ECONOMIC DEVELOPMENT & INSTITUTIONS

BENIN INSTITUTIONAL DIAGNOSTIC WP19/BID02

CHAPTER 2:

A REVIEW OF PRESENT ECONOMIC AND SOCIAL CHALLENGES

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1 Benin's economic development from 1960

This chapter is the second part of the overview of institutional and other constraints on the development of Benin. While the first chapter focused on the geographical, historical, social, and political characteristics shaping the environment in which Benin's development is set, this chapter looks more closely into the country's economic performance and social achievements. This macro picture provides in Section 1 a close-up on growth and structural change and on key aspects of internal and external equilibrium. Section 2 focuses on poverty, inequality, educational, and health achievement. Section 3 summarises the main lessons drawn from these first two sections.

1.1 Economic growth (aggregate)

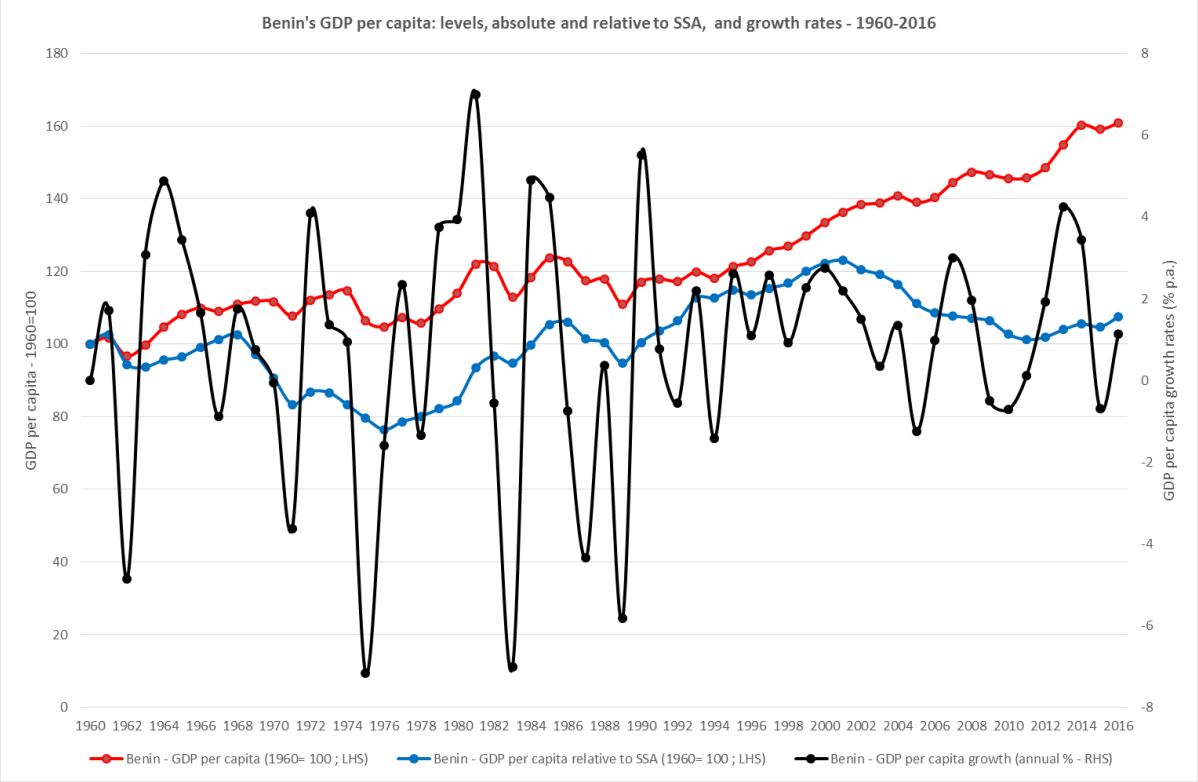
Considering the whole period since independence, Benin's growth performance has been relatively modest. With an estimated US$ 2,010 GDP *per capita* (at 2011 international prices) in 2016, Benin ranks among the world's poorest countries (just a bit higher than the world country ranking's lowest decile). While its GDP *per capita* is 72% higher in 2018 than in 1960, this only reflects a weak annual growth rate of 0.94%. Moreover, the high population growth rate Benin has experienced over this 56-year period (an average of 2.85% per year) requires a relatively high GDP growth to significantly raise *per capita* income levels. This clearly continues to be an important challenge for the country as the population's current annual growth remains close to this long period average, and close also to that of the average sub-Saharan African (SSA) country. This challenge will remain quite acute for the coming decade as demographic projections forecast an annual growth rate of Benin's population that only slowly declines, to reach 2.50% per year in 2030.[1]

Benin's growth performance from independence in 1960 to the current period closely matches the major changes in economic policy the country has witnessed under its successive political regimes. One can accordingly distinguish three main sub-periods (Figure 1):

i) *The 1960–1972 sub-period*, during which political instability went hand in hand with a very volatile and on average low growth rate: GDP *per capita* grew during this period by 1% per annum, less than the average SSA country (2.26%). This post-colonial period was marked by a continuing focus on exports of agricultural products – mostly seed cotton, whose output grew tenfold between 1965 and 1972 – and imports of manufactured products, with France as the country's main trading partner (Dossou and Sinzogan, 2007, p. 90).

[1] Source: United Nations (2019). The data reported in the text for Benin are those of the medium variant of the projections. For 2030, the high variant population growth rate is 2.77% per year and 2.21% for the low variant.

Figure 1: Benin's GDP *per capita*: levels, absolute and relative to SSA (1960=100) and growth rates, 1960–2016



Source: World Development Indicators (WDI).

ii) *The 1973–1989 sub-period*, during which the Marxist and military regime managed the economy through state control and central planning. In this period, the major industries and banks were nationalised. Public involvement in the agricultural sector became important through government-owned enterprises active in agricultural production, transformation, and distribution, supervised by the newly founded SONAPRA (*Société Nationale pour la Promotion Agricole*). New public enterprises were set up in most sectors of the economy, with heavy public investment in three large projects: a cement plant in Onigbolo, planting and processing of sugarcane units in Savè, and the exploitation and refining of offshore oil in Semè. Economic growth was quite uneven during this period, affected by counteracting factors of domestic or of foreign origin. Growth was weak in the early years (1973–1976) of the period, with a big drop in 1975 as a result of the oil crisis and a poor performance in the cotton sector. It then picked up, under the pull of the large public investments and of strong demand from Nigeria. Growth *per capita* averaged a hefty 3.3% per annum from 1977 to 1981.

However, it plunged quickly again after 1981 as major disequilibria became apparent (World Bank, 1984): i) an increasing external deficit, stemming from low export performance, partly due to the reversal of external demand and depressed terms of trade, as well as from huge imports of capital goods, an immediate consequence of the large public investment projects. Accordingly, the trade balance deficit reached its maximum (close to 30% of GDP) in 1982; ii) an

increasing pressure on public finances as a result of a decline of import duties, of lossmaking public enterprises, of increased government consumption (mostly on wages), and high costs and lows returns on poorly targeted and inefficiently executed public investments. The overall budget deficit reached 14% of GDP in 1984 (World Bank, 1998). As a consequence of these twin deficits, external public debt expanded rapidly, to reach a ratio to 320% of exports (75% of GDP) in 1985. Public debt problems also involved the banking system, which had lent massively to finance the public enterprises and had refinanced themselves with the BCEAO, the central bank of the West African Economic and Monetary Union (WAEMU). When the public enterprises fell into insolvency, the government had to step in and guarantee the bank's debt to the BCEAO. It became clear that full service of total government debt could no longer be guaranteed. Arrears on external and domestic debt were building up. The banking system collapsed in early 1989. Deposits were frozen, which for many years undermined public confidence in the formal banking system. Having piled up a ratio of 80% of non-performing loans, the three government-owned commercial banks had to be liquidated.

Amidst the financial crisis, Benin had to request debt relief from its creditors and new external financing. In 1989, a Structural Adjustment financing was set up by the World Bank, the International Monetary Fund (IMF), and other multilateral and bilateral donors. The *adjustment* part of the package, effective in 1989–1990, intended to tackle the twin deficits aimed at reducing absorption (e.g. through the downsizing of the civil service and liquidation of public enterprises). Given Benin's fixed exchange rate commitment within WAEMU, adjustment could not count on the increased external competitiveness a devaluation might have achieved. The *structural* part of the package proposed a wide-ranging reform programme and was designed to be implemented over several years.

The financial crisis, the ensuing socio-political crisis, and the growth-reducing short-term effects of adjustment measures interacted to result in a dismal performance of Benin's economy during the 1982–1989 period: real GDP *per capita* decreased annually on average by 1.3% during this seven-year period. It must be noted that Benin's performance was not atypical for the region: many other SSA countries faced similar adverse external shocks and domestic failures in managing the economy and experienced similar macroeconomic adjustment policies. Indeed, GDP *per capita* also declined in the whole region during this seven-year period, on average by an annual rate of 1.4%.

Considering the whole 16-year sub-period, which ended with Benin's biggest macroeconomic crisis yet, it appears that Benin did not succeed in growing sufficiently to improve *per capita* income, which was in 1989 approximately at the same level as in 1972.

iii) *The sub-period after 1990*, during which Benin launched important economic reforms in parallel with its political reforms based on a new democratic consensus. The wide-ranging economic reforms initiated in 1989 were designed and sponsored under Benin's first Structural Adjustment programme (which covered the period 1989–1992) and by two successive Enhanced Structural

Adjustment Facility programmes (covering the 1993–1999 period). The economic reforms aimed at liberalising trade, lifting domestic regulations (tax reform and revised labour and commercial legislation), improving the performance of a down-sized public sector, privatising government-owned industrial and commercial enterprises, developing a more favourable investment climate (via a new investment code), and restructuring the banking system.

After the 1989 drop in GDP, growth picked up again in 1990 and has remained in positive territory since. Real GDP *per capita* rose at an annual rate of 1.2% (4.2%) over the whole 1990–2016 period. It was also much less variable than during the two previous periods. Growth was not fully synchronised with the average SSA country, however, with Benin growing more rapidly from 1990 to 2002 and less systematically so afterwards. Indeed, growth was more dynamic during these first 12 years: GDP *per capita* grew at 1.4% per annum (GDP at 4.6% per annum), with only a relatively minor setback from the shock of the devaluation of 1994 of the *West African CFA franc* and from concomitant adjustment measures. External competitiveness was actually boosted by the devaluation.

It is difficult to assess to what extent the liberalisation of the economy contributed to this growth performance. An indication may be found in the cotton sector, which forms the basis of the rural and agro-industrial economy and represents 70% of exports (see Section 1.3.1): production was boosted (it increased threefold between the 1985/86 and 1997/98 seasons) and yields improved. Also, foreign direct investment, quasi nil before 1990, reached 4% to 6% of GDP in the early 1990s. But external factors have also played a major role, notably the pull of Nigerian growth.[2] Benin has also benefited during this period of solid support and high confidence from bilateral and multilateral donors (including HIPC debt relief on its external debt in 2000–2003). This put strong pressure on the country to implement the large array of reforms sponsored by donors.

However, growth became more variable after 2002, and slightly lower. From 2003 to 2016, growth of GDP *per capita* averaged 1.1% per annum (4% per annum for GDP). Reforms were often not implemented with the necessary efficiency, as in the case of cotton sector reform, where organisational problems led to a sharp drop in cotton production (a drop by half between 2004 and 2010, reaching again its 2004 level only in 2014[3]). Foreign direct investment dropped again after 2000 to minimal levels until picking up in 2011. Growth failed to be sufficiently inclusive. The poverty headcount ratio at US$ 1.90 a day[4] stood at 48.8 in 2003 and at 49.6 in 2015.

[2] The contemporaneous correlation coefficient between Benin and Nigerian GDP growth rates is particularly high during this 1990–2002 period: 0.36 versus 0.19 for 1972–1989 and only 0.01 for 2003–2017. Only the 1990–2002 correlation coefficient is significantly positive. Note that contemporaneous correlations between the two annual growth rates can only be indicative of short-term effects of Nigeria's GDP on Benin's GDP, and cannot measure the longer term, structural relationship between the two countries' growth performance (see also Section 1.3.1).
[3] Data from www.indexmundi.com. See also Section 1.3.1.
[4] WDI data, threshold at 2011 PPP (purchase parity power) level.

1.2 Growth and structural change

We briefly present the production structure of the Beninese economy as shown by the official national account statistics published by INSAE and the Ministry of Economics and Finance. We consider only the most recent period (1999–2015). National account data are actually available since 1990 but they rest on a methodology, especially a classification of industries and activities, which was profoundly overhauled in the early 2000s. The national account data under this new methodology are only available since 1999, while the publication of those following the old methodology was discontinued after 2012. The methodological changes in the sectoral classification are too important to allow combining the data to cover the full 1990–2017 period. We therefore limit our analysis to the 1999–2017 period.[5]

Sectoral employment data are also not readily available. To study the effects of sectoral reallocations of activity on labour productivity, we therefore rely on a recent study by Haile (2018) covering the 2006–2015 period.[6]

Table 1 shows that Benin's economy is structurally dominated by the primary and tertiary sectors, which account for about 26% and 47% of GDP at factor cost respectively, on average over the reported period. The period average for the size of the secondary sector is 27% of GDP. The primary sector is heavily dominated by rain-fed agriculture, in which cotton plays a dominant role (see Section 1.3.1). Its share in GDP has been on a slightly decreasing trend. The secondary sector is dominated by small-scale processing units for agricultural products and by construction activities. Its share in GDP has also been on a decreasing trend, quite significantly so over the 1999–2013 period. The tertiary sector is the largest one, currently representing more than the half of GDP. It regroups transport, telecommunications, banking, and insurance as well as trade, catering, and hospitality services. It also includes public administration and public services in education, health, and social security. A key component in this sector is dominated by the activities of the Cotonou Autonomous Port, which is one of the main ports in the sub-region due to its transit role for the region's landlocked countries (Burkina, Niger, and Mali). It plays a central role in Benin's economy (see Section 1.3.1). It is this sector that has seen its share in GDP increase from an average of 42% in 1999–2003 to an average of 52% in the most recent sub-period (2014–2017), at the detriment of both the primary and secondary sectors. Within the tertiary sector, the most dynamic subsectors have been transport and communications (from 4.5% to 11.2% of GDP at factor costs between 1999 and 2017) and public administration and social security (from 6.4% to 9.4%).

Table 1 also reports the large role played by the informal sector in Benin: two-thirds of GDP originates in the informal sector. The ratio is highest in the primary sector, where all activity is recorded as informal. The ratio stands at 66% in the secondary sector and 46% in the tertiary sector.

[5] Note also that the national accounting system has recently been overhauled, providing for a larger use of survey data. As a consequence, there have been, for the year 2015, some moderate changes in the three sectors' shares (with the tertiary sector increasing its share in GDP by 2.9%). More spectacular is, for 2015, the 36.7% increase in nominal GDP, from the old to the new national account system. See INSAE (2019).
[6] Haile (2018) combines Beninese national account data with employment data taken from three waves of surveys of household living conditions (ECOMICoV 2007, 2011, and 2015) and complemented with the World Bank's International Income Distribution Data Set (I2D2).

Table 1: Sector-based structure of GDP (% of value-added at current factor prices)

	1999–2003	2004–2008	2009–2013	2014–2017	Average
Primary	26.0	27.7	25.5	23.9	25.8
of which informal	*25.9*	*27.8*	*25.4*	*24.5*	*25.9*
Secondary	32.4	28.7	24.1	24.3	27.4
of which informal	*21.5*	*19.8*	*16.2*	*14.4*	*18.0*
Tertiary	41.6	43.6	50.4	51.9	46.9
of which informal	*17.9*	*19.1*	*22.5*	*23.1*	*20.6*
GDP (factor costs)	100.0	100.0	100.0	100.0	100.0
of which informal	*65.3*	*66.7*	*64.1*	*62.0*	*64.5*

Source: INSAE for 1999–2015 data and Ministère de l'Economie et des Finances (2017) for 2016/17 provisional data.

Remaining at the aggregate sector level, one observes that the share of the primary sector decreases, by about 2 percentage points after 1999, mostly to the benefit of the tertiary sector (+2.8 percentage points). There is also a significant and regular decrease in the share of government services.

A more disaggregated sectoral growth analysis is provided by Haile (2018) for the most recent period (2006–2015). Table 2 reports the gross value-added at 2007 constant prices (GVA), employment (Emp.), and labour productivity per worker (LP).

Table 2: Gross value-added, employment, and labour productivity by sector (%)

	2006			2010			2015		
	GVA	**Emp.**	**LP**	**GVA**	**Emp.**	**LP**	**GVA**	**Emp.**	**LP**
Agriculture	26.9	59.4	0.41	26.1	45	0.51	22.3	42.1	0.52
Mining	0.5	0.1	5.31	0.4	0.1	4.12	0.4	0.1	4.47
Manufacturing	20.1	7.3	2.51	14.7	7.6	1.71	14.7	7.8	1.86
Utilities	0.4	0.2	2.33	0.6	0.2	2.98	1.1	0.2	5.95
Construction	7.8	2.3	3.16	7.9	2.6	2.7	8	2.7	2.93
Commerce	13.5	19.1	0.64	12.5	27.7	0.39	13.5	28.7	0.46
Transport	7.7	3.3	2.12	9.6	4.3	1.97	10	4.5	2.19
Finance	1.5	0.2	6.76	3.6	0.3	11.16	5.6	0.2	24.7
Other services	21.4	8.2	2.37	24.5	12.4	1.73	24.3	13.7	1.75
Total	**100**	**100**	**0.91**	**100**	**100**	**0.88**	**100**	**100**	**0.98**

Source: Haile (2018) - Excerpts from Appendix Tables 1, 2, and 3 (p. 18). The category 'Other services' includes public administration, education, health, real estate, renting and business activities, and community, social, and personal services. The data for GVA and Emp. are in %, and for LP in million CFA franc.

Agriculture is a sector that has seen its share in both GVA and in employment decline, the latter more significantly so. Its productivity has thereby somewhat increased, while remaining one of the lowest sectors. This probably reflects the fact that the sector has shed its lowest productivity or surplus workers. Manufacturing has kept a stable share in total employment, but has seen is productivity decline by some 20%, so that its share in total GVA decreased

by 5 percentage points. This could be explained by labour hoarding in the face of a decrease of demand for the sector's output. 'Commerce' and 'Other services' make up more than one-third of total GVA and have slightly increased their share (by 3 percentage points). Both sectors have at the same time raised their joint share in total employment from 27.3% to 42.4% – an increase of 15 percentage points – and witnessed a decrease of productivity of some 27%. None of these structural changes allows one to characterise either of these most important sectors as a potential 'engine of growth'. On the other hand, the (relatively) fastest-growing sectors (finance and transport) are small in terms of employment and GVA, and not in a position to pull growth significantly. The increase in the share of finance in GVA is mainly driven by higher value-added per employee, probably mostly reflecting a general upward trend in the salary scale within this sector. On the whole, total productivity has increased by close to 1% per year on average between 2006 and 2015, but this hides two diverging episodes: a decrease in productivity of a yearly rate of 0.8% from 2006 to 2010, followed by an increase at a yearly rate of 2.2%.

Table 3, which is based on Haile (2018), helps us to better understand which sectoral shifts in employment combine with inter-sectoral differences in productivity to generate the economy's changes in global productivity. The table features the decomposition of growth of overall labour productivity into its sectoral contributions (col. 3 -Total).[7] Each sectoral contribution is the sum of two components: i) a structural component, obtained by multiplying the *change* in the sector's share in total employment by its reference productivity level[8] (col. 1); and ii) a 'within-sector productivity change' component, obtained by multiplying the change in the sector's productivity by its reference share in total employment (col. 2).

