# Exploring the Reasons behind Modest Economic Performance* 

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This chapter reviews Benin's economic development performance, within its historical and institutional context as well as in recent years. Its aim is to identify the main economic challenges the country's development is facing. How some of these challenges are linked to the characteristics of Benin's economic, social, and political institutions will be examined at a later stage. This deeper analysis of particular aspects of the Beninese development challenges will be undertaken in several thematic chapters in the second part of this volume.

The chapter is organised in six sections. Section I focuses on the somewhat disappointing growth performance and the apparent lack of a powerful and sustainable engine of growth. Section II focuses on the two key sectors of the Beninese economy: cross-border trade (CBT) with Nigeria and production and export of cotton and other agricultural products. Section III considers the foreign trade context, highlighting the largely illegal CBT flows with Nigeria as one of its specificities. Section IV is devoted to macro-economic aspects, with emphasis on key issues in public finance and the financing of the economy. Section V concentrates on social aspects, achievements, and limitations of Beninese development. Section VI intends to identify the Beninese economy's 'binding constraints' for which a deeper analysis is required.

## I GROWTH PERFORMANCE OVER TIME AND <br> CHANGING ECONOMIC CONTEXT

## A Aggregate Growth

Benin's growth performance has been relatively modest since independence. With an estimated US $\$ 3$, 16 I gross domestic product (GDP) per capita (at

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FIGURE 2.I Benin's GDP per capita: levels, absolute and relative to sub-Saharan Africa ( $1960=100$ ), and growth rates, 1960-2019. LHS, left-hand side; RHS, right-hand side. Sources: Author's calculation based on data from World Development Indicators (WDI).

2017 international prices) in 2018, Benin ranks among the world's poorest countries, just at the upper limit of the poorest 15 per cent. As can be observed from Figure 2.1, its real GDP per capita was only 72 per cent higher in 2018 than in 1960 , reflecting a weak annual growth rate of 0.94 per cent. Total GDP growth has been considerably faster, but it bears emphasis that three-quarters of it have been amputated by the high population growth rate ( 2.85 per cent on average). As in other sub-Saharan African (SSA) countries, population growth continues to be an important challenge: while it is expected to decline slowly, it should still reach 2.5 per cent per year in $2030 .{ }^{\text {I }}$

Benin's growth performance from independence in 1960 to the present time closely matches the major changes in economic policy the country has witnessed under its successive political regimes. One can accordingly distinguish three main subperiods:

## I 1960-1972: Post-Independence Instability

Political instability went hand in hand with low and very volatile growth during this period. GDP per capita grew by i per cent per annum, less than

[^1]the average SSA country ( 2.26 per cent). The economy had essentially kept its colonial features with agricultural exports - mostly seed cotton- as the dominant activity and France as the main trading partner.

## 2 1973-1989: The Socialist Experience, the Ensuing Financial Crisis, and the Structural Adjustment Programme

During this period, the Marxist and military regime managed the economy through state control and central planning. The major industries and banks were nationalised and public involvement in the agricultural sector became important through government-owned enterprises. Economic growth was quite uneven because of both domestic and foreign causes.

Growth was weak in the early years (1973-1976) of the period, with a big drop in 1975 because of the oil crisis and a poor performance in the cotton sector. It then picked up, under the pull of large public investments and of strong demand from Nigeria. However, major macro-economic imbalances became apparent in the early 1980 s, which quickly led to an unsustainable external public debt - 75 per cent of GDP in 1985 - and to the collapse of the whole banking system in 1989.

Amid the financial crisis, Benin had to request debt relief from its creditors and new external financing. In 1989, a Structural Adjustment financing agreement was set up with the World Bank, the International Monetary Fund (IMF), and other multilateral and bilateral donors. The macro-economic adjustment part of the package focused on reducing public spending and liquidating public enterprises. The correction was all the more severe because Benin's fixed exchange rate commitment within the West African Economic and Monetary Union (WAEMU) prevented resort to a devaluation.

These severe shocks resulted in a dismal growth performance of Benin's economy for the whole 1973-1989 period. A telling testimony to the severity of these shocks is that GDP per capita turned out to be at the same level at the end of the period as it was at the beginning.

## 31990 and after: Market-Oriented Reforms but Modest Overall Growth

Wide-ranging economic reforms were initiated in 1989 within Benin's Structural Adjustment Programme (SAP). They ranged from liberalising trade, to lifting domestic regulations, to improving the performance of a downsized public sector, to restructuring the banking system.

Growth picked up again after 1990, and Benin even grew more rapidly than the average SSA country throughout the 1990s. Yet, it is difficult to assess to what extent this improvement was due to the liberalisation of the economy or to favourable external circumstances, including cotton exports and CBT with Nigeria at the end of the period.

Growth slowed down a bit after 2002, unlike in the rest of the region, and it became more volatile. Yet, a clear acceleration seems to have taken place over the last five years or so: the annual growth rate of GDP per capita achieved
2.5 per cent on overage, an unprecedented performance when compared to the last three or even four decades.

## B Growth and Structural Change

Economic growth always comes with structural changes: some sectors increase their weight in total output while others, typically agriculture, recede. Structural changes also explain the growth of labour productivity, and thus of GDP per capita. Indeed, overall productivity gains result from both the reallocation of labour from least to more productive sectors of the economy and from productivity gains within sectors. This section analyses the structural changes that took place in Benin, as well as their contribution to growth. We proceed in two steps. First, we discuss briefly the results of a 'growth accounting' aggregate analysis that spans the 1970-2017 period. Second, we examine the relationship between aggregate growth and the sectoral structure of activity and employment. This sectoral analysis had to be restricted to the 1999-2017 period, and sometimes even a shorter period, due to limited availability of fully time-consistent data. ${ }^{2}$

The growth accounting analysis decomposes GDP growth into the contributions of the production factors, labour and capital, and of total factor productivity (TFP). Appendix $I$ to this chapter presents this decomposition for the five decades since 1970. A striking result emerges, which is the contraction of the capital-per-capita ratio over the whole period since 1970. Capital only weakly contributed to growth, except in 197I-I980 (a period of substantial public investment) and in the very recent years when, at last, some capital deepening occurred again. It thus appears that, by and large, growth of GDP per capita, which largely coincides with labour productivity, has mostly resulted from TFP growth, at least since the 1980 . TFP growth appears to have more than compensated for the effects of the decline in capital intensity. It turns out, however, that the observed changes in TFP largely reflect the major changes that have occurred in the sectoral structure of the economy rather than autonomous productivity gains. This is what we argue in what follows.

[^2]TAble 2.1 Sector-based structure of GDP (per cent of value-added at current factor prices) and informality ratios

|  | 1999-2003 | $\mathbf{2 0 0 4 - 2 0 0 8}$ | $\mathbf{2 0 0 9 - 2 0 1 3}$ | 2014-2017 | Average |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Primary | 26.0 | 27.7 | 25.5 | 23.9 | 25.8 |
| Informality ratio | 1.00 | 1.00 | I .00 | 1.00 | 1.00 |
| Secondary | 32.4 | 28.7 | 24.1 | 24.3 | 27.4 |
| Informality ratio | 0.66 | 0.69 | 0.67 | 0.6 I | 0.66 |
| Tertiary | 41.6 | 43.6 | 50.4 | 51.9 | 46.9 |
| Informality ratio | 0.43 | 0.44 | 0.45 | 0.45 | 0.44 |
| GDP (factor costs) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Informality ratio | 0.65 | 0.67 | 0.64 | 0.62 | 0.65 |

Source: Author's calculation based on data from Institut National de la Statistique et de l'Analyse Economique du Bénin (INSAE) for 1999-2015 and Ministère de l'Economie et des Finances (2017) for 2016/17 provisional data. The informality ratio is defined as informal over total value-added.

To assess the extent of the structural changes, we first focus on broad patterns. Table 2.I shows that the primary (mostly agriculture) and tertiary (services, broadly defined) sectors dominate Benin's economy in terms of gross value-added at factor cost (GVA). The share of the primary sector has been decreasing over the whole period, but it is remarkable that it did so only recently, suggesting indeed the limited dynamism of the economy prior to recent years. The share of the tertiary sector has increased, another typical pattern of the development process. It now represents more than half of total GVA - that is, of GDP. At the same time, however, the share of the secondary sector (manufacturing, utilities, and construction) declined, which points to quite a worrying aspect of Benin's development.

Table 2.I also reports the large role played by the informal sector in Benin: two-thirds of GDP originate in the informal sector. The ratio is equal to unity in the primary sector, where all activity is recorded as informal. It is approximately constant in the two other sectors, but declines overall because of the falling weight of the primary sector. Altogether, however, the change in informality has been limited and concentrated in the recent period.

Table 2.2, adapted from Haile (2018), zooms in on the most recent period (2006-2015) and provides more disaggregated data. ${ }^{3}$ It combines GVA and employment data, from which it is possible to derive relative levels and changes in sectoral labour productivity. It also provides an interesting decomposition of the overall change in labour productivity.

[^3]table 2.2 Structural changes in the Beninese economy and decomposition of changes in labour productivity, 2006-2015

|  | Sectoral structure of GVA and of employment (Empl.). Sectoral levels of labour productivity (LP) |  |  |  |  |  | Sectoral decomposition of change in aggregate labour productivity (Annualised percentage changes) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006 |  |  | 2015 |  |  | Contribution of |  |  |
|  | GVA | Empl. | LP | GVA | Empl. | LP | Structural change (inter-sectoral) | Productivity within sector | Total |
| Agriculture | 26.9 | 59.4 | 0.41 | 22.3 | 42.1 | 0.52 | 1.02 | 0.69 | I.7I |
| Mining | 0.5 | O.I | 5.3 I | 0.4 | O.I | 4.47 | 0.00 | -0.01 | -O.OI |
| Manufacturing | 20.1 | $7 \cdot 3$ | 2.51 | 14.7 | 7.8 | I. 86 | 0.07 | -0.60 | -0.53 |
| Utilities | 0.4 | 0.2 | 2.33 | I.I | 0.2 | 5.95 | 0.01 | 0.08 | 0.09 |
| Construction | 7.8 | 2.3 | 3.16 | 8.0 | 2.7 | 2.93 | 0.11 | -0.07 | 0.04 |
| Commerce | I3.5 | I9.I | 0.64 | I3.5 | 28.7 | 0.46 | -0.47 | -0.53 | -I.00 |
| Transport | 7.7 | $3 \cdot 3$ | 2.12 | 10.0 | $4 \cdot 5$ | 2.19 | 0.18 | 0.03 | 0.21 |
| Finance | 1.5 | 0.2 | 6.76 | 5.6 | 0.2 | 24.70 | 0.04 | 0.47 | 0.51 |
| Other services | 21.4 | 8.2 | 2.37 | $24 \cdot 3$ | I3.7 | 1.75 | 0.75 | $-0.83$ | -0.08 |
| Total | 100 | 100 | 0.91 | 100 | 100 | 0.98 | 1. 73 | -0.77 | 0.96 |

Source: Author's calculation based on data from Haile (2018) - excerpts from text Table 3 and from Appendix Tables I-3. 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 employment (Empl.) are sectoral shares, in percentages; productivity levels (LP) are expressed in constant 2007 Communauté Financière en Afrique (CFA) franc (in millions)

On the GVA side, the table roughly confirms the conclusion of Table 2.I; that is, a recent drop in the share of agriculture, a slightly larger drop in manufacturing, and a continuous increase in services, with a surge in finance and to a lesser extent transport. The latter evolution is related to the surge in re-exports from Cotonou's port after 201I, as will be shown later. On the employment side, the most noticeable change is the huge drop in the share of agriculture essentially in favour of commerce, other services, and, to a lesser extent, transport. Equally noticeable is the extremely limited change in the employment share of the other sectors, especially manufacturing.

This reallocation of output and employment across sectors entails strong changes in terms of sectoral productivity relative to the overall productivity gain - which proceeded at an annual rate a little below i per cent a year. Agriculture has seen its share in both GVA and employment decline, but the latter more significantly so. As a consequence, its productivity has substantially increased, while remaining among the lowest across sectors. This probably means that the sector has shed its 'surplus workers', those with very low productivity.

