-2014



Source: UNCTAD database.

Thus, as shown in Figure 6, even if world exports of merchandise remained 4 times higher than exports of services, in 2014, services represented 64% of world value-added share, while industry represented only 26% (Figure 5). On these points, the SSA countries are also following this trend, since their services exports increased by 120% over the period from 2005-2018, while those of goods increased by only 76%, and the share of services in the total value added was higher than that of industry (World Bank).

The global demand for services is therefore one element that drives developing countries to orient their productive and export structure towards services rather than industry. SSA countries, some of which are LDCs, are therefore struggling to develop the absorptive capacities necessary for the development of an internationally competitive services sector that provides the necessary spillover effects for long-term growth. However, if we analyse services exports by knowledge intensity, we note that developed and emerging countries export mainly knowledge-intensive services (KIS), such as financial, telecommunication, or air transport services, while SSA countries export mainly low-knowledge-intensive services (LKIS), such as postal services, travel services or courier services (WTO data).

One question remains: will sub-Saharan Africa be able to develop without factories (cadot et al. 2015) and only with the services or raw materials sectors?

CONCLUSION

Our work shows that SSA countries suffer from premature deindustrialization that is rooted in demand mechanisms and not simply in supply mechanisms. Tight domestic markets and strong global demand for services leave few growth opportunities for SSA manufacturing sectors. Similarly, their high specialization in resources prevents them from benefiting from the positive effects of international integration. Our work also shows that the services sector, which is growing in this region, remains highly specialized in low-knowledge-intensive services.

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Une note sur le rôle de la demande intérieure et de la demande extérieure dans le processus de désindustrialisation précoce des pays subsahariens

Résumé - Pour certains auteurs (Rodrik, 2015 et 2017), la désindustrialisation est prématurée dans les pays subsahariens. Cela implique que la période d'industrialisation a été relativement courte, avec trop peu de création d'emplois et de croissance pour garantir une trajectoire de développement. Cet article étudie l'impact des différents types de demande (globale/domestique) sur ce processus d'industrialisation. Nous montrons que les pays d'Afrique subsaharienne souffrent d'une industrialisation prématurée plus ancrée dans les mécanismes de demande que dans les mécanismes d'offre.

Mots-Clés

Changement structurel
Désindustrialisation précoce
Demande de services
Afrique subsaharienne