Table 3: Sectoral decomposition of labour productivity growth, 2006–2015

	Annualised % changes		
	Structural change (inter-sectoral)	**Productivity within sector**	**Total**
Agriculture	1.02	0.69	1.71
Mining	0.00	-0.01	-0.01
Utilities	0.01	0.08	0.09
Manufacturing	0.07	-0.60	-0.53
Construction	0.11	-0.07	0.04
Commerce	-0.47	-0.53	-1.00
Transport	0.18	0.03	0.21
Finance	0.04	0.47	0.51
Other services	0.75	-0.83	-0.08
Total	1.73	-0.77	0.96

Source: Haile (2018). Excerpts from Table 3, p. 18.

Globally, labour reallocation across sectors would have increased global productivity by 1.7% yearly if each worker had retained his/her productivity constant at the reference level.

[7] The technique applied is the standard Shapley decomposition method (Haile, 2018, p. 10), which is used for computing the contributions of all the factors that determine growth of *per capita* GDP. We report only here the part concerning changes in productivity.
[8] A sector's reference productivity level (employment share) is defined as the average of its 2006 and 2015 productivity (employment share).

However, productivity has not remained constant and changes in sectoral productivity have, at constant shares in total employment, led to a decrease of global productivity, at an annualised rate of 0.77%. The major combined contributions (col. 3) to the change in global productivity come, on the positive side, from agriculture, finance, and transport, and on the negative side from commerce and manufacturing.

It thus seems that the major driving force of changes in global productivity over the 2006–2015 period is the reallocation of labour, away from the agricultural sector, initially the one with the lowest productivity. This helped increase average productivity on two counts: by the movement of labour out of agriculture and into somewhat more productive sectors, also by increasing the sector's apparent productivity over the period. The sectors that are at the receiving end of labour reallocation were, however, not able to transform this influx into higher growth. Labour did not move to high productivity sectors, on the contrary. Commerce, with a productivity rate even lower than in agriculture in 2015, and Other services (for a large part government services) ranking as the third lowest productive sector, depressed productivity growth over the period. When also considering the underperformance of manufacturing, where one could have expected higher productivity fostered by higher sectoral capital intensity and technology transfers from abroad, we are led to raise the question of sustainability. What is the long-term sustainability of structural changes that follow an agriculture-cum-service model, featuring mostly non-traded goods and primary commodities as outputs?

The low rate of productivity growth has to be considered together with the other two factors that contribute to *per capita* income growth: the share of working age population in total population and the employment rate. Over the 2006–2015 period, gross value-added *per capita* grew annually by 1.07%. Most of this growth came from productivity, with the two other factors having opposite effects: the positive effect of the decrease in the dependency rate was largely compensated for by a decrease in the employment rate of the working population (Haile, 2018). Therefore, the challenge for raising *per capita* income in Benin clearly lies in improving productivity across sectors and, *simultaneously*, in increasing the employment rate.

The broad picture that emerges, therefore, is that Benin is still lacking a powerful and sustainable engine of growth. Cotton and cross-border trade with Nigeria are considered the two leading sectors for the Beninese economy (see Section 1.3.1). Activities in the cotton sector span both the agriculture and manufacturing sectors, both of which display a weak productivity performance. In addition, there is a high level of variability in export revenues from these activities and they only weakly correlate with real GDP growth.[9] Concerning cross-border trade with Nigeria, a large part of which is illegal and informal, its development has surely contributed to the observed growth in the shares of the commerce and transport sectors. Again, however, average productivity has decreased in the former and only moderately increased in the latter. In addition, the sustainability of a strategy relying on this sector as a growth engine is clearly very questionable.

[9] The annual growth rate of real exports of agricultural raw materials and manufactured products combined has a range of [-32%; +87%]. Exports of these goods have a share in total exports that varies between 70% and 80% over the 1994–2017 period. The correlation coefficient between their annual growth rates and those of real GDP is 0.29 (Source: WDI – data in USD converted into local currency units and deflated by the GDP deflator).

With agriculture playing such a large role in the economy, both in employment and value-added, an important institutional issue relates to property rights in land. The question as to whether property rights in land are sufficiently secure comes up as a natural concern as far as productivity improvements in the agricultural sector are concerned. How secure land rights are best achieved is a tricky issue. Does the state need to intervene in a big way to establish formal land rights through cadastral surveys and land titling, or can it rely on informal rights and support rather than replace them? This also raises the question as to which agency is competent to deal with land conflicts, including assignment problems and issues of repossession of land by banks when the land is used as collateral: state courts or informal agencies possibly regulated by the state?

The case of Benin is especially interesting because in 2013 the state embarked upon a pioneering land titling reform undertaken in the framework of the MCA programme financed by the US development agency (other African countries are now following the same route). In the process, it has created a special agency in charge of surveying villages, mapping their lands and registering local land claims, and implementing the formalisation process (the *Agence Nationale du Domaine Foncier*). The impact of this programme has been recently evaluated with the help of a randomised controlled trial methodology, offering a unique opportunity to assess the experience (Goldstein *et al*., 2018). Also, a new law establishing full-fledged (freehold) land rights supported by formal titles was passed in 2016.

Clearly, serious problems have been encountered in the designing and the enforcement of the 2013 law. There are several possible sources of these problems: (i) the individualisation of land rights in the context of traditional collective or communal land tenure; (ii) the mapping of customary land rights via the *Plans Fonciers Ruraux* (Rural Land Maps); and (iii) the mechanisms of rights' enforcement and dispute settlement. Also, in a country where mobility is high and ethnic diversity large, how migrants' rights are transformed as a result of the formalisation of land rights is a crucial issue. Finally, did the fact that only temporary tenure rights were granted under a first phase of the reform (lasting five years) create disincentives for firms to invest and for banks to accept land as collateral? How were conflicting land claims adjudicated during that transitory period? How well accepted were the conflict-settlement procedures?

1.3 Specific structural characteristics

This subsection concentrates on two specific structural features of Benin's economy, allowing us to better understand the aggregate performance presented in the previous subsection. Analysis includes the discussion on leading real sectors (Section 1.3.1) and the financial system (Section 1.3.2).

1.3.1 Leading real sectors

An overview

Benin is dependent on the activities of two main real sectors: cotton and cross-border trade. Cotton is produced in Benin and mainly exported abroad to Asia and Europe, whereas cross-border trade involves the importations of goods from Asia and Europe through the harbour of Cotonou and later re-exported to neighbour countries through informal channels.

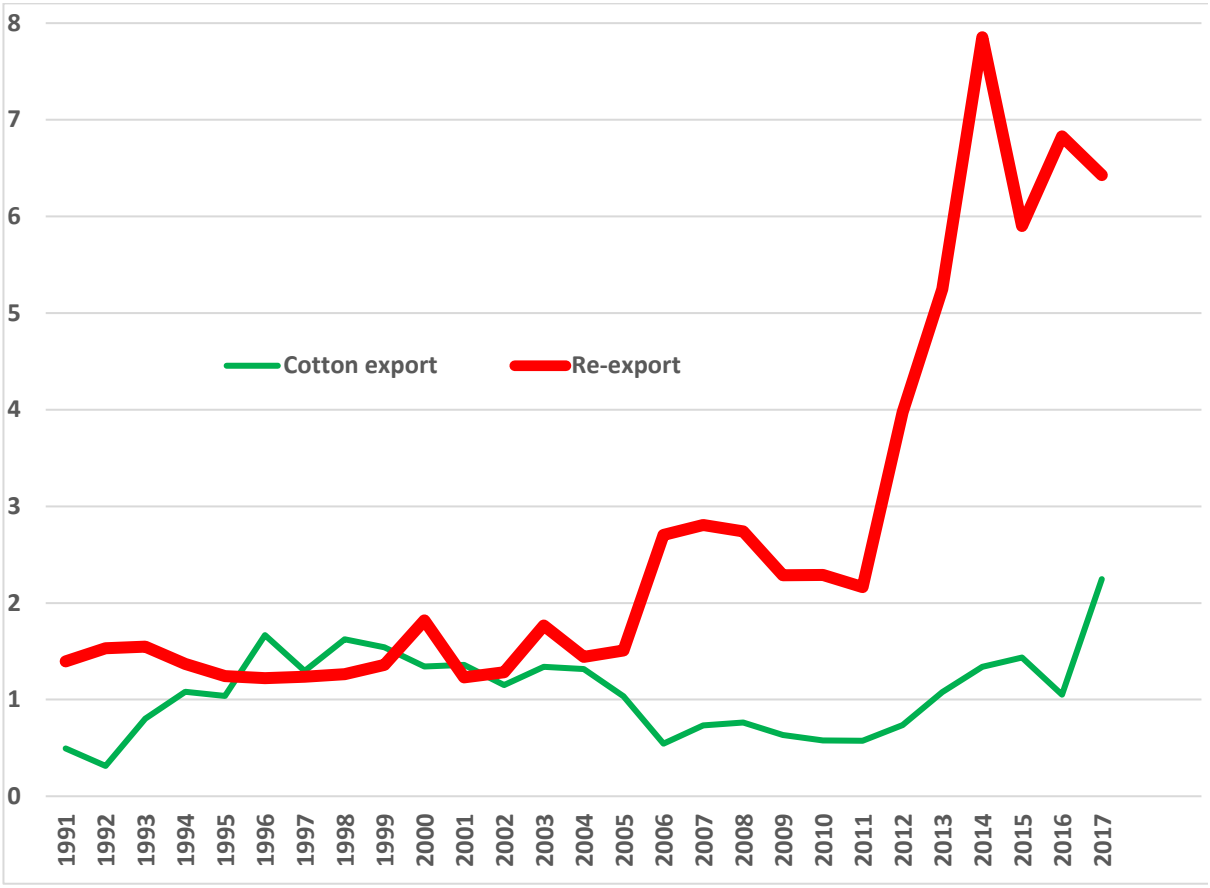
These two activities account, on average, for more than 70% of Benin's total exports. Figure 2 below reports data on real exports of cotton and re-exports of goods (gross flows) over the 1991–2017 period. The data highlights two important issues Benin's economy is facing as regards these two sectors.

First, re-export activities have played a dominant role in Benin's economy. The available estimates suggest that cotton and cross-border trade account for about 13% and 20% of Benin's GDP, respectively.[10] The latter estimate is, however, open to some discussion, as we explain below. Nigeria is the main recipient country of cross-border trade, accounting for more than 90% of Benin's re-export activities. On the other hand, cotton is mainly exported to Asia, Europe, and the US. As such, there is a fundamental difference between these two activities. In particular, cross-border trade entails a loss of foreign exchange reserves for Benin whereas cotton contributes to official export earnings. In the same way, re-export activities compete with the agro-industrial sector. However, the incentive of Benin's authorities for tolerating cross-border trade derives from the fact that it generates customs and VAT revenues for the country. Below we elaborate on cross-border trade and discuss spillover from Nigeria to Benin. Figure 2 shows that re-exports strongly increased from 2007 on and peaked in 2014. As there was simultaneously a marked increase in cotton exports, it is not surprising that the growth rate of GDP *per capita* also significantly picked up (see Figure 1), confirming the leading role of these two sectors for the Beninese economy.

Second, the data in Figure 2 shows that export of cotton has been performing poorly for a long period since 1996. This disappointing trend coincides with a number of institutional changes that occurred in the sector over the past years. The institutional changes have most to do with the liberalisation of activities as well as the privatisation of the state enterprise involved in the sector. We discuss these issues and other challenges facing the cotton sector below.

[10] These estimates are obtained from MAEP (2008) and Golub (2012a; 2012b) for cotton and cross-border trade, respectively.

Figure 2: Exports of cotton and re-export of goods, in real terms (billions CFA francs deflated by the consumer price index)



Sources: BCEAO (https://edenpub.bceao.int/ and various annual reports)

Cross-border trade and spillovers from Nigeria

Activities related to cross-border trade between Benin and Nigeria largely stem from differential (trade, taxation, and exchange rate) policies in the two countries (Igué and Soulé, 1992). Nigeria uses tariff and non-tariff barriers to protect domestic industries in a number of economic sectors (e.g. Igué and Soulé, 1992; De Melo and Ugarte, 2013; Golub, 2012), including cars, textiles, cigarettes, and food items (such as rice, vegetable oil, and poultry). In 1973, the military regime in Benin introduced lower import tariffs than in Nigeria, with the aim of extracting rents from re-export activities. This happened in the context of the first oil shock, which generated a boom in Nigeria. Togo also implemented similar import tariff cuts in 1973 in order to compete with Benin on the re-export market.

The aim of extracting rents from re-export activities in order to benefit from the pent-up demand in the huge domestic market in Nigeria has been a constant strategy pursued by the Beninese authorities. Benin was therefore very early on labelled an ‘entrepôt state’ (‘Etat entrepôt’), a term coined by Igué and Soulé (1992). The BCEAO (2017) data for re-exports (see Figure 2) imply that these represented an average of 61% of Benin’s total exports over the 2007–2017 period. The competition with Togo in terms of tariffs, import taxes, port duties, and import valuation systems (Golub, 2012b) has also to be interpreted in terms of a strategy to maximise Benin’s share in the fallout of the Nigerian oil rent.

Most of the re-export activities are aimed at the Nigerian market. They are organised under an official status as well as under an unofficial one (Golub, 2012a). Official activities include imported goods declared for re-export or for transit to Nigeria. The unofficial part of the re-export activity has two facets: i) imported goods that are declared for transit to neighbouring landlocked countries, thereby benefiting from low customs duties and taxes, but that are later diverted to Nigeria via a network of informal intermediaries; and ii) imported goods that are declared as goods for the domestic market, but are then also shipped to the Nigerian border through the same informal network. Concerning the latter category of unofficial re-exports, IMF (2017, p. 8) notes that Beninese customs do not process goods in transit if these goods are subject to an import ban by Nigeria. Imports of such goods (like frozen poultry or vegetable oil and, at times, specific types of used cars) have then to be declared for domestic consumption and are subject to VAT.

It is to be noted that the import process of the goods intended for the Nigerian market is itself fully formal and legal. It is operated by formal firms, which trade with local and international contractors, borrow from formal banks, and pay income taxes. Related infrastructure, both public (port, customs) and private (parking lots for used cars, warehouses for other products), have been set up in an open and regular way. The unofficial (illegal) aspect of cross-border trade with Nigeria occurs when customs rules are bent to, as noted above, switch from Niger to Nigeria as the final destination for transit goods, when an imported good is declared for domestic use but sent to Nigeria, or when the imported goods are being deliberately undervalued to benefit from lower custom duties and taxes. Or, in addition, when imported goods are falsely declared as coming from Togo, or another member of the West African Monetary Union, to benefit from tariff exemptions.[11] The trade flows become also illegal, obviously, at the border with Nigeria, when these goods have to be smuggled in. Because rules need to be bent and controls evaded, which is done on a systematic and large scale, bribing and corruption becomes an integral part of this fraudulent cross-border trade. In addition, organising the dispatching of goods from their entry port to their Nigerian border destination cannot in general occur via formal traders and intermediaries once trade in these goods has become unofficial. This organisation is therefore handled by a well-organised network of operators and intermediaries active in the informal sector (Golub, 2012a). Unofficial trade thus breeds informality. The scale at which the unofficial cross-border trade is organised and the weakness with which it is controlled also necessarily implies high-level political connections on the part of the bigger operators, presumably in both countries. Such a permanent tolerance, instead of repression, of fraudulent activities certainly does not contribute to improving the general business climate in Benin. More importantly, it raises the risks of political capture, as evidenced by political infighting involving big players in the unofficial trade business with Nigeria[12] (see Chapter 1).

[11] Bensassia *et al*. (2019) report that this practice is documented by the observed discrepancy between exports from Togo to Benin and Benin's imports from Togo. The latter are about five times larger than the former.
[12] A telling example is the rivalry, both in the political and the business spheres, of two of Benin's famous as well as richest businessmen: Sebastien Ajavon and Patrice Talon. The former made his fortune in the agro-business, the latter in the cotton sector. Ajavon is a leading importer of frozen poultry from France, where he has invested in chicken farming, into Benin. His firm COMON S.A. is also the major player in the unofficial cross-border trade of poultry into Nigeria, where this product is officially banned. Both Ajavon and Talon have pushed their ambition into politics, financing the campaigns of politicians close to their interests. Both initially allied against the acting president, Yayi Boni, to foster their respective interests. However, they quickly entered into conflict and both ran as candidates in the 2016 presidential election. Talon won. Ajavon then started his own party but had to face

Unofficial cross-border trade with Benin is not limited to re-export activities. Benin also benefits from the Nigerian oil rent when the latter takes the form of oil price subsidies for its citizens. A significant part of Benin's petroleum imports is smuggled from Nigeria into Benin. Other consumer and capital goods are also imported unofficially on a significant scale, evading import duties and domestic taxes. This illicit cross-border trade also benefits from an efficient network of informal operators, which functions, like that set up for unofficial re-export activities, with bribes and side-payments to officials on both sides of the border (Golub, 2012b).

Illicit cross-border trade brings benefits to both countries. The Nigerian middle and upper classes have the opportunity to buy goods from Benin that are not available or too expensive on their domestic market because of the country's protectionist trade policy. More importantly perhaps, the authorities of Nigeria may value the political leverage they have on Benin because of the strong dependence of the Beninese economy on Nigeria's policies relating to trade, the exchange rate, and public price subsidies.

For Benin, the benefits are exclusively economic ones, in terms of economic activity, employment, and tax receipts. Estimating these effects is not a simple task, given the unofficial nature of these flows. For the effects of unofficial cross-border trade on GDP, the most frequently cited estimate is that of Golub (2012a). Based on an earlier study on the unofficial trade in used cars, which represents a large part of the total unofficial re-export trade to Nigeria, and extrapolating from these data to the whole trade, Golub (2012a, p. 215; 2012b, p. 1159) estimates the contribution to be about 20% of GDP. He also estimates that about 50 000 people are directly involved in this trade. Such an estimated contribution to GDP is huge. The estimation on employment is relatively lower, as it represents for the year of estimation (2005) about 9% of employed workers in the three sectors susceptible to contribute to this trade, i.e. commerce, transport, and finance, and 2% of total employment in the economy. To assess the consistency between the GDP and employment estimates, we reason in the following way. Estimated tax receipts from cross-border trade are about 30% of tax receipts (World Bank, 2009), which translates into an average of 4.5% of GDP. Using 2006 data, we net-out this share of GDP from the global contribution to GDP and compute the net contribution in terms of gross value-added at factor costs. The resulting ratio is 17%. We assume that this net contribution to value-added at factor costs originates from 65% in the commerce sector, 30% in the transport sector, and 5% in the finance sector. Using the respective productivity data reported in Table 2 of Section 1.2 (source: Haile, 2018), we obtain an effect on employment amounting to 450,000 individuals, or 18% of total employment in the economy. This huge effect on employment reflects to a large extent the low productivity in the commerce sector, which was noted in Section 1.2. It actually implies that about 80% or people employed in this sector are supposed to be involved in cross-border trade. As one does not really see why this scenario would grossly overestimate the employment effects (e.g. increasing the proportion of commerce in the value-added

multiple judicial troubles. He had to defend himself against accusations of fiscal fraud and drug trafficking, was sentenced to heavy fines and long prison terms. However, the African Court on Human and People's Rights recently (2019) asked Benin's courts to annul the sentence. Ajavon has sought and obtained refugee status in France. See Chapter 1 and www.lemonde.fr/afrique/article/2017/08/28/au-benin-le-roi-du-poulet-ne-veut-pas-se-faire-plumer-par-le-fisc_5177538_3212.html ; https://beninwebtv.com/2018/10/benin-talon-vs-ajavon-retour-sur-10-ans-de-rivalite-economique-devenu-conflit-politique/

generated would only enhance the employment effects),[13] one is led to conclude that the figure of 20% of GDP appears to be somewhat excessive. As an alternative, we can use the same approach, based on sectoral productivities, and reverse it. We explore a scenario in which we start from a specific hypothesis on sectoral employment in unofficial cross-border trade. We arbitrarily assume that 25% of workers in commerce, 20% in transport, and 5% in finance are active in unofficial cross-border trade, this representing about 150,000 workers and 5.5% of total employment in 2006. We obtain, under this hypothesis, a total contribution of unofficial cross-border trade to GDP (i.e. indirect tax receipts included) of about 9% in 2006. Repeating the exercise for 2015 we get 10%. These simple calculations are tentative and are not intended to minimise the importance of unofficial cross-border trade for Benin. However, they clearly point to the need for further research to assess more precisely the impact of unofficial cross-border trade on aggregate value-added.