Manufacturing has kept a stable, relatively minor share in total employment. As its share in GVA has fallen by 5 percentage points, its level of labour productivity has fallen too, possibly indicating a change towards lowerproductivity activities. This decline of labour productivity in manufacturing is also observed in other West African countries, but it is more pronounced in Benin (see Haile, 2018). Furthermore, as can be seen in the left-hand panel of Table 2.2, the sector's absolute productivity went down in Benin at an annual rate of $3 \%$. This significant downward trend is presumably due to a combination of factors, among which is insufficient competitiveness, possibly reflecting the lack of investment in physical and human capital noted earlier, as well as other constraints relating to the business environment and public infrastructure (see, e.g. Ministère de l'Economie et des Finances, 2019, pp. 28-33; see also Section 2.4).

The same major drop in labour productivity can be observed in 'commerce' and 'other services', which make up more than one-third of total GVA. As a matter of fact, labour productivity in the former sector had become lower than in agriculture by 2015 , as if those surplus or low-productivity workers in agriculture who migrated towards commerce simply shared the value-added potential of this sector with the incumbents. The phenomenon is less pronounced in 'other services', which include the government sector where productivity is essentially assimilated to wages, higher than in the rest of the economy.

Outside agriculture, utilities, transport, and finance are the only sectors where productivity has not decreased. The latter two sectors most likely benefited from a surge in CBT with Nigeria and the re-export of imports arriving at Cotonou Autonomous Port. There is no doubt that this boosted the transport sector. It also boosted the finance sector through trade financing on the import side of re-exports to Nigeria.

The general picture that comes out of this evolution of the structure of output, employment, and productivity is rather worrying. While most of the limited overall productivity gain in Benin between 2006 and 2015 was due to labour leaving low-productivity agricultural activities to work in higher-productivity sectors, it has come at the cost of decreasing productivity in the latter. In other words, no sector could be really considered as a growth engine in Benin, except perhaps the financial sector, but with practically no impact on employment.

This view of economic growth in Benin appears fully consistent with the growth accounting exercise summarised earlier where TFP was found to be the main source of growth. It is clear that most of that TFP growth is attributable to net labour migration out of agriculture, with no autonomous productivity gains in the destination sectors.

The last columns of Table 2.2 show a decomposition of the aggregate productivity gain of the Beninese economy into two parts: first, the part attributable to changes in the structure of employment; and second, the part attributable to changes in within-sector productivity. The result is appalling and fully confirms the preceding conclusions. Per se, the reallocation of labour away from agriculture into commerce and other services contributed to an annual growth of overall productivity equal to 1.73 per cent. Yet, sectoral productivity changes contributed negatively, at an annual rate of -0.77 per cent to the change in overall labour productivity. While productivity increased in the agricultural sector, because of surplus labour leaving the sector, it decreased in other major sectors of the economy. Thus, the general picture is that of workers leaving the agricultural sector because there are better income opportunities elsewhere, but, as a matter of fact, essentially reducing income per capita in the destination sectors.

Benin's economic development until the mid-2oros can be summarised by a dismal rate of capital accumulation, and the total lack of a growth engine able to push the whole economy forward. Instead, the little growth that has taken place over the last few decades seems more consistent with some income gain from CBT with Nigeria or cotton exports fuelling limited growth in demand for domestic services. In any case, it is doubtful whether the agriculture-cum-service model that seems to be the pattern of Beninese growth over the last decades can be the source of sustainable development. Strong productivity-enhancing strategies are needed.

## II LEADING REAL SECTORS: ACHIEVEMENTS AND CHALLENGES

Cotton and CBT are the two leading sectors of Benin's economy. Together they generate one-third of the country's GDP, 13 per cent and 20 per cent for cotton and re-exports, respectively. ${ }^{4}$ Cotton also represents around 70 per cent of Benin's total exports, excluding re-exports. Cotton is mainly exported to Asia,

[^4]

FIGURE 2.2 Benin's GDP per capita: exports of cotton and re-export of goods, in real terms, and GDP annual growth rates
Source: Author's calculation based on Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO, 2019) balance of payments data; WDI for GDP growth and Consumer Price Index (CPI) data used to estimate real trade data.

Europe, and the USA, whereas CBT involves importing goods from Asia and Europe through the harbour of Cotonou and later re-exporting them to neighbouring countries, in particular Nigeria. The leading role of cotton and re-exports is also evident from Figure 2.2, where a clear correlation emerges between GDP growth cycles and those in cotton exports and merchandise re-exports. Growth decelerates when cotton exports fall from 2000 until 2005 , picks up temporarily when re-exports rise, before accelerating when both surge after 201 I . A similar scenario can be observed with the 2015 recession and the following recovery.

Because of their crucial importance for Benin's economy, the two following subsections will be devoted to an in-depth discussion of CBT and cotton production. The deep institutional factors and political economy aspects that characterise each sector will be further examined and assessed in dedicated chapters in this volume.

## A Cross-Border Trade with Nigeria

Nigeria is the main recipient country of Benin's CBT, accounting for more than 90 per cent of Benin's re-export activities. The intense trade between the two countries stems mainly from differences in tariffs, trade restrictions, and subsidies. On the one hand, Nigeria uses tariff and non-tariff barriers as well
as exchange controls to protect domestic industries in a number of economic sectors, including cars, textiles, cigarettes, and food items (see, e.g. Igué and Soulé (1992); De Melo and Ugarte (2013); Golub (2012a) for further discussion). Prices for these goods are consequently higher in Nigeria than in Benin, which abides by the lower WAEMU tariff rates. On the other hand, Nigeria, an oil-producing country, subsidises domestic petroleum prices, which are thus lower than formal prices in Benin. These important price differentials between Benin and Nigeria for certain categories of products are a strong incitement to circumvent Nigeria's import tariffs and trade restrictions through smuggling operations across a long - and porous - border into Nigeria for Benin's re-exports, and into Benin for Nigerian petroleum and some other products.

The context within which this trade operates is thus intrinsically one of informality and illegality. 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), has been set up in an open and regular way. The unofficial (illegal) aspect of CBT with Nigeria occurs at a later stage when goods that benefited from low customs duties and taxes, because they were declared either for domestic use or for transit to other (landlocked) neighbouring countries, are smuggled to Nigeria. On the other hand, the smuggling of goods bought in Nigeria into Benin is of course utterly unlawful.

The unofficial nature of an important part of the re-exports makes it very difficult to rigorously document their size and estimate their economic impact. The most frequently cited estimate by Golub (20I2a) is based on unofficial trade in used cars, which represents a large part of the total unofficial re-export trade to Nigeria. Extrapolating from these data to the whole trade, Golub (2012a, p. 215, 2012b, p. 1159) estimates that the contribution of re-exports to GDP is about 20 per cent and that it directly involves 50,000 people. Such a large estimated contribution of CBT to GDP seems out of proportion with the estimated effects on employment, however. Based on rough approximations described in Appendix 2 to this chapter, we feel that a IO-I2 per cent contribution to GDP would be a more reasonable range of estimate.

Since the unofficial CBT with Nigeria is very lucrative for the Beninese economy and since it generates significant tax revenues for the country, it is not only tolerated but even encouraged by the Beninese authorities. Yet, there are important downsides associated with it.

First, Benin has become very vulnerable to changes in economic conditions and trade protection policies in Nigeria. Concerning the latter, Nigeria has not only often changed import tariffs on protected goods, but has also recently closed its border with neighbouring countries, with dire consequences for the Beninese economy. Tellingly, almost half of the volatility of GDP growth in Benin is due to the volatility of the Nigerian economy, itself very much the
result of the volatility of global oil prices. A regression of Benin's GDP growth on the growth of household consumption in Nigeria over the 1980-2017 period suggests that a one standard deviation shock in the latter - not an infrequent event - produces a I .3 per cent change in Benin's GDP - a little less than half the standard deviation of GDP growth (see Appendix 3 to this chapter). This means that although Benin is not an oil-exporting country, it has acquired some of the features of the latter through its excessive dependence on trade with Nigeria.

Second, the smuggling of goods from Nigeria into Benin and the ensuing artificially low prices of these goods hamper the development of locally produced goods, like textiles and rice for example.

Third, the illegality inherent in most of the trade between Benin and Nigeria severely damages Benin's public institutions because of the corruption, tax evasion, and possibly government capture that it entails. This is true at every level in the public sector, but the scale at which the unofficial CBT is organised necessarily implies high-level political connections on the part of the bigger operators, in both countries. The risk of political capture is also strengthened by the illegal practices associated with re-exports, as is evident from the political infighting involving big CBT players. ${ }^{5}$

Finally, the permanent tolerance, instead of repression, of fraudulent activities by the authorities does worsen the general business climate because low standards of honesty, compliance with the rule of law, and respect for the country's institutions have spilled over to other sectors. Consequently, while illicit CBT benefits both countries, it also entails large costs and Benin needs to urgently rethink its development strategy, to make it less dependent on illicit CBT.

## B Cotton Exports: Historical Heritage and Changing Organisational Structure

Cotton production is a major sector of Benin's economy and the livelihood of one Beninese out of three depends on it. Cotton does not only play a major economic and socio-political role in the countryside, but forms the basis of more than half of Benin's industrial production. It also accounts for about 60-70 per cent of export revenue (excluding re-exports) and 45 per cent of tax revenue (excluding customs revenue). Overall, cotton is estimated to account for 13 per cent of Benin's GDP (MAEP, 2008). This number seems rather large, however, and a contribution within the range of 7 -10 per cent seems more reasonable. Indeed, using the average ratio of Benin's total exports relative to GDP of

[^5]
figure 2.3 Performance of the cotton sector in Benin and West Africa
Sources: Author's calculation based on data from Food and Agriculture Organization (FAO) Corporate Statistical Database (FAOSTAT). Benin's data over the period 20162017 is obtained from 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.
about 17.8 per cent in 1960-2016 and considering the 60 per cent share of cotton in Benin's total exports indicated earlier, we arrive at an estimated GDP ratio of 10.6 per cent. Furthermore, if we take into account that the share of cotton in Benin's total export revenue is probably overestimated and if we use instead the data from the Observatory of Economic Complexity (OEC, see https://oec.world), we find a ratio of cotton revenues to GDP of about 7 per cent, which is the value reported by the World Bank (2016). ${ }^{6}$

Beninese cotton production followed a bumpy expansion after independence until 1997, after which production plateaued for seven years. This period of stagnation was immediately followed by a sharp decrease in production in the years between 2004 and 2009, caused by a decreasing dollar price of cotton whose negative impact was further amplified by a persistent appreciation of the CFA Franc. As can be seen in Figure 2.3, this decrease has been particularly severe in Benin compared to its francophone neighbouring countries (Burkina

[^6]Faso, Cote d'Ivoire, and Mali), suggesting that other country-specific factors have exacerbated the effects of the shock in Benin.

Benin's cotton sector has indeed been characterised by excessive political interference since independence and has known long periods of instability, oscillating between private and public modes of governance. This instability was particularly severe after I990, when the sector embarked on a failed process of liberalisation and privatisation. The causes of the failure are multiple: (I) political actors controlled the whole reform process and thereby made reforms vulnerable to regime changes; (2) liberalisation did not lead to competition, as officially intended, because the allocation of seed cotton was administratively decided and the procurement of seed cotton was not transparent; (3) the rules (e.g. about input quality assessment, input import and distribution, quotas of cotton seeds) were not considered credible since there were no clear enforcement mechanisms against those who violated them; and (4) the reforms were not appropriated or owned by the local authorities since they were undertaken at the behest of donors.

The huge instability of the cotton sector and the failure of reforms are further apparent from the high volatility and the lack of growth of cotton yields over time (Figure 2.3). The value of Benin's yield lags on average four basis points behind that of other countries.

