

## Chapter 4

# **Dynamics of growth, jobs and inequalities in Central Africa**

This chapter presents trends and determinants of growth, employment and inequalities in Central Africa (Burundi, Cameroon, the Central African Republic, Chad, Congo, the Democratic Republic of Congo, Equatorial Guinea, Gabon, Sao Tome and Principe). It looks at the sectoral composition of the economies in the region as well as the dynamics of productivity, of job creation and of inequality of opportunity and income. It also analyses the role of structural transformation in reducing the region's vulnerability to international commodity price fluctuations.

The chapter addresses four topics: growth dynamics, employment dynamics, dynamics of inequalities, and concludes with recommendations that take into account national specificities.

# BRIEF IN

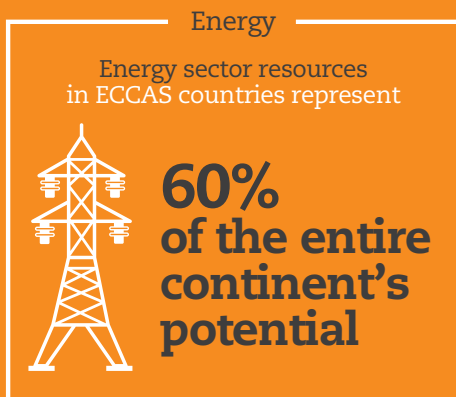
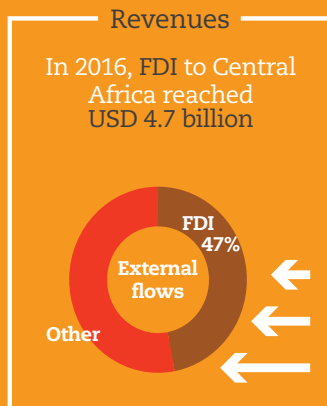
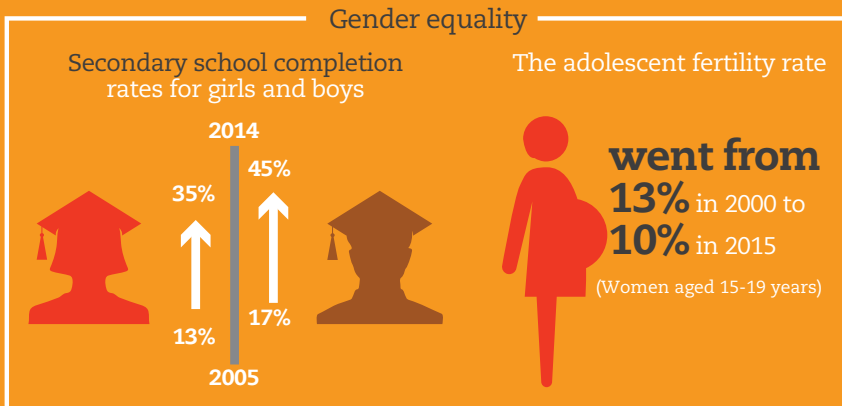
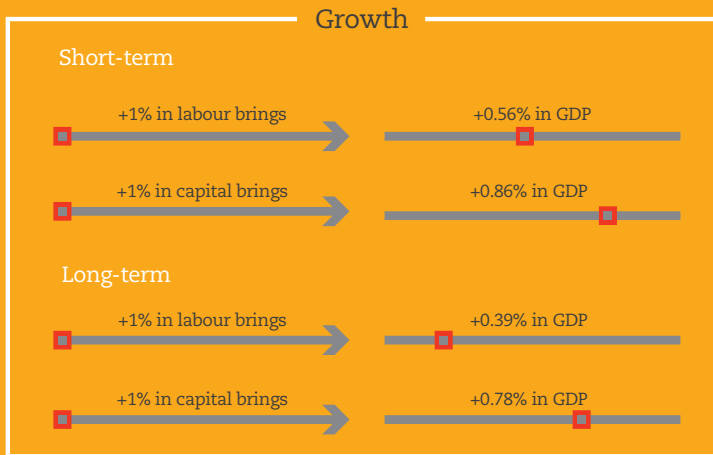
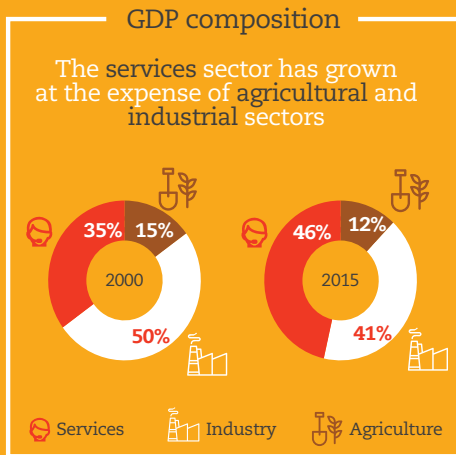
Between 2000 and 2016, Central Africa had a strong **growth** dynamic – at 5.6% on average – but with a volatility almost twice as high as the rest of Africa, due to its vulnerability on global commodity prices. Without any structural transformation, the prospects of sustainable growth reducing poverty and inequalities remain weak.

Despite their heterogeneity, all countries in the region share a dependence on oil and minerals. Since the start of the 1990s, the services sector has contributed around 40% of GDP. The agricultural sector's contribution fell from 21% of GDP in 1990 to 11% in 2015 in favour of the industrial sector's expansion, with a rising contribution to GDP from 34% to 49%. This improvement is based on extractive activities and does not signal a deep structural change.

While the unemployment rate is stable at 7% since 2000, the informal economy dominates the labour market. Based on a production profile dominated by minerals, growth is more capital intensive than labour intensive. Only the services sector has managed to create jobs, without being able to offset **employment** losses in other sectors.

Pro-poor policies have led to a reduction in poverty and **inequality** of opportunity in most countries in the region, without eradicating them entirely. However, income inequality has not fallen. The Gini coefficient has remained constant at 42 since 2000, the highest level on the continent. Yet, Central Africa diverges from the rest of the continent in terms of its positive results in combatting gender inequality even though this remains high. Countries must persevere in their efforts to ensure that gender inequality does not start to rise again.

# Dynamics of growth, jobs and inequalities in Central Africa



## Central Africa regional profile

Table 4.1. Basic indicators for Central Africa, 2017

Population (thousands)	144 575
Land area (thousands of km <sup>2</sup> )	5 276
Population density (pop./km <sup>2</sup> )	27
GDP, PPP (USD billion)	294
GDP per capita, PPP (USD)	2 009

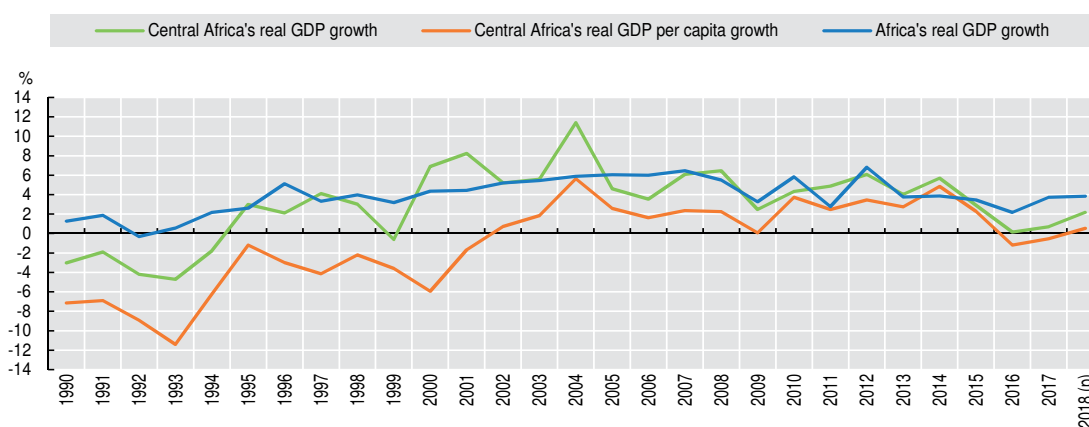
Source: Authors' calculations based on UNDESA (2017) database, World Bank (2017a), World Development Indicators, IMF (2017a), World Economic Outlook (database of October 2017).

Table 4.2. Financial flows and tax revenues to Central Africa, 2009-16 (current USD billions)

		2009	2010	2011	2012	2013	2014	2015	2016	
Foreign	Private	Inward foreign direct investment	5.2	7.5	7.2	8.7	7.5	8.7	5.6	4.7
		Portfolio investments	0.3	0.3	-2.2	-3.5	1.3	0	0	0
		Remittances	0.2	0.2	0.4	0.3	0.3	0.4	0.3	0.3
	Public	Official development assistance (net total, all donors)	4.8	7.0	7.9	4.9	4.9	5.0	5.0	4.9
<b>Total foreign flows</b>		<b>10.6</b>	<b>14.9</b>	<b>13.3</b>	<b>10.4</b>	<b>14.0</b>	<b>14.1</b>	<b>10.9</b>	<b>10.0</b>	
<b>Domestic tax revenues</b>		<b>10.8</b>	<b>10.8</b>	<b>13.4</b>	<b>14.6</b>	<b>15.8</b>	<b>17.2</b>	<b>14.2</b>	<b>11.5</b>	

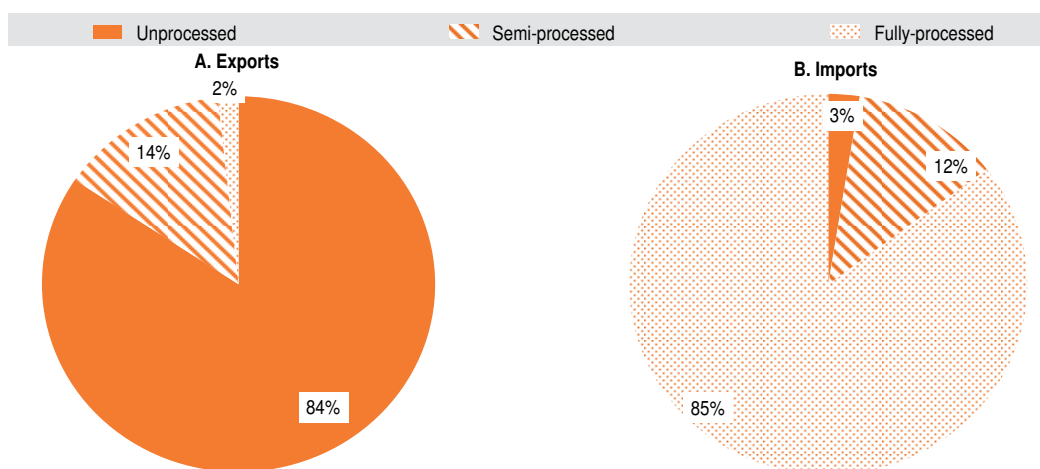
Source: Authors' calculations based on World Bank (2017a), World Development Indicators database, IMF (2018), World Economic Outlook database (October 2017), and OECD/DAC (2017), Online Statistics on International Development database.