Although the unofficial cross-border trade with Nigeria is in many aspects very lucrative for the Beninese economy, there are definite downsides. A key one is that Benin is very vulnerable to changes in economic conditions and trade protection policies in Nigeria. First, Nigeria has often changed import tariffs on protected goods, generating substitution between re-exports from Benin and direct imports from the rest of the world (Asia, Europe, and the US) to Nigeria. In 1995 and 1996, for instance, the Nigerian government lowered import tariffs on rice from 100 to 50%. These changes led to an increase of rice imports from Asia to Nigeria and a decrease in re-exports from Cotonou. Likewise, the discontinuation of prohibitions on textile imports in 1997 led to similar substitution effects.[14]

Second, Nigeria is very much exposed to global shocks given the dominant role it plays in the world oil market. As such, the country plays an important role in the transmission of global shocks to Benin. During the recent global financial crisis and great recession that started in 2007, for instance, Benin suffered from re-exported activities especially in the car sector. In the same way, Nigeria recently devalued its currency in 2016 as a result of persistent negative oil price shocks in 2015/16.

There are several channels through which these adverse shocks from Nigeria could spill over to Benin. First, because they imply cuts in Benin's government's tax revenue, they compromise its ability to finance public infrastructure and other expenditures. Second, they impact negatively on the activities of the harbour of Cotonou and other service sectors including commerce, transport, telecommunications, insurance, and banking that are related to re-export activities. Third, proceedings from re-exports largely accrue to the informal sector and have often been used to import intermediate and capital goods from Nigeria (Igué and Soulé, 1992), which generates positive supply effects in Benin.[15] Fourth, external shocks improve the activities of the domestic agro-industry sector.

It is difficult to provide a reliable estimate on the impact of re-export shocks given that they run through the informal sector. Attempts to provide quantitative estimates of their effects use static general equilibrium models (e.g. Medenou, 2016; Gautier, 2000; Balaro *et al*.,

[13] Similarly, using 2015 data for the same scenario implies that the 20% of GDP contribution of cross-border trade represents an employment effect of 27% of total employment (87% of employment in the commerce sector). Again, the decrease in productivity in the commerce sector between 2006 and 2015 explains this difference.
[14] Nigeria has also sometimes unilaterally closed its borders with Benin for political reasons. These happened for instance in 1996 and 2003 and generated similar negative effects on re-exports.
[15] In particular, Benin depends for 80% of oil imports from Nigeria.

2013; Paquet and Savard, 2009). For instance, the estimate recently reported by Medenou (2017) indicates that a 10% increase in re-export demand from Nigeria in textile and food items would generate a 2.3% increase in customs revenues and a 0.3% acceleration of real GDP growth in Benin. Based on this estimate and the observed decrease of about 25% of re-exports between 2014 and 2015 (Figure 2), this would imply a growth contraction of about 0.75% in Benin.

An alternative way to quantify the short-run relationship between Nigeria and Benin is to look at household consumption in Nigeria as a driving factor for Benin's growth, using national account aggregate.[16] Nigeria's household consumption is better suited than Nigeria's GDP as a driving factor, as a large part of cross-border trade of Benin with Nigeria originates in Nigerian domestic consumption spending, as indicated above. We accordingly run a regression between Benin's GDP growth and the growth of household consumption in Nigeria over the 1980–2017 period (data on household consumption are not available for Nigeria before 1980 in the WDI Database). The regression includes one lag of each variable. The estimated coefficient of contemporaneous Nigerian household consumption is 0.08 and is significant at the 1% level. Although significant, the coefficient appears to be small in economic terms. However, one needs to take into account that the volatility of household consumption growth in Nigeria is much higher that the volatility of Benin's GDP: their respective standard errors for the 1980–2017 period are 16.0% and 2.9%. A representative one standard error positive shock in Nigerian household consumption would thus increase Benin's GDP by 1.3%, an estimate with a 95% confidence band of 0.4% and 2.2%. This economically significant effect is confirmed by a variance decomposition analysis performed with a bi-variate structural vector auto-regression model with the same two variables and over the same period. It attributes about 22% of the variance of the model's forecast error for Benin's GDP growth to shocks in Nigerian household consumption.

Another downside is the distortions that the unofficial cross-border trade with Nigeria may entail for the structure of Benin's economy and for its development. It may hamper the development of regional trade relationships. Some locally produced goods, like textiles and possibly rice, that Benin could legally export to Nigeria at regionally competitive prices face unfair competition from low-cost goods imported from, say, China and illegally shipped to Nigeria. This will occur if the cost difference between local and imported goods is not fully compensated by tax and custom dues.

Finally, as already discussed, the organisation of the illegal re-export and import activities to and from Nigeria nurture not only informality but also corruption, tax evasion, and possibly political capture. These negative characteristics may spill over to other sectors by setting low standards for honesty, compliance with the rule of law, and respect for the country's

[16] Note that estimating the empirical relationship between growth in Nigeria and growth in Benin using the two countries' national account data leads to statistically contrasting results. Only annual data are available. Regressing Benin's GDP growth on Nigeria's growth over the whole period 1961–2017 with or without additional control variables (e.g. changes in oil and cotton prices, growth of Eurozone GDP, etc.) and with the appropriate lag structure never leads to a significant effect of Nigeria's GDP on Benin's GDP. This can possibly be explained by the fact that the national accounts of both countries only very imperfectly capture the value-added embedded in the largely informal transactions between the two countries. It may also reflect structural shifts over time in the relationship between the two countries. Indeed, performing cross-correlations between contemporaneous growth rates of Benin and Nigeria over a rolling 20-year window, one observes that the correlation coefficient is only significant for the periods ending in 2001 and 2002. For this 1981–2002 period, which includes Benin's 1990–2002 dynamic growth period (see Section 1.1), it reaches 0.5, before returning to lower, non-significant values.

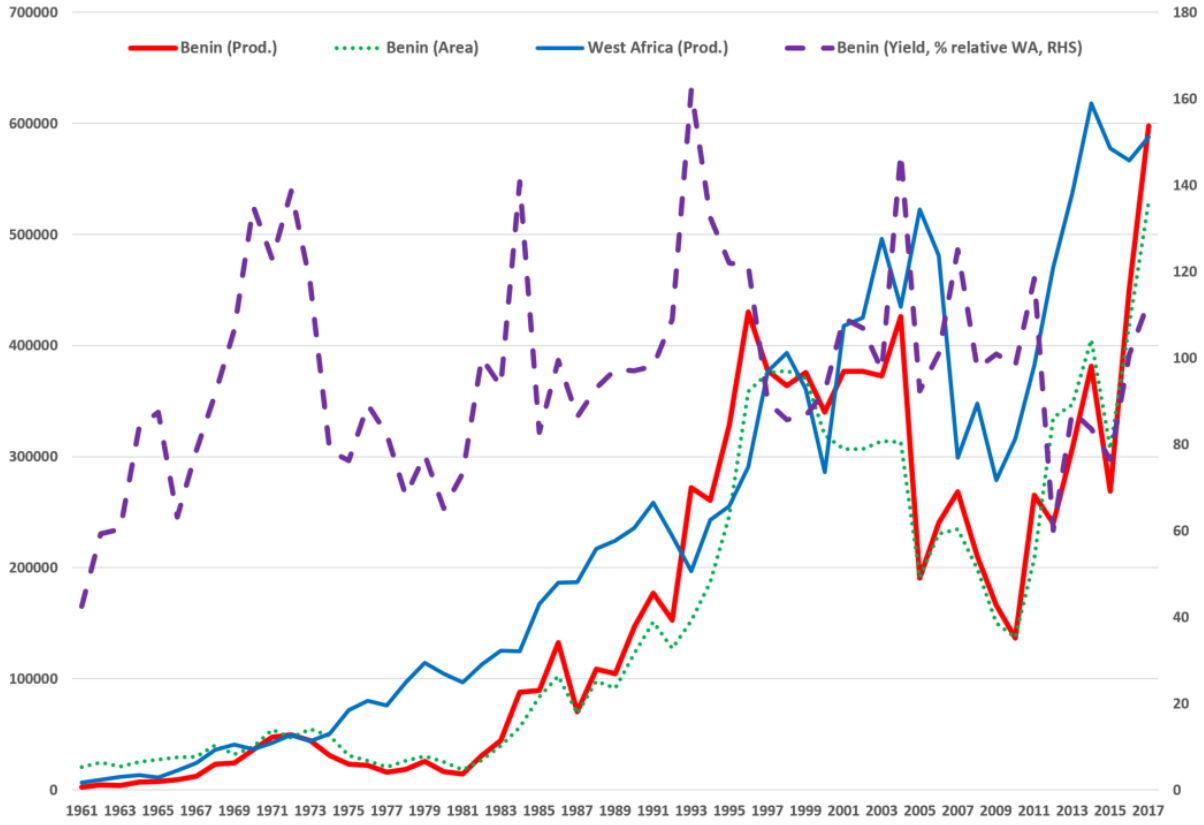
institutions. Upholding a strategy that selects unofficial re-export trade as a pillar of Benin's economy has hidden costs. They limit major improvements in the business climate and make harder the fight against corruption and in favour of better functioning institutions.

The cotton sector

In Benin, cotton plays a major economic role, accounting for about 60% of export revenue (excluding re-exports) and 45% of tax revenue (excluding customs revenue). It provides livelihoods for about one-third of the total population of 10.7 million and the basis for 60% of the industrial sector (19 ginning factories, four textile industries, and two agro-food industries for vegetable oil extraction), where it generates about 3,500 paid jobs (MAEP, 2008). In the same way, cotton contributes to activities in the services sector (e.g. transport and construction) and also plays a socio-political role in rural development (e.g. Kpadé, 2011).

In light of this importance, any problem in the cotton sector would severely affect Benin's development. Figure 3 reports the performance of the cotton sector in Benin and its francophone neighbouring countries (Burkina Faso, Cote d'Ivoire, and Mali), on the basis of the production of seed cotton, yields, and cultivated area over the 1961–2016 period. First, the data shows contrasting performance in Benin's production in 1973–1992 and since the early 2000s. On the contrary, Benin slightly outperformed its neighbours in 1993–1997. Second, production moved hand in hand with cultivated land area, suggesting that yield improvement was not the main driver of cotton production increases in the country. Indeed, Benin's yield is volatile, and its value lags behind that of other countries (the average gap is about 4 basis points). More worryingly, in recent years the cotton yield in Benin has come down to the level where it was in the 1970s.

Figure 3: Performance of the cotton sector in Benin and West Africa

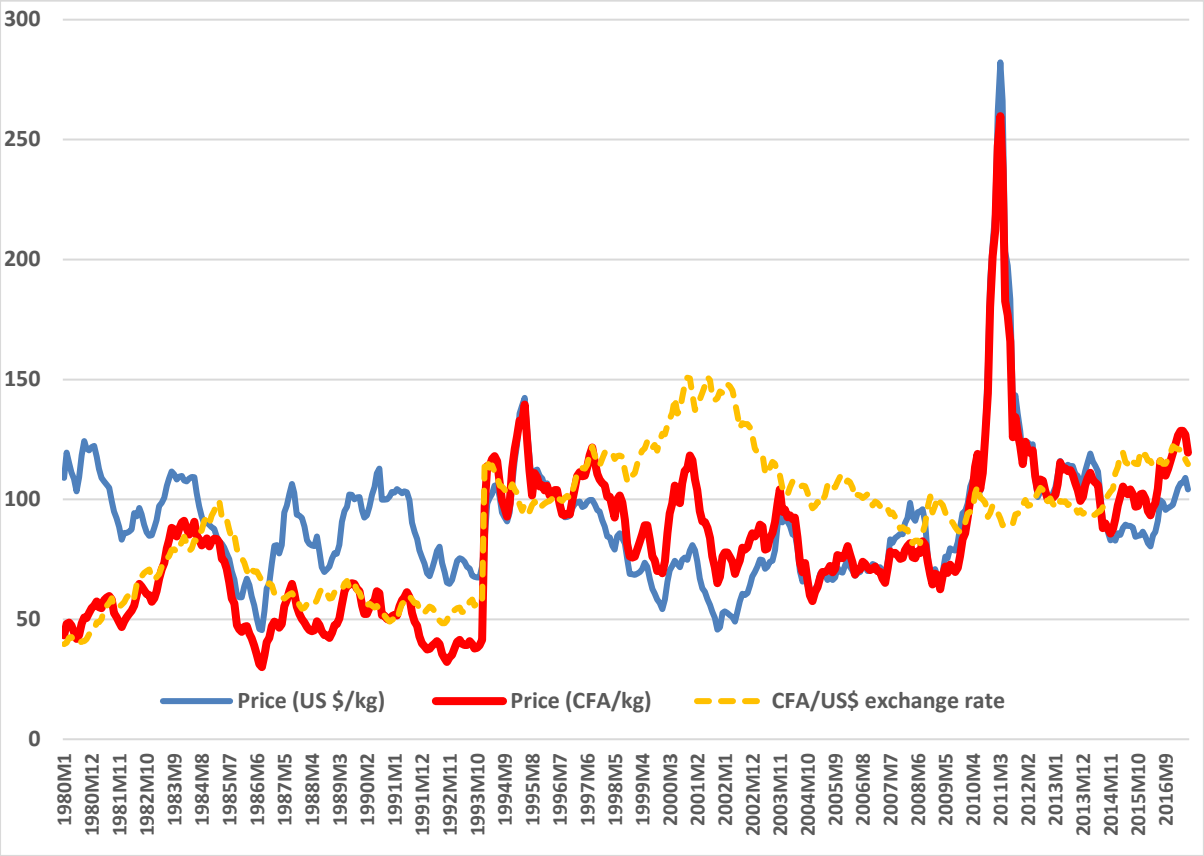


Source: Food and Agriculture Organization (FAO) Corporate Statistical Database (FAOSTAT). Benin's data over the period 2016-2017 is obtained from the *Institut National de la Statistique et de l'Analyse Economique* (INSAE) and the *Association Interprofessionnelle de Coton au Bénin* (AIC) and is being updated in the FAOSTAT database. Note: West Africa (WA) is a simple average of data from Burkina Faso, Cote d'Ivoire, and Mali. Production is in tonnes, Area in hectares, and Yield is in percentage relative to the value of average yield in the other WA countries.

Domestic and external factors are responsible for Benin's performance (see Bourdet, 2004; AIC, 2008; Ahohounkpanzon *et al*., 2002; Cabinet Afrique Décision Optimale, 2010; Gergery, 2009; Kpadé, 2011; Saizonou, 2008; and Yérima, 2005).[17] Domestic factors include political forces and institutional arrangements in the cotton sector, whereas external factors relate to forces that drive the domestic currency value of the world cotton price as well as export demand for cotton. We start with the latter and then turn to the former.

[17] In addition to these two factors, rainfall shocks also affect cotton supply.

Figure 4: World cotton price and the CFA franc/US dollar exchange rate (1996=100)



Source: IMF commodity database and IMF internal financial statistics. Note: After the CFA/kg was constructed all series were transformed in indices with base year 1996 as a normalised factor.

Figure 4 displays monthly data on world cotton prices in US dollar and CFA franc together with the CFA franc/US dollar nominal exchange rate over the period 1980–2017. The data shows that variations in both the nominal exchange rate[18] and the dollar value of the world cotton price[19] have caused great fluctuations in the CFA franc value of the cotton price. In the period 2004–2009, for instance, the dollar value of the cotton price showed a declining trend, which was amplified by a persistent appreciation of the CFA franc. Following this drop in price, we see a contraction in production and land cultivated both in Benin and in the other countries. However, Benin displayed a much larger negative response, suggesting that country-specific factors may also have explained the behaviour of cotton supply.[20] During the years 1984–1993, the persistent appreciation of the CFA also contributed to low cotton prices, yet this did not prevent the cotton supply from rising perceptibly not only in Benin but also in the other producing countries of the region. This again suggests that factors other than producer prices have been at work. Finally, cotton supply increased sharply in Benin

[18] Except for the 1994 devaluation in the CFA franc, the variations in the currency mainly reflect movement in the French franc (prior to 1999) and the Euro (after 1999), to which the currency has been pegged.
[19] Fluctuations in world dollar price of cotton are due to both demand and supply factors (e.g. Janzen *et al.*, 2018). The impact of world supply on cotton price is due to subsidies in some leading cotton-producing countries, of which the US plays an important role.
[20] Alia *et al.* (2017) provides recent evidence for the role of cotton price for cotton supply in the Benin context using data on local price paid to producers.

and other countries following a strong increase in the dollar price and the devaluation of the CFA franc in 1994.

We can now turn to the domestic factors impeding cotton production. They are largely of an institutional or organisational kind and are therefore of special interest to us. Five groups of actors have been involved in the cotton sector: i) small-scale producers; ii) importers and distributors of inputs; iii) ginning industries; iv) the government; and v) international donors (of which France and the World Bank are the major players). The roles of each of these actors have evolved over time depending on the political regime and the institutional arrangements that were put in place in the cotton sector. Five sub-periods can be distinguished: 1961–1971; 1972–1981; 1982–1990; 1991–1999; and 2000–present. First, prior to 1972, two French companies (*Compagnie Française de Développement des Fibres et Textiles* (CFDT) and the *Société d'Assistance Technique et de Coopération* (SATEC)[21]) were responsible for the main operations in the sector of Benin: provision and distribution of inputs, commercialisation and ginning of cotton, and exporting abroad. This vertically integrated system was also introduced in the other West African francophone countries. During this period, the level of cotton production was very similar in Benin and these other countries (as shown in Figure 3).

Second, from 1972 to the late 1970s, when the Marxist-Leninist regime of Kérékou was in power and created a number of parastatals to manage the agricultural sector, Benin started to underperform. In addition, the new regime encouraged subsistence agriculture at the expense of cotton, and French companies withdrew from the cotton sector. The regime also promoted community-level farmer associations, known as *Groupement Revolutionnaire a Vocation Cooperative* (GRVC) in addition to the existing *Groupements Villageois* (GV). Both the GVs and GRVCs organised joint input credit and primary marketing of seed cotton. They also pooled their resources in order to build local infrastructure, such as schools and health centres. One main difference between these two farmer organisations is that GRVC promote production in block of the members' plots and a high degree of centralisation of extension services.[22] Following these changes, Benin's cotton production substantially diverged from production in neighbouring countries. Third, in the early 1980s the government took a renewed interest in cotton and a new parastatal (*Société Nationale pour la Promotion Agricole*: SONAPRA) was created in 1983 to stimulate cotton production and enhance the efficiency of the sector. Nevertheless, its mode of operation continued to be vertically integrated. An additional source of change came from external donors supporting development projects in Benin's cotton sector. As a result, SONAPRA came to acquire 10 ginneries. Following such changes, yields and the cultivated area improved considerably in the 1980s (Figure 3). In the period 1985–1987, however, SONAPRA faced a debt crisis because of low international cotton prices and its limited ginning capacity to absorb the total amount of cotton production as well as poor financial management of government agencies in the cotton sector.