## C Non-cotton Agricultural Exports: An Ancillary Driver of Growth?

Besides cotton, there is a wide variety of other crops, including cassava, maize, cashew, pineapple, palm oil, rice, and vegetable, that could be the basis of a dynamic agro-industrial export sector and even become altogether an ancillary engine of growth, along with cotton. Among those the case of cashew is particularly interesting. Its share in export revenues more than quadrupled in the period between 1995 and 2018 , reaching 16.9 per cent at the end of the period (OEC). As a result, cashew has become the second most important contributor to Benin's export revenue and accounts for 3 per cent of GDP.

Yet, different institutional shortcomings prevent Benin from fully capitalising on the rising world demand for cashew nuts (see www.nutfruit.org/industry) and utilising its natural advantage in cashew production in the central and northern parts of the country. Insecure land property rights (treated in depth in Chapter 7) and insufficient access to external finance have led to underinvestment, for example in the replacement of older trees. This is reflected in the low yields of cashew in Benin ( $356 \mathrm{~kg} / \mathrm{ha}$ in 2019) compared to Nigeria ( $715 \mathrm{~kg} / \mathrm{ha}$ ) and Togo ( $1530 \mathrm{~kg} / \mathrm{ha}$ ) (FAOSTAT database).

In addition, high costs of electricity and the use of less advanced technology impair the competitiveness of processing firms. Coupled with poor organisation and integration of the actors operating in the sector, this has led to a situation where the bulk of raw cashew is exported essentially to Vietnam and India, instead of the markets of the buoyant advanced economies.

figure 2.4 Major constraints to private firms in Benin and sub-Saharan Africa Source: Author's calculation based on data from World Bank Enterprise Survey (various years).

## D Obstacles to the Development of the Nonagricultural Business Sector

The non-agricultural business sector, excluding CBT with Nigeria, accounts for around 45 per cent of Benin's private sector. It has been characterised by slow growth over the whole period since independence. Four major growth constraints can be highlighted based on the two waves (2009 and 2016) of the World Bank Enterprise Survey data: (i) external finance constraints; (2) deficiencies in physical infrastructure; (3) informal competitors; and (4) difficulties firms face in dealing with public administration (taxes, customs, and trade regulations). Worryingly, these constraints are not only more severe in Benin than in the average SSA country, but they have also been increasing over time (Figure 2.4). This is particularly true for access to finance and electricity, which will be treated in more detail in the following two subsections.

## I Financial Constraints

The Beninese formal financial sector operates under the supervision of WAEMU and includes three categories of institutions: commercial banks, formal micro-finance institutions, and other financial institutions (e.g. pension funds and insurance companies). The informal system, on the other hand, does not have the capacity to finance any enterprise other than micro-businesses. It
does so through numerous micro-finance institutions (MFIs), which altogether amount to a tiny share of the financial sector's assets. ${ }^{7}$

According to existing reviews of the financial sector by the IMF (2016, 2018a and 2019), the weak lending performance of Benin's banks could be explained by several institutional factors. The first relates to asymmetries of information and the poor management of credit risks, which increase borrowing costs. To alleviate this problem, a credit centralisation initiative was started by banks in 2013 to exchange information on borrowers, but this system does not function well. ${ }^{8}$ Private credit bureaus were also authorised in 2017, but the system is not yet operating. Second, there are weaknesses in banking supervision and regulation that undermine risk management in financial intermediaries and their performance. In some cases, long delays in banking dispute resolutions (due to corruption or bureaucratic inefficiency, for example) allow underperforming financial intermediaries to remain active for long periods of time, wasting resources in operating costs and undermining credit supply. Finally, there are important concentration risks. Credit is structurally concentrated on a very small number of large business groups (with a majority of activities linked to CBT with Nigeria). As a result, negative shocks in the trading sector, often originating in Nigeria, cause an important rise in the share of non-performing loans (NPLs), which ultimately makes borrowing more expensive for small and medium-scale borrowers. For example, a i per cent decrease in the Nigerian growth rate is associated with a 0.79 per cent decrease in the bank provisions-to-asset ratio in Benin (IMF, 2019, p. 42). In addition, Benin's banks are indirectly much exposed to government's laziness in meeting its payment commitments to the private sector, which affects business credit risks and makes lending to the private sector more expensive.

In addition to the factors already identified, bottlenecks in the judiciary and property sectors tend to discourage access to finance. ${ }^{9}$ On the one hand, serious flaws in the judiciary system, including low capacity in handling financial issues and complex and long litigation procedures, complicate contract enforcement and discourage access to credit for certain categories of borrowers. On the other hand, 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, constrains the use of land as collateral and thus reduces the use of bank credit.

[^7]The poor functioning of the banking sector has limited the banks' capacity to lend to businesses and explains why the difficulty of obtaining external financing is the top structural constraint reported by private firms in the country. One out of three small and medium-sized enterprises (SMEs) in the 2016 World Bank Enterprise survey declared themselves to be suffering from involuntary exclusion from external financing. Furthermore, more than one-third of these firms attributed this to a lack of the proper collateral required by banks. Worryingly, these constraints have increased in recent years (from 2009 to 2016), which is surprising given that the financial sector has very much expanded over the same period - see Table 2.2. This may suggest that this expansion was directed more towards very specific activities, especially those linked to CBT.

## 2 Pbysical Infrastructure

A key problem that shackles Benin's economic development is the dearth and low quality of transport, electricity, and telecommunications infrastructure. Following the IMF (2018a, pp. 3I-32), Benin scores systematically below the average SSA country according to an indicator meant to measure the overall quality of infrastructure. It indeed lags the average SSA country in terms of access to electricity, use of internet, public health, education, and transport infrastructures. But Benin performs well and sometimes even slightly better than other SSA countries in terms of access to treated water, mobile access, and port infrastructure. ${ }^{\text {IO }}$

Concerning the electrical energy infrastructure, only one-third of the total population has access to electricity, which is slightly below SSA averages, according to WDI data. Benin's energy consumption (KWh per capita) is well below the SSA's and lower middle-income countries, about one-fifth and one-seventh, respectively. Also, electricity rates are generally higher in Benin and the quality of services - for instance frequency of outages - is worse than in other African countries. ${ }^{1 I}$ To circumvent the failures of the electricity network Beninese companies have resorted to private substitutes (e.g. generators) that put a strain on their costs.

The supply and use of the Internet remain low in Benin, with only in per cent of the population using the Internet in 2015 versus 21 per cent in SSA countries (WDI). Progress in the adoption of information and communication technologies (ICT) turns out also to be remarkably slow compared to other African countries. This low use of internet services in Benin can be explained by ( I ) the lack of telecommunications infrastructure, although this may be

[^8]compensated by easy access to the 3 G and 4 G mobile networks; (2) the low availability of new technologies; (3) the high costs of the various services; and (4) the low quality of the connection and related services.

The development of roads, water, and telecommunications is a critical factor for the competitiveness and growth of an economy. Following the most recent World Bank logistics performance index, the quality of Benin's trade and transport infrastructure is slightly above the averages for SSA and lower middle-income countries, and rose steadily from 1.89 in 2007 to 2.50 in 2018.

The structural and multifaceted deficits in physical infrastructure in Benin raise the question of the factors that could explain this situation: is it a deficit in the public investment effort or a lack of efficiency of the latter? This will be briefly taken up later when discussing public spending.

## III THE FOREIGN TRADE CONTEXT

A word of caution is necessary before discussing external trade issues for Benin. As reported in the previous section, Benin has vibrant CBT with Nigeria that is for a large part illegal. These large informal flows are not recorded in Benin's official export and import data, making interpretation of the latter difficult since part of imports are re-exported and not used in the domestic economy. However, BCEAO has since 2019 updated external trade statistics for Benin that adjust official data in order to account for the 'unofficial' export and import flows. ${ }^{12}$ We use these adjusted data to discuss the aggregate trade flows, but primarily focus on the official data to document the structure and composition of foreign trade flows.

## A Parallelism between Exports and Imports

Figure 2.5 a reports total (adjusted) exports and imports of goods and services, together with estimated re-exports and GDP growth for the 1990-2019 period. Three main points stand out:

First, there is a strong parallelism between exports and imports since the re-exports, official and unofficial, must necessarily have been imported in the

[^9]
figure 2.5a International trade and real exchange rates: Exports and imports of goods and services, re-exports of goods, and GDP growth
Sources: Author's calculation from BCEAO website for exports and imports (balance of payment data); WDI for growth.
first place. ${ }^{13}$ The dynamics of exports are indeed strongly driven by re-exports, especially since the early 2000 (Figure 2.5a).

Second, there is relatively high volatility in the export and import GDP ratios. This can also be partly explained, since 2004 at least, by the characteristics of CBT and the dependence it entails on positive or adverse developments in the Nigerian economy, as noted earlier.

Third, the balance of goods and services shows a sizeable and persistent deficit throughout the period, with an average of 6.7 per cent of GDP. Despite strong growth in exports since 2004, no reduction in the gap was achieved. We return in the next section to the issues this raises for the sustainability of Benin's development.

## B Composition of Exports and Imports of Goods and Services

The export and import data provided by BCEAO mostly combine official data with estimated unofficial re-exports and imports. ${ }^{14}$
${ }^{13}$ The correlation coefficient between export and import GDP ratios is 0.88 over the 1990-2019 period, and 0.67 between export and re-export GDP ratios.
${ }^{14}$ Since 2015 the coverage of unofficial trade activities has been extended, so that adjusted exports and imports go beyond activities of re-export and include other unofficial trade flows, also mostly with Nigeria. The latter represent sizeable amounts, but their detailed composition is not publicly available (see BCEAO, 2019, pp. 19 fn5, 6I, 64).

Concerning the status of re-exports relative to domestically produced export goods, one could hold that, as these goods are all imported, they are of no major concern for the domestic economy. Indeed, if this activity only consisted of organising the transit of goods, it would not be recorded as merchandise exports and imports. However, re-exports involve significant value-added by domestic residents to the imported goods. This is especially the case in Benin, where CBT is a key driver of re-exports. The latter involve the supply of transport and warehouses, as well as of wholesale or even retail trade services, for an amount that is far from negligible even though not readily observable and imperfectly known, as discussed in Section 2.I. Under these conditions, it is indeed justified to consider re-export as the export of services originating in the domestic economy, with of course a huge import component.

Re-exports' value-added is however intrinsically much lower than that of Benin's other exports, for similar gross values, and focusing on the former's large share in total adjusted exports would not do justice to Benin's other (official) exports, and underestimate the latter's importance for the economy.

Cotton products (mostly raw cotton) dominate (official) merchandise exports, with a 57 per cent share in 2017-2018, followed by cashew nuts ( I4 per cent). Palm products, gold, meat, fruit, metal, and petroleum products, though less important (about 2-3 per cent each), contribute to diversifying Benin's export base. ${ }^{15}$ The shares of exported products do however vary greatly from year to year.

Exports of services (other than re-export activities) also matter, accounting for an average of 3.4 per cent of GDP for 2010-2019. Travel represents slightly more than a third of export service receipts, indicating that tourism is also a potential driver of the country's development. ${ }^{16}$

As already mentioned, merchandise imports evolve, because of re-exports, in parallel with exports. This is reflected in their composition, dominated by food products (e.g. rice for re-export to Nigeria). Imports of services outweigh exports of services, mostly because of freight and insurance expenditures related to the import of goods though the port of Cotonou.

The contribution of net exports to growth is thus dependent on re-export activities whose large gross volume compensates for the low per unit value-added, on agricultural products, cotton and non-cotton, and on tourism. The growth contribution of net exports could be improved if the high potential of non-cotton agriculture and of tourism, which both account for high domestic value-added, could be exploited.

[^10]
## C Real Exchange Rates

The last external trade issue that merits discussion is competitiveness. Although there are many facets to competitiveness, we focus on the relative price component and use the real exchange rate as an indicator. ${ }^{17}$ Since Benin is on a fixed peg with respect to the Euro and since Benin is a price taker on the international market, its price competitiveness is heavily impacted by the exchange rate of the Euro vis-à-vis other currencies, especially the US dollar and those of Benin's Asian trade partners. ${ }^{18}$ Note that price competitiveness with its WAEMU and Communauté Economique et Monétaire d'Afrique Centrale (CEMAC) African trading partners is not directly influenced by changes in nominal exchange rates as these countries are also on a peg with the Euro.