Figure 4.1. Growth dynamics in Central Africa and Africa, 1990-2018



Source: Authors' calculations based on IMF (2017a) World Economic Outlook database (April 2018).  
StatLink <http://dx.doi.org/10.1787/888933783266>

Figure 4.2. Trade composition in Central Africa, 2016



Source: Authors' calculations based on UNCOMTRADE database (2017).  
StatLink <http://dx.doi.org/10.1787/888933783285>

Central Africa is made up of nine countries that differ greatly in terms of size, population and geography. The region includes landlocked countries such as Burundi and Chad as well as smaller insular states such as Equatorial Guinea and Sao Tome and Principe. Cameroon, the Central African Republic, Congo, the vast Democratic Republic of Congo (DRC) and Gabon are also part of the region.

With 144.6 million people in 2017, 53% of which were aged between 15 and 64 years, Central Africa represents 11.5% of the continent's population. Central Africa's land covers 5.3 millions of square meters (km<sup>2</sup>) and has the lowest population density with 27 inhabitants/km<sup>2</sup>. It is lower than Africa's 39 inhabitants/km<sup>2</sup>. Varying from country to country, the rural population went from representing 73% to 55% of the total between 1980 and 2016.

Central Africa's GDP is the smallest one of the continent, at USD 294 billions at purchasing parity power (PPP). The sub region's contribution to Africa's GDP fluctuates from 4% to 11%, depending on the global economy and international prices for oil products. These latter represent more than 80% of the region's total exports.

All the region's countries are members of the Economic Community of Central African States (ECCAS), a free trade area created in 1983. Six of the nine countries are additionally members of an economic and monetary area created in 1994, the Economic and Monetary Community of Central Africa (CEMAC).

## Unstable and fragile growth

### More volatile growth compared to the continent

Growth in Central Africa generally shadows that of the continent, both in periods of growth and recession, although it is more erratic. From 1989 to 1993, the region experienced a harsh economic crisis caused by the 1986 petrol crisis, the depletion of oil deposits (particularly for Cameroon) and the collapse in prices of raw materials. After the devaluation of the CFA franc (XAF) in 1994, growth followed a broadly positive trajectory, at times above that of Africa. Since 2015, economic activity, unsettled by the fall in prices of primary materials, has been lower.

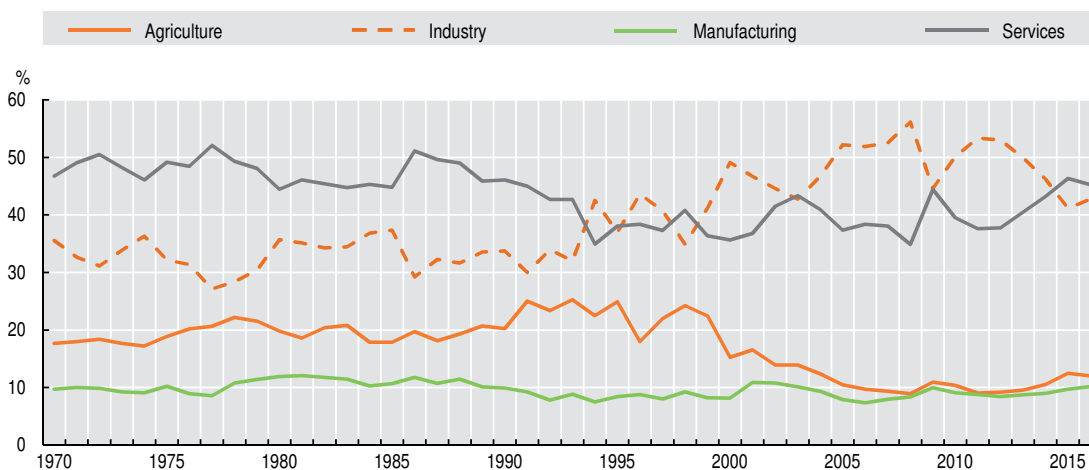
The instability of this growth appears more pronounced than elsewhere, with volatility almost twice as high as in the rest of Africa. Volatility is here measured via a standard deviation of the rate of economic growth. This was 4.11 and 2.6 for Central Africa over the 1971-2016 and 2000-16 periods, versus 1.84 and 1.63 for Africa over the same periods.

### Since 1994, the extractive sector has driven growth


The sectoral contribution to growth highlights the dominance of the extraction of primary products, despite deindustrialisation in the 1990s and 2000s.

- The agricultural sector contributed less to regional production, its share having collapsed since the start of the 2000s to stabilise around 10% of GDP at the end of the decade.
- The services sector appeared to drive growth up until 1993, before stabilising at 40% of GDP.
- Since 1994, industry has propelled growth, associated with the extraction of primary products rather than the real creation of value added. In fact, the share of manufacturing production included in the industrial sector is low and stable, around 10% of GDP over the 1970-2015 period (Figure 4.3).

Figure 4.3. Sectoral contribution to GDP in Central Africa (percentage)

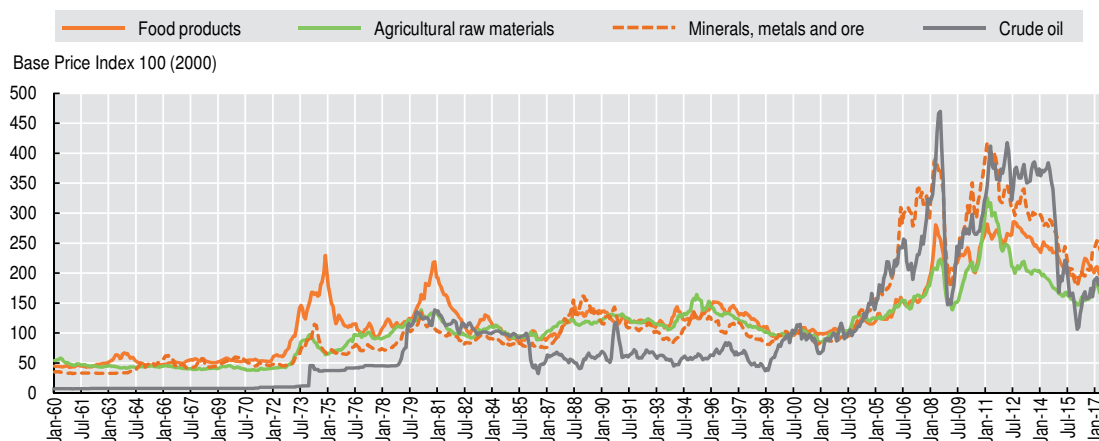



Source: Authors' calculations based on UNCTAD (2017), UNCTADStat database.

StatLink  <http://dx.doi.org/10.1787/888933783304>

Since 1999, the rise in the price of raw materials (Figure 4.4) has encouraged the exploitation of natural resources, particularly oil. It also led countries to turn away from other sectors such as agriculture, a dynamic that impedes development of other branches of the economy that could create real value added, such as manufacturing.

Figure 4.4. Evolution of prices of main primary products



Source: Authors' calculations based on UNCTAD (2017), UNCTADStat database.  
 StatLink  <http://dx.doi.org/10.1787/888933783323>

Given the weight of raw materials in the national economies, two types of structural transformation are common favouring either the industrial sector or services. In Congo, Equatorial Guinea and Chad, mining production underpins growth in the industrial sector. In contrast, Burundi and Sao Tome and Principe experienced an expansion of services to the detriment of agriculture. In all the countries of Central Africa apart from Burundi, the primary sector contributes less to growth than the secondary and service sectors.

Since 2000, the economic performance of the region has been dependent on the evolution of prices for raw materials, the collapse of which in 2014-15 resulted in a recession. The lack of diversification in the economies weakens growth.

### Capital: The engine of economic growth

An analysis of factors of production shows that capital contributed more to economic growth than labour and total factor productivity (TFP), both in the short and long term (Table 4.3).

Table 4.3. Factorial contribution to growth

VARIABLES	Production	Variation in production
	Long term	Short term
Labour	0.385*** (0.0167)	
Capital	0.784*** (0.0217)	
Variable Labour		0.564** (0.234)
Variable Capital		0.864*** (0.202)
TFP	0.987*** (0.211)	-0.00951 (0.0110)
Observations	315	306
Square root	0.926	0.163

Notes: The symbols \*\*\*, \*\*, and \* refer to statistical significance of 1%, 5% and 10%, respectively. The standard deviations are found in parentheses. The model used for estimates considered problems of autocorrelation and heteroscedasticity. Annex 4.A1 describes the steps taken to break production down into labour, capital and total factor productivity (TFP).

Source: Authors' calculations based on GGDC/UC Davis 2017, Penn World Table 9.0 database.

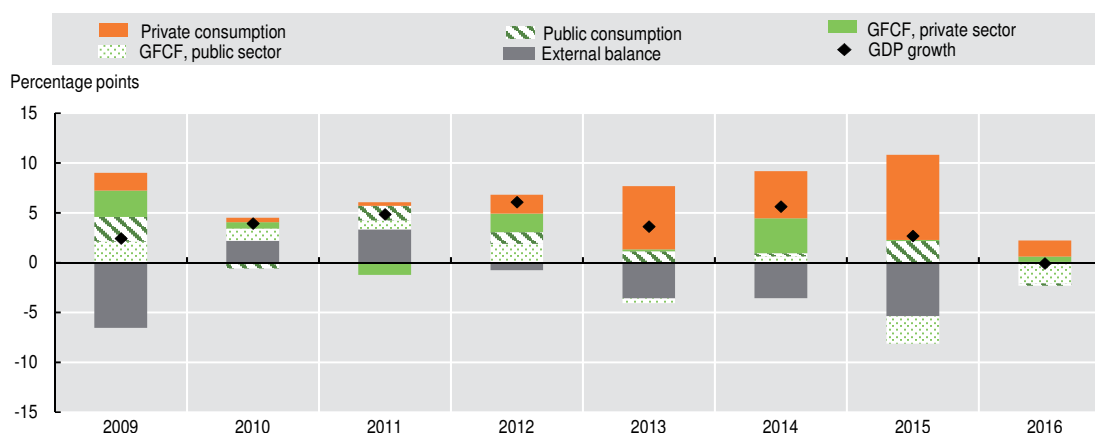
- Over the short term, variations in growth are driven by labour and capital. A 1% rise in the employment growth rate is associated with a 0.56% rise in the overall growth rate. The impact of capital is larger: a 1% rise in capital growth brings with it an improvement of growth of 0.86%. There is no significant effect of productivity on growth.
- Over the long term, capital has a more important role in production than labour. A 1% rise in the labour factor causes a 0.39% rise in production while a 1% rise in capital brings about an increase in production of 0.78%.