Fourth, in the early 1990s the government embarked upon a new policy consisting of the liberalisation of the cotton sector and the privatisation of SONAPRA with the support of the two main donors. Moreover, a minimum price guarantee and input subsidies were

[21] The production of cotton dates back to the pre-colonial period (Manning, 1982) but the two companies introduced new varieties that boosted the yield of cotton production. They independently developed their activities: CFDT in the North and SATEC in Central Benin.
[22] See Chapter 5 for more details.

introduced. These reforms were gradually implemented. Thus, the *Fédération des producteurs du Bénin* (FUPRO-Bénin) was created in 1994 to federate the GVs and 80% of the importation and distribution of inputs was liberalised over the years 1992–1995. In the subsequent years, from 1995 to 1998, the liberalisation of the ginning industry was initiated and eight privately owned ginneries started to operate in addition to the 10 belonging to SONAPRA. Limited cotton production, however, caused the total capacity of the 18 ginning firms to be under-utilised. Note that, throughout all the above changes, SONAPRA remained the main operator in the sector. Thus, it continued to organise the allocation of inputs across the GVs and it later started to also allocate cotton seeds between the private ginning firms. Following the reforms, which were combined with the devaluation of the CFA franc, cotton production increased considerably and for the first time Benin's production outperformed the other countries over the years 1993–1997.

Fifth, in 1998–2000 additional professional associations were created: the *Association Professionnelle des Egraineurs du Bénin* (APEB) for ginners, the *Coopérative d'Approvisionnement et de Gestion des Intrants Agricole*s (CAGIA) for the management of input quotas between private firms, the *Association Interprofessionnelle du Coton* (AIC) for the management of the whole supply chain, with a special emphasis on the allocation of cotton seeds between ginneries, and the *Centrale de Sécurisation des Paiements et de Recouvrement* (CSPR), a key institutional regulatory body created to achieve the recovery of input loans to farmers and the payment of cotton seeds purchased by ginners. A number of administrated rules were also put in place such as fixed prices for inputs and cotton seeds across the whole country. When these bodies were established, SONAPRA stopped operating the sector but continued to manage its ginneries. It is striking that this period of intense organisational change did not witness any effect on cotton. Moreover, conflicts emerged among the actors starting from 2002/03. For instance, farmers complained about expensive input prices. In the same way, a number of private firms contested the outcomes of the input procurement procedure, whereas some ginneries found fault with the quotas of cotton seeds. As a result, they boycotted the AIC-CSPR-GARCIA system and started parallel activities. For instance, the dissident distributors attracted some farmers by proposing lower prices than those the official system was offering. However, the quality of the output delivered was not properly monitored. Likewise, the quality of privately supplied inputs could not be guaranteed and producers frequently complained that they were cheated in this regard. The ground was laid for a genuine crisis in the cotton sector. In particular, a lot of confusion was generated by the plurality of input sources and output outlets, and a number of farmers and ginners became severely indebted as the CSPR could no longer track their activities. As a consequence, the system encountered delays in payments, which discouraged farmers. Many of them turned away from cotton production, which was depressed in 2005. The government's reaction consisted in stepping in to finance the debt shortfall. Moreover, it adopted a framework agreement (*Accord-cadre*) with AIC, but this had no effect. In 2007, the new elected president (Yayi Boni) dissolved the agreement with AIC and an *ad hoc Commission Nationale* was established to manage cotton inputs.

In 2008, the industrial assets of SONAPRA were privatised and a new group, known as *Société de Développement du Coton* (SODECO), was soon created to take over assets after several problems in procurement management became manifest in 2006/07. Once again, however, the new organisational changes failed to improve the situation in Benin's cotton sector. Yields and the cultivated area remained low. In 2009, a new framework agreement

was signed between the government and AIC. But, following a now familiar scenario, the problems persisted and in 2012 AIC was suspended by the government. Nonetheless, the new government that assumed power in 2016 re-established AIC. Thereafter, yield, acreage and production have been improving over the last three years (2016-2018).

Overall, the liberalisation of the cotton sector did not succeed in improving its functioning and enhancing its efficiency, although some positive effects could be observed in the early stage. The causes of the failure are several. First, political actors controlled the whole reform process and thereby made reforms vulnerable to regime changes. Second, liberalisation did not lead to competition as officially intended, in particular because the allocation of seed cotton was administratively decided and the procurement of seed cotton was not transparent. Third, there were no clear enforcement mechanisms against those who violated the rules, with the result that these rules were not considered credible by the actors concerned. Finally, to a very large extent, the reforms were undertaken under pressure (at the behest of) from two donors and were therefore not appropriated or owned by the local authorities. The usual outcome in this type of situation is that reforms are circumvented, and official rules and procedures are manipulated by powerful interests that tend to act behind the scenes. These powerful interests are based on narrow links between politics and business, between political actors occupying critical positions in the government or the high administration, on the one hand, and Big Men, powerful patrons or oligarchs operating in the cotton sector in collusion with the former, on the other hand.

1.3.2 The financial system

In Benin, the financial sector is characterised by a dual system where formal and informal institutions coexist.[23] The formal system operates under the supervision of WAEMU. It includes three categories of institutions: commercial banks, microfinance institutions, and other financial institutions (e.g. pension funds and insurance companies). Banks play a dominant role.

During the Marxist-Leninist regime of Kérékou, private banks were nationalised into three state-owned banks: the *Banque Béninoise de Developpemen*t (BBD), founded in 1974 to finance the industrial sector, the *Banque Commerciale du Benin* (BCB), founded in 1975 for commerce, and the *Caisse Nationale de Credit Agricole* (CNCA), founded in 1975 for agriculture. Due to poor management and especially excessive credit extensions to state enterprises and political supporters in the 1970s and 1980s, all these banks collapsed in a banking crisis that occurred in 1989.

In the 1990s, the banking sector was reformed in the framework of the Structural Adjustment programmes and new private banks have since then been operating in the country. Following these reforms, the banking sector developed significantly. Some challenges remain, however. In comparison with other countries in WEAMU and SSA, Benin's banking sector is less developed, and it also displays several vulnerabilities (IMF, 2016; 2018; *Commision Bancaire de l'UEMOA*, 2016). For instance, the data reported in Figure 5 below indicate that Benin is lagging behind in many dimensions, including regulatory capital ratios, liquidity, returns on assets and equity, and non-performing loans (NPLs). As a result, difficulty obtaining external financing is the top structural constraint facing private firms in the

[23] The informal financial sector is not discussed here. For information see, for instance, Tomety (1999).

country. From Figure 6, we can see that these constraints have increased in recent years (from 2009 to 2016). Other major constraints on businesses in Benin include electricity supply problems, informal sector competitors, and problems arising from taxation as well as corruption inside the public administration.

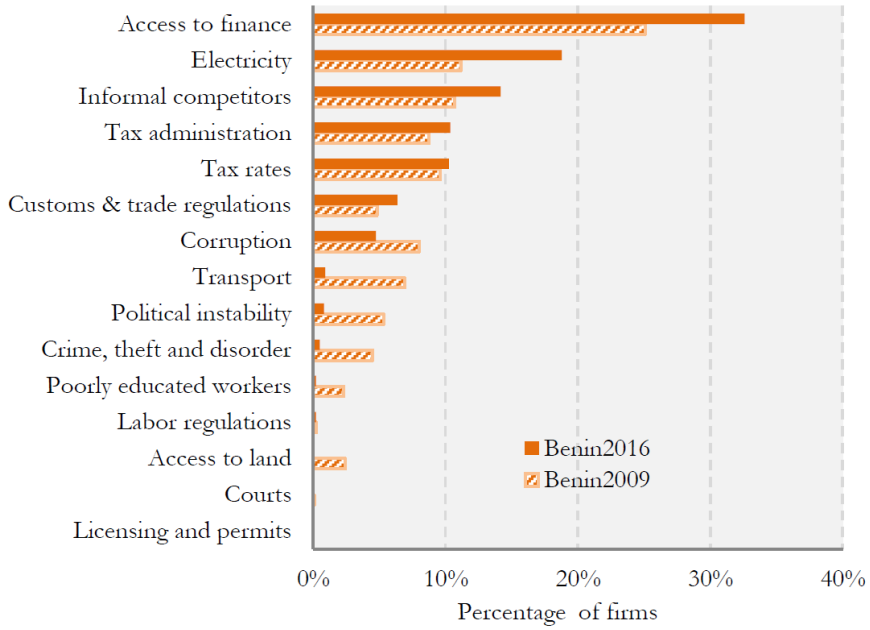
Figure 5: Performance indicators of the banking system in Benin and selected other African countries

Sources: IMF (2018); Note: (1) data for the period 2013–2015.

A number of structural factors are responsible for the underperformance of the banking sector. From the demand side these include: a poor business environment (Figure 6); a low quality of credit demand applications resulting from the poor quality of firm managers (MCA, 2012); and a large informal sector that implies a low base for financial intermediaries in the official sector and concentration risks.

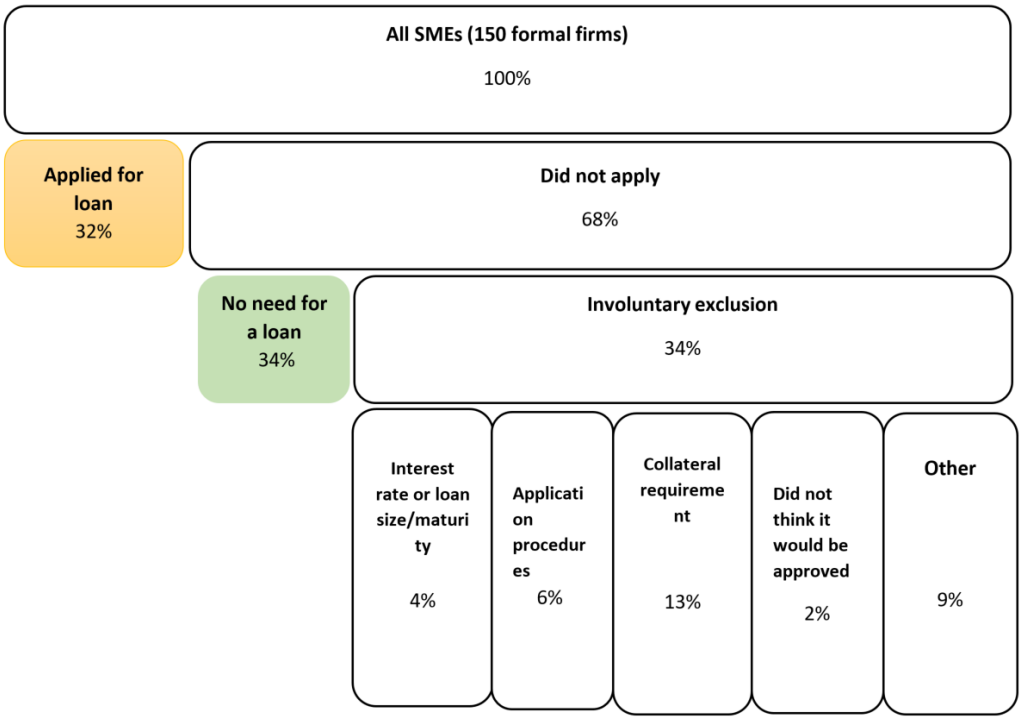
In order to understand the role of information in access to finance, we distinguish firms that apply for loans from those that did not. The data in Figure 7 show that, in the majority of cases (68%), firms did not apply for loans; this suggests that demand factors may be explaining the poor access to finance. We further distinguish between firms that are voluntarily versus involuntarily excluded from external financing. The data shows that among the 34% of the firms that were involuntarily excluded from applying for loans, more than one-third (13%) attributed the problem to a lack of proper collateral and about one-fifth (6%) to the complexity of application procedures. These figures hint at serious problems on the supply side of credit markets.

Figure 6: Access to finance as the major constraint to private firms in Benin



Source: World Bank Enterprise Survey (2016), Country highlights.

Figure 7: Understanding access to finance in Benin (2016)



Sources: World Bank Enterprise Survey 2016 on 150 formal firms (80 manufacturing and 70 services).

The poor quality of collaterals thus stands out as one key problem that constrains the use of bank credit in Benin. This reflects the poor quality of property titles, especially over land assets due to uncertain status, long delays in registration, and the high cost of verifying property titles. As pointed out earlier, Benin has embarked upon a pioneering land titling reform undertaken in the framework of the MCA programme financed by the US development agency.

A second constraint arises from the poor management of information asymmetry. A credit centralisation initiative was started by banks in 2013 to exchange information on borrowers but this system does not function well.[24] Private credit bureaus have recently been authorised as part of reforms by WAEMU and the related law was passed in 2017 in Benin. Nonetheless, here too the system is not yet functioning.

Third, there are serious flaws in the judiciary system, including low capacity in handling financial issues and complex and long litigation procedures that have the effect of complicating contract enforcement and discouraging access to credit for certain categories of borrowers.

Fourth, there are weaknesses in banking supervision and regulations that undermine risk management in financial intermediaries and their performance (IMF, 2016). In some cases, long delays in banking resolutions (due to corruption or bureaucratic issues, for example) allow underperforming financial intermediaries to stay open for long periods of time, wasting resources in operating costs and undermining credit supply. For instance, credit is

[24] One explanation could be the concentration of the banking sector. The banking system is concentrated on four banks, which account for about 80% of credit and capital of the system.

structurally concentrated on a very small number of large business groups and, in particular, on the commercial sector (with a majority of activities linked to Nigeria). As a result, negative shocks in the trading sector, often originating in Nigeria, cause an important rise in the share of NPLs. Moreover, important bottlenecks in supervision and regulation about concentration risks and NPLs constrain the quality of financial intermediaries.[25] In addition to long judiciary litigation procedures about NPLs and the obligation of regulators to keep NPLs in the balance sheets of financial intermediaries until the end of these procedures, concentration risk is a major challenge facing the banking system in the country.

Fifth, Benin's banks have a strong exposure to the government, which affects credit risks and poses a major constraint on the supply of credit to the private sector. The banking sector, and the whole economy, are thus negatively affected by the government's structural propensity to delay honouring its payment engagements with banks but also with private firms. In the same way, banks have recently invested relatively more in government securities. As a member of WAEMU, Benin has access to the regional bond market of francophone countries. Starting from early 2000 there has been a number of reforms encouraging the issuing of government securities to finance the public deficit. As a consequence, banks have been investing in these securities, which they perceive as less risky than loans to private firms.[26] Their large exposure to government financing increases their vulnerability, however: in 2012, for instance, Benin's banks holding securities on Cote d'Ivoire were negatively impacted by debt restructuring in that country.

1.4 The structure of aggregate spending

Figure 8 shows how total expenditures (absorption) by domestic agents, relative to GDP, have evolved since 1968. Total expenditures are the sum of domestic household consumption, of government final consumption, and of total, private and public, gross capital formation (investment).

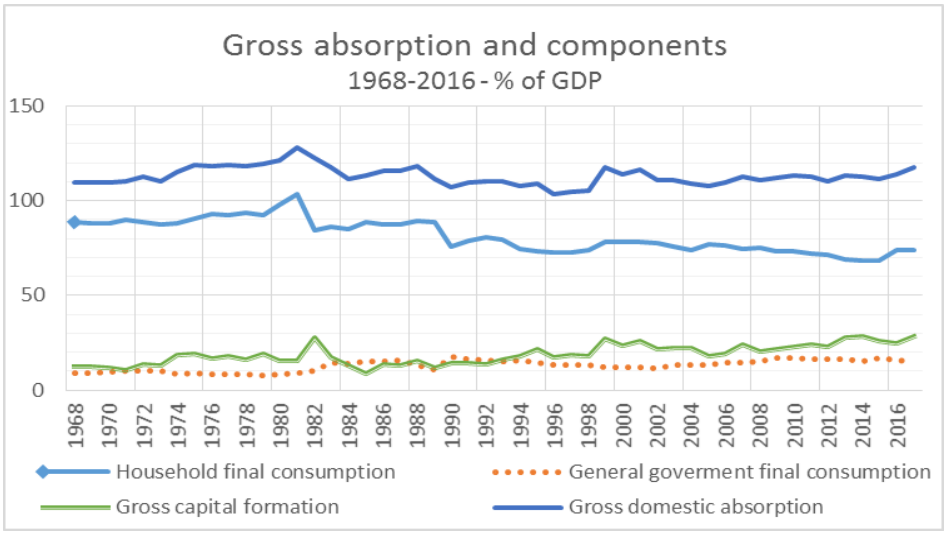
A first striking observation is that total *domestic absorption* has always exceeded GDP. This indicates that Benin has relied during the whole period on foreign resources to finance its total expenditures. The extent of the use of foreign resources, either through transfers or through borrowing from abroad, was on average 13% of GDP over the period, with a maximum of 28% in 1981 and a minimum of 3% in 1996. Absorption particularly rose during the early years (1973–1981) of Benin's centralised economy experience, nourished by the large public investment programme and by a rise in household consumption, possibly induced by the former. Absorption plunged, in the context of decreasing growth during the years leading up to the 1988/89 economic and financial crisis. Dependence on external resources came to their lowest level when the first phase (1989–1999) of the donor-supported adjustment programmes ended. When Official Development Assistance (ODA)

[25] The issue of regulation and supervision is even more pertinent for microfinance institutions (MFIs). Among the 721 MFIs, only 226 were regulated. This large unregulated MFI sector is a potential source of risks that could spread to the banking system and further limit credit supply to the private sector. In 2010/11 a crisis erupted in the sector following a Ponzi scheme and the loss of deposits is still unsolved (Investment Consultancy and Computing Services). See IMF (2013).

[26] The accommodated policy of the central bank that facilitates refinancing of banks at low interest rates (about 2.5%) creates the opportunity for banks to invest in these securities at about 6%.

and multilateral concessional lending in support of ongoing structural reforms rose again, from the mid-2000s on, absorption also increased again. It reached 114% in 2016, averaging 112% for the 2000–2016 period. This raise in absorption can largely be explained by the concomitant higher rate of capital formation, mostly of private origin, which can be observed since 1999 (see below) and which has not been compensated by an equivalent decrease in combined public and private consumption.

Figure 8: Structure of absorption, 1968–2016



Source: WDI

A second feature of the absorption picture is the progressive and persistent fall in the share of household consumption after 1981. It quickly fell from 103% in 1981 to an average of 87% for the period 1983–1989 leading up to the 1989 crisis, before dropping again and levelling out at 75%, with an occasional drop to 68% (2013–2015).[27] One can probably largely attribute the drop in the household consumption ratio over the crisis period and the subsequent period of structural adjustment to the hardship brought about by the crisis and, later, by the deflationary effects of domestic adjustment measures biased against consumers. The continuing slide of the ratio after 2002 is, however, more difficult to understand. Several specific factors can be mentioned: i) a progressive adjustment of household consumption to a lower growth *per capita* and to its increased variability; ii) a fall in the employment rate; iii) output shocks biased toward subsistence workers in the agricultural sector; iv) price shocks on items with a significant weight in the household consumption basket (e.g. the reduction in gas subsidies in Nigeria, which generated a 50% increase in fuel prices in Benin between 2011 and 2012[28]); and v) increasing income

[27] There seems to be a methodological break in the WDI National Account series in 1981/82. The observed consumption ratio falls from 103.2% in 1981 to 84% in 1982, a 19 percentage point drop, while capital formation has a share that rises from 15.6 to 27.6 over these two years. It is prudent to somewhat discount the data from these two years and focus on observations before 1981 and after 1982.