The multilateral index of Benin's real exchange rate indicates a real appreciation of the CFA Franc until 2008, followed by a continuous depreciation (Figure 2.5b). The appreciation period coincides with the long-lasting appreciation of the Euro against the US dollar (2001-2008), while the depreciation reflects both the reversal of the Euro-US dollar nominal exchange rate and the low rate of inflation that Benin managed to achieve relative to its main official trading partners.

As Benin is exclusively a price-taking economy, these changes in the EuroUS dollar exchange rate have led to ample fluctuations in local currency cotton prices and thus in producers' profit margins. Accordingly, the observed evolution of exports very broadly reflects the trend in the multilateral real exchange rate. During the period of continued real appreciation up to 2006, the GDP ratio of exported goods declined (see Figure 2.5a) before increasing again slowly in parallel with the real depreciation. ${ }^{19}$

But Benin's multilateral real exchange rate only imperfectly reflects actual changes in the country's price competitiveness, since it is based on official trade statistics and official nominal exchange rates, while a large part of Benin's trade is informal. We therefore decided to also analyse the real exchange rate between the CFA Franc and the Naira, Nigeria's currency. ${ }^{20}$ The evolution of

[^11]

FIGURE 2.5b International trade and real exchange rates: Multilateral and bilateral CFA Franc-Naira real exchange rates
Sources: Author's calculation for the real multilateral exchange rate based on data from IMF that were retrieved from the Federal Reserve Bank of St Louis data bank; for the real CFA Franc-Naira exchange rate: Central Bank of Nigeria and Macrobond database.
the bilateral real exchange rate with Nigeria combines a trend of persistent real depreciation with, around this trend, several periods of large real appreciation shocks. The real depreciation trend is the result of Nigeria's CPI inflation being systematically higher than Benin's and a depreciation of the Naira-CFA Franc rate that falls short by about half of this differential. The short-term real appreciation shocks reflect episodes of large, and often sudden, depreciations of the Naira, mainly as a result of the abrupt fall in oil prices.

These large swings in the bilateral real exchange rate had a significant impact on Benin's economy. Re-exports declined by about 20 per cent during the two real appreciation shocks of 2009-2010 and 2015-2016. Whether, and to what extent, these declines are due to a loss of price competitiveness is difficult to assess. The drop in real incomes in Nigeria following the large depreciation shocks indeed had an additional, and probably stronger, demand-reducing effect. Accordingly, it appears that the declines in volumes can largely be attributed to the spill-over effect of the decrease in Nigerian demand, a result of the depreciation of the Naira and of the direct income effects of the oil shock. Price competition may probably matter more on the import side of the CBT, where Nigerian products directly, and intensively, compete with domestic ones. The 2015-2016 depreciation of the Naira, for example, led to massive
exports of Nigerian products to Benin, at very competitive prices (Ministère de l'Economie et des Finances, 2016, pp. 20-21).

To conclude, as a price taker on international markets and as a member of a monetary and customs union whose external exchange rate is a hard peg, neither exchange rate nor trade policies are in the hands of Benin's authorities. This represents a key constraint on their policy options, a constraint reinforced by the vulnerability to exchange rate shocks originating from Nigeria, an important partner in official and unofficial trade. As a matter of fact, the only option for Benin to have some control of the competitiveness of its tradeable goods is to keep the evolution of its nominal domestic prices and wages in check. Given that, for 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 wage policy may be one of only a limited number of instruments that the authorities can resort to.

## IV FINANCING THE ECONOMY AND THE PUBLIC SECTOR

Benin has been structurally highly dependent on external resources. As documented in the preceding section, exports are far from permitting the Beninese economy to get even close to economic independence. Aggregate spending is systematically above national income. There is an overall - that is, private and public - propensity to consume averaging almost 0.9 over the last twenty years. As a result, a third of investment expenditures has to be covered by foreign resources. Domestic government revenues are sometimes insufficient to pay for recurrent expenditures, and still less for public investments. Privatesector savings and the flow of foreign direct investment fail to fully finance private capital accumulation. Without a sizeable volume of foreign aid, the Beninese economy would not be able to grow or even function.

This section goes briefly over these macro-economic issues, which directly determine the space for development and most crucially the sustainability of Benin's current development model. Three issues are considered in turn: the consumption bias in aggregate spending; the efficiency versus resource constraint in the public sector; and foreign assistance dependency.

## A Consumption Bias in Aggregate Spending

Figure 2.6 shows total expenditures (absorption) relative to GDP since 1990, in agreement with the current 2015-based National Accounts methodology that implied some rescaling of aggregates before this date. ${ }^{2 \mathrm{I}}$ Total expenditures are

[^12]

FIGURE 2.6 Structure of absorption, 1990-2019 (per cent of GDP)
Source: Author's calculation based on data from WDI; series in percentage of Benin's rescaled GDP.
the sum of domestic household consumption, of government final consumption, and of total, private and public, gross capital formation (investment). The first striking observation that highlights the acute dependency of the Beninese economy on foreign financing is that total absorption always significantly exceeded GDP (on average by 8 per cent over 1990-1998 and 6 per cent over 1999-2019). The three successive SAPs Benin underwent over the 1989-1999 period tamed absorption for several years - it was at 128 per cent of GDP in 198I - but the effect did not last, and absorption surged again towards the end of the i990s and remained high thereafter.

Considering the composition of absorption, the first noticeable feature is the relative size of household final consumption expenditures, which remained close to 80 per cent from 1999 until 2006, before sliding down to 68 per cent in 2019. This raises two questions: why such a high propensity to consume; and why the slide?

A country comparison indicates that the Beninese consumption ratio over GDP has in general been higher than in the average low-income or SSA country over the last twenty years. It is however difficult to find a convincing
the 1999-2014 period. Relative to the data series based on the earlier methodology, nominal GDP data have been systematically revalued retroactively by 36.7 per cent for the 1999-2014 period. GDP ratios have been adjusted upwards for private consumption and absorption and downwards for public consumption and investment, implying significant increases, and respectively decreases, for the corresponding nominal aggregates.
explanation for this beyond that of differences in national account methodologies for measuring household consumption, an aggregate whose measure is often particularly imprecise. ${ }^{22}$ In line with this, the three available household surveys do indeed report an average per capita real consumption that is about 30 per cent lower than the national account data. ${ }^{23,24}$ One can however expect that the evolution of the consumption ratio reasonably describes actual trends in consumption patterns.

A second feature of the absorption picture is, precisely, the slide in the household consumption ratio. ${ }^{25}$ Various factors could explain the decline in the household consumption ratio since 2006. First, the deep deflationary shocks in Benin in 2008-2009 and 2015-2016 caused by the reversal in oil prices and its effect on the Nigerian economy may have increased precautionary savings and thus participated in the decline of the consumption ratio. ${ }^{26}$ It is however doubtful that this argument can explain the persistent decrease of this ratio over the whole period since 2006. A more fundamental factor may be at play. As further discussed in the last part of this chapter, inequality has been
${ }^{22}$ In most SSA countries, household final consumption is computed as a residual (IMF, 2018d, 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 was the case for Benin, at least for the period under discussion. The new national account system introduced by Benin in 2019 integrates household survey data (INSAE, 2019).
${ }^{23}$ According to average per capita consumption as reported in the World Bank's PovcalNet database for the 2003, 2011, and 2015 surveys. Of course, this difference could, at least partly, be due to the surveys missing consumption data of high-income households, as a result of a too narrow focus or of under-reporting.
24 An additional imprecision in the measure of household final consumption in Benin's national accounts could result from inaccurate recording of imports of consumption goods. As indicated previously, goods imported by Benin that have Nigeria as their final destination are often channelled through customs, not as goods in transit or for official re-export, but as goods intended for the domestic market. To the extent that this is not fully taken into account in estimating household consumption, some overestimation of household consumption expenditures and absorption (as well as an underestimation of exports) occurs.
${ }^{25}$ Combining PovcalNet estimates of per capita consumption and GDP per capita data for the three survey data points indicates the following changes in the consumption-to-GDP ratio: an increase between 2003 and 2011 from 52.4 to 54.2 per cent, followed by a decrease to 49.8 per cent in 2015. INSAE reports data from 2007, 2009, 2011, and 2015 household surveys. While INSAE and PovcalNet surveys provide similar results for 2011 and 2015, INSAE's 2007 estimate of per capita consumption (INSAE's first survey) seems out of line with the result of the later surveys, as it would imply a way too large ( I 6 per cent) decline of per capita real consumption between 2007 and 201 r. INSAE's 2009 survey does however allow us to date the decline in the consumption ratio back to 2009 (INSAE, 2016a).
${ }^{26}$ Additional shocks can also be factored in, like 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 per cent increase in fuel prices in Benin between 2011 and 2012. The latter price shock is the result of Benin's huge dependency on illegal imports of fuel for its domestic consumption. See World Bank (2OI4).
on a rapidly increasing trend in Benin. Increased inequality in income distribution and its effects on aggregate consumption patterns is most likely one of the factors behind the observed fall in Benin's household propensity to consume.

Government consumption has reached a largely constant io per cent share of GDP since the mid-2000s, after a downward adjustment in the 1990s. This level is in line with those observed for most WAEMU members, slightly higher than for the average SSA country - once Benin's recent rescaling of national accounts has been accounted for.

The share of gross capital formation in GDP has exhibited marked changes over the last thirty years. After a strong rise in the early i990s following the transition back to a market economy, the ratio steadily declined until 2006, before clearly picking up again from 2013 on, reaching a 25 per cent average over the last years. Taken over the whole period, Benin's investment-to-GDP ratio of 17 per cent was not only below what was observed elsewhere in the region but, most importantly, it proved too low to prevent the capital-to-labour ratio from declining, endangering the growth of per capita income, as discussed earlier. The strong rebound of investment over the last seven years is thus a welcome positive development. Given the significant structural change Benin is confronted with, a sustained level of both public and private investment is indeed a sine qua non for improving growth performance through increased productivity.

The combined high-level consumption of households and government in Benin for a time coincided with a retreat of capital expenditures, up to the late 2000 . These trends have been reversed since, consumption receding in favour of investment. These structural changes in absorption have been eased by Benin's access to external financing. Not only has past investment been less constrained by consumption expenditures thanks to external financing, but the recent rise in investment could also be financed despite an insufficient increase in domestic savings. The extent to which this persistent, and seemingly easy, access to external finance has provided Benin with the indispensable resources to redeploy its economy, and not invited or sustained excess spending, is a legitimate but delicate question. To gain some insight about it, we focus next on two closely related aspects: how constrained resources are for the public sector and how efficiently they are managed; and which financing channels could Benin mobilise to sustain this structural recourse to external financing.