### Economic drivers uncondusive to sustainable growth


Since 2009, growth has been driven by private consumption and private investment. Private consumption has been the most stable determinant of growth since 2003 (Figure 4.5). Investment also has a positive effect on growth in Central Africa, similar to the dynamics for all of Africa (Figure 4.6).

However, the low level of public investment in infrastructure undermines long-term growth. Variations in oil prices render public finances unstable and the countries have experienced difficulties in committing to long-term public investment, notably in infrastructure. Access to electricity in Central Africa is close to that of the continent, at 30%, despite large regional differences. Burundi, Gabon, Equatorial Guinea and Sao Tome and Principe have good levels of electrification (between 50% and 70%, compared with less than 10% in the Central African Republic, DRC or Chad).

Figure 4.5. Components of growth in Central Africa



Source: Authors' calculations based on World Bank (2017a), World Development Indicators database and IMF (2018), World Economic Outlook database (October 2017).

StatLink  <http://dx.doi.org/10.1787/888933783342>

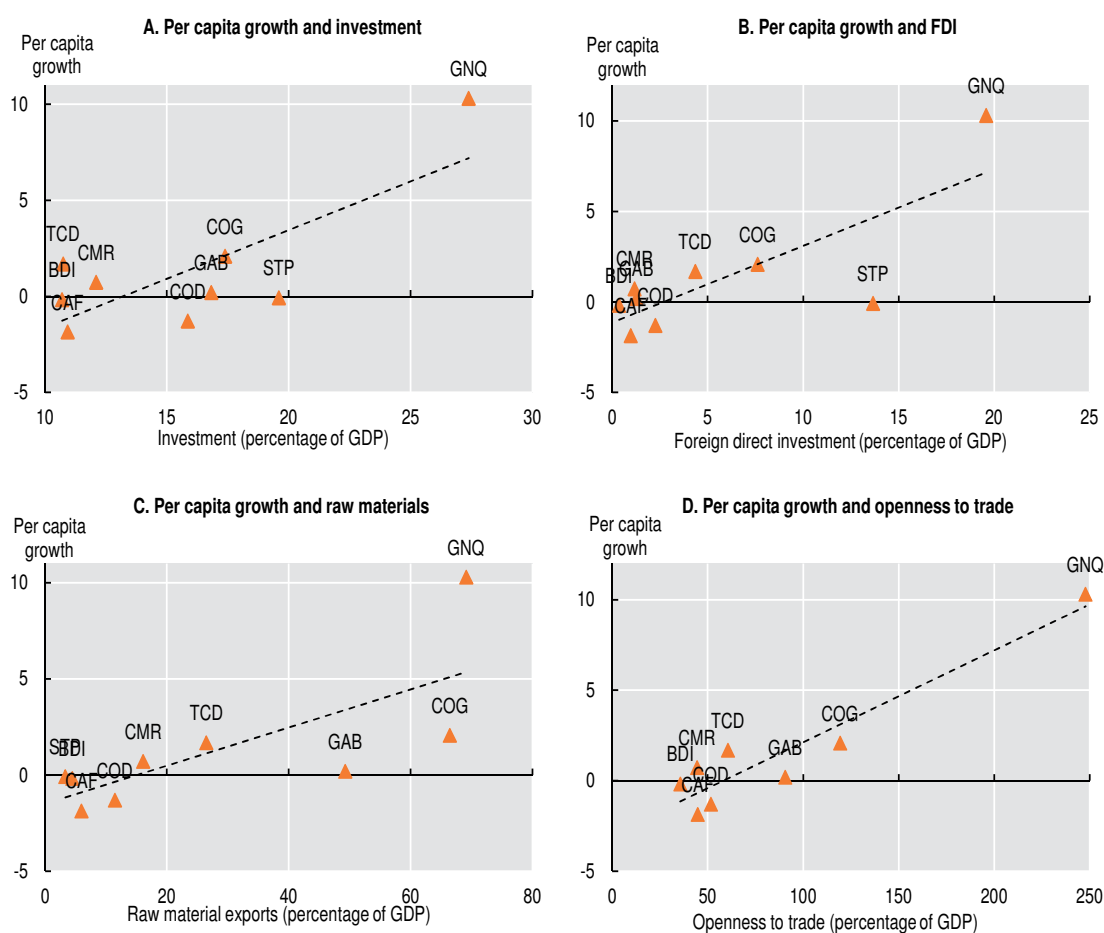
Since 2015, an improvement in the business environment has encouraged the growth of private investment. The reforms of the Ohada Treaty and Uniform Acts and national legislation brought new protection for minority investors and promoted the acquisition of loans (World Bank, 2017b). However, the countries of the region have consistently lower performances internationally in the World Bank's *Doing Business* index, which each year evaluates the business environment around the world. Cameroon, the region's leading country, is thus in 163rd place in 2018 out of a list of 190 countries (World Bank, 2018). The adoption of new legislation should thus go hand in hand with the effective implementation of reforms.


The countries with the highest levels of growth also have the highest levels of openness to trade and financial flows (Figure 4.6). This relationship, often highlighted in the literature (Barro, 1991; Barrow, 2000), depends on the structure of national economies although the correlation does not strictly imply a cause and effect link.



Mining and oil countries benefiting from relative institutional stability attract more FDI (Figure 4.6). Congo, Equatorial Guinea and Sao Tome and Principe receive on average more FDI thanks to the extractive sector, while FDI remains very low in other countries of the region.

Figure 4.6. The principal determinants of growth in Central Africa (averages from 1980 to 2014)



Source: Authors' calculations based on World Bank (2017a), *World Development Indicators* database; GGDC/UC Davis (2018), *Penn World Table 9.0* database; and UNCTAD (2017), *UNCTADStat* database.  
StatLink  <http://dx.doi.org/10.1787/888933783361>

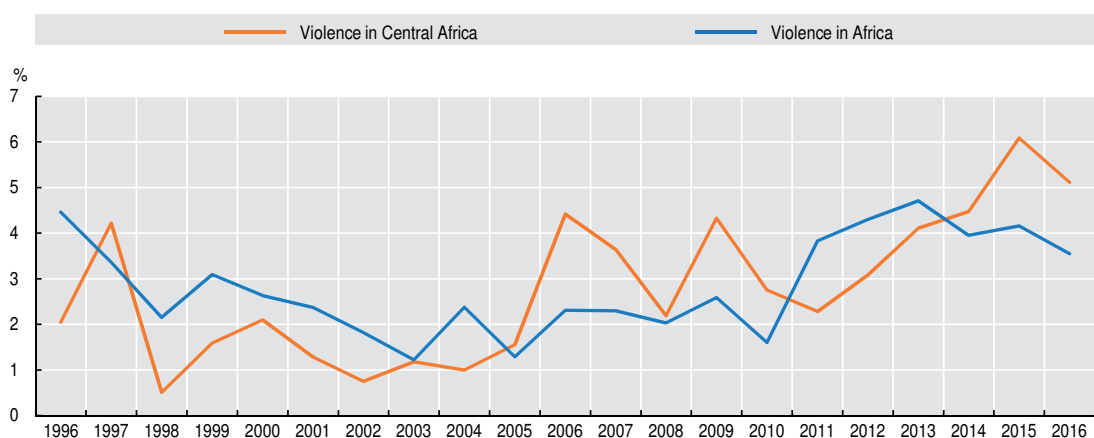
Economic openness has a positive and significant effect on growth, despite strong heterogeneity between countries (Figure 4.6). Equatorial Guinea, with 10% growth, represents an exceptional case compared with the regional average, due to its very high level of investment, exports and openness to trade.

Exports of raw materials remain one of the principal sources of revenue and of foreign currency, but they hinder economic diversification. The countries that depend on the export of raw materials, such as Congo, Gabon and Equatorial Guinea, have poorly diversified economies that are more vulnerable to variations in international oil prices. Other economies are also exposed by their dependence in the sense that 75% of their exports derive from three products (Central African Republic, DRC, and Sao Tome and Principe), or even a single product (oil in Chad).

While not all the countries have experienced a period of conflict, the region has been affected by serious security risks (Figure 4.7). Since 2000, Burundi, Cameroon, the Central African Republic, DRC and Chad have either experienced or still experience conflict, whether internal or cross-border. The correlation between conflicts and economic development is not clear. A country that lives with conflict could have a good level of growth, like DRC between 2011 and 2016.

Despite this, security problems have negative repercussions on the drivers of growth. The wars in Central Africa have destroyed physical capital, reduced investment in health and the education of human capital and curbed the accumulation of social capital, notably trust-building between investors and governmental institutions (Hugon, 2006). These conflicts also lead to forced displacement of the population, which prevents all stable productive activity. As such, more than 400 000 people have fled Burundi since 2015 (UNHCR, 2017) and 542 380 the Central African Republic since 2013 (UNHCR, 2018), or around 4% and 10% of the population, respectively.

Figure 4.7. Violence by non-state actors in Africa



Source: OECD Development Centre indicators based on information collected by the Reuters and AFP press agencies in Africa.

StatLink  <http://dx.doi.org/10.1787/888933783380>

## Growth without employment weakens the economy

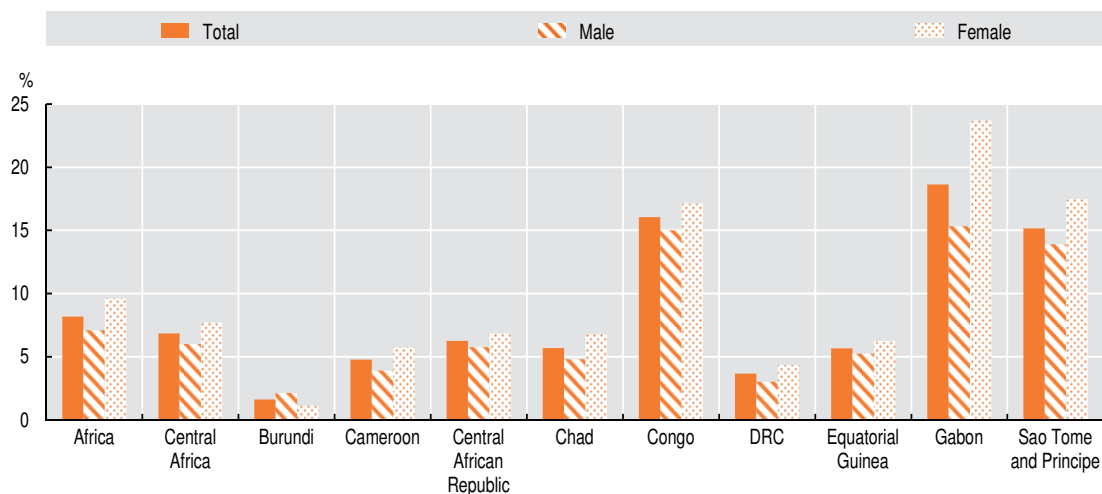
### In 15 years, the labour market has remained predominantly informal

With a booming labour market, employment levels appear to be slightly higher than the African average over the 2000-15 period. By 2030, the working age population should increase by 4.3 million people a year. Today, 68% of the total population of Central Africa is economically active, compared with 61% for the entire continent. The employment rate of women in Central Africa exceeds that of the continent, although gender inequality persists (Annex 4.A2). Women have an employment rate of 64.8%, versus 71.7% for men in the region and 48.7% on average for women on the continent.