[28] See World Bank (2014). This price shock in Benin is the result of Benin's huge dependency on illegal imports of fuel for its domestic consumption. Such a price shock would curtail consumption volume but would also increase the relative price of private consumption relative to GDP. The net effect on the reported share of (nominal) household consumption in (nominal) GDP could thus go either way, depending on the movement in GDP prices. The ratio between the consumer price index and the GDP deflator (source: WDI) actually declined somewhat (2%) between 2010 and 2014, which is consistent with the observed decline in the share of household consumption in GDP.

inequality. A country comparison indicates that the Beninese consumption ratio has in general been higher than in an average SSA country and is presently (as at 2016) close to it.

To gain additional insights into the factors behind the decline of the share of household final consumption it is interesting to compare national account data with available household survey data. Four rounds of EMICoV surveys [29] are available, for 2007, 2009, 2011, and 2015. The surveys report a sizable decline of *per capita* household consumption: the latter declined, in real terms, by 14.2% from 2007 to 2009, by 2% from 2009 to 2011, and by an additional decline of 1.8% from 2011 to 2015. The strong decline in 2009 was the direct result of international increase in food and fuel prices and of the concomitant recession (GDP *per capita* decreased by 0.5% in 2009). The total decline of 17.7% of *per capita* consumption observed from 2007 to 2015 in survey data could explain the receding of the share of household consumption in GDP, from 74.3% to 68.3%, that is observed in national account data over the same period. However, if one takes into account that GDP *per capita* grew over the same period by 10%, one would have expected an even stronger decline in the share of household consumption, actually from 74.3% to 55.5%.

This discrepancy between survey and national account data is the consequence of fundamental differences in methodology. In most SSA countries, household final consumption is computed as a residual (IMF, 2018, p. 14), i.e. as the difference between the sum of aggregate value-added and imports on the one hand and the other components of aggregate demand (exports, government final consumption, and private and public investment) on the other hand. This is the case for Benin, at least for the period under discussion.[30] The methodological differences result in significant differences between *per capita* real consumption reported by national account data and those reported by survey data. The observed ratios between the former and the latter are 1.07 for 2007, 1.24 in 2009 and 2011, and 1.33 in 2015. The differences observed since 2009 are particularly important. A possible explanation is the following. As discussed in Section 1.3.1, cross-border trade with Nigeria is quite sizable and for a large part informal and fraudulent. A feature of this trade is that some goods that have Nigeria as their final destination are channelled through Benin's customs not as goods in transit or for re-export but as goods for the domestic market. Imports of these goods are thus included in domestic expenditures, even if they should be considered as exports.[31] Moreover, if household consumption is computed as a residual aggregate when national accounts are established, imports of all these goods will be included in household consumption. It is difficult to get reliable estimates of such flows of goods falsely declared for domestic expenditures because of their fraudulent nature, let alone assess the extent to which they imply an overestimation of household consumption in national account data. One can, however, point to some indirect evidence of their importance. Indeed, it is interesting to note that it is during the period when the difference between the national accounts and the survey data was the highest (2009–2015) that re-

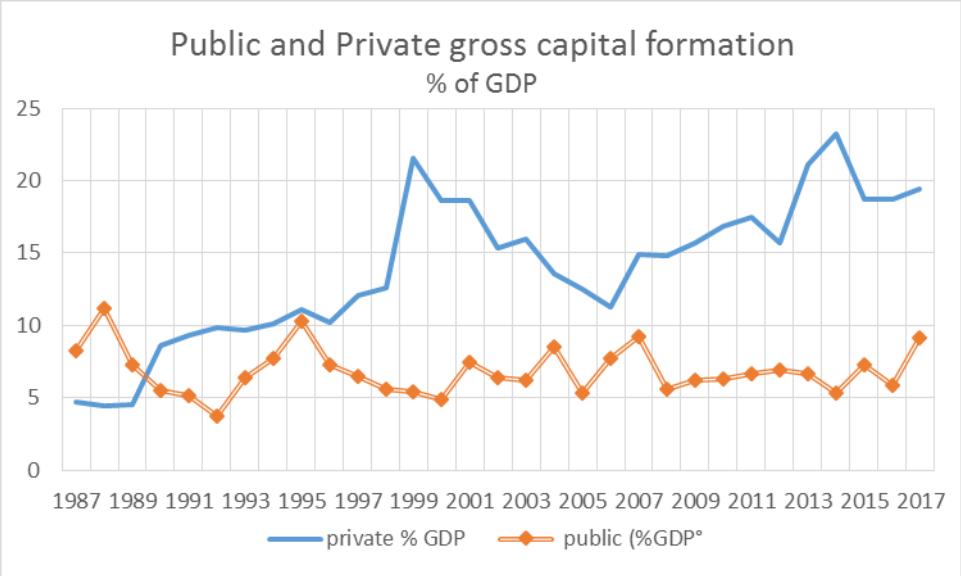
[29] See INSAE (2015). The 2013 survey report is only focused on poverty issues and does not report data on aggregate household consumption spending.
[30] As already mentioned, a new national account system has recently been introduced by Benin (INSAE, 2019). The new system integrates the 2015 EMICoV household survey data.
[31] Note that informal cross-border trade with Nigeria can also result in some underestimation of household consumption in national account data. Informal imports (mostly of fuel) of Benin from Nigeria will not be included in national account imports, nor in household consumption. Survey data on household consumption will, however, include them.

export activity was also the largest (see Figure 2 in Section 1.3.1). It was also during this period that the share of imports in GDP strongly rose (see Figure 8).

The share of *government consumption* in GDP increased from some 9% in the 1960s to 16% in 1990, before being trimmed by the Structural Adjustment programmes to some 12% in 2004, progressively increasing again to reach a new high of 17% after 2010, slightly above that of the average SSA country.

The share of *gross capital formation* in GDP closely matched government spending policy until the end of the centralised economy experience in 1989, accelerating until 1982, and has been retreating thereafter. When the liberalisation of the economy started in the early 1990s, private investment progressively picked up. This mostly accounts for the rise in the ratio of gross capital formation to GDP during the 1990s. Total investment in the economy has averaged 21.3% since the move to a market economy in 1990. More recently it reached even 27%. Such a period average level is close to that of a typical low-income country (19.2%), but is well below that of East Asia and Pacific IDA/IRBD countries (38.2%).

Figure 9: Capital formation, public and private



Source: WDI

Figure 9 decomposes for the period after 1987[32] the share of gross capital formation into its two components, private and public investment. The share of private investment in total investment has progressively risen, to represent since the early 2000s about 70%. Public investment has averaged 6.5% of GDP over the 1990–2016 period, and private investment 14.7%. For the average IDA/IRBD SSA country, the respective shares for the same periods were 3.7% and 13.9%.

Given the significant structural changes Benin is confronted with, a sustained level of both public and private investment is a *sine qua non* for improving growth performance through increased productivity. However, efforts in raising public investment, as in the period 2005–

[32] WDI data for private capital formation only start in 1987.

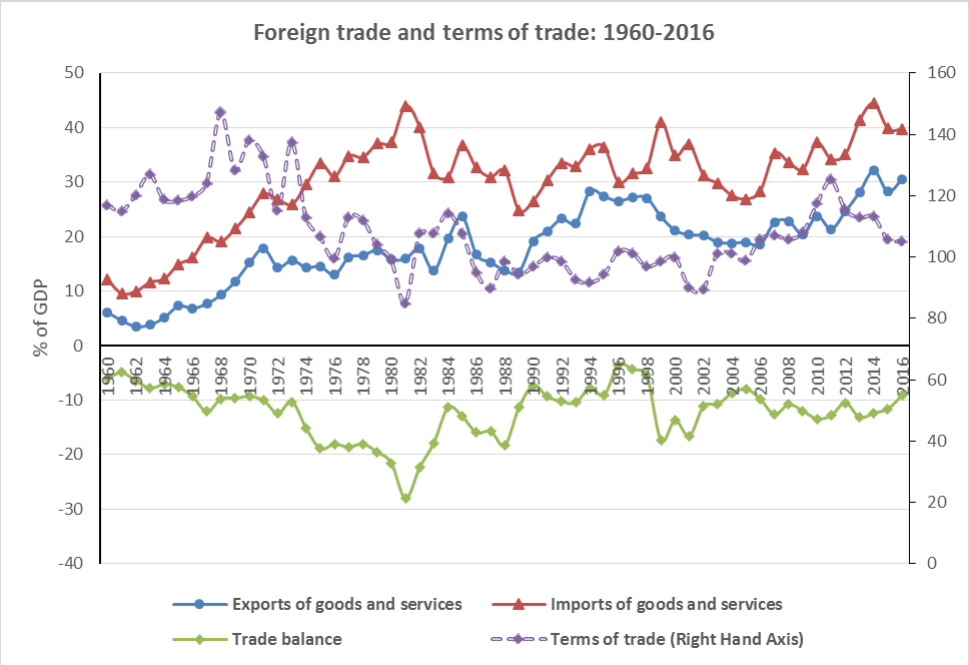
2007, have rarely been sufficiently persistent.[33] This may of course be the result of domestic financing difficulties or of some reluctance from donors, who finance a large part of public investment spending. Regardless, besides its size, the efficiency of public investment is also cause for worry in Benin. The country lags in this respect, relative to other comparator countries, on two counts (IMF, 2018a, p. 29ss): it has larger infrastructure gaps (concerning roads, public health, and education infrastructure) and the quality of its public services (electricity supply, roads, railways, etc.) is lower. Closing these infrastructure gaps and improving investment quality could eradicate crucial growth bottlenecks, in the shorter term (electricity and roads) as well as in the medium term (education). Moreover, it could attract continued support from donors and mobilise additional private investment. In a market economy, the latter is a crucial factor of economic dynamism. It is also very sensitive to initial conditions and to future growth prospects and risks. This is especially true when a significant part of domestic private investment is financed from abroad, through foreign direct investment (FDI), which can have catalysing effects. Indeed, the share of private investment in GDP and FDI inflows have followed similar patterns over the period in Benin: a rise at the beginning of economic liberalisation, a retrenchment after several years of lower growth and a weakened pace of reforms, and again a significant increase since 2007.[34]

1.5 External trade

A word of caution is necessary before discussing external trade data for Benin. As noted above, economic activity in Benin is characterised by a large degree of informality. This is also true for international trade, especially so when one considers the extent of smuggling and illegal trade between Benin and Nigeria (see Section 1.3.1). A significant part of import and/or export transactions can thus remain unrecorded, to an extent that may vary from year to year, depending on the strength of the incentives behind these illegal activities. Prudence is advisable, but one should nevertheless be able to detect in the available data the major trends and the specific features of external trade in Benin.

[33] IMF (2010, p. 11) puts the target for public investment at about 9% of GDP over the medium term, as 'consistent with the country's development needs and absorption capacity constraints'.
[34] FDI reached 4% of GDP in 1992, then declined progressively. It started recovering in 2006 and reached 4% again in 2014.

Figure 10: Foreign trade and terms of trade, 1960–2016



Source: WDI

The patterns of external trade of Benin over the 1960–2018 period are, similarly to what has been discussed for the structure of aggregate spending (see Section 1.4), broadly in line with the major changes in governmental economic policy Benin has experienced. During the post-colonial period (1960–1972), one observes a rise both in the GDP shares of exports and of imports, mostly with France as destination and origin, respectively for agricultural and manufactured products (Dossou and Sinzogan, 2007, p. 90). The period of Marxist-Leninist-inspired economic policy (1973–1989) sees the export share stagnate and the import share further increase, at a quick pace until 1981, then decrease. This corresponds to the observed patterns in household consumption and investment shares in GDP (see Section 1.4). During this period, the terms of trade evolved in a strongly negative way, falling by 42% from 1968 to 1981, similarly to the experience in the whole of WAEMU. This put a drag on real incomes that the government tried to counteract by profligate government expenditures. As a result of adverse evolution in exports, imports, and terms of trade, the trade balance deteriorated sharply, reaching a deficit of 28% of GDP in 1981.

With the transition to a market economy after 1990, the export share in GDP rose again, from 13% of GDP in 1981 to 28% in 1994, before dropping to 19% in 2006, then rising regularly to 30% in 2014–2016. Given the importance of cotton in Benin's economy (see Section 1.3.1), it is not surprising to observe that the export share cycles closely match the cycles observed for cotton production. The latter started from very low levels in the early 1980s, peaked in 1995–2001, then progressively fell by more than half, before recovering slowly after 2010 and reaching its earlier peak again in 2014.[35]

Terms of trade recovered from 2002 to 2010, before deteriorating again. Given the rise in import shares, which has paralleled the rise in export shares since 1990, the trade balance remained in deficit after 1990, at a sizeable level of 10% of GDP, not much below its 1960–

[35] Data from www.indexmundi.com/agriculture.

2016 average (12%). This persistent and high level of deficit is not necessarily worrying, provided it finds its origin in imports of growth-enhancing capital goods and can thus easily be financed by non-debt-creating FDI flows or concessional financing (see Section 1.6).

The global parallelism observed between export and import shares reflects two features of the Beninese economic context: i) many structural reforms have been designed to favour public and private investment in the export-oriented cotton and manufacturing sector, implying increased imports of capital goods; and ii) importing goods for re-export to Nigeria and landlocked Niger and Burkina Faso, an important trade activity for Benin, leads to a parallel recording of these goods as both imports and exports, at least for the official side of this trade. As noted earlier, a significant amount of imports is declared at customs for domestic destination, although these goods are later illegally re-exported to Nigeria. The recorded official imports are thus overestimated by the amount of this diverted flow of imported goods. The latter obviously are unrecorded in the official exports, which implies that the trade balance is biased downwards. The amount of this bias is difficult to assess, however.

A crucial question is whether exports can be identified as an engine of growth for Benin. The years from 2005 to 2014 were the most recent period of continuous high growth in export volumes, with exports growing at an annualised rate of 7.8%. With an average share of 25% of GDP during this period, exports thus contributed directly to about 2% of annual GDP growth, close to half the observed GDP growth over this nine-year period. While this indeed suggests that exports have a major role to play in pushing growth, a qualifying argument is necessary. As already mentioned, growth in exports was paralleled by growth in imports. The latter grew more rapidly, at an annualised rate of 13.4%, implying a deterioration of the trade balance. Strong export growth was thus not sufficient to lead to an improvement of Benin's external constraint.[36] In addition, episodes of high export growth are prone to being reversed, as was the case in 2015/16 when the export volume decreased by 43%, relative to its 2014 level. To be a reliable and sustainable engine of growth, exports would thus need to have a sufficiently high domestic value-added content and grow at a high and steady pace.

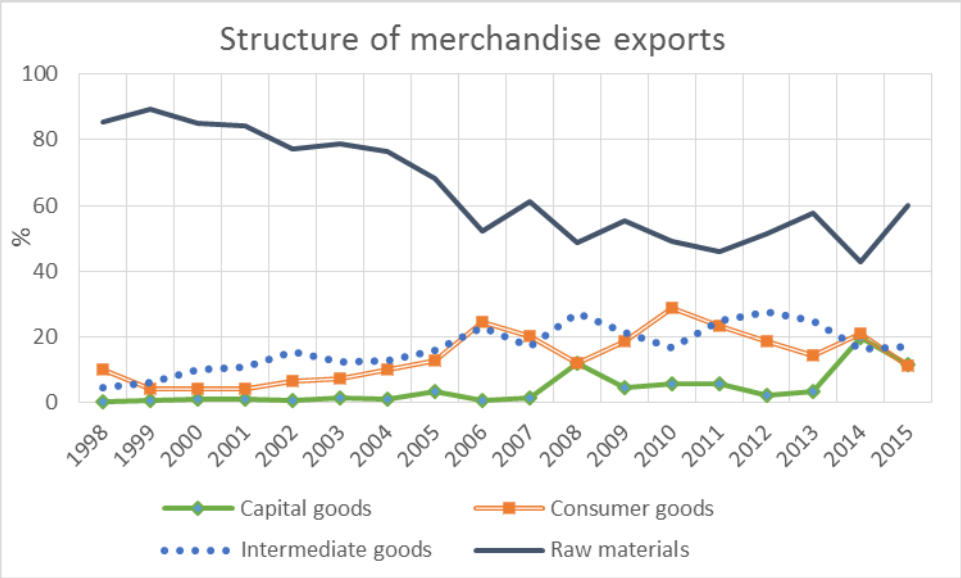
An analysis of the composition of exports helps to understand why the contribution of exports to growth is still not satisfactory. Figure 11 shows the composition of merchandise exports since 1998. Raw materials (mostly agricultural products such as cotton seeds, palm nuts, cashew nuts, and the like), which are particularly exposed to the hazard of climate and of fluctuations in international prices, are on a decreasing trend but still represent more than half of total merchandise exports. The shares of intermediate goods and of consumer goods are on the rise, each representing in the most recent years around 20% of merchandise exports. Both include mostly transformed agricultural products. The share of capital goods – the more sophisticated part of manufacturing – stands at less than 5%. There is no significant trend but some unusually large shares are sometimes observed, which is probably due to particularly high re-export activities during these years. WTO (2017) aggregates merchandise exports into three broad categories: agriculture, manufacturing, and extractive industries (including gold). In 2016, the respective shares of these three categories were 71.6% (down from 80.7% in 2009), 18.5% (18.6% in 2009), and 9.9% (up

[36] To more precisely assess the net effect of exports of growth and on the trade balance one would need to take into account, beyond the direct content of imports in exports, the multiplier effects of exports on the whole economy and the volume of imports.

from 0.7% in 2009). These figures confirm the strong link between exports and the performance of the agricultural sector as well as the relatively low contribution of manufacturing to export dynamism. They also point to a weak degree of product diversification of Beninese exports.

The destination countries of merchandise exports[37] are the neighbouring African countries and Asia (India, Bangladesh, and China), well ahead of Europe. The share of Asian countries has increased, from 36% in 2009 to 54% in 2016, with the share of the African countries dropping over the same period from 58% to 28%. Despite this reorientation of trade toward fast-growing countries, the diversification of partner countries remains, like the diversification of products, weak and below the average of African and Asian comparator countries, according to a recent IMF (2018) study.

Figure 11: Structure of merchandise exports



Source: World Bank UNCTAD WITS Database

The share of services in total exports of goods and services is significant, although on a decreasing trend, from 35% in 1990 to 17% in 2016. Tourism has the largest share in service activities (in general more than 40%) and even now accounts for about 2% of GDP. Transport is the other important component of export services, and predominantly reflects the activities of the Port of Cotonou.

Concerning the composition of merchandise imports (Figure 12), one notes the high and relatively constant share of consumer goods and the lower and declining share of intermediate products. Capital goods have been on an increasing trend since 2006. Of course, part of these goods is for re-export to Nigeria and other landlocked countries, so that a more detailed analysis would be necessary in order to draw relevant conclusions about the implications of these evolutions for the patterns of domestic expenditures and growth. Europe (especially France) remains an important source of merchandise imports, followed by India, Thailand, and China (WTO, 2017, Table A1.4).

[37] WTO (2017) Table A1.3.