## B Efficiency versus Resource Constraint in the Public Sector

With total spending close to 15 per cent of GDP ( 17 per cent in the last five years) and a large proportion of formal employment, the Beninese government is a major economic actor. ${ }^{27}$ However, it is an actor that does not have the

[^13]table 2.3a Benin's domestic and external accounts, 2002-2019 (per cent of GDP): Government revenue, expenditures, financial balance, and debt

| \% of GDP | $\begin{aligned} & 2002- \\ & 2004 \end{aligned}$ | $\begin{aligned} & 2005- \\ & 2007 \end{aligned}$ | $\begin{aligned} & 2008- \\ & 2010 \end{aligned}$ | $\begin{aligned} & 2011- \\ & 2013 \end{aligned}$ | $\begin{aligned} & 2014- \\ & 2016 \end{aligned}$ | $\begin{aligned} & 2017- \\ & 2019 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct taxes | 2.7 | 2.6 | 2.5 | 2.3 | 2.7 | 2.6 |
| Indirect taxes | 7.9 | 8.I | 8.9 | 8.6 | $7 \cdot 5$ | 7.6 |
| of which: VAT | $4 \cdot 4$ | 4.5 | 4.9 | 4.7 | 4.1 | $4 \cdot 7$ |
| of which: Customs duties | 2.6 | 2.8 | 2.9 | 2.9 | 2.7 | 2.1 |
| Total taxes | 10.6 | 10.7 | II. 4 | 10.9 | IO.I | 10.2 |
| Social contributions | 0.0 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 |
| Non-tax revenue | 0.6 | I.I | 0.7 | 0.6 | I. 4 | 2.7 |
| Total domestic revenue (excl. grants) | II. 2 | II. 9 | I 2.4 | II. 9 | II. 9 | I3.3 |
| Recurrent expenditures | 9.1 | 9.6 | 10.0 | $9 \cdot 3$ | I2.I | II. 3 |
| Savings (excl. grants) | 2.1 | 2.3 | 2.4 | 2.5 | -O.I | 2.0 |
| Investment expenditures | 4.0 | $4 \cdot 4$ | 4.8 | 4.6 | 4.2 | 5.4 |
| Budget deficit (excl. grants) | 1.9 | 2.1 | 2.3 | 2.1 | $4 \cdot 4$ | $3 \cdot 4$ |
| Grants | I.I | 1.6 | 1.5 | I. 2 | 0.5 | 0.9 |
| Total revenue | I2.3 | I 3.6 | I3.9 | I3.I | I 2.5 | I 4.2 |
| Total expenditures | I3.I | I4.I | I 4.8 | 14.0 | I 6.3 | I6.7 |
| Budget deficit (incl. grants) | 0.8 | 0.5 | 0.9 | 0.9 | 3.8 | 2.6 |
| Government debt | 25.2 | 16.5 | 19.4 | 20.0 | 29.7 | 40.6 |

[^14]means for the crucial role it is expected to play. On the one hand, the observed imbalance between government domestic savings and investment translates into a recurrent budgetary deficit and thus a strong public finance constraint. On the other hand, Benin's mobilisation of domestic resources appears to be low, and both government revenue and spending exhibit significant inefficiencies. These latter come at a high cost at a time when foreign grants and loans are trending downwards, even raising the issue of sustainability of basic public services.

Table 2.3a provides an overview of the government's resources, spending, and deficit financing over 2002-2019. ${ }^{28}$

[^15]
## I Revenues

Tax revenues are in the range of io-II per cent of GDP, globally constant over the 2002-2019 period, notwithstanding the 2016-2017 weaker performances and the recent recovery. Benin's tax-to-GDP ratio was assessed by the IMF as below that of comparable developing countries, including SSA countries.

Indirect taxes represent the bulk of tax revenues, with direct taxes representing only 24 per cent of the total, broadly in line with WAEMU and low-income SSA countries and a direct consequence of the degree of informality of the economy. Value-added tax (VAT) represents the largest part of indirect taxes, followed by custom duties. The latter are proportionally higher in Benin, possibly as a reflection of the oversized imports for re-export ${ }^{29}$ On the contrary, revenue from excise taxes are proportionally lower, largely a consequence of the loss of tax revenue due to the fraudulent import of Nigerian fuel products. ${ }^{30}$ Property taxes and other taxes on goods and services also account for only small parts of tax revenues. ${ }^{31}$

Foreign grants have represented quite a variable share of total government revenue over the period and are on a decreasing trend. This makes the issue of enhancing domestic resource mobilisation all the more acute for Benin. Such a policy can a priori be pursued by raising tax rates. Yet, the uniform VAT rate applied by Benin ( 18 per cent) is already the maximum rate allowed by WAEMU. Furthermore, while excise tax rates are lower than in WAEMU, custom tariffs are constrained by the common external tariff imposed by Benin's membership in the ECOWAS customs union. Statutory corporate tax rates are also already relatively high ( 30 per cent in 2018) , and the progressive personal income tax system features marginal tax rates up to 45 per cent. ${ }^{32}$ In short, increasing statutory tax rates is not really a viable option for Benin, as it would in addition reinforce the incentives for tax evasion. However, enlarging the tax base and enhancing the efficiency of tax collection have the potential to unlock a significant amount of resources and should therefore be given a high priority on Benin's authorities' policy agenda.

Various studies concur in pointing out that Benin underperforms in raising domestic tax revenues, relative to comparator countries. Following the World

[^16]Bank (2018), Benin's VAT C-efficiency ratio ${ }^{33}$ (4I per cent) was below the regional average in 2014 and started to decline afterwards, reaching a low 3 I per cent in 2016. The C-efficiency ratio for corporate income tax is also particularly low (io per cent). Both indicators point to huge scope for improving tax revenue. However, such straightforward efficiency measures can only offer a relatively blunt assessment, as they do not take into account the structural factors that shape a country's capacity to collect taxes.

Caldeira and Rota-Graziosi address more thoroughly these efficiency aspects of Benin's domestic resource mobilisation in Chapter 6 of this book. They find that several factors account for the unsatisfactory level of VAT revenues: the high degree of informality in economic activity, weak compliance and fraud encouraged by insufficient audit capacity of the fiscal administration and amplified by corruption, and large tax exemptions, VAT exemptions alone representing 6I per cent of total tax expenditures in 2016. ${ }^{34}$

## 2 Expenditures

Total government spending has averaged 14.8 per cent of GDP over 20022019, with about two-thirds devoted to current expenditures and close to one-third to public investment. Recurrent expenditures have stayed broadly constant, around 9.5 per cent of GDP until 2014 , before experiencing a rise in the recent period. The wage bill is the largest item ( 44 per cent on average), followed by current transfers ( 32 per cent), expenditures on goods and services (i7 per cent), and interest on debt ( 6 per cent). Current transfers comprise spending on education and social services, pensions and scholarships, transfers to local authorities, as well as subsidies to government agencies and state enterprises. ${ }^{35}$ Many of these transfers also finance wages, making public wage and employment policy a key determinant of current expenditures. The latter

[^17]policy, however, has suffered from significant inefficiencies. A telling sign of this is that the public wage bill has most often been proportionally higher than the average WAEMU country (Lundgren, 2010; Ndoye, 2015). Since 2008 at least, it has also systematically been above the WAEMU convergence criterion. ${ }^{36}$ A weakly controlled public wage bill threatens the sustainability of public finances and/or risks a crowding out of needed spending on social transfers or of capital expenditures. Recent steps have been taken by the authorities to mitigate these risks by improving control over the wage bill. ${ }^{37}$

Public investment in physical infrastructure is a key factor of development, not least because it is complementary to private investment. As has already been seen, Benin faces in this respect significant infrastructure gaps, in terms of both availability and quality. Public investment has averaged 4.6 per cent of GDP in 2002-2019, with some variability. It accounted for a third of total government expenditures, with a large part ( 40 per cent) of it financed by external sources. According to the IMF (2020a), Benin's public investment, relative to GDP, was on average higher that in WAEMU and SSA countries over 1990-2015. Yet, as documented by this IMF study, Benin's stock of public capital significantly decreased between 2000 and 2015 , a result of a lack of new investments and insufficient maintenance of existing infrastructure. It is therefore the inefficiency of investment more than its volume that is at the root of Benin's low quality of infrastructure. The IMF (2020a) study also points out that the efficiency of investment is substantially limited by institutional weaknesses in the evaluation and selection of investment projects. Improving governance relating to the public investment cycle is an important challenge, especially given the government's recent move towards significantly scaling up public investment, through budgetary funding and through partnerships with the private sector.

## 3 Financial Balance

The Beninese government's domestic resources were insufficient to cover its expenditures year after year over the 2002-2019 period (see Table 2.3a). The budget deficit excluding grants averaged 2.7 per cent over the period. Grants, on a declining trend, were never sufficient to avoid a globally negative financial balance and the public debt thus increased over the whole period, bringing the total central government debt-to-GDP ratio from 19 per cent in 2013 to 42 per cent in 2019. Most of the increase in debt has been financed at

[^18]non-concessional terms, mostly on the domestic and regional markets, thus involving enhanced interest rate and refinancing risks. ${ }^{38}$

To contain the risks resulting from unfavourable debt dynamics, Benin needs to improve domestic resource mobilisation and keep its public expenditures in check. As discussed in the two preceding subsections, this can be achieved without sacrificing development goals by giving strong priority to increasing the efficiency of both tax collection and expenditure management.

## C Foreign Assistance Dependency

The external position of Benin is described with some detail in Table 2.3b. This essentially combines saving and investment expenditures of the private sector and the government and shows how the observed gap between domestic savings and investment is financed by the rest of the world. ${ }^{39}$

Investment expenditures systematically exceed domestic savings for the government, but also for the private sector. The latter is responsible for the largest part of the overall imbalance between 2002 and 2013, while the government takes the largest share in the deficit over 2014-2019 as a result of increased spending. Migrant remittances and foreign grants significantly reduce Benin's total domestic savings imbalance, but the current account deficit (item 4 Table 2.3b) remains significant, 5.4 per cent of GDP on average.

The contribution of foreign direct investment towards closing the financing gap is a modest I .5 per cent of GDP on average. To cover the remaining funding needs, Benin has thus to rely on capital transfers from donors and on external borrowing. The former represented a rather constant resource flow of I .5 per cent of GDP, except in 2006 when a large public debt write-off was recorded. ${ }^{40}$ External borrowing amounted to about 2 per cent of GDP. ${ }^{41}$

[^19]TABLE 2.3b Benin's domestic and external accounts, 2002-2019 (per cent of GDP): Financing flows of the economy and external debt

| \% of GDP | $\begin{aligned} & 2002- \\ & 2004 \end{aligned}$ | $\begin{aligned} & 2005- \\ & 2007 \end{aligned}$ | $\begin{aligned} & 2008- \\ & 2010 \end{aligned}$ | $\begin{aligned} & 2011- \\ & 2013 \end{aligned}$ | $\begin{aligned} & 2014- \\ & 2016 \end{aligned}$ | $\begin{aligned} & 2017- \\ & 2019 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (1) Gross domestic savings | 8.6 | 6.7 | . 2 | 10.4 | 13.6 | 19.9 |
| (a) Private sector | 6.5 | 4.4 | 4.7 | 7.9 | 13.7 | 17.9 |
| (b) Public sector | 2.1 | 2.3 | 2.4 | 2.5 | -0.1 | 2.0 |
| (2) Gross domestic investment | I5.1 | 13.8 | 14.7 | 16.9 | 20.1 | 25.3 |
| (a) Private sector | II.I | 9.4 | 10.0 | 12.3 | 15.9 | 19.9 |
| (b) Public sector | 4.0 | $4 \cdot 4$ | 4.8 | 4.6 | 4.2 | $5 \cdot 4$ |
| (3) Income from abroad (net, primary, and secondary) | I. 5 | 2.7 | I. 6 | I. 3 | I. 3 | I. 2 |
| (4) External funding needs [(2) + (3) - (I) = current account deficit]. (4) External funding sources $[(5)+(6)+(7)]$ | 4.9 | $4 \cdot 4$ | 5.9 | 5.I | 5.2 | $4 \cdot 3$ |
| (5) Capital transfers (net inflows) | I. 3 | 6.5 | I. 2 | т. 8 | r. 4 | I. 4 |
| of which: Debt forgiveness | 0.5 | 5.3 | O.I | 0.0 | 0.0 | 0.0 |
| (6) Foreign Direct Investment (net inflows) | 0.7 | т. 6 | I. 6 | I. 8 | I. 6 | I. 3 |
| (7) Other financial liabilities (net, increase) and use of reserve assets | 2.8 | -3.7 | 3.I | I. 5 | 2.2 | 1.5 |
| Memo items |  |  |  |  |  |  |
| (8) External debt stocks | 30.9 | 14.8 | 13.6 | 16.3 | 18.0 | 24.9 |
| (9) Official development assistance (net flows) | 5.8 | 5.6 | 6.9 | $5 \cdot 4$ | 4.2 | 4.5 |

Source: Author's calculation based on data from IMF Balance of Payments data for items (3)-(7); WDI for items (2), (8), and (9). Items ( Ib ) and (2b) from Table 2.3a. Items (I) and ( Ia ) are deducted as residuals, to insure consistency between funding needs and sources.

Most borrowing abroad is in the form of public or publicly guaranteed debt. External non-guaranteed private-sector debt is minimal.