However, these statistics should be interpreted with caution, given the size of the informal sector. It is very difficult to gain an accurate overview of the labour market overlooking this sector, estimated at around 38% of GDP on average in Africa (IMF, 2017b). According to the same source, the available figures for Central Africa between 2010 and 2014 go from just under 30% for Cameroon (the lowest in the region) to almost 45% in Gabon. Jobs in the informal sector represent a reserve that makes it possible to absorb growth of the working-age population. However, insecurity linked to jobs – which includes income instability and lower salaries – are an argument for the encouragement of formal activities.

Unemployment figures do not account for underemployment, thus underestimating the extent of unemployment in the economy. However, to evaluate and improve the efficacy of public policy, complete and current databases are necessary. As such, unemployment data appear insufficient for capturing the reality of the labour market and its development over time. For example, between 2000 and 2015, average unemployment varied little in the region and on average was fairly low at 7% (Figure 4.8). Unemployment by category barely changed either, at 14.6% among youth, 9.8% for women and 7% for men.

Figure 4.8. Average unemployment, 2000-15 (percentage)

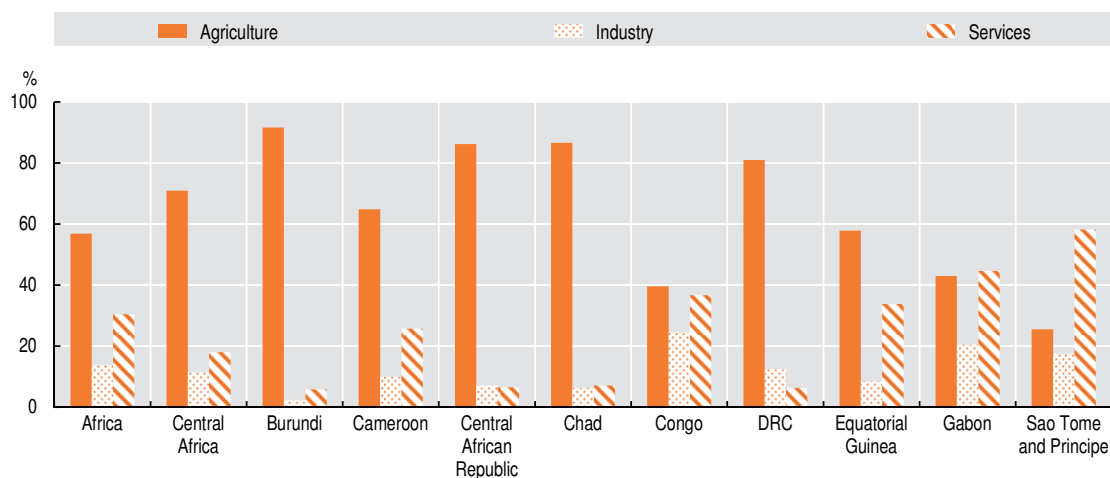


Source: Authors' calculations based on ILO (2017), ILOStat database.  
StatLink <http://dx.doi.org/10.1787/888933783399>

### Capital-intensive growth has not succeeded in creating employment

As in other low-income countries, jobs in Central Africa are concentrated in the agricultural sector. Almost all countries have agricultural sector employment rates well in excess of other sectors, with a regional average of 70.9%. Only Gabon (43%) and Sao Tome and Principe (26%) are exceptions to the rule (Figure 4.9).

Figure 4.9. Employment distribution by sector 2000-15 (percentage)

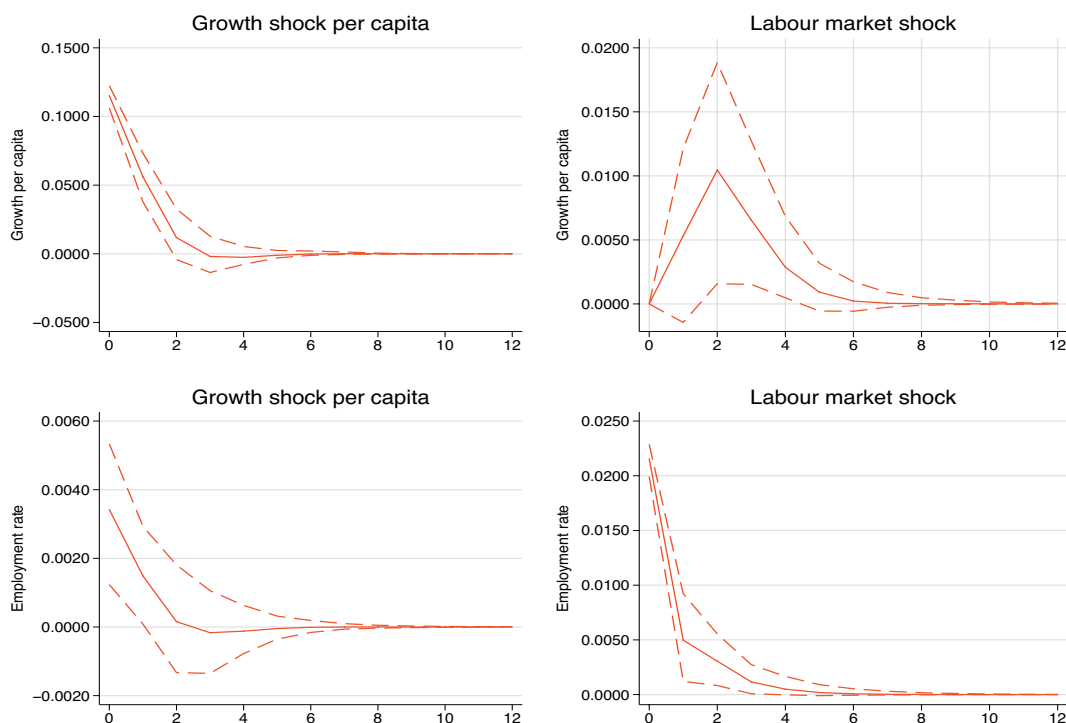



Source: Authors' calculations based on ILO (2017), ILOStat database.  
StatLink <http://dx.doi.org/10.1787/888933783418>

According to the Vector Auto Regressive (VAR, Annex 4.A1) model, the relationship between the labour market and economic growth in Central Africa is certainly positive, but with very different temporal dynamics (Figure 4.10).

- Positive shocks to the economy have an immediately positive, although relatively low, impact on job creation. In fact, the magnitude of the reaction of employment (called the *impulse response*) is relatively low, according to the results in Central Africa between 2008 and 2014. For example, a 1% increase in economic activity results in a marginal rise of 0.03% in employment in the same year. The effect gradually diminishes, becoming zero after two years.
- Inversely, a positive shock to the labour market has a delayed effect – after two years – that is sustained on economic growth, until the fourth year after the shock. In this instance, a 2% rise in employment will lead to a 1% rise in economic activity during the second year and a 0.5% rise during the third year. This effect is still positive the fourth year after a shock.

Figure 4.10. Interaction between growth and employment in Central Africa (impulse response to shocks), 1980-2014



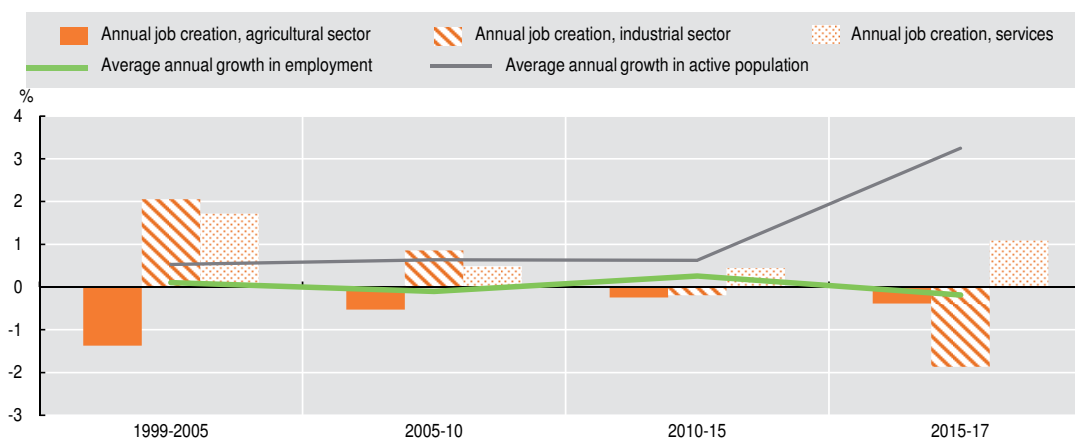
Source: Authors' calculations based on GGDC/UC Davis (2018), *Penn World Table 9.0* database.  
StatLink  <http://dx.doi.org/10.1787/888933783437>


Growth over the past seven years has also not created sufficient jobs, especially in the countries dependent on natural resources (Figure 4.11). At the start of the 2000s, structural transformation led to the creation of low-wage jobs in the extractive sector, which employs less than 1% of the active population and has not succeeded in recruiting sufficient numbers of local workers for high value added jobs (UNDP, 2017).

The various sectors are unable to create sufficient employment. Agricultural sector employment fell, particularly between 1999 and 2005. This could be an indication of structural transformation or a redistribution of the labour force. Still, this decline is not offset by a proportional number of new jobs in industry and services. The lack of

opportunity remains worrying while the working age population continues to increase, at a rate of 16% between 2010 and 2015 (UNDESA, 2017).