Figure 12: Structure of merchandise imports

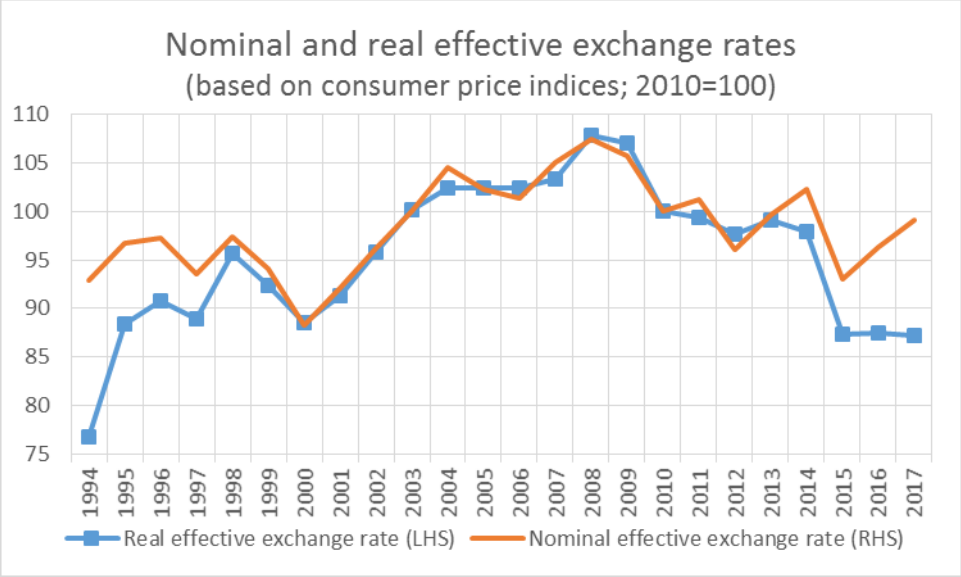
Source: World Bank UNCTAD WITS Database.

A last external trade issue that merits discussion is competitiveness. Although there are many facets to competitiveness, we focus on the relative price component[38] and use the real exchange rate as indicator.[39] As a member of WAEMU, Benin is on a fixed peg with respect to the Euro (the French Franc before 1999). The peg has only been changed once since 1948. This was the case in January 1994 when the CFA franc was devalued by 50%. Figure 13 shows the evolution in Benin's nominal and real effective exchange rates since 1994. The low level of the real effective exchange rate observed immediately after the 1994 devaluation (compared to 2010, the base level year of the index) reflects the correction of the important overvaluation that had been built up over the preceding years. This large gain in competitiveness was progressively eroded, as domestic currency import prices and later domestic wages and prices rose. Inflation went up to 39% in 1994 and was still 14% in 1995, before falling again below 5%. After 1998, the real exchange rate closely followed the nominal exchange rate, with Benin managing to keep the inflation rate at levels close to those observed in trade partner countries.[40] Benin still has close trade links with France and other Eurozone countries as well as with other WAEMU and CEMAC African countries whose currency is also pegged to the Euro. The nominal effective exchange rate has therefore largely followed the trend in the French Franc/Euro exchange rate against the US dollar. As a result, Benin gained some competitiveness from 1998 to 2000, then faced a

[38] Two other components are the quality of products and trade policy. Concerning the former aspect, IMF (2018a, p. 18) reports that 'the product quality of Benin exports has remained relatively mediocre over time'. We do not discuss the latter issue, given its complexity. Benin has applied the ECOWAS common external tariff since 2015.
[39] The reported real effective exchange rate indicator is based on consumer prices. Using producer prices would have been preferable, but this is not possible due to data limitations. For a small open economy like Benin the ratio of prices of non-traded goods to traded goods (the internal real exchange rate) would also provide useful indications about competitiveness. A study by IMF (2004) of the evolution of real exchange rate movements over the 1993–2004 period (before and after the 1994 devaluation of the CFA franc) reveals that both measures of the exchange broadly show similar evolutions.
[40] And broadly complying with WAEMU convergence criteria, which include an inflation rate lower than 3% per annum in every member country.

cumulative loss of about 20% from 2000 to 2008. Starting in 2010, the real exchange rate depreciated again by some 19%, even by more than the nominal rate, with inflation in Benin falling below that of its trading partners.

Figure 13: Nominal and effective exchange rates



Source: International Monetary Fund data: for 1991–2003 from various issues of IMF Country Reports; for 2004–2017 data retrieved from Federal Reserve Bank of St. Louis data bank.

The changes in the real exchange rate discussed above only give broad indications of Benin's competitiveness, for at least two reasons. First, Benin is exclusively a price-taking economy, with a tradable sector producing a weakly diversified array of goods. Producer prices in domestic currency are thus determined by international prices and by the exchange rate. This implies that it is domestic costs (mostly unit wage costs, which encompass both nominal wage and productivity differentials) that determine producers' profit margins and therefore the sector's medium to long term competitiveness and development prospects. Real exchange rates based on relative consumer price indices only imperfectly reflect this cost competition aspect. Second, the reported effective nominal and real exchange rates are based on official exchange rates. However, a significant part of international trade between Benin and Nigeria is informal. Transactions on these informal markets are channelled through the parallel exchange market of the naira, where the exchange rate is usually depreciated relative to its official exchange rate. Real exchange rates computed at official rates thus underestimate the actual degree of overvaluation.[41] However, even if the reported competitiveness indicator is imperfect, one can nevertheless conclude that real exchange rate shocks have been sizable during the last 25 years and that they have been very much outside the control of the Beninese authorities. Indeed, as a member of a monetary union whose external exchange rate is a hard peg, the only option for Benin to have some control on the competitiveness of its tradable goods is to keep in check the evolution of its nominal domestic prices and wages. Given that in low-income countries wages in the public sector often play a leading role in the dynamics of wages and prices in the private sector, public

[41] Premia between the parallel and the official rate were often huge for prolonged periods, e.g. from 1993 to 1998 when they reached 300% (data on premia from Reinhard, 2018), although they fell to more moderate levels after the 1998 devaluation of the naira. Levels around 50% have again been observed in 2015, up to the 2016 devaluation of the naira.

wage policy may be one of only a limited number of instruments that the authorities can resort to.

1.6 Financing of the economy

Establishing a developing economy's financial accounts, including its transactions with the rest of the world, is a challenging statistical task, especially if the degree of informality in this economy is high. Figure 14 combines national account data from INSAE with balance of payments data from WDI to assess the financing needs of the economy and the ways the latter have been covered by foreign financing. Using two different sources of data raises inevitable consistency issues and invites to caution. Nevertheless, imperfect as they are, the data still offer an interesting look into the major trends characterising the domestic and external financial flows of Benin. Due to data availability, we start our analysis in 2002.

Figure 14: Financing flows of Benin's economy, 2002–2014

% of GDP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Domestic Flows													
Gross domestic savings	**12.4**	**13.0**	**14.5**	**10.0**	**10.3**	**11.5**	**9.6**	**10.8**	**14.1**	**15.9**	**13.7**	**18.4**	**17.1**
Private sector	9.2	12.3	12.8	9.3	8.3	6.4	6.7	11.7	10.5	13.6	10.3	15.8	14.6
Public sector	3.2	0.6	1.7	0.8	2.0	5.0	2.9	-0.9	3.6	2.3	3.4	2.6	2.5
Gross domesting Investment	**21.8**	**22.2**	**22.1**	**17.8**	**19.0**	**24.1**	**20.4**	**21.9**	**23.1**	**24.1**	**22.6**	**27.8**	**28.6**
Private sector	16.7	16.6	17.1	12.7	14.4	16.4	14.2	15.9	16.7	17.8	16.9	21.7	23.2
Public sector	5.1	5.6	5.0	5.1	4.5	7.6	6.1	6.1	6.4	6.3	5.6	6.1	5.3
Need for funding	**9.4**	**9.2**	**7.6**	**7.8**	**8.7**	**12.6**	**10.8**	**11.1**	**9.1**	**8.2**	**8.8**	**9.4**	**11.5**
Private sector	7.5	4.2	4.4	3.4	6.2	10.0	7.6	4.1	6.2	4.2	6.6	5.9	8.7
Government deficit excluding foreign grants	1.9	5.0	3.3	4.4	2.5	2.6	3.2	7.0	2.9	4.0	2.2	3.5	2.8
Foreign financing	**10.9**	**8.7**	**9.0**	**10.1**	**12.0**	**14.0**	**12.9**	**11.2**	**12.1**	**12.3**	**11.3**	**13.2**	**12.7**
Net primary and secondary income from abroad	4.3	0.7	1.2	3.1	4.4	3.7	3.3	2.0	1.5	1.6	1.6	2.0	2.4
Official development assistance (net flows)	7.3	7.7	8.7	7.3	7.8	8.0	8.9	9.5	9.9	8.6	6.2	7.2	6.2
Foreign Direct Investment (net inflows)	-0.6	0.3	-0.9	-0.2	-0.2	2.3	0.7	-0.3	0.8	2.1	3.5	3.9	4.2
Memo:													
Outstanding external debt	44.2	36.7	34.6	36.3	9.8	10.5	13.0	13.8	16.9	16.6	15.3	16.7	19.8
Government deficit including foreign grants	1.4	3.2	0.9	2.5	0.8	-0.4	1.6	4.0	1.5	1.7	0.4	2.6	1.9

Source of Data: INSAE (for domestic flows) and WDI (for foreign financing).

A first observation is that domestic savings are systematically lower than domestic investment, resulting in a persistent need for external funding. This savings deficit, relative to investment, is significant, with an average of 9.6% of GDP for the whole period, and it shows no sign of abating. Both the private and public sectors have a savings rate that is insufficient to cover their expenditures for capital accumulation. The private savings rate decreased from 2002 to 2006 before recovering again, a trend that coincides with the patterns of growth in *per capita* income. The significant deceleration in *per capita* growth in the period 2000–2006 led consumers to decrease their savings rate so as to preserve their consumption level, while firm profits also presumably came under stress. The opposite evolution is observed for the 2009–2014 period. The savings rate of the public sector stands at the low period average rate of 2.3% of GDP. This reflects difficulties in mobilising more domestic fiscal revenue. Government consumption thus largely exhausts government revenue, leaving only

a small space for financing investment out of domestic public resources or even no space at all, as was the case in 2009.

As the low rate of public saving goes back to a low mobilisation of domestic revenue, it is interesting to briefly discuss the structure of government revenues and their evolution over the recent period.

Figure 15: Government revenue, 2002–2016

% of GDP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Direct taxes	3.8	3.5	3.7	3.6	3.4	3.6	3.6	3.4	3.2	3.3	3.0	3.1			
Indirect taxes	10.7	10.7	11.0	10.3	10.8	12.1	12.5	11.6	12.3	11.5	11.4	12.2			
of which: VAT	6.0	5.7	6.2	5.8	6.0	6.8	6.8	6.8	6.5	6.3	6.3	6.6			
of which: Taxes on International Trade	3.5	3.6	3.7	3.6	3.9	4.2	4.4	3.5	4.1	3.6	3.9	4.3	7.5	7.0	5.7
Total Taxes	14.4	14.3	14.6	13.8	14.2	15.7	16.1	15.0	15.5	14.8	14.4	15.4	14.1	14.0	12.1
Social Contributions	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Non-Tax revenue	0.9	0.9	0.8	0.8	0.7	2.8	0.7	0.9	1.3	0.8	0.8	0.8	1.7	2.2	2.1
Grants	0.5	1.8	2.3	2.0	1.7	2.8	1.7	2.4	1.5	2.2	1.1	1.0	1.0	0.6	0.5
Total Revenu	15.8	16.9	17.8	16.7	17.1	21.8	19.1	18.9	18.8	18.4	16.9	17.8	17.2	17.3	15.2

Sources: IMF, Government Financial Statistics up to 2013; 2014–2016 UNU-WIDER data set on government revenue.

As shown in Figure 15, tax revenues are in the range of 14–15% of GDP, globally constant over the 2002–2016 period, and with a recent decline. The tax effort is below that of SSA countries (excluding high-income countries), which averaged 18.9% over the 2013–2016 period (Source: WDI). It is also well below the 20% target assigned by WAEMU to its members, though this is still the case for all of them except Togo (UEOMA, 2018, p. 88). Non-tax revenues are in general low, except during the most recent years, while grants are decreasing. Direct taxes on firms and individuals and social contributions amount to less than 4% of GDP. This is essentially the consequence of the large degree of informality of the Beninese economy. Indirect taxes therefore constitute the bulk of domestic revenue mobilisation. Benin was among the first SSA countries to adopt VAT, as early as 1991. VAT provides the largest part of indirect fiscal revenue over the 2002–2013 period,[42] immediately followed by taxes on international trade. The data reported in Figure 15 for taxes on international trade exclusively concern customs and other duties on imports for the domestic market and for re-exports. Other exports are mostly not taxed or only moderately so (WTO, 2017, p. 113).

The sizable contribution of taxes on international trade to total taxes mostly reflects the importance of re-export activities that characterises Benin (see Section 1.3.1). This appears more clearly so when one compares Benin with other average SSA countries (excluding

[42] VAT is collected both by customs and by the tax administration. While published data for total customs revenues are available for the period after 2013, their decomposition into trade taxes and VAT is not available.

high-income countries), whose taxes on international trade only amount to about 2% of GDP over the 2013–2016 period (Source: WDI). Also, the contribution of trade taxes significantly increased during the 2013–2015 period, which coincides with the period when re-export activities peaked (see Figure 2). Note, finally, that the reported share of international trade taxes underestimates the total amount of taxes Benin derives from its re-export activities. Indeed, as noted in Section 1.3.1, part of the imports declared at customs as intended for the domestic market, and therefore subject to VAT, are in fact unofficially re-exported to Nigeria. VAT collected on these re-routed goods also significantly contributes to the fiscal benefits derived from the re-export trade, although to an extent that is difficult to assess.

Taxes are collected in Benin by two separate bodies: the customs administration and the tax administration. Taxes collected by customs represented over the 2013–2016 period a share of total tax revenues varying from a high of 56% in 2013 to a low of 45% in 2016. Also, VAT collected by customs represented over the same period a share of indirect taxes (the sum of those collected by the fiscal administration and of the customs VAT revenues) varying from a high of 51% in 2013 to a low of 36% in 2016 (Ministère de l'économie et des finances, 2017). Both statistics again give a clear indication of the major role played by cross-border trade in Benin.

Given the crucial role of customs in the tax collection process, much effort has been devoted, with the help of technical assistance from donors, to improving revenue collection, with the additional aim of improving and strengthening the competitiveness of Cotonou, the country's main entry point for imports. A recent evaluation of the performance of Benin's customs administration by the World Bank (2015b) has singled out several remaining operational inefficiencies, such as lack of transparency, insufficient control procedures for the enforcement of customs regulations, incomplete and irregular transmission of data between customs and the port administration, and limited controls at land borders. The evaluation also indicated that the customs administration's governance remained problematic: the low risk of sanctions implies that incentives for operators and customs officials to comply with the law and the administrative rules are low, so that fraud and corruption are still common within the customs administration. The performance of the customs administration has also been undermined by the back and forth of the government in privatising crucial tasks of customs control: in 2011, the *Programme de Vérification des Importations* (PVI), designed to improve the procedures for assessing the correct value of imported goods and applying the correct tariff and tax rates, was tendered to a private Beninese firm, Benin Control, despite strong opposition by customs agents and private operators (IMF, 2013, p. 9). The privatisation was politically motivated and tainted by conflicts of interest. Subsequently, the PVI was suspended in 2012 because Benin Control and its foreign subcontractor performed badly and charged excessive prices for their services. This brought about severe disruptions in the traffic at the port of Cotonou and threatened its competitiveness. In 2017, however, Benin Control was reinstated by the government to perform the same tasks, again indicating strong political interference and suggesting major underlying conflicts of interest (see Chapter 1).[43]

[43] The 2011 deal involved the government of President Yayi Boni and the major businessman Patrice Talon, at that time a strong supporter of Yayi Boni. Talon's firm, Benin Control, was awarded the PVI contract. Some time later, Talon had a fall-out with Yayi Boni, whose government suspended the PVI in 2012 (see Chapter 1). Talon became himself Benin's president in 2016. In 2017, Benin Control was reinstated by Talon's government to

Gross domestic investment has averaged 22.7% of GDP over the 2002–2014 period, with somewhat higher investment rates after 2006 that are largely the result of the dynamism of private investment during this period. Indeed, as already mentioned in Section 1.4, the largest part of domestic investment is private (75% over the period). Public and private investments are in principle complementary,[44] especially so when there is a public infrastructure gap that discourages private investment, be it domestic or foreign. Indeed, both public and private investments are necessary for sustainable growth. A level of 22.7% is quite close to the average rate observed in low-income countries. However, the efficiency of a given investment rate is also a crucial issue. An indication of how efficiently investment translates into growth is given by the incremental capital–output ratio (ICOR). World Bank (2014) reports that Benin's average ICOR over the 2004–2013 period has been around 5 and thus significantly higher than for comparator countries. With an ICOR of 5, the increase of 9 percentage points in the rate of investment to GDP, which is the increase that has been observed between 2006 and 2014 in Benin, would have contributed, if maintained, to an additional annual GDP growth of 1.8%. Had Benin's ICOR instead been 3.8, the value observed for Bangladesh, a comparator country in the World Bank study, the same increase in the investment rate would have contributed to 2.4% additional annual GDP growth, a significant difference of 0.6%.[45]

Given the relative differences in savings and in the investment rates of the private and the public sectors, it appears that the need for external funding mainly originates in the private sector.

Turning to the foreign funding that has been made available to the economy, it should first be noted that the supply of foreign financing appears to be larger than the total needs. This is unfortunately the consequence of the inconsistencies that arise from putting together two different statistical frameworks (national accounts and balance of payments), both with their own reporting difficulties. In addition, accounting practices for ODA are particular, as not all ODA is linked to disbursement of external funds. This is especially important for our period of analysis, during which Benin has benefited from different mechanisms of debt relief.[46]

perform the same tasks under a new contract (*Programme de Vérification des Importations de Nouvelle generation*). The opacity about the task involved in the contract and the extent of fiscal exonerations it contained raised some outrage in the Beninese press in 2017 and even prompted a leader of an opposition party to address a letter concerning this matter to the IMF. See https://lanouvelletribune.info/2017/07/pvi-ng-remunerations-exorbitantes-bc/; www.ccdb- www.banouto.info/article/economie/20170914-bnin-fmi-alert-otage-conomie-talon/

[44] IMF (2018b, p. 65) indicates that infrastructure-focused public investment can be complementary to private investment when it raises the productivity of private capital; it can, however, also crowd out private investment when it is financed through increased taxes that discourage private investment, or by domestic borrowing that rations the financing available for firms, or by unsustainable foreign borrowing.