The increase in borrowing has resulted in a progressive increase in the external debt-to-GDP ratio over the last years up to its 2019 level of 27 per cent. At first this level might not appear alarming compared to its previous crisis level of 87 per cent in 1994 and given that almost all external debt is currently at concessional terms with multilateral development agencies or bilateral lenders. ${ }^{42}$ Yet, Benin's external dependency should not be minimised, since future

[^20]official development assistance (ODA) might not be as forthcoming as in the past. Indeed, ODA clearly appears to be on a declining trend. ${ }^{43}$ At around 5 per cent of GDP over the last ten years, it is well below the $10-\mathrm{I} 5$ per cent levels witnessed in the 1990s. Should this trend persist, Benin would face increased external financing constraints. Current account deficits at levels observed in the past would then need to be financed at non-concessional terms, at higher and possibly fast-increasing costs - assuming of course that access to international financial markets could be maintained.

Benin's development policy should thus give the highest priority to guaranteeing the sustainability of its external debt and, more broadly, to decreasing its foreign financing dependency by curtailing its current account deficit, grants excluded. In this respect, crucial future challenges include expanding the export base, cutting or rationalising public spending, increasing public investment, and tax collection efficiency.

## V BENIN'S SOCIAL CHALLENGES

Benin is confronted with a number of social challenges that hinder the improvement of the well-being and quality of life of its population, including demographic pressures, poor health care and quality of education, as well as persistent poverty and inequality.

## A Demographic Pressure

As emphasised in Section r , population growth is still very high in Benin, on average 2.8 per cent per year in 2005-2018. While it is not significantly different from that of other SSA countries, it is largely above the growth rate of other developing regions. This high level of population growth can be explained by the high fertility rate, which was still at five children per woman in 2018. Poverty and low education levels appear to be the main driving forces behind that rate.

High population growth poses a number of challenges for Benin's economic development. First, it requires the private sector to create more jobs in order to absorb a growing labour force, especially given the high proportion of young people, typical of a fast-growing population. Current economic growth trends would imply that the majority of newcomers would have to turn to lowproductivity jobs in the informal sector. Poor-quality jobs for a high proportion of the youth may have a high social and even political cost, as they may lead to increasing inequality and grievances. Avoiding this outcome requires increasing the volume and/or the efficiency of investment so as to put the level of physical

[^21]capital per worker on a positive trend. Second, high population growth puts pressure on the government to scale up public services in health and education.

## B Persistence of Poverty and Rising Inequality

## I Poverty Incidence

The incidence of poverty at the national level is high: the poverty headcount ratio (the percentage of population unable to cover their basic food and nonfood subsistence needs) exceeds 40 per cent, the exact value differing between institutions depending on the value they set for the poverty line. ${ }^{44}$ Also, their assessment of the evolution of poverty over time is contradictory. Following the World Bank (2017), poverty declined between 2010 and 2015, whereas INSAE's estimates indicate the opposite, again reflecting differences in poverty lines and methodology. In both cases, however, the change is limited. On the other hand, more recent estimates by INSAE suggest a slight drop by 2019 (see INSAE, 2020).

The infrequency of household surveys measuring poverty is responsible for the relative ambiguity of available evidence on poverty and prevents us figuring out the long-run trend of poverty. For the 2010-2015 comparison it turns out that 2015 was an exceptional year during which Benin experienced a severe recession because of the drop in oil prices and its consequences for the Nigerian economy and CBT activity. On that basis, we would thus expect poverty to be more pronounced during that year. At the same time, GDP per capita remained 9 per cent above 20IO, the year of the previous household survey. These two opposite circumstances explain why the change in poverty has been limited during that period and why different methodologies lead to different conclusions about the direction of the change. Poverty would probably have been lower in 2015 if not for the recession. That the change between 2015 and 2019 is also limited is more worrying, as precisely the opposite bias should have been observed. This suggests that recent economic growth in Benin has not been very inclusive.

The preceding remark on the somewhat exceptional role of the 2015 recession in explaining a poverty headcount lower than what could have been expected raises another point. This is that the country does not have well-established safetynet systems that can be rapidly activated in times of crisis. ${ }^{45}$

In contrast with monetary poverty indicators, the headcount of non-monetary poverty ${ }^{46}$ slightly decreased over the period 201I-2015 (INSAE, 2018). It is

[^22]also smaller than the monetary poverty headcount. In both cases, the explanation of the difference is that non-monetary poverty includes several deprivations that do not change or even keep improving in times of recession. This would be the case for instance for school attendance, child mortality, and the presence of some assets in the household.

## 2 Inequality

Income inequality in Benin is both high and increasing. In a little more than ten years between 2003 and 2015, the Gini coefficient is thought to have surged from 0.39 to 0.48 , a very high level even by SSA standards and a very large jump. This casts some doubt on the comparability of the household surveys behind these measures. Even though such an increase remains consistent with the limited upward or downward changes in the monetary poverty headcount discussed earlier, it would suggest that the severity of poverty has enormously increased, with the bottom 40 per cent of the population seeing their real expenditures per capita plummeting by around 20 per cent. ${ }^{47}$ Although it is not to be excluded that poverty became more severe, it is difficult to imagine that such a fall would not cause major social and political turbulence.

Thus, even though probably much overestimated, inequality has escalated since the turn of the millennium. Therefore, it can be confidently said that growth in Benin has not been inclusive, to put it mildly: the gains from growth have disproportionately accrued to the top of the living standard distribution. This is confirmed by the most recent estimate of monetary poverty that found little change between 2015 and 2019, although based on a different source (see INSAE, 2020).

## C Literacy and Education

## I Literacy

Benin's record of literacy achievements is close to catastrophic, as it ranks today among the worst performers in the world (World Bank WDI). Literacy rates in Benin are much lower than those estimated for SSA ( 30 in Benin vs 63 in SSA in 1979). This reflects primarily the low priority that was long put on education, a situation that fortunately changed some time ago (a literacy rate of 6 I in Benin vs 76 in SSA in 2018). Even though the first results of these changes have become apparent in the last decades, the gap with the average SSA country remains large: around is percentage points whatever the population group being chosen, even the youth.

If it ever were needed, this last observation shows the utmost importance for Benin of enhancing its education system, both by broadening its population

[^23]coverage and by improving its performance. Also worth noting is the significant and persisting gender gap in literacy achievements, although this gap has somewhat decreased for the youth in recent years ( 82 for males vs 52 for females in 2018).

## 2 Primary Education

The situation regarding primary school enrolment differs from the situation for literacy. In this area Benin's progress has been impressive, at least if one concentrates on the enrolment rate. The latter has increased from 40 per cent in 1990 to 96 per cent today, overtaking the SSA average..$^{8}$

The question must nevertheless be raised as to whether rapid growth in enrolment and even completion rates ${ }^{49}$ has been obtained at the price of a deterioration in the quality of schooling. Benin does indeed lag significantly behind other SSA countries regarding the pupil-teacher ratio ${ }^{5 \circ}$ and the proportion of repeaters among enrolled primary school pupils. ${ }^{51}$ More worryingly, learning outcomes are low, not to say dismal in some cases, and have shown no significant improvements since 2005. ${ }^{52}$ Taken together, these findings may explain the still relatively high proportion of illiterate people among the youth.

It was to be expected that quality would be affected by the surge in enrolment. Yet, Benin has already for several years been close to universal enrolment and it is time for quality to catch up.

## 3 Post-Primary Education

Progress in secondary education enrolment over the last years has been still more impressive and, to some extent, a consequence of higher primary completion rates. The enrolment rate has doubled since 2004 to reach 59 per cent today, compared to only 43 per cent on average in SSA.

As the number of students who are completing primary education increases, so does the pressure on secondary, vocational, and tertiary education. Yet, it is noticeable that it is not the same for boys and girls, the latter lagging

[^24]significantly behind when moving up the education ladder. Furthermore, as in primary education, quality does not follow. Rapid expansion of enrolment strains resources and negatively affects the quality of education.

The situation is comparable for tertiary education. Enrolment rates have roughly doubled since the early 2000 s to reach 10 per cent today, which is significantly above the SSA average. An additional issue in the case of higher education is the relevance of the curriculum, together with the fields of knowledge covered. There is a huge enrolment imbalance in favour of social sciences over technical curricula. This creates a mismatch between the competencies of candidates for a job and those actually required by employers.

## 4 Education-Sector Reforms

The low quality of basic education and its considerable variation between different parts of the country (particularly between the north and the south) are clearly matters of serious concern. If bringing most kids to school may reasonably come before improving quality, unfortunate policy decisions in educational matters were taken in the past that were detrimental to educational outcomes. In particular, teacher training schools in Benin were discontinued at some stage during the i990s, causing a severe, long-lasting shortage of teachers in many parts of the country, particularly in the north. There, outsized classes (reaching up to $\mathbf{I} 20$ pupils), teacher absenteeism, and substitution of poorly trained teachers for the missing qualified staff attained unprecedented levels, with all the adverse long-term effects that can be easily imagined.

How could such a deterioration occur while an ambitious structural reform of the education sector, initiated in 1989, was under way? ${ }^{53}$ This was not so much because the reform proved inconsistent with the fiscal restraint imposed by the macro-economic adjustment. Rather, it was due to the lack of training and upgrading of government staff made necessary by the reform (African Development Bank, 2003, pp. 13-14, 17). ${ }^{54}$ Paradoxically, at a time when money available for education had been reduced and efforts should have been directed to more efficient use of it, the lack of teaching staff caused the allocated budget not to be fully used - the utilisation rate was lower than 60 per cent at the end of the 1990s. It was in this already difficult context that President Boni Yayi introduced reforms in 2000-2008 to lower/suppress tuition fees at the various levels of education. These reforms caused an explosion of enrolment, leading to a further erosion of the teacher-to-student ratio and further deterioration in quality.

[^25]
## D Health-Care Issues

Even though it was halved in the last thirty years, neonatal and infant mortality remains very high in Benin. The neonatal mortality rate was still 32.5 and the infant mortality rate 63.1 per 1,000 live births in 2016, somewhat above the SSA average. Malnutrition among children under 5 (stunting) not only remains higher than elsewhere in the region, but has worsened over the past thirteen years (DHS, 2013). As would be expected, stunting and wasting are of greater concern in rural areas.

The overall quality and efficiency of health-care delivery systems clearly need to be improved. The World Bank (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. It is also striking that, in 2016, doctors' wages were higher in Benin than in other SSA countries with better-performing health-care systems (Prady and Sy, 2019).

## VI CONCLUSION

Benin faces several crucial economic and social challenges. They are the result of multiple factors that have hampered its development.