Figure 4.11. Annual job creation by sector, 1999-2017



Source: Authors' calculations based on World Bank (2017a), World Development Indicators database.  
StatLink  <http://dx.doi.org/10.1787/888933783456>

## The structures of the economies increase inequality

### Inequality and poverty have stalled at alarming levels

The Gini coefficient for Central Africa has remained fixed at 42 (Table 4.4) for the past 15 years and it remains the highest of all the regions of the continent. The capacity of countries to allocate resources and redistribute income appears limited by, among other things, the low level of tax revenue: only 11% of GDP in 2016, compared with an average of 16% for all of Africa (IMF, 2018). The inconsistency of statistical measurements however does not allow for a precise and complete overview of the scale of poverty and inequality. Still, several trends emerge for the countries listed here in alphabetical order.

Table 4.4. Income inequality in Central Africa

Country	Year	Gini coefficient
Burundi	2006	33.4
	2013	39.2
Cameroon	2001	42.1
	2007	42.8
	2014	46.5
Central African Republic	2003	43.6
	2008	56.2
Chad	2003	39.8
	2011	43.3
DRC	2004	42.2
	2012	42.1
Congo	2005	47.3
	2011	48.9
Equatorial Guinea	-	-
Gabon	2005	42.2
Sao Tome and Principe	2000	32.1
	2010	30.8
Central Africa	2000-08	42
	2009-16	42

Source: Adapted by the authors from World Bank (2017a), World Development Indicators database.

The level of poverty remains high in Central Africa in the absence of strong systems of social security (Tables 4.5 and 4.6). The countries of the region have not managed to sustain inclusive growth, despite redistributive policies. Where these exist, it is necessary to assess the impact of social security reforms, such as in Gabon, where a human investment strategy was launched in 2014.

Table 4.5. Poverty rates in Central Africa (threshold of USD 1.90)

Country	Year	Rate
Burundi	2006	77.7
	2013	73.7
Cameroon	2001	23.1
	2007	29.3
	2014	24
Central African Republic	2003	64.8
	2008	66.3
Chad	2003	62.9
	2011	38.4
Congo	2005	50.2
	2011	37
DRC	2004	94
	2012	77.1
Equatorial Guinea	-	-
Gabon	2005	8
Sao Tome and Principe	2000	29.8
	2010	32.3

Source: Adapted by the authors from World Bank (2017a), *World Development Indicators* database.

Table 4.6. Poverty rates in Central Africa (national thresholds)

Country	Year	Rate
Burundi	2006	67.1
	2014	64.6
Cameroon	2001	40.2
	2007	39.9
	2014	37.5
Central African Republic	2008	62
Chad	2002	54.8
	2011	46.7
Congo	2004	69.3
	2011	46.5
DRC	2004	69.3
	2012	63.9
Equatorial Guinea	2006	76.8
Gabon	2005	32.7
Sao Tome and Principe	2000	68.3
	2010	66.2

Source: Adapted by the authors from World Bank (2017a), *World Development Indicators* database.

Once again, these statistics must be interpreted with caution given the inconsistency of the studies carried out. The fight against poverty and inequalities begins with a precise assessment of the situation. But little current data are available, which decreases the reliability of existing statistics. Administrative systems extending to the far reaches of each country and that enable the systematic collection of basic data on the population (for example, the birth certificate for each child) remain to be established.

Income inequality is reinforced by inequality of opportunity (Table 4.7). Despite progress achieved in terms of access to basic services, education and healthcare in all countries, and notably Gabon, the region could improve further. The rate of primary school enrolment (68%) is good, despite a low rate of secondary school enrolment (25%), and could attract further commitment. Since 1999, the infant mortality rate has been approximately halved in almost all countries, except for Chad and DRC. Rural areas remain underprivileged, as the example of Cameroon shows, where 86% of citizens have access to electricity, compared with just 22% in rural areas. In addition, access to Internet is low, 10% of the population, worse than in the rest of the continent, 24% (Annex 4.A2).

**Table 4.7. Inequalities of opportunity in the countries of Central Africa, 1999-2015**

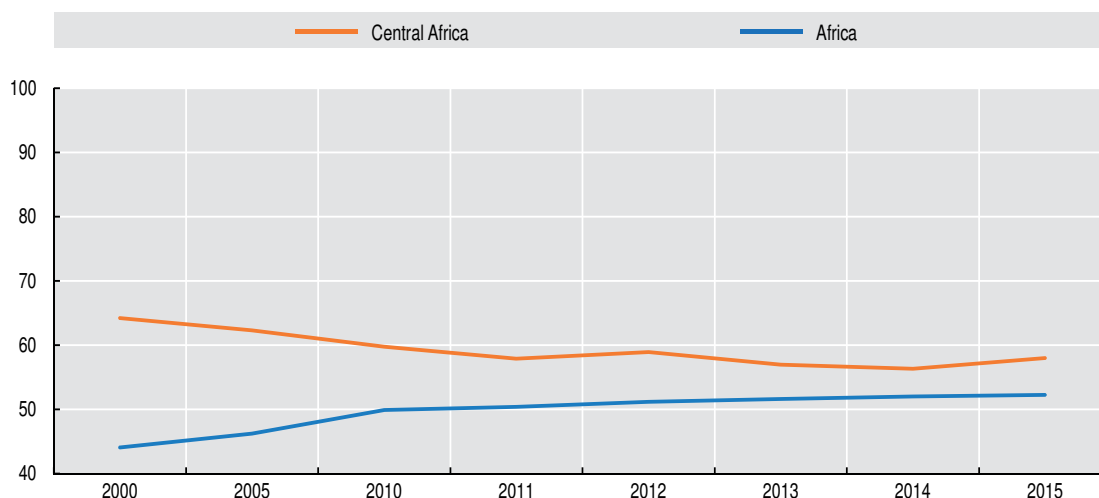
	Burundi	Cameroon	Central African Republic	Chad	Congo	DRC	Equatorial Guinea	Gabon	Sao Tome and Principe	Central Africa
<b>Education indicators</b>										
Primary school enrolment rate	71.3	87.9	60.4	58.5	35.8	72.8	60.5	-	94.1	<b>67.1</b>
Secondary school enrolment rate	19.4	41.6	12.7	8.6	-	-	22.7	-	41.1	<b>25.3</b>
Girls enrolment share in primary	69.2	85.4	51.5	48.2	34.4	73.8	58.3	-	92.9	<b>63.5</b>
Girls enrolment share in secondary	18.5	38.8	9.0	4.3	-	-	15.4	-	43.4	<b>22.2</b>
<b>Health indicators</b>										
Infant mortality rate (%)	70.3	76.7	103.5	88.9	90.2	53.7	85.6	45.0	39.3	<b>72.9</b>
Life expectancy at birth	53.8	53.7	46.7	49.3	54.7	57.2	55.0	61.6	65.0	<b>55.4</b>
<b>Decent standards of living indicators (percentage of the population)</b>										
Access to electricity	5.1	49.2	9.2	5.2	10.7	35.3	63.7	81.6	57.1	<b>39.0</b>
Access to basic services, sanitation	46.2	39.2	20.8	9.7	21.0	13.8	77.0	40.0	30.4	<b>31.5</b>
Access to basic services, water	54.2	60.4	73.4	40.7	62.1	38.1	49.1	83.7	53.2	<b>57.6</b>
<b>Technological indicators (per 100 people)</b>										
Access to fixed line telephone	0.3	2.0	0.1	0.2	0.0	0.4	1.6	2.1	4.1	<b>1.3</b>
Access to mobile telephone	13	32	13	17	18	53	33	85	34	<b>35.7</b>

Note: Access to technology indicators were taken as averages for the 2010-15 period, to better reflect reality. These indicators were almost 0 in the 1990s and rose rapidly in the 2000s.

Source: Adapted by the authors from World Bank (2017a), *World Development Indicators* database.

Since 2000, gender inequality has declined (Figure 4.12), particularly in the labour market, although progress remains to be made in terms of health, education, labour market participation and political representation.

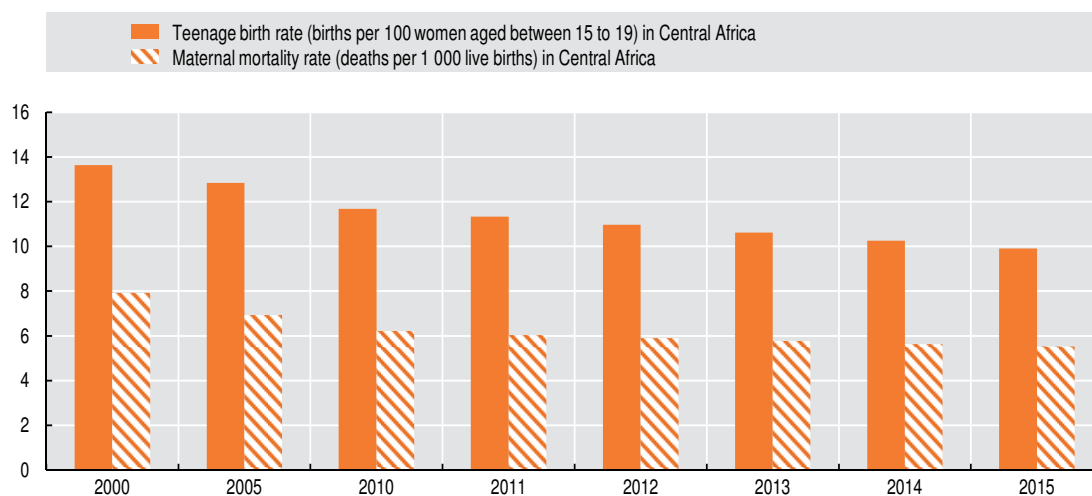
Figure 4.12. Evolution of gender inequality index in Central Africa (percentage)



Source: Authors' calculations based on UNDP (2016), *Human Development Report* database.  
 StatLink <http://dx.doi.org/10.1787/888933783475>

The number of teenage pregnancies and the rate of maternal mortality fell throughout the region (Figure 4.13) thanks to urban migration and the higher level of education for girls (UNICEF, 2015), but they remain too high.