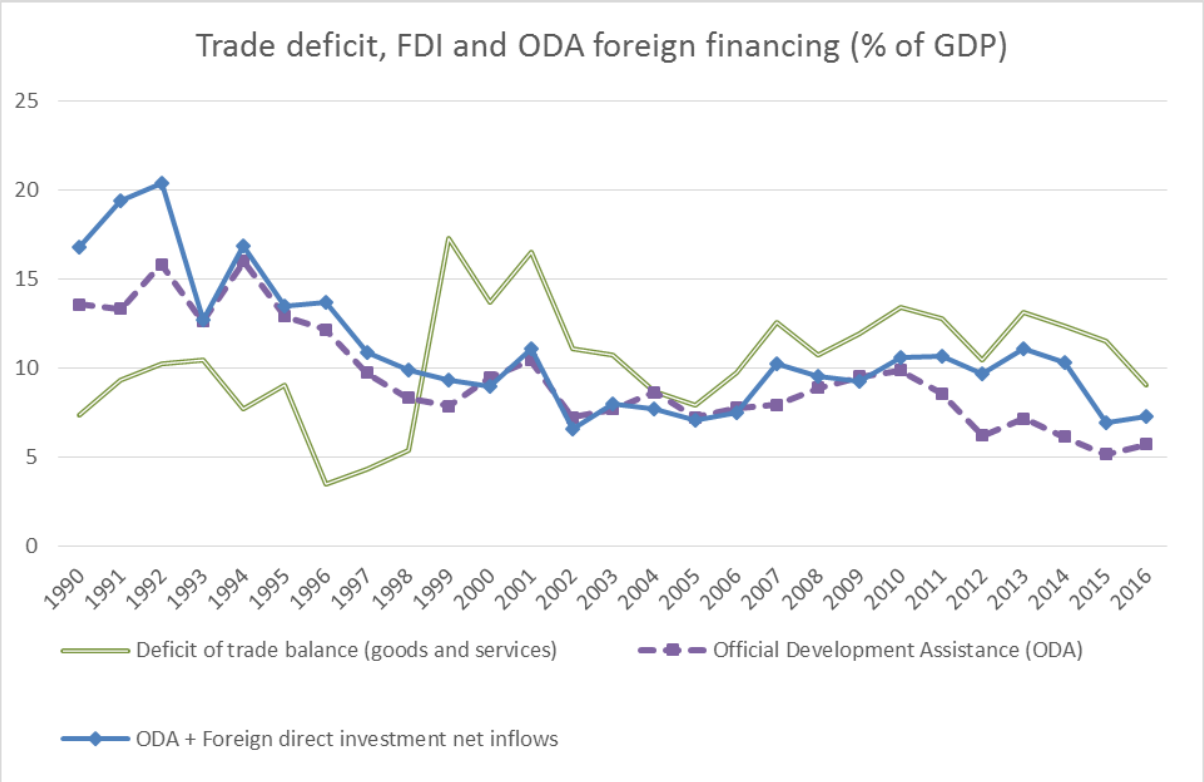
[45] As discussed in IMF (2018a), efficiency of public investment is directly linked to the quality of the governance of the country. The study reports results from a cross-country analysis. Public investment efficiency is measured by efficiency scores relative to a peer group. Efficiency scores are based on physical indicators (e.g. access to water, length of roads, etc.) and indicators of infrastructure quality. They are computed through a data envelopment analysis. The results show that Benin lags all comparator groups. With this methodology, it is estimated that Benin could improve the efficiency of its public investment by 55%

[46] Benin qualified in 2000 for the Highly Indebted Poor Countries (HIPC) debt relief initiative and reached its completion point in 2003. It also qualified in 2006 for the Multilateral Debt Relief Initiative (MDRI) when a large part of its multilateral debt was written off. Starting in 2000, these debt reduction operations had an impact on reported ODA flow, as parts of these debt reductions were considered as ODA.

A significant part of the external funding needs of the private sector is covered by FDI, especially in more recent years. Another part is covered by private transfers (net primary and secondary income from abroad, which includes workers' remittances), which are not negligible, with a period average of 2.4%, although on a declining trend. The remaining part of the external funding needs of the private sector is either covered by ODA flows benefiting the private sector or by debt financing. As domestic firms have only a very limited direct access to foreign borrowing,[47] the external funding is ultimately intermediated through the domestic banking system.

The government's need for external funding is met by ODA grants, which are, however, insufficient to fully finance the difference between public savings and public investment. The government's balance after taking grants into account is still a deficit (see Figure 16). The latter has to be financed either by soft ODA loans or by non-concessional debt, external or domestic.

Figure 16: Financing of the external balance of goods and services, 1990–2016



Source of data: WDI.

Looking at ODA flows in light of Benin's persistent and large need for external funding, one has to conclude that the economy is strongly dependent on aid flows. Indeed, ODA represents the largest part of Benin's external funding. Averaging 8.2% over the period, its share in total external funding is about 70%. The importance of ODA grants and loans for closing the gap between domestic savings and domestic investment is also illustrated in Figure 14, for a more extended period (1990–2016). The figure displays the deficit of the external balance on goods and services and its financing by ODA and FDI (shown as the

[47] The international debt statistics database does not report any long-term non-guaranteed private debt.

difference between the two lines ODA+FDI and ODA). The dominant role of ODA clearly appears. Before 1999, ODA even exceeded the trade balance deficit.[48] After 2000, ODA and FDI flows no longer finance the trade deficit completely. However, when one also takes net income flows from aboard of about 2% of GDP into account, the gap is more or less closed, although not always. In the latter case, there is accumulation of external non-concessional external debt.

A key question is therefore the sustainability of this strong dependence of Benin's economy on ODA financing. Should ODA significantly decline, Benin's development would be seriously hampered unless additional FDI financing could be attracted. If the latter did not materialise, the temptation could be to replace ODA financing by scaling up borrowing of external debt at market rates. Debt distress could then loom again in the future. Furthermore, it has to be noted that external debt levels have already been on the raise again (see Figure 14), after the large HIPC and MDRI debt write-offs Benin benefited from in the early 2000s.[49]

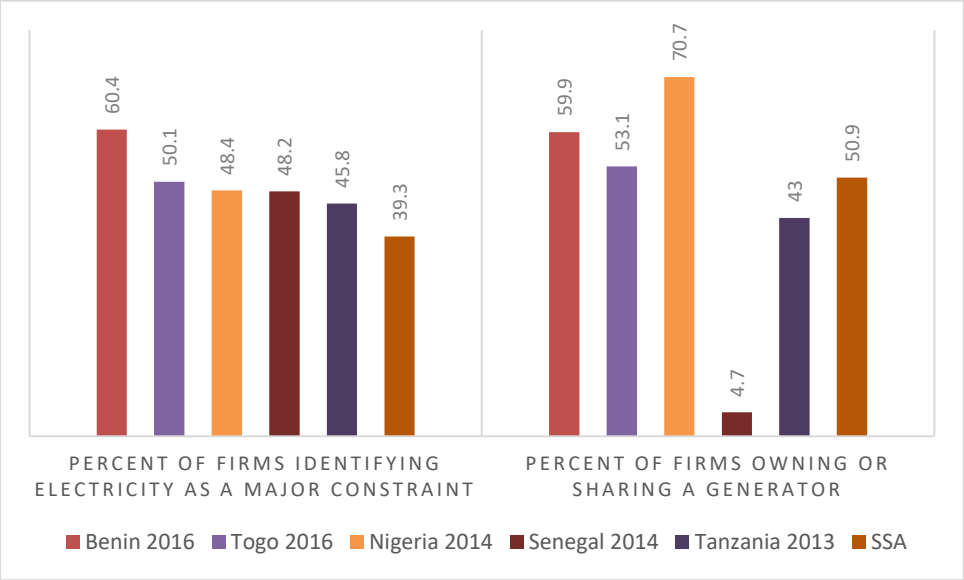
1.7 Physical infrastructure

A key problem that shackles Benin's economic development is the dearth and low quality of electricity, transport, and telecommunications infrastructure. Below, we provide some evidence documenting this crucial deficiency.

Let us begin with energy. The structural deficit of electrical energy infrastructure can be grasped on the levels of access, cost, and quality (UCF, 2012; Ianchovichina, 2008; Benin, 2006; World Bank, 2015b; Ghilardi and Sola, 2015). Costs of production factors (electricity, telecommunications, etc.) are generally higher than those of other African countries,[50] which themselves are higher than those in other regions of the world. As for the quality of electricity and telecommunications services, it is often mediocre (Benin, 2006). Finally, together with the problem of costs, access to electricity is the constraint on the development of firms most cited by economic operators: 60.4% of Beninese firms identify it as such (see Figure 17). This is confirmed by the World Bank's Doing Business Report (2016), which ranks Benin 179th of 189 economies for access to electricity. When there is a significant constraint, agents look for alternative workarounds (Hausmann *et al*., 2008). In this particular sub-sector, to circumvent the constraint, companies can resort to private production sources such as their own generators. This can be seen clearly in Figure 17 since, with the exception of Nigeria (where energy is not such a constraint), it is Benin that has the highest proportion of companies with electricity generators, with about 60% of firms, compared to about 5% in Senegal and 43% in Tanzania.

[48] This could be the result of the changes in the composition of external debt, with ODA debt replacing non-ODA external liabilities, or of an accumulation of reserves. ODA commitments may also have been particularly important in the wake of the 1994 CFA franc devaluation.
[49] Most of the new external debt is with multilateral creditors (e.g. the 2016 extended credit facility arranged with the IMF). Disbursements are, for this type of debt, conditioned on performance in putting into effect recommended growth-facilitating policies.
[50] See Report on the Diagnostic Study Trade Integration Study (DTIS) Update (World Bank, 2015b).

Figure 17: Electricity supply constraints in Benin and comparator countries



Source: Enterprise Surveys: www.entreprisesurvey.org

The development of roads, water, and telecommunications is another critical factor for the competitiveness and growth of an economy. By effectively connecting businesses to the input, output, and technology markets, this infrastructure can reduce production costs and improve competitiveness in both the domestic and international markets. The lack of road infrastructure, in rural areas in particular, causes difficulties in accessing the local and sub-regional markets while the lack of rail transport infrastructure has serious congestion effects on the road network (Nigeria) (Ianchovichina, 2008; UCF, 2012; Gnimassoun, 2016). The logistic performance index assesses the level of transport and trade infrastructure over the 2007–2016 period. On a scale of 5, the index for Benin rose from 1.89 in 2007 to 2.39 in 2016, thus showing progress. Overall, the quality of trade and transport infrastructure in Benin remains close to the average for SSA (estimated at 2.29) but is far below the best quality level, which is observed for Tanzania.

A study by Ianchovichina (2008) notes that, while the state of infrastructure in Benin is generally poor, in some subsectors the constraint is less severe: thus, among a group of 30 African countries, Benin is performing well in terms of access to drinking water. On the other hand, if 40% of the firms identify telecommunications and transport infrastructure as a strong constraint on economic activities, the low quality and the high cost of infrastructure services constitutes even more severe constraints. Gnimassoun (2016) reaches the same conclusion: while he identifies several factors as impeding the competitiveness of the Beninese economy, he considers infrastructure as one of the most severe problems. This diagnosis has recently been confirmed by the aforementioned IMF study (2018a), which reports results from a cross-country study based on efficiency scores measured relative to a peer group and computed through a data envelopment analysis. The results show that Benin lags all comparator groups for indicators of infrastructure quality (see Section 1.7).

Evidence from the INSAE study (p. 19) shows the presence of considerable geographical disparities. For example, in terms of access to electricity, the three departments ranking highest in terms of access to electricity are Littoral (84.1%), Ouémé (43.7%), and Atlantic

(39.2%), all located in the Southern part of the country. At the other end of the spectrum, two of the three departments with the worst supply – Alibori (10.8%) and Atacora (13.5%) – are in the North. The third one, Kouffo (15.6%), belongs to the Centre. In terms of access to drinking water, of the three departments with the best supply – Littoral (97.4%), Borgou (58.9%), and Ouémé (55.5%) – only one is in the North, while of the three departments with the worst access, only one does not belong to the North.[51]

Lack of telecommunications infrastructures is expected to prevent innovation efforts (Ianchovichina, 2008). Both the supply and use of the Internet remain fairly low in Benin compared to other countries, with only 6.79% of the population using the Internet in 2015 compared to 22.39% in SSA. Moreover, progress in the adoption of ICT in Benin turns out to be remarkably slow, in contrast to other African countries where it is very high: the adoption rate was 0.23% in 2000, compared to neighbouring Nigeria where, starting from an even lower base than Benin (0.06% in 2000), the rate rose up to 47.44% in 2015. In Senegal, progress was from 0.40% in 2000 to almost 22% in 2015. The low use of Internet services in Benin is partly due to the lack of telecommunications infrastructure and new technologies, and partly to the cost of the various services involved. In addition to use, other factors to consider are the quality of the connection and related services. The low availability and accessibility of good low-cost connections clearly reduce the scope for economic gains from the Internet in the case of Benin.

We can finally point out that the Enterprise Survey, which assesses the extent of the infrastructure challenge along two dimensions – adequacy of the physical infrastructure and institutional capacity in each sub-sector – concludes that management and governance problems in the transport public sector of Benin are pervasive and unsettled.

[51] 'Access' means access to SONEB running water at home, SONEB water elsewhere, standpipe or public tap, village pump, or well equipped with a human-operated pump.

2 Social indicators

We are fortunate to have available a quite recent *Growth and Poverty Reduction Strategy Report* by the World Bank for the period 2011–2015 (World Bank, 2015a). This report contains a lot of useful data about poverty, inequality, education, and health that the reader can easily refer to. Another useful report is the *Note sur la pauvreté au Bénin en 2015*, published by the INSAE (2015) and part of the 'Enquête Modulaire Intégrée sur les Conditions de Vie des Ménages', second edition. In what follows, we will use information contained in these two reports as well as more recent data extracted from the World Bank Development Indicators.

2.1 Poverty incidence and inequality

2.1.1 Poverty incidence

With a Human Development Index score of 0.427, Benin was ranked 167th out of 187 countries in the 2011 Human Development Report. The incidence of poverty at the national level is high too: the poverty headcount ratio was estimated to be 40% in 2015. More worryingly still, there is no discernible tendency for this ratio to decrease: it was 37.5% in 2006. This worsening tendency is confirmed by other evidence: the poverty gap has also increased (especially in rural areas) and the same holds true of inequality among the poor. As expected, poverty is more widespread in rural than in urban areas, although the difference is not significant (only a few percentage points). It also bears emphasis that poverty as measured by the headcount ratio has recently increased in all the departments of the country except along the coast, where it was already much lower than in the rest of the country. As for the poverty gap and inequality among the poor, they have increased in all departments over the years 2011–2015.

A second approach to measuring poverty consists of looking at non-income poverty, as assessed on the basis of a composite index that is a linear combination of dichotomous variables of household living conditions and property or assets. In the case of Benin, the headcount of non-monetary poverty is significantly smaller than the headcount of monetary poverty, and it has slightly decreased over the years 2011–2015.

Given the ethno-regional polarisation of the country underlined in Chapter 1, it is important to say more about the inter-departmental variations in the incidence of poverty. Here below we display the headcount poverty ratios for all the departments regrouped by broad region, as they have been estimated for 2015 (extracted from INSAE, 2015). Figures are presented in the order of department names:

- Southern, or coastal departments (Littoral, Ouémé, Atlantique, and Mono): 26%, 28%, 41%, and 47%.
- Central departments (Plateau, Zou, Collines, and Kouffo): 37%, 43%, 47%, and 49%.
- Northern departments (Borgou, Alibori, Donga, and Atakora): 39%, 40%, 42%, and 42%.

We see that by far the lowest rates of (monetary) poverty are observed in two Southern, coastal departments: Littoral, where the capital city of Cotonou lies, and Ouémé, which

includes the old and thriving city of Porto Novo. Departments in the other two broad regions, Central and Northern, show very high rates running from 37 to 49%. It is surprising to see that in the Southern, coastal region, two departments have very high poverty rates (47–49%), contrasting with the low rates of their immediate neighbours along the coastline. The highest poverty rate in the country is found in Kouffo (Central region), closely followed by Mono (Southern region) and Collines (Central region).

We now repeat the same exercise for non-monetary poverty:

- Southern, or coastal departments (Littoral, Ouémé, Atlantique, and Mono): 21.5%, 17%, 17%, and 40%.
- Central departments (Plateau, Zou, Collines, and Kouffo): 31.5%, 34%, 24%, and 44%.
- Northern departments (Borgou, Alibori, Donga, and Atakora): 30%, 35%, 19%, and 47%.

Clearly, the correlation between the two measures of poverty is far from perfect. The lowest rates of non-monetary poverty are found in three (out of four) departments in the Southern region (Ouémé, Atlantique, and Littoral), in one department in the Central region (Collines), and in one department in the Northern region (Donga). The highest rates are observed in one department in the Northern region (Atakora) and in one department in the Central region (Kouffo). The general pattern is therefore only partly confirming expectations: if the incidence of poverty (whether monetary or non-monetary) is comparatively small in the Southern, coastal departments, there is strong heterogeneity inside the coastal region itself. This is so much so that a Southern department, Mono, is one of the three worst achievers in the country, whether the monetary or the non-monetary measure is used. In fact, prosperity in Benin is centred on the clusters around Cotonou and Porto Novo, which cover only part of the country's coastline.

A third approach is based on an assessment of subjective poverty, that is, on whether people consider themselves to be poor and the manner in which they assess their living conditions. Results here are roughly consonant with those of the second approach: subjective poverty is smaller than the headcount of monetary poverty, and it has perceptibly decreased over the years 2011–2015.

A final approach rests on a combination of the first three approaches. It looks at hardcore poverty defined as the set of people who cumulate all the symptoms of poverty simultaneously. The proportion of this group of multidimensionally poor people in the total population has been estimated at 15.3% in 2015, as against 13.6% in 2011. This points to a deterioration of the poverty situation seen from the angle of these especially disadvantaged people.

Turning now to the individual characteristics of poor people, the following findings deserve emphasis. First, individuals belonging to households headed by persons who have at least completed primary-level schooling are less affected by both monetary and non-monetary poverty. Second, and more surprisingly, the incidence of monetary poverty is higher in male-headed than in female-headed households (but the opposite is true for non-monetary poverty). Third, a similar non-convergence is observed when the effect of household size is examined: while monetary poverty is more important in relatively large households, non-monetary poverty exhibits the inverse relationship (i.e. it is larger in smaller households).

A key factor behind the recent rise of (monetary) poverty in Benin is that the country does not have well-established safety net systems that can be rapidly activated in times of crisis. In recent years, Benin has been hit by global shocks, such as the food, fuel, and financial crises that began in 2008, and by domestic shocks, such as the floods of 2010 and 2012. All these crises have revealed important shortcomings in Benin's safety net systems. Spending on safety nets amounted to 0.3% of GDP between 2005 and 2009, which is well below the SSA average of 2.3%. Strengthening Benin's safety net system – particularly in the form of cash transfers for the chronic poor combined with labour-intensive public works for households with available labour – is essential to break the cycle of chronic poverty and to allow for a more effective, targeted, and timely response to future shocks (see World Bank, 2013).

2.1.2 Inequality

The Gini coefficient for income inequality in Benin is both high and increasing: at 0.39 in 2003, it rose to 0.46 in 2011, and close to 0.48 in 2015. Spatial disparities also appear as a critical feature of income inequality in Benin (INSAE, 2015).

Here, we give the Gini coefficients for all the departments regrouped by broad region (for the year 2015):

- Southern, or coastal departments (Littoral, Ouémé, Atlantique, and Mono): 0.405, 0.485, 0.345, and 0.401.
- Central departments (Plateau, Zou, Collines, and Kouffo): 0.371, 0.477, 0.460, and 0.408.
- Northern departments (Borgou, Alibori, Donga, and Atakora): 0.499, 0.394, 0.414, and 0.436.

No clear pattern emerges from this department-wise differentiation of Gini inequality measures. If the lowest inequality is found in a Southern department (Atlantique), it is in another department from the same region (Ouémé) that we observe one of the highest department-level inequality rates in the country (in fact, the second-highest coefficient after Borgou in the Northern region).

Note finally that the worsening of income inequality at country level, as reflected in the Gini coefficient, is also confirmed by other statistics such as the share of the lowest income decile, or the two lowest deciles, in aggregate income. Thus, the share of the poorest 10% of the population has declined from 2.9% in 2003 to 2.5% in 2011 and 1.0% in 2015. As for the share of the poorest 20%, this has declined from 7.0% in 2003 to 6.1% in 2011 and to 3.2% in 2015.

2.2 Education

2.2.1 Literacy

Benin has a catastrophic record of literacy achievements, ranking among the worst performers in the world. As Table 4 shows, literacy rates in Benin are much lower than those

estimated for SSA (excluding high-income countries). It is true that they have increased significantly over the last three decades (despite a regression between 2002 and 2006), but not by enough to even fill the gap with other SSA countries in general.