The challenges Benin is facing are as follows:
I. Benin's GDP per capita growth has been unsatisfactory over the last decades. The high population growth rate, which is expected to persist for several years, requires much higher and sustained growth. The nature of structural change that has occurred in Benin until now does not, however, bode well in this respect. It has mostly been characterised by a passive adjustment to the decline of the agricultural sector, with labour moving into informal activities or being absorbed by low-productivity sectors, mostly by (petty) commerce. The within-sector productivity growth has also been generally low, even regressing in the manufacturing and services sectors. Globally, capital deepening has been absent. As a result, aggregate productivity growth has been weak.
Low within-sector productivity growth is due to poor factor accumulation, both in terms of human and physical capital, misallocation of resources implying efficiency losses, and slow technological change. For instance, much of the recent educational progress in Benin has been in the form of rising gross school enrolment. The quality of education was not raised and may even have deteriorated. Moreover, there is a large mismatch between the supply of higher education and the skill requirements of formal enterprises that could raise overall productivity. In the same way, compared to most SSA countries, Benin displays large infrastructure and efficiency gaps in key sectors, like electricity, transport, health, and telecommunications. Private capital accumulation is
also discouraged because of low returns on private activities caused by an inadequate and unreliable business environment, whether for formal firms or informal producers, including family farms. The last few years have seen an acceleration of growth, some capital deepening, and some productivity increase. Yet, no clear sign of a change of regime in the development of the economy is visible, so that this change may be the result of particular external circumstances.
2. Benin's economy is poorly diversified and concentrated on risky activities, either subject to short-run price fluctuations or offering uncertain long-run growth perspectives. Indeed, its agriculture is heavily focused on cotton exports, making the economy vulnerable to swings in international commodity prices and in real exchange rates. Growth in the cotton sector has also been constrained by institutional instability and political interference. Efforts to develop non-cotton agricultural exports have not yet resulted in sizeable trade flows. The other key opportunity exploited by Benin has been re-exports, with Nigeria, its giant neighbour, as the main focus. The aim was to capture this country's huge, oil-rent-financed, domestic demand for goods subject to Nigeria's tariff and non-tariff barriers. This strategy has developed into a mostly unofficial and illicit CBT activity, operated by a network of informal operators present on both the re-export and the import-smuggling fronts. This CBT activity served Benin well, contributing to about Io-I2 per cent of its GDP, according to our estimates. It has, however, clear downsides. It nurtures not only informality but also corruption, tax evasion, and political capture, as evidenced by the involvement of a few well-connected big actors in this trade. This activity also distorts incentives to develop legal domestic and more productive activities and crowds out resources that could be invested in them. Last, but not least, it is vulnerable to - and in some way hostage to - changes in Nigeria's trade protection policies as well as border control practices, as evidenced by the recent closing of the border unilaterally decided by Nigeria. Benin is thus clearly in need of a sustainable export development strategy, one that is focused on a diversified export base and can foster formal trade networks.
3. Benin's high degree of informality in economic activities acts as a strong constraint on its development strategy. Informal firms are on average less productive as they use less capital and operate on a lower technology level. Informality deprives the public sector of valuable fiscal resources, putting a drag on valuable economic and social public expenditures. Because informal firms operate outside a legal framework, the resulting lack of a level playing field also hampers the emergence of a dynamic network of formal firms.
4. Benin's public-sector performance is below its potential. This is the case for its domestic resource mobilisation. Inefficiencies in tax
collection, a consequence of several institutional weaknesses (informality, corruption, lack of transparency, poor enforcement...), deprive the public sector of much-needed resources. The management of public expenditures also suffers from inefficiencies, resulting in low quality of investments in key infrastructures or in misallocations of resources in spending on, for example, education and health. The persistent gap between total government resources, grants included, and total expenditures could be reduced by improving the efficiency of revenue collection and expenditure management, without sacrificing development goals, with the benefit of keeping the build-up of public debt in check.
5. Benin displays a persistent and extensive need for foreign resources, ODA in particular. The sustainability in the medium and long term of such structural dependency on external concessional financing is a major concern, particularly when access to the latter at past levels is not necessarily guaranteed for the future, especially at a time of 'aid fatigue' among donors. This is all the more true for an economy that has not yet really started carrying out the structural transformation that would significantly reduce this dependence. It is also vital for Benin to keep open access to external funding as an insurance in times of duress, when it is hit by external shocks affecting its two leading sectors, cotton and re-exports, the more so because monetary policy is limited, with Benin being a monetary union member with a fixed peg to the Euro. A key challenge is thus to guarantee the sustainability of its external debt by reducing its structural dependence on foreign financing, particularly on costly non-concessional flows.

For an economy without extractive resources, Benin needs a re-orientation of its development strategy: towards activities that offer better returns than traditional activities based on raw agricultural products, and towards viable long-term trade relations that fully exploit the country's regional comparative advantages, instead of keeping the focus on the illicit and informal CBT with Nigeria. To achieve this re-orientation, Benin needs to deal with the different, but very much intertwined, challenges already noted. Various policies can be figured out to address them. However, the question is not so much the nature of these policies as whether the most adequate ones will actually be adopted by the political decision system, and whether they will then be effectively implemented. Both issues in turn depend upon the institutional context of policy making and management.

The characteristics of these institutions, and their strengths and weaknesses in addressing Benin's development challenges, will be investigated in depth in the remainder of this volume. Before this, however, it will be useful to look at what is known about precisely these institutional strengths and weaknesses.

## APPENDIX I

## Growth Accounting

A straightforward exercise of growth accounting for Benin is performed in Table 2.A.I over subperiods of ten years, starting in 1970.

The following results stand out:

- Growth of GDP per capita was subdued during the first two decades, but much more dynamic during the 1990-2000 period of economic reform, as the economy recovered from the 1980s crisis period. Growth in 2000-2010 slowed again, before picking up during the most recent period.
- After rising in 1970-1980 - the period of heavy public investment under the socialist regime - the capital-to-labour ratio continuously decreased during the next thirty years, weighting negatively on labour productivity growth during these years. It is only in the most recent period that the ratio picked up again.
- Total factor productivity (TFP) contributed positively to GDP growth during each subperiod, except during the socialist experience. From 1980 to 2010, TFP allowed labour productivity to grow despite the thirty-year decline in the capital-to-labour ratio. It is probably not a coincidence that the most significant contribution of TFP to growth occurred during the r990s-2000s, the period during which structural adjustment and reforms were carried out. During the other subperiods, its contribution to growth is relatively constant, at about I per cent per annum.
table 2.A.I Growth accounting

| \% per annum | 1970-1980 | 1980-1990 | 1990-20 | 2000- | 2010-2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Growth rates |  |  |  |  |  |
| GDP | 2.69 | 3.23 | 4.62 | 3.87 | 4.57 |
| Labour (L) | 2.47 | 2.96 | 3.27 | 2.97 | 2.82 |
| GDP per capita | 0.22 | 0.27 | 1.35 | 0.90 | 1.75 |
| Capital (K) | 3.38 | I.14 | I. 53 | 2.55 | 4.50 |
| K/L | 0.91 | -1. 82 | -1. 74 | -0.42 | 1. 68 |
| GDP growth: contrib. of |  |  |  |  |  |
| K | 1.32 | 0.45 | 0.60 | 0.99 | 1.76 |
| L | I. 5 I | i. 8 I | r. 99 | r.8I | 1.72 |
| Total ( $\mathrm{K}+\mathrm{L}$ ) | 2.83 | 2.25 | 2.59 | 2.8 I | 3.48 |
| TFP | -0.14 | 0.98 | 2.03 | 1.06 | 1.09 |
| Labour productivity growth | 0.22 | 0.27 | I. 35 | 0.90 | 1. 75 |
| of which due to K/L | 0.36 | -0.71 | -0.68 | -0.16 | 0.66 |

[^26]
## APPENDIX 2

## Contribution to Benin's GDP of Re-exports to Nigeria

Golub (2012a, p. 2I5, 20I2b, p. II59) estimates that re-export activities to Nigeria contribute to 20 per cent of Benin's GDP. Golub et al. (in Chapter 8 of this book) report a slightly lower figure of 18 per cent. Their estimates for employment effects range from 50,000 people directly involved (and possibly up to 100,000 people when those indirectly involved are also taken in account). These estimates on employment effects represent for the year of estimation (2005) about 8 per cent of employed workers in the three sectors susceptible to contribute to this trade - that is, commerce, transport, and finance - and 2 per cent 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 CBT are about 30 per cent of tax receipts (World Bank, 2009), which translates into an average of 4.5 per cent of GDP. Using 2006 data, we net out this share of GDP from the estimated global 20 per cent contribution to GDP and compute the net contribution in terms of gross value-added at factor costs. The resulting ratio is 17 per cent. We assume that this net contribution to value-added at factor costs originates 65 per cent in the commerce sector, 30 per cent in the transport sector, and 5 per cent in the finance sector. Using the respective productivity data reported in Table 2.2 (Haile, 2018), we obtain an effect on employment amounting to 450,000 individuals, or 18 per cent 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 I.2. It actually implies that about 80 per cent of people employed in this sector are supposed to be involved in CBT. Using 2015 data for the same scenario implies that the 20 per cent of GDP contribution of CBT represents an employment effect of 27 per cent of total employment ( 87 per cent of employment in the commerce sector). Again, the decrease in productivity in the commerce sector between 2006 and 2015 explains this difference. Using actual sectoral productivity data thus shows that the estimates of the contributions of CBT to GDP and to employment are inconsistent. It also shows that the 20 per cent of GDP estimate appears to be really excessive, when its implications for employment are assessed with realistic productivity levels.

As an alternative, we 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 CBT. We arbitrarily assume that 25 per cent of workers in commerce, 20 per cent in transport, and 5 per cent in finance are active in unofficial CBT, this representing about 150,000 workers and 5.5 per cent of total employment in 2006 . We obtain, under this hypothesis, a total contribution of unofficial CBT to GDP (i.e. indirect tax receipts included) of about 9.1 per cent in 2006. Repeating the exercise for 2015 we get io. 3 per cent. One could, however, argue that the national account
productivities used in these calculations underestimate actual productivities in the informal trade. Because the latter involves a multiplicity of intermediaries and gives rise to specific costs, which includes bribery, the value-added per employee in this business can be expected to be larger. Assuming therefore that productivities are, say, 30 per cent higher in this specific informal trade than those reported in the national accounts, we obtain an estimated contribution of unofficial CBT to GDP of 10.4 per cent in 2006 and 12.1 per cent in 2015. All in all, a range of $10-12$ per cent for the contribution of unofficial CBT to GDP thus seems a reasonable estimate. ${ }^{55}$

## APPENDIX 3

## Effects of Shocks in Nigeria on Benin's GDP

To quantify the short-run effects of aggregate demand shocks in Nigeria on Benin's GDP, we focus on household consumption in Nigeria as a driving factor for Benin's growth, using national account aggregates. Nigeria's household consumption is better suited than Nigeria's GDP as a driving factor, as a large part of the CBT of Benin with Nigeria originates in Nigerian domestic consumption spending. We run a regression between Benin's GDP growth and the growth of household consumption in Nigeria over the 1980-2017 period.

The regression includes one lag of each variable and uses the longest period for which data on household consumption are available in both countries in the WDI database. The estimated coefficient of contemporaneous Nigerian household consumption is 0.08 and is significant at the I per cent 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 than that of Benin's GDP: their respective standard errors for the 1980-2017 period are 16.0 per cent and 2.9 per cent, respectively. A negative shock of one standard error in Nigerian household consumption - statistically not that improbable for the Nigerian economy would decrease Benin's GDP by 1.3 per cent, an estimate with a 95 per cent confidence band of 0.4 per cent and 2.2 per cent. The regression results also indicate that the impact occurs contemporaneously, the one-year lagged effect of the Nigerian shock being quite small and insignificant.

These results confirm that a significant shock to the growth rate of household consumption in Nigeria, similar to those not infrequently witnessed there, can have a sizeable effect on Benin's contemporaneous GDP growth rate. This economically significant effect is confirmed by a variance decomposition

[^27]analysis performed with a bivariate structural vector auto-regression (SVAR) model with the same two variables and over the same period. This attributes about 22 per cent of the variance of the model's forecast error for Benin's GDP growth to shocks in Nigerian household consumption.

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[^1]:    ${ }^{1}$ 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 cent per year and 2.2 I per cent for the low variant.

[^2]:    ${ }^{2}$ Detailed national account data published by Institut National de la Statistique et de l'Analyse Economique (INSAE) and the Ministry of Economics and Finance are available since 1990, but rest on a methodology, especially a classification of industries and activities, which was profoundly overhauled in the early 2000 s. 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 for combining the data to cover the full 1990-2017 period. Benin's national accounting system has recently been overhauled again, providing for a greater use of survey data. This rebasing was officially introduced in 2019, starting with the 2015 data (see INSAE, 2019). As a consequence of the new methodology, nominal GDP has been re-evaluated by 37 per cent relative to the previous system of accounts. For consistency reasons, we stick in this section to the older system of accounts.

[^3]:    ${ }^{3}$ Haile (2018) combines Beninese national account data with employment data taken from three waves of surveys of household living conditions (Enquête Modulaire Intégrée sur les Conditions de Vie des Ménages (EMICoV) 2007, 2011, and 2015) and complemented with the World Bank's International Income Distribution Data Set (I2D2).

[^4]:    4 These estimates are obtained from MAEP (2008) and Golub (2012a, 2012b) for cotton and CBT, respectively, although it will be seen shortly that the latter is probably overestimated.