Figure 4.13. Maternal mortality and teenage birth rates in Central Africa

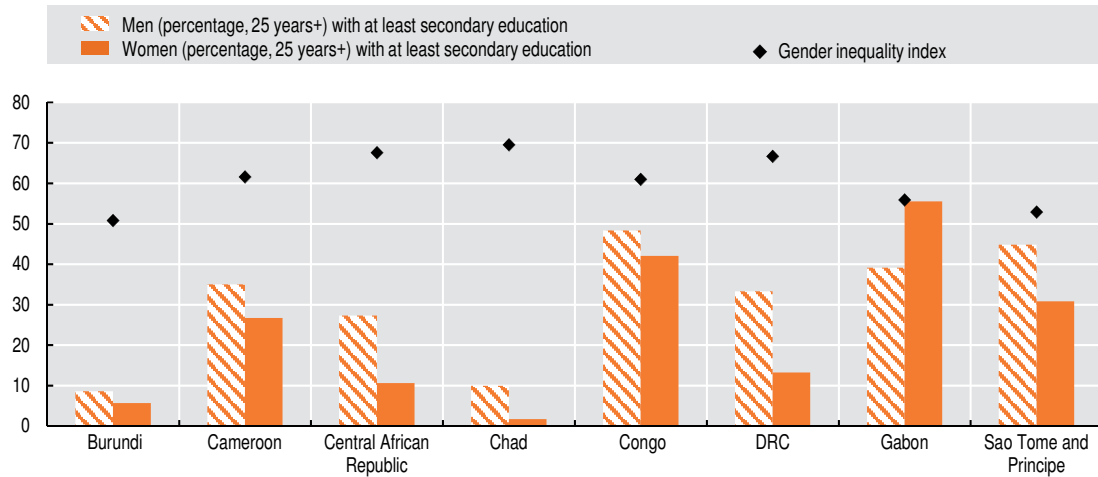


Source: Authors' calculations based on UNDP (2016), *Human Development Report* database.  
 StatLink <http://dx.doi.org/10.1787/888933783494>

In terms of education, the countries must continue their efforts to promote female access to education. Everywhere the share of men over 25 years with a minimum of secondary level education is higher than that of women, except in Gabon (Figure 4.14). In Burundi and Chad, less than 10% of men have higher level education, versus 5.6% and 1.7% of women, respectively.



Figure 4.14. Average school enrolment rates by gender (average 2000-15)



Note: Incomplete data for Equatorial Guinea.

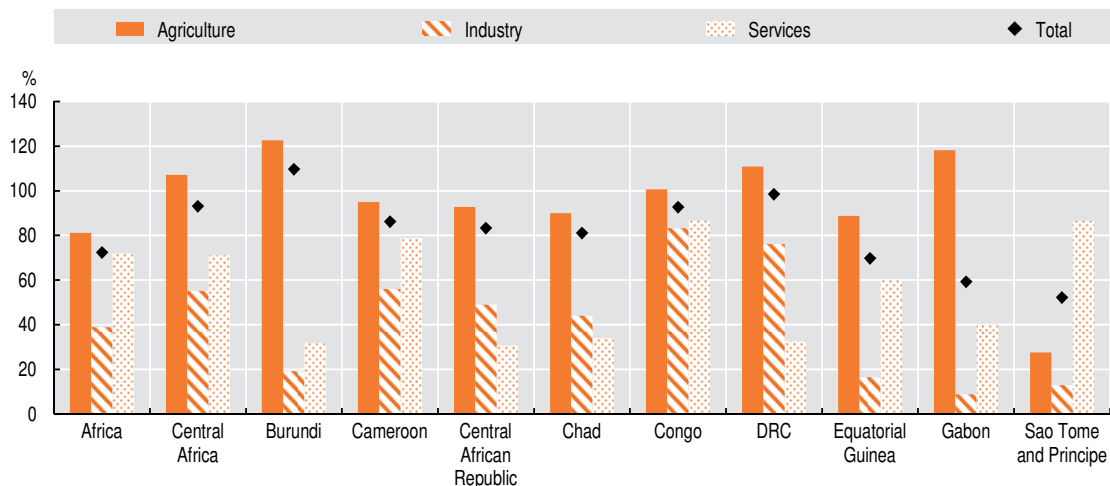
Source: Authors' calculations based on UNDP (2016), Human Development Report database.

StatLink <http://dx.doi.org/10.1787/888933783513>

The labour market appears less unequal than in the rest of the continent (Figure 4.15). Apart from Gabon and Sao Tome and Principe, all the countries of the region have female employment rates that are above the African average. In addition, the agricultural sector employs marginally more women than men, demonstrating that women succeed in becoming engaged in food-producing economic activities. These activities provide low value-added jobs that are more flexible, which facilitates female integration into the labour force.

However, the gender pay gap has not materially diminished since 2000 (Figure 4.16). Burundi has the lowest gap, with women earning on average 84% as much as men, compared with less than 50% in Sao Tome and Principe and around 66% (two thirds) in Cameroon, the Central African Republic, Chad, Equatorial Guinea and Gabon.

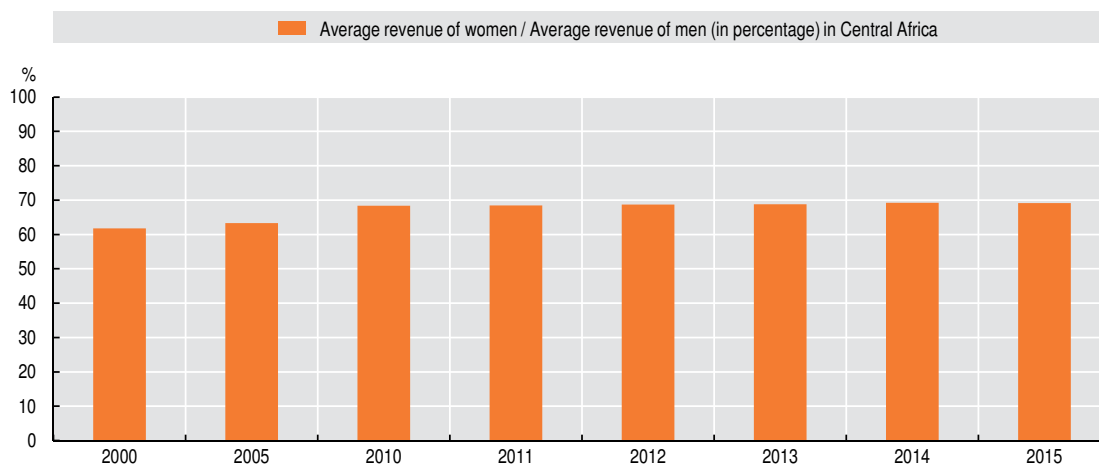
Figure 4.15. Female/male employment rates by sector (average over 2000-15 period, percentage)



Source: Authors' calculations based on ILO (2018), ILOStat database.

StatLink <http://dx.doi.org/10.1787/888933783532>

Figure 4.16. Male/female income inequality (average over 2000-15 period)

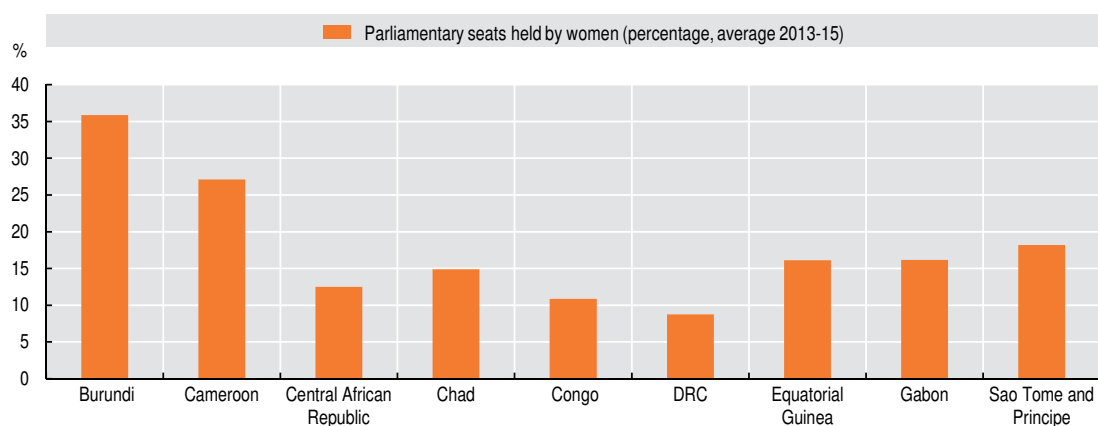


Source: Authors' calculations based on UNDP (2016), *Human Development Report* database.

StatLink <http://dx.doi.org/10.1787/888933783551>

Women are very poorly represented in institutions of power (Figure 4.17). The country that has made the most effort on this front remains Burundi, where almost one third of Parliamentary delegates are women, a level three times that of the Central African Republic (11%).

Figure 4.17. Female representatives in Parliament (average 2000-15)



Source: Authors' calculations based on UNDP (2016), *Human Development Report* database.

StatLink <http://dx.doi.org/10.1787/888933783570>

### Productivity gains in the extractive sector have not reduced income inequality

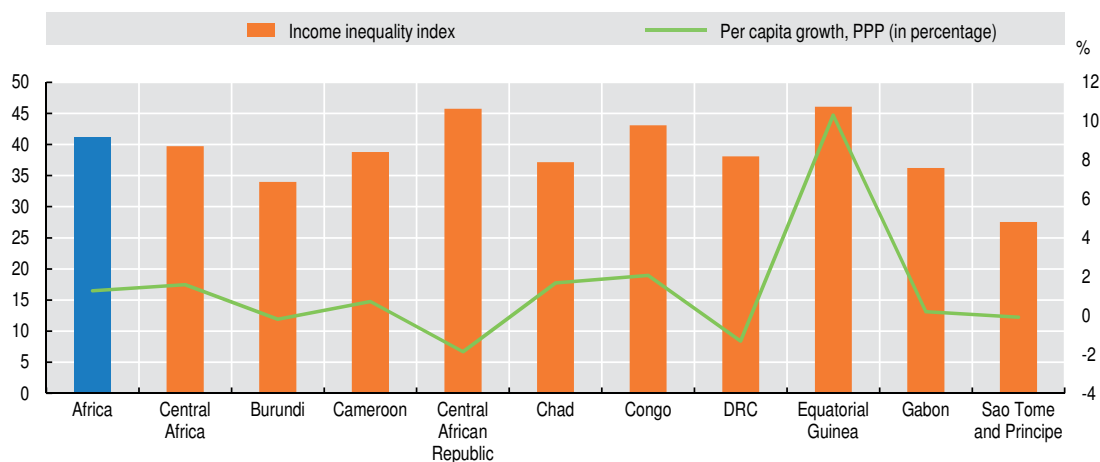
Central Africa has not managed to maintain inclusive and sustainable growth. Redistribution policies have not succeeded in capitalising on the growth at the start of the 2000s. Also, inequalities have stalled, or even increased in Burundi, Cameroon, the Central African Republic and Chad.


Economic growth has been driven by an industrial sector that fails to create jobs and generates inequality. In effect, inequalities fell in those African countries where growth is driven by progress in modern agriculture, the service sector or highly labour-intensive industrial production (UNDP, 2017). But, the industrial sector in Central Africa depends on mining and oil, which are both capital intensive.