Table 4: Literacy rates in Benin and SSA (excluding high-income countries), 1979–2012

	Adult males (>14) Benin	Adult males (>14) SSA	Young females (15–24) Benin	Young females (15–24) SSA	Youth total (males and females) Benin	Youth total (males and females) SSA
1979*	25.19	60.331	18.255	54.677	29.787	63.182
1992	39.903	63.644	26.69	59.055	39.877	65.98
2002	47.866	67.773	33.238	61.609	45.31	68.10
2006	40.616	68.088	30.787	62.252	42.363	68.423
2012	44.96	70.057	40.938	68.068	52.492	72.795

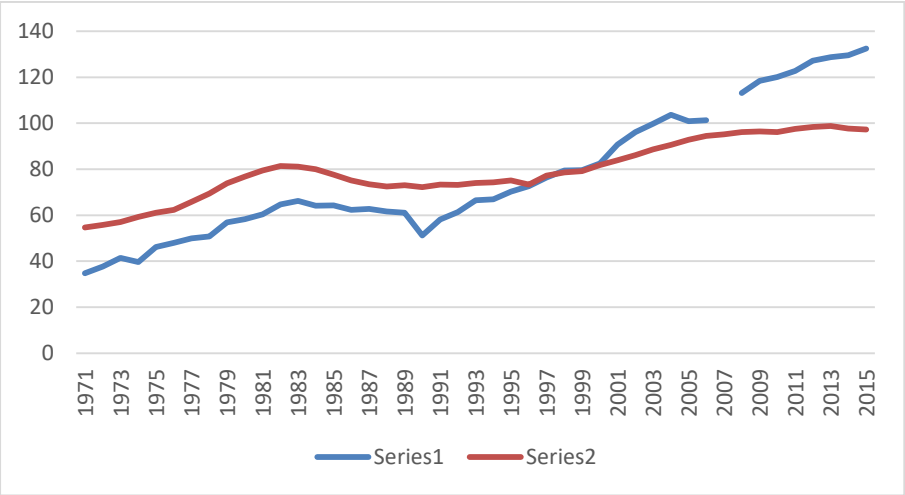
*year 1984 or 1983 for SSA.

Source: World Bank Development Indicators.

2.2.2 Primary education

The situation regarding primary school gross enrolment differs from the situation for literacy: in this case, although Benin had initially (in the early 1970s) much lower rates than SSA, it succeeded in overtaking the latter during the 1990s (see Figure 18). This is so much so that in 2015 Benin's gross enrolment rate in primary schools exceeded that of SSA by a wide margin (132% as against 97% for SSA).

Figure 18: Primary school enrolment (gross), Benin and SSA (excluding high-income countries), 1971–2015



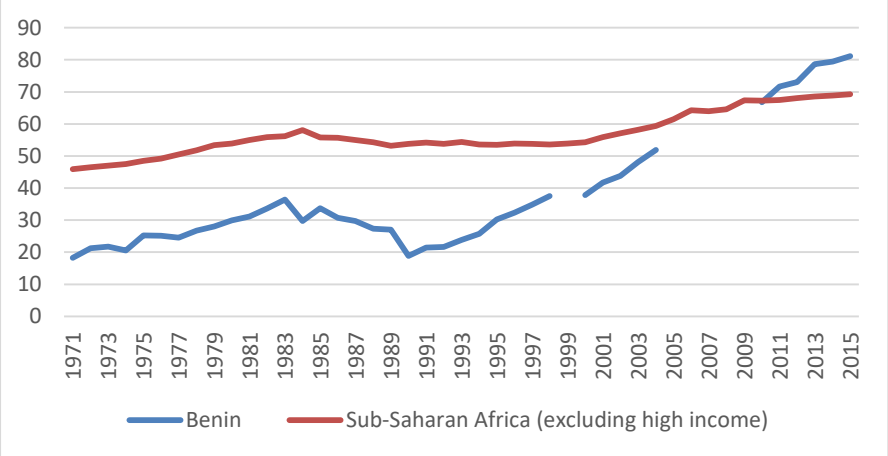
Source: WDI.

This performance is explained by remarkable progress related to the gross admission rates. The question must nevertheless be raised as to whether rapid growth in admission rates has been obtained at the price of a deterioration in the quality of schooling. One way to answer

that question is by looking at primary school completion rates, as we do below in Figure 19. What we find here is encouraging, since Benin again appears to have not only made up for the initial gap with the rest of SSA but also to have (recently) overtaken the latter. Another clue can be obtained from the evolution of the pupil–teacher ratio for primary schools. We do not show the figures here because they are oddly and suspiciously erratic: the ratio considerably improved (decreased) between 1980 and 1990 (from 54.6 to 30.5) only to rise abruptly to reach 62.2 in 2003, from which year the ratio starts again to continuously improve. In 2015, it stood at 45.0, in comparison to 37.5 for SSA as a whole, where the evolution has been rather steady (displaying a slow but regular decline over the years). As for the proportion of repeaters among enrolled primary school pupils, the main finding can be easily summarised: a peak was reached in 1985 after a regular deterioration in the years before, and then, following that peak, a steady decline in the ratio occurred to bring Benin closer and closer to the value observed for SSA (about 11% in Benin compared to 8% in SSA).

Our last indicator to assess the quality of primary schooling is the most appropriate because it measures it through learning outcomes rather than indirectly through inputs (as the pupil–teacher ratio does) or through outcomes liable to reflect levelling-down effects (like completion rates and repeater ratios). Unfortunately, the findings are quite worrying when we turn to this more reliable indicator: learning outcomes in primary education show no significant improvements since 2005. An assessment carried out in 2011 on a sample of 167 public primary schools and three private primary schools showed that: (i) only 28% of second grade students (CP) from public schools and 43% from private schools were literate while 18% and 47%, respectively, had mastered the curriculum in mathematics; (ii) only 12% of fifth grade (CM1) students from public schools and 42% from private schools were literate, while 11% and 38%, respectively, had mastered the curriculum in mathematics (World Bank, 2015). These findings seem to match the aforementioned poor literacy performances of Benin.

Figure 19: Primary school completion rates, Benin and SSA (excluding high-income countries), 1971–2015



Source: WDI.

2.2.3 Post-primary education

The data available for secondary school (gross) enrolment are much scattered than for primary school. From Table 5 below, however, we can see that enrolment in secondary schools has considerably increased: starting from a lower initial base in 1971, Benin rapidly caught up with SSA in the mid-1980s to largely exceed the latter's achievement in 2015.

Table 5: Secondary school enrolment (gross), Benin and SSA (excluding high-income countries), 1971–2015

	Benin	SSA
1971	4.31%	13.05%
1983	21.22%	22.3%
2000	21.8%	25.8%
2011	49.1%	40.6%
2015	58.8%	42.5%

Source: World Bank Indicators.

There is an increasing number of students who are completing basic education and they exert pressure for higher enrolments in secondary, vocational and tertiary education. The problem is that the gender gap widens as students move up the education ladder: girls' enrolment is consistently lower that of boys. Moreover, rapid expansion of educational enrolment strains resources and negatively affects the quality of education and the relevance of the curriculum, in tertiary education in particular. There is, therefore, an urgent need to reform the education system so as to avoid further declines in its quality (World Bank, 2015a). This requirement is especially critical because "Benin does not benefit from extractive resources like many of its neighbours, its development must be more knowledge intensive. Higher investment in human capital will enable the country to move up the technological ladder and diversify into higher value, knowledge- and research-intensive activities which promise better returns and are less subject to competitive pressures when compared to the raw agricultural products on which Benin has been largely relying to date" (*ibid*).

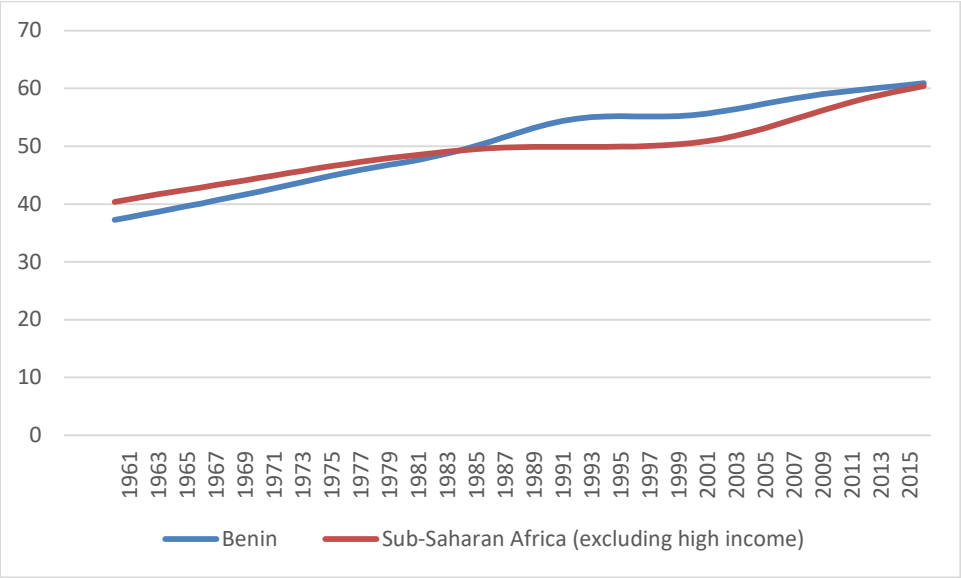
Achievements in tertiary education enrolment are easily summarised on the basis of World Bank data: the ratio was just 2% as recently as 1996, and then it gradually went up to reach 16% in 2013. Since then, however, it has started to decline (13% in 2016). The comparison with SSA (excluding high-income countries) shows that Benin has made more progress since about 2000: for SSA, the values of the ratio are 3.9% in 1996, 8.6% in 2013, and 8.8% in 2016.

2.3 Health

Starting with life expectancy at birth, Figure 20 shows that there is no big difference between Benin and SSA and, in 2016, both units had reached about the same value: 60.9 years for Benin and 60.4 years for SSA. The curves and outcomes for total mortality rates are broadly similar to those displayed in the figure below. An important factor behind the fall of mortality in Benin has been the decrease in malaria-related mortality**,** most likely thanks to the

massive distribution of bed nets. Thus, the proportion of children sleeping under a bed net increased from 20% in 2006 to 76% in 2011 (DHS, 2011).

Figure 20: Life expectancy at birth, Benin and SSA, 1960–2016



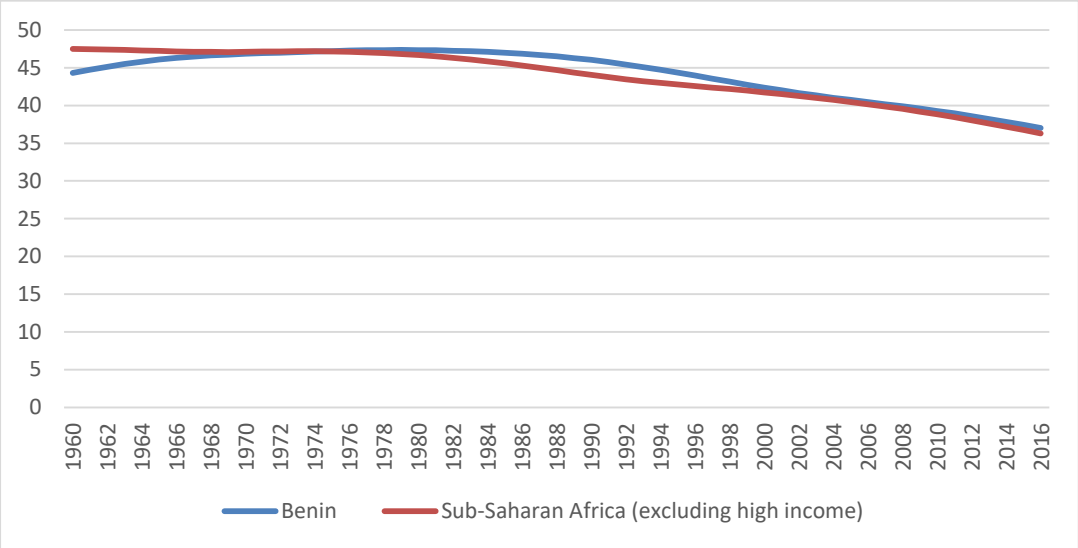
Source: WDI.

A look at comparative evolutions of neonatal mortality rates in Benin and SSA (not shown) essentially shows that, while the statistic was identical in the two observation units in 2007 (at 34.5 per 1,000 live births), progress became slower in Benin in the following years. In 2016, the neonatal mortality rate was 32.5 in Benin as against 27.7 in SSA. The same situation is obtained for infant mortality rates: 63.1 per 1,000 live births in Benin as against 53.3 in SSA in 2016 (although Benin was doing better than SSA during the period 1990–2005).

What about the incidence of malnutrition measured by the proportion of children under five who are underweight (in terms of weight for age)? Data from the World Bank Indicators indicate that it has steadily declined in Benin: from 26.2% in 1996, to 21.5% in 2001, 20.2% in 2006, and 18.0% in 2014 (data for SSA are not available). The picture emerging from DHS (2011) data is less encouraging, however: malnutrition among children under five not only remains high but has worsened over the past 10 years. Moreover, Benin's malnutrition rates of the order of 45% for stunting and 16% for wasting stand above the average of West and Central Africa. As expected, stunting and wasting are of greater concern in rural areas, yet prevalence is marginally lower among female children compared to males. The aforementioned World Bank Report (2015a) notes that the government's food and nutrition reform programme has suffered from weak institutional arrangements, reflected in various disjointed, small-scale sectoral components housed in the Agriculture, Health, and Family Affairs ministries. The overall quality and efficiency of health care delivery systems clearly need to be improved.

Finally, we display the comparative evolutions of crude birth rates (per 1,000 people) since 1960 in Figure 21. It is evident that these evolutions do not differ much between Benin and SSA, and the birth rates in 2016 are close: 36.3 for Benin and 37.43 for SSA.

Figure 21: Crude birth rates (per 1,000 people) for Benin and SSA, 1960–2016



Source: WDI.

3 Binding constraints on Benin's economic development

This concluding section integrates the central lessons of both chapters 1 and 2 as they relate to the binding constraints on the country's development.

Because Benin is not a country with abundant extractive resources, its development must be more knowledge intensive. This means that its economy has to diversify into higher value, knowledge- and research-intensive activities that offer better returns than traditional activities based on raw agricultural products. This reorientation of the economic development strategy necessitates that huge investments are made in human capital so as to allow the country to move up the technological ladder. Over the last few decades, Benin has actually made noticeable progress on the educational front and this is a step in the right direction. Nonetheless, two mitigating remarks need to be made here. First, Benin started from a very low base, and even today its achievements in terms of the literacy level of the population remain very disappointing. Second, much of the educational progress is in the form of rising gross enrolment in primary (and post-primary) schooling. The quality of education, however, has not been raised and has probably deteriorated during the period of increasing admissions into the schooling system. This is worrying inasmuch as quality education is a fundamental requirement for sustained increases in income *per capita*. The task is especially challenging because of high population growth rates in the recent past.

Although Benin does not possess mineral or non-mineral resources, it benefits from its direct access to the sea. Moreover, it has a long legacy of regional trade in which some ethnic groups, the Yoruba in particular, have played an important role over centuries. The coastal cities of Porto Novo and Cotonou, and their hinterland, constitute the growth pole of Benin's economy. It is in their tiny departments that poverty is kept under control – unlike in many other parts of the country, where it remains intolerably high. Development in Benin thus appears to be unbalanced and to be marked by large spatial disparities.

Benin suffers from ethno-regional polarisation deeply rooted in the historical past. It did not result, however, in one party monopolising political and economic power. Instead, power shifted from North to South and vice-versa, not according to some well-institutionalised rule but following the play of competitive politics. A 'winner-take-all' approach has tended to prevail, with poisonous effects on the political environment and the approach to power. This has meant that the comparatively poor Northern part of the country has not been consistently deprived of the levers of political power; however, effective public investments in critical assets such as transport and communications infrastructure have not been made, and opportunities to change the course of lopsided spatial development have been essentially wasted.

The fact of the matter is that power did not accrue to men equipped with a vision of the requirements of their country's or their region's long-term development and the determination to implement them. Rather, it accrued to Big Men who follow a patronage logic that obeys particularistic interests. Even under a so-called Marxist regime, general long-term interests did not prevail; instead, key sectors of the economy – banks and financial institutions in particular – were simply appropriated by President Kérékou and his clique and used for their own short-term benefit. Albeit under more subtle forms, this kleptocratic

system survived through the ensuing Democratic Renewal period, as can be seen in the continuing meddling of politicians in the economy: the oligarchs acting behind the screen of formally democratic institutions make key decisions in and appear to be the effective owners of parastatals and formally independent private corporations. This is especially pertinent in the case of the privatised cotton sector.

No democracy can function well if the judiciary is subject to interference from the executive power, and if people do not believe that judges act impartially. In this respect, the situation in Benin is worrying: trust in the courts and in judges and magistrates is very low, and people tend to believe that the latter are often corrupt. Low trust is also expressed toward important sectors of the public administration, particularly tax collectors. Plausibly, these negative evaluations of the public sector and the court system reflect the widespread idea that magistrates and officials are there to serve the interests of the Big Men and their clients or allies. Corruption in public administration remains a major constraint on private sector development, investment, and economic growth. Informal payments and rent-seeking in the administrative bureaucracy have been sources of inefficiency and productivity losses for many firms, especially those belonging to the formal sector. In addition, these symptoms of weak governance seriously affect the business climate and tend to deter FDI. This is especially damaging because it goes hand in hand with a low investment in public infrastructure, which plays a critical role in improving global productivity.

Benin not only trades through the sea but also across its border with its giant neighbour, Nigeria. Because Benin is part of the WAEMU while Nigeria is not, it is particularly vulnerable to swings in bilateral exchange rates and to Nigeria’s exchange rate and trade policies. This situation creates strong incentives for illicit trading and the concomitant expansion of the informal trading sector.

One of the most pressing concerns regarding the development pattern of Benin is its sustainability in the medium and long term. As it stands, the economy remains heavily dependent on external financial flows, and on ODA in particular. The ongoing structural transformation of the Beninese economy does not hold promises for a foreseeable reduction in such dependence on external financing. Indeed, the significant decrease in the share of agriculture in domestic value-added has not been associated with a corresponding increase in the share of tradable manufactured goods, but rather with a rapid increase in the share of non-tradable services. Directly related to this weakness is the low diversification in export goods: the economy remains heavily dependent on the export of a few raw agricultural products (among which cotton stands foremost) that are highly vulnerable to climatic hazards and swings in international commodity prices.

Because they compound the above effects, the low rates of labour productivity growth in all the sectors of the economy are a major concern. Inefficiencies in the manufacturing and tertiary sectors combine with stagnant yields in agriculture to determine slow progress in *per capita* income. Whereas in the informal segment of these sectors, which is substantial, low labour productivity is caused by a lack of capital, in the formal segment it stems from a low productivity of capital, itself the result of low capacity utilisation, inefficient organisation, etc. In the agricultural sector, an additional issue is the level of land tenure security. Although the government has recently made attempts at reinforcing this security by allowing formal individualisation of land rights, the results have been disappointing. One possible reason for

this is that the reforms have stopped short of more radical individualisation, or that they have created more ambiguity in land rights than existed under the pre-reform situation.

There are several critical constraints on Benin's economic development that emerge from the above diagnosis and deserve further in-depth analysis:

1. The intermeshing of business interests and politics;
2. The management and organisation of the cotton sector;
3. The weak governance of public sector institutions;
4. Land rights and tenure security; and
5. The economic relationship between Benin and Nigeria.

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