[^5]:    ${ }^{5}$ A telling example is Sebastien Ajavon, a leading importer of frozen poultry from France, where he has invested in chicken farming, into Benin. His firm COMON S.A. is the major player in the unofficial CBT of poultry into Nigeria, where this product is officially banned. He financed the campaigns of politicians close to his business interests before himself running as a candidate in the 2016 presidential election. See also Chapter I and Mensah (2018).

[^6]:    ${ }^{6}$ However, potential indirect effects of cotton through the demand and supply sides of the economy are not taken into account in our estimates.

[^7]:    ${ }^{7}$ In 2016, for instance, there were 685 MFIs, accounting for about 5 per cent of the overall financial sector's assets. However, only about 15 per cent of these MFIs were officially authorised, 85 per cent being therefore informal (IMF, 2016). More generally on the informal financial sector see Tomety (1999).
    ${ }^{8}$ One explanation could be the concentration of the banking sector. The banking system is concentrated on four banks, which account for about 80 per cent of the credit and capital of the system.
    ${ }^{9}$ Besides, quantitative constraints on the deposit side may also impede banks' lending to the private sector. For instance, a limited amount of term deposit may contribute to explaining low bank credit supply.

[^8]:    ${ }^{\text {ro }}$ One should however note that considerable geographical disparities exist with respect to infrastructure (INSAE, 2016b). For example, in terms of access to electricity, the three departments ranking highest are all located in the southern part of the country, while two of the three departments with the worst supply are in the north. In terms of access to drinking water, of the three departments with the best supply only one is in the north, while of the three departments with the worst access only one does not belong to the north.
    ${ }^{\text {II }}$ See the Report on the Diagnostic Trade Integration Study (DTIS) Update (World Bank, 2015 b).

[^9]:    ${ }^{12}$ BCEAO, which establishes WAEMU's balance of payments, estimates unofficial re-exports and imports using a methodology that rests on the reconciliation of WAEMU's intra-zone trade flows and on INSAE's estimates of Benin's unrecorded trade. Note that BCEAO's adjustment methodology has been significantly overhauled since 2015 , in the wake of the new national account framework introduced by Benin in 2019 - and applied from 2015 on - to, among others, provide for a better inclusion of informal activities. The coverage of unrecorded trade flows has been much extended, both on the export and import sides. BCEAO's 2015 balance of payments data for Benin's exports of goods have been revaluated by 42 per cent, relative to those resulting from the earlier methodology, and those for imports of goods by 33 per cent (BCEAO, 2019, p. 16). As GDP has also been revaluated by 37 per cent, the effect of this change in methodology only marginally affects the export and import GDP ratios depicted in Figure 2.5a.

[^10]:    ${ }^{15}$ Petroleum products, which are handled by the port of Cotonou, are an example of officially recorded re-exports (BCEAO, 2019, p. 19). Total re-exports are, however, mostly unofficial.
    ${ }^{16}$ WTO (2017, p. 140) reports that tourism is a major source of foreign currency, but that laws and regulations are ill-adapted to the sector's need, which explains its sluggish development. To improve the contribution of tourism to development, the Benin government launched in 2017 the World Bank-funded Cross-Border Tourism and Competitiveness Project.

[^11]:    ${ }^{17}$ 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'. Benin has applied the Economic Community of West African States (ECOWAS) common external tariff since 2015. Nigeria, however, does not abide by ECOWAS rules, a situation that nurtures the informal CBT.
    ${ }^{18}$ Benin's peg was with the French Franc before 1999. It has only been changed once since 1948. This was the case in January 1994 when the foreign currency value of the CFA Franc was halved.
    ${ }^{19}$ The appreciation of Benin's multilateral real exchange rate actually goes back to 1994, building up progressively after the devaluation of the CFA Franc.
    ${ }^{20}$ To this end we also use consumer price indices. However, we do not rely on the official rate of the Naira, but use the bureaux de change (BDC) Naira exchange rates, which can be considered as a proxy, albeit an imperfect one, for the parallel exchange rate used in cross-border trade.

[^12]:    ${ }^{21}$ Data for the 1999-2019 period are based on the 2015 national account methodology and are not fully comparable with the earlier series. WDI data rely on Benin's national account methodology introduced in 2015 and applied from that year on. Significant adjustments have also been made in the databases of international organisations for Benin's national account aggregates for

[^13]:    ${ }^{27}$ In 2015, 89 per cent of employment was in the informal sector, 6 per cent in the formal private sector, and 4 per cent in the public sector, according to the EMICoV 2015 survey (INSAE, 2016a, p. 35).

[^14]:    Source: Author's calculation based on data from IMF Government Financial Statistics, World Economic Outlook, and Regional Economic Outlook for SSA databases; WDI; United Nations University - wider government revenue database for revenue categories up to 2013. For later period, World Bank (2018, Table 2, p. 17) and author's own estimates based on data from Ministry of Finance. The information on statutory tax rates is taken from IMF (2018b) and World Bank (2018).

[^15]:    ${ }^{28}$ All data in the table are expressed as shares of GDP, with the latter rescaled over the whole period according to Benin's 2015 revision of national accounts. As a result, all Benin's public finance data expressed as shares of GDP have been reduced by a factor of I.37, relative to those based on the previous GDP series. This complicates comparisons between Benin and other countries. We take this factor as much as possible into account in our discussions.

[^16]:    ${ }^{29}$ It should be noted that the reported share of international trade taxes underestimates the total amount of taxes Benin derives from its re-export activities. Indeed, as noted earlier, 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.
    ${ }^{30}$ Golub et al. in Chapter 8 of this book report a fiscal loss due to smuggling of petroleum products from Nigeria that is estimated by government sources at about CFA Franc 20 billion for 2018, amounting to 2.2 per cent of total tax revenue. Ndoye (2015, pp. 8-9) finds a loss of the same order of magnitude based on 2011 data.
    ${ }^{31}$ Non-tax revenues other than grants do not contribute much to total revenues in Benin, which is not a country rich in natural resources.
    ${ }^{32}$ This information on statutory tax rates is taken from IMF (2018b) and World Bank (2018).

[^17]:    ${ }_{33}$ The C-efficiency of VAT is defined as the ratio between actual VAT revenue and potential VAT revenue, the latter being estimated as the product of statutory VAT rates and private consumption expenditures.
    ${ }^{34}$ The efficiency of the tax collection process has at times also been weakened by political interference. This has, for example, been the case for the Beninese customs administration, with 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 performed badly and charged excessive prices, threatening the competitiveness of the port of Cotonou. In 2017, however, Benin Control was reinstated by the government of the newly elected president, Patrice Talon, who also had been the successful tenderer for the PVI in 201 i. The opacity about the task involved in the new contract, and the extent of fiscal exonerations provided, raised public outrage.
    35 For 2018-2019, pensions and scholarships make up about io per cent of recurrent expenditures, subsidies to public agencies and enterprises about 8 per cent, and other transfers 13 per cent.

[^18]:    ${ }^{36}$ Source of data in this section: Ministère de l'Economie et des Finances, Bénin: Tableau des Operations Financières de l'Etat (TOFE), www.dge.finances.bj/slug/tableau-des-operations-financieres-de-letat-tofe.
    ${ }^{37}$ IMF (2018c, p. 7) reports that, starting in 2016, the wage bill has 'been rationalised without reducing the number of civil servants or lowering their base salary'. This included removing ghost workers from the payroll, eliminating selected non-wage benefits, and switching from cash to bank transfers for salary payments.

[^19]:    ${ }^{38}$ The additional debt has been mostly financed by bonds issued in domestic currency (CFA Franc). Recently, Benin also issued, following the lead of other sub-Saharan countries, Eurobonds, for which the exchange rate risk is minimal (or nil, if one abstracts from a presently unlikely CFA devaluation scenario). The IMF assesses Benin's overall risk of debt distress as moderate, characterising it as allowing a 'limited space to absorb shocks', but points to the need for medium-term fiscal consolidation in order to maintain debt sustainability (IMF, 2020b, p. I).
    39 The table combines national account and balance of payments data, which refer to different statistical frameworks and may each reflect specific reporting difficulties. In Table 2.3b, inconsistencies between both sources are reflected in the data for gross domestic savings, both for the private sector and the economy's aggregate, as both series are computed as residual items.
    $4^{\circ}$ 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. The latter is recorded as a capital transfer, with a reduction in external liabilities as its counterpart. A debt write-off does not provide new current financing but frees future domestic resources from the servicing obligations of the debt written off.
    ${ }^{41}$ 2002-2019 average, after excluding the 2006 debt write-off amounting to 13.8 per cent of GDP.

[^20]:    ${ }^{42}$ In contrast to domestic public debt, which has increased at a faster pace and is issued at non-concessional terms (see Section 4.2.3). Interest payments on external debt represented a modest 0.2 per cent of GDP in 2018. In 2019 Benin also issued Eurobonds, which carry, like its domestic debt, non-concessional interest rates but have benefited from favourable market conditions. The Eurobonds represented 16 per cent of Benin's external debt at end 2019 (IMF, 2020b, Table 3).

[^21]:    ${ }^{43}$ ODA combines grants and concessional loans. It is also impacted by donor-financed debt relief operations on ODA debt and on non-concessional debt. Recorded ODA flows can thus not be construed as financing a current account deficit, and are therefore presented as a memo item in panel (b) of Table 2.3b.

[^22]:    ${ }^{44}$ Following INSAE the poverty headcount ratio was 40 per cent in 2015, which is lower than the one obtained from the World Bank's Povcalnet database ( 47 per cent).
    ${ }^{45}$ One problem, however, with such a programme is that it is very expensive.
    ${ }^{46}$ The headcount of non-monetary poverty focuses on a set of material household deprivations including lack of access to education or health care, rather than the value of household consumption expenditures.

[^23]:    47 This figure is obtained from the decile shares reported by the World Bank's Povcalnet database. The consumption expenditure share of the bottom 40 per cent of individuals would have fallen from 17.9 to 12.9 per cent, whereas the mean for the whole population increased by only 8 per cent.

[^24]:    ${ }^{48}$ Source: World Bank, Education Statistics Data Base. Note that the SSA average may be affected by a few atypical countries - typically conflict countries (South Sudan, Somalia, etc.). Moreover, the adjusted net enrolment rate in primary education reflects the number of students of the official primary school age group who are enrolled in primary or secondary education, relative to the corresponding population. The statistic is, however, affected by the repetition rate of students, so that a rate of ioo per cent does not necessarily imply that the universal primary education goal has been achieved.
    ${ }^{49}$ Benin achieved for 2015 a completion rate of 80 per cent (vs 70 per cent for the rest of SSA).
    ${ }^{50}$ In 2015 , it stood at 45.0 in Benin in comparison to 37.5 for SSA as a whole.
    ${ }^{51}$ ir per cent in Benin compared to 8 per cent in SSA.
    ${ }_{52}$ An assessment carried out in 2011 on a sample of 167 public primary schools and three private primary schools showed that only 12 per cent of fifth-grade (CMI) students from public schools and 42 per cent from private schools were literate, while ir per cent and 38 per cent, respectively, had mastered the curriculum in mathematics (World Bank, 2015c). The most recent PASEC tests, an external evaluation of primary school competencies, in ten Francophone African countries report similar shortfalls (PASEC, 2015, pp. 36, 50).

[^25]:    ${ }^{53}$ This reform was implemented as part of the SAPs monitored by the World Bank and the IMF throughout the 1990s. The reform in education (and health) was aimed at restructuring the Ministry of Education, providing textbooks to pupils and students, encouraging parent/teacher associations and their recruitment of contract teachers, and allocating better teachers across urban and rural areas.
    54 More specifically, the voluntary retirement programme and the freezing of recruitment into the civil service had the effect of causing an ageing of the administration, which was already suffering from a lack of training, a dearth of competent staff, and an acute shortage of senior-level officers.

[^26]:    Source: Author's calculation based on data from WDI and Feenstra et al. (2015); the share of capital to GDP is set at 0.39 ; population is used as a proxy for labour, as a factor of production.

[^27]:    55 Extensive surveys, along the lines of those already undertaken by INSAE (2011), could help getting more reliable estimates. Also, indirect multiplier effects on aggregate demand could be taken into account in a global assessment of the contribution of unofficial CBT to economic activity.