In maintaining diversification efforts, Cameroon has succeeded in lowering the poverty rate. With the fall in oil prices at the start of the 1990s, Cameroon's dependence on primary products triggered an economic recession. To build the foundations of a resilient economy, the government encouraged investment in services and agriculture. Productivity gains in the agricultural sector and job creation in services caused a reduction in the poverty rate, from 29% in 2007 to 24% in 2014.

In countries dependent on natural resources, inequalities are reinforced by institutional instability. The exploitation of these resources weakens the governance of certain countries such as DRC. Conversely, weak institutions increase dependence on natural resources. Yet, the extractive sector, which is highly capital intensive, is an incentive for state monopolies or oligopolies. The small number of operators with the financial means to invest lets them benefit from rents and informal institutional protection (UNDP, 2017).

Figure 4.18. Economic growth and income inequality (2000-15)



Source: Authors' calculations based on UNDP (2016), *Human Development Report* database.  
StatLink  <http://dx.doi.org/10.1787/888933783589>

## Policy recommendations

Addressing the challenges of the region involves supporting structural transformation that increases economic capacity and resists the distortions associated with the domination of the extractive sector. The manufacturing, services and agricultural sectors could create jobs and make economic growth more sustainable over the long term. This section proposes measures aimed at bolstering and diversifying activity, and reducing unemployment and inequalities in the region. Specific and detailed policies should be tailored to the specific needs of each country.

### Promote more diversified, productive and job-creating growth

By focusing on the management of natural resources and the business environment, a well-designed policy of raw material transformation could increase the value of exports and create jobs in industry, notably agro-food. First, trade policies could lift financial and material barriers for small and medium-size enterprises (SMEs) seeking to invest in secondary processing inputs. Secondly, policies should promote investment in electricity, transport and agro-food research infrastructure. Furthermore, the countries should invest in training labour qualified for jobs in construction and maintenance of processing machinery. The goal once again is to set up the conditions necessary for local transformation of raw materials. As such, it will be possible to avoid a situation like in

Gabon when the decision to ban exports of lumber (cut but not squared timber) resulted in high costs for companies. They had to adapt their production to transform wood, while coping with a low-skilled workforce (AfDB/OECD/UNDP/UNECA, 2013).

To be effective, these policies must incorporate the social and environmental challenges linked to the exploitation of natural resources (oil and minerals). The sector's actors, both nationally and internationally, should collectively define the conditions on which extractive activities will remain beneficial to the region's economy. To channel the negative externalities of the exploitation of raw materials, governments, companies, industries and representatives of civil society all have a role to play in the sustainable management of these resources (OECD, 2016a). With a high level of engagement of OECD members since 2010, 11 African members of the International Conference of the Great Lakes Region (ICGLR), industry, civil society, as well as UN experts on the DRC, the OECD drew up a practical guide on the due diligence of responsible supply chains in minerals from conflict or high risk zones. This guide sets out norms to be respected and evaluation tools aimed at helping extractive industry companies respect human rights (OECD, 2018). In DRC, this engagement has already resulted in a fall in conflict financing by the mining of minerals including tin, tantalum and tungsten, to name but a few (OECD, 2015).

In agriculture, policies should boost the sector's productivity, which remains low. In Cameroon and DRC, agriculture has become more productive thanks to public programmes to upgrade and develop infrastructure (AfDB/OECD/UNDP, 2017).

However, agricultural production policies should also reconcile the need to create jobs in rural areas as well as in medium-sized towns, as the agricultural sector employs more than 70% of the region's workforce. Creating non-agricultural rural employment is a priority in some countries such as Burundi where between 1989 and 2015 demographic pressure has divided by one and a half times the area of agricultural land available per inhabitant. This is thus estimated at 0.12 hectares in 2015 (World Bank data, 2017a). Developing the agro-food, logistics and distribution value chains more could create numerous jobs whilst facilitating the growth of more productive activities. DRC, for example, began to create agro-industrial parks focusing on cassava, palm oil, processed fruit and fisheries products.

Facilitating the business environment should be a priority for attracting investment and enabling the private sector to develop. Countries could improve governance and transparency, for example by reducing corruption and bureaucracy. These are measures for which Central Africa remains far behind other African regions (IIAG, 2017). To improve the quality of institutions, governments could establish agencies to promote investment by guaranteeing transparency, reducing procedures – if necessary via points of single contact – and by consulting the private sector to respond to its needs and attract investors.

### **Prioritise infrastructure investment**

Despite its great need, the region invests the least in infrastructure per inhabitant in Africa. In 2016, just USD 6.3 billion – or 2% of regional GDP – was used to finance projects. This is two times lower than elsewhere in Africa (ICA, 2017).

Increasing electricity production remains imperative. Paradoxically, the energy sector in the region is the least developed in Africa, despite the ECCAS countries having a potential that corresponds with 60% of that of the entire continent (AfDB, 2011). The Grand Inga dam project on the Congo River in DRC will have a 40 GW capacity (AfDB/OECD/UNDP, 2016). However, the absence of co-operation between public enterprises dramatically curbs intra-African energy exchanges and affects the reliability of supply (AfDB/OECD/UNDP, 2015).

Public-private partnerships (PPP) to finance infrastructure could be broadly improved. Most projects with private participation are found outside Central Africa, due to the smaller size of these markets and a weak institutional framework. In 2016, only 6.2% of infrastructure financing for the region came from the private sector (ICA, 2017). For example, the Egis Group and the Republic of Congo invested in three airports in the country, including Maya-Maya airport in Brazzaville. However, these partnerships must guarantee transparency, in particular in the granting of contracts by public actors and in cost management by operators throughout the life of the contract. Ground rules consist of retaining as much simplicity in contracts, avoiding unconditional commitment clauses and carrying out realistic projections of revenue expected by the partnership.

At the inter-regional level, several opportunities exist in the transport sector. The region could invest in an electric cross border rail network, such as the Eastern African Railway Masterplan (EAM) which should connect Burundi, Kenya, Tanzania, Rwanda and Uganda. Since 1999, the International Commission of the Congo-Oubangui-Sangha Basin (CICOS), created by Congo and DRC, has been promoting sustainable use of water (AfDB/OECD/UNDP, 2015). Its role could include better regulation of trade via river transportation, as this method of transport is the most polluting after road transport. Monitoring the application of better regulations could protect the ecosystems of Central Africa.

### **Include regional integration in economic policy**

The ECCAS free trade agreement should be introduced as part of a coherent regional economic policy. Without the two regional organisations of CEMAC and ECCAS, Central Africa has the lowest rate of internal trade of all regional African communities (De Melo, Nouar and Solleder, 2017). However, the states are furthering integration efforts. In October 2017, they all ratified a free movement of people agreement. Before the end of 2018, it is envisaged that the citizens of CEMAC member states will be able to travel effectively visa-free for up to three months. The liberalisation of regional trade should increase trade flows by 15% (Djemmo Fotso, 2014). Given the lack of complementarity of goods produced in the region, ECCAS countries should support trade liberalisation by co-ordinating their industrial plans. Regional integration has been boosted by the signing of the Continental Free Trade Area agreement in March 2018.

Monetary policy could help countries to better withstand the market distortions produced by the predominance of the extractive industries. Following the 2007-08 crisis, the fixity of the exchange rate and the guarantee of convertibility have reduced speculation around the XAF. The CEMAC countries have a stable inflation rate of below 3%, but it is important to maintain room for manoeuvre in case of shocks associated with prices of raw materials. The Bank of Central African States (BEAC) should be able to strengthen its balance sheet, particularly by building up foreign exchange reserves, which suffered due to the collapse in oil prices (IMF, 2016).

The countries could facilitate regional trade by harmonising both quality standards and the productive capacities of the private sector. Burundi and Equatorial Guinea could rejoin the Quality Infrastructure Programme for Central Africa (PIQAC), a shared public-private action plan to develop rules and quality-control systems to attain international standards.

### **Improve tax revenue mobilisation**

This priority for all Africa turns out to be particularly important in Central Africa. Except for Cameroon, the countries of the region remain highly dependent on official development assistance (ODA) and revenue from natural resource extraction. In 2015, ODA represented XAF 1 200 billion while public receipts from oil production contributed XAF 78 billion (OECD/ATAF/AUC, 2017).

It is essential to redirect income from natural resources while reducing dependence on them. A redistribution of wealth could serve to finance priority investments better in the region and to reduce inequality. Sound financial management could also reduce the impact of price volatility of raw materials. A fund to accrue revenue could enable the adoption of counter-cyclical policies during periods of macroeconomic shock or simply better redistribution. Gabon and Equatorial Guinea have thus had sovereign wealth funds since 1998 and 2002, respectively.

Fiscal discipline policies, necessary as they are, should not impede the consumption potential of households. Since 2016, Chad has implemented a restrictive policy to reduce the structural public deficit, particularly by reducing public sector spending. Also, crucial fiscal stabilisation should not take place at the expense of middle class vectors. In 2018, spending reached XAF 1 343 billion while receipts reached XAF 846 billion.

Countries should continue to optimise the tax structure to increase public revenue minimising costs for the population. This entails effective tax reforms that eliminate taxes and allowances that are no longer justified. Fiscal reforms should avoid over dependence on a single type of tax, and their regressive effects could assist underprivileged parts of the population.

These measures could help countries better collect economic data. Thus, most fiscal revenues from consumption taxes have risen in Cameroon and DRC since 2000 (OECD/ATAF/AUC, 2017). The countries in the region could also follow the example of the Small and Medium Taxpayers Office (SMTO) in Rwanda, which has permitted informal businesses to register and has simplified the registration process. This reform has made it possible to increase the tax compliance rate to 97% (OECD/ATAF/AUC, 2017).

### **Primary and secondary schooling is vital for boosting growth**

An ambitious education policy for Central Africa could entail mandatory schooling to the age of 16. In DRC for example, the 2016-25 sectoral strategy on education and training (*Stratégie sectorielle de l'éducation et de la formation*, SSEF) provides for mandatory schooling to increase to eight years. While the secondary school completion rate has improved in Central Africa, gender disparities are strong. In 2005, 13% of girls and 17% of boys finished secondary school. This increased to 35% for girls and 45% for boys in 2014.

The gender gap in education must be reduced, particularly in secondary schooling. Throughout this level of education, girls achieve parity with boys in just one country: Sao Tome and Principe. The lowest rates of secondary school enrolment are in the Central African Republic (51%), DRC (59%) and Chad (46%) (UNESCO, 2015). Policies could encourage families to educate young girls. Gender issues could also be incorporated into the training curriculum of teachers. Hiring more female teachers and evaluating student performance along gender are other potential tools.

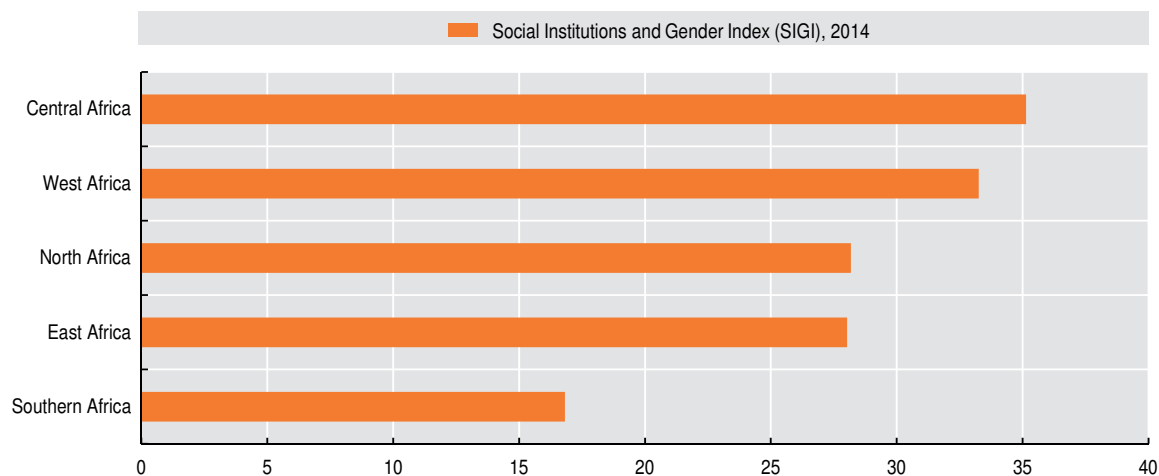
### **Reduce gender inequality**

Achieving the African Union (AU) Agenda 2063 goals entails the promotion of gender parity at all levels and in all domains. All the more as this agenda aspires to: “an Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children.”

Women's empowerment policies remain to be implemented. Countries could adopt legislation penalising businesses for wage discrimination for equal work and discouraging income disparities between traditionally female and male occupations, encouraging individuals to work where his or her gender is a minority. Equally, governments could encourage women's access to financial services and property (OECD, 2016b).


Reducing child marriage and pregnancy requires better protection of young women. Teenage marriage remains a common problem throughout the region, with a minimum of 10% of youth married before the age of majority in Burundi and a maximum of 45% in Chad (OECD, 2014). Health policies focused on contraception and increased education could yield results (Odejimi and Bellingham-Young, 2014).

Figure 4.19. Gender inequality in Africa



Note: The SIGI ranges from 0, for very low discrimination to 100 for very high discrimination. Higher SIGI values indicate higher inequality.

Source: OECD (2016b), Gender, Institutions and Development Database.

StatLink  <http://dx.doi.org/10.1787/888933783608>

### Introduce pro-poor growth policies

A pro-poor growth policy focused on rural areas is important. Aside from Gabon, no country in the region possesses a social safeguarding programme that targets at least some of the poorest families (World Bank, 2015). The countries could envisage:

- **Conducting surveys and censuses to update data available on the labour market as well as on inequalities of income, gender and opportunity.** These studies could be conducted through a partnership between national statistical institutions and international organisations.
- **Map out social security and poverty reduction policies in a coherent way, with the aim of implementing universal lifelong coverage.** For example, the new social security system in Gabon is comprised of four types of insurance: health, workplace accidents, family benefits and pensions.
- **Combine social security programmes, public works to generate employment, assistance to non-active women and financial aid for childhood education.**
- **Increase spending on health services and improve their quality.** Only Burundi and Sao Tome and Principe achieve spending levels on health that are above the average of Sub-Saharan Africa (7.5% and 8.4% of GDP, respectively, versus 5.5% for south of the Sahara). The Central African Republic, Equatorial Guinea, DRC and Chad have the highest rates of neonatal, infant and under-fives mortality south of the Sahara. In the Central African Republic and Chad, life expectancy is lower by 8.5 and 7.3 years than the average in Sub-Saharan Africa (59.9 years in 2015). Equally, health is one of the three major problems often cited by Cameroonians (AfDB/OECD/UNDP, 2017).
- **Devote public funding to social security programmes to free them from dependence on international aid.** Real systems of social protection also financed by domestic resources remain to be developed in the region.

## Annex 4.A1. Methodological annex

### Box 4.A1.1. Factoral contribution to growth: labour, capital and TFP

To examine the contribution of traditional factors of production to growth, we rely on a Cobb Douglas type function of production in which production  $Y$  is expressed as labour ( $L$ ) and capital ( $K$ ) as indicated in the equation below:

$$Y_{i,t} = A_{i,t} L_{i,t}^{\alpha} K_{i,t}^{\beta} \quad (1)$$

where  $i$  ( $i = 1, \dots, N$ ) denotes the country, and  $t$  ( $t = 1, \dots, T$ ) time.  $A_{i,t}$  is the total factor productivity (TFP). By linearising this function by a logarithmic transformation, we obtain the below equation which enables us to calculate the sensitivity of production to the variation of each factor of production.

$$y_{i,t} = \delta + \alpha l_{i,t} + \beta k_{i,t} + \varepsilon_{i,t} \quad (2)$$

$Y_{i,t} = (\text{ogap}_{i,t}, \text{CA\_gap}_{i,t}, \text{mis}_{i,t})' y_{i,t} = \ln(Y_{i,t})$ ,  $\delta = \ln(A_{i,t})$ . In effect, we are making the reasonable hypothesis that total factor productivity is comparable between countries and does not vary in time as it depends on institutional and organisational factors that are comparable and relatively stable in time.  $\alpha$  is the elasticity of the production of labour and  $\beta$  is the elasticity of production of capital. Here we impose no limits on these parameters; which leaves us the possibility of decreasing, constant or increasing returns to scale. Lastly, to examine the short-term effects of factors of production on economic growth, we consider equation (2) in variation, that is, in first difference as follows:

$$\Delta y_{i,t} = \delta + \alpha \Delta l_{i,t} + \beta \Delta k_{i,t} + \varepsilon_{i,t} \quad (3)$$

### Box 4.A1.2. Modelling the Vector Auto Regressive in Panel (PVAR) to estimate the relationship between the labour market and economic growth

Combining a traditional VAR approach (Sims, 1980) with panel data econometrics, the panel VAR model (PVAR) is particularly suited for analysing interactions between macroeconomic variables. In effect, the impulse response functions (IRF) inferred from the PVAR valuation are very useful for analysing how growth and labour interact. The reduced-form PVAR model is established as:

$$X_{i,t} = \alpha_i + \Gamma(L) X_{i,t} + \varepsilon_{i,t} \quad (1)$$

where  $i$  ( $i = 1, \dots, N$ ) denotes the country, and  $t$  ( $t = 1, \dots, T$ ) time.  $X_{i,t}$  is the vector of endogenous stationary variables,  $\Gamma(L)$  represents the matrix polynomial in the operator of delay  $L$ ,  $\alpha_i$  denotes the vector of country fixed effects and  $\varepsilon_{i,t}$  is an error vector. The vector  $X_{i,t}$  is comprised here of our two macroeconomic variables – the variations (or cycles) of real GDP per inhabitant in PPA ( $\text{varPIB}$ ) and the variation of labour from its long-term trend ( $\text{varemploi}$ ):

$$X_{i,t} = (\text{varPIB}_{i,t}, \text{varemploi}_{i,t})' \quad (2) Y_{i,t} = (\text{ogap}_{i,t}, \text{CA\_gap}_{i,t}, \text{mis}_{i,t})'$$



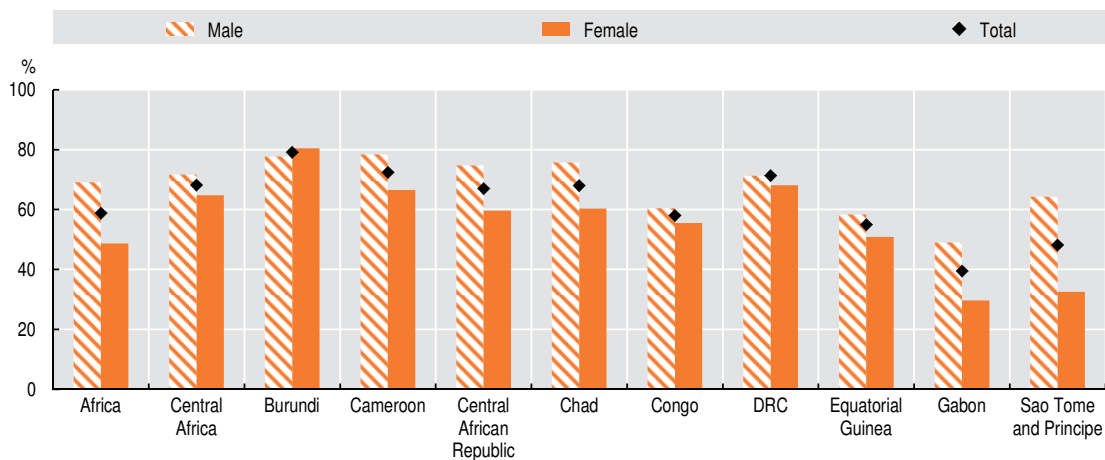
**Box 4.A1.2. Modelling the Vector Auto Regressive in Panel (PVAR) to estimate the relationship between the labour market and economic growth (cont.)**

From a methodological point of view, the application of the VAR process on panel data necessitates imposing the same underlying structure for each transversal unit (country); a constraint that could be violated in practice (see Love and Zicchino, 2006). The fixed effects by country introduced in equation (1) are a mean of overcoming the restriction on the parameters to the extent they capture individual heterogeneity. It is nevertheless well known that the use of an estimator of fixed effects in autoregressive panel data models is not appropriate, fixed effects being correlated with regressors due to deviations of the dependent variable (Nickell, 1981). To overcome this problem, we consider the generalised method of moments (GMM). More specifically, to suppress fixed effects, we use the differentiation procedure known as the Helmert procedure as in Love and Zicchino (2006) among others. This transformation preserves orthogonality between transformed variables and delayed regressors, which enables us to use delayed regressors as tools and to estimate the coefficients of the GMM procedure. Once coefficients are estimated, we calculate the IFR using the Cholesky decomposition.

The VAR approach has several advantages. It enables the analysis of the relationship between growth and labour without a priori postulating a direction to the causality. This leaves the possibility that growth could be explained by labour and conversely. In addition to the advantages of traditional VAR models, the panel VAR method makes it possible to collect a number of larger observations necessary for reliable results. This is particularly important in the context of this study given the limited time dimension of variables by country.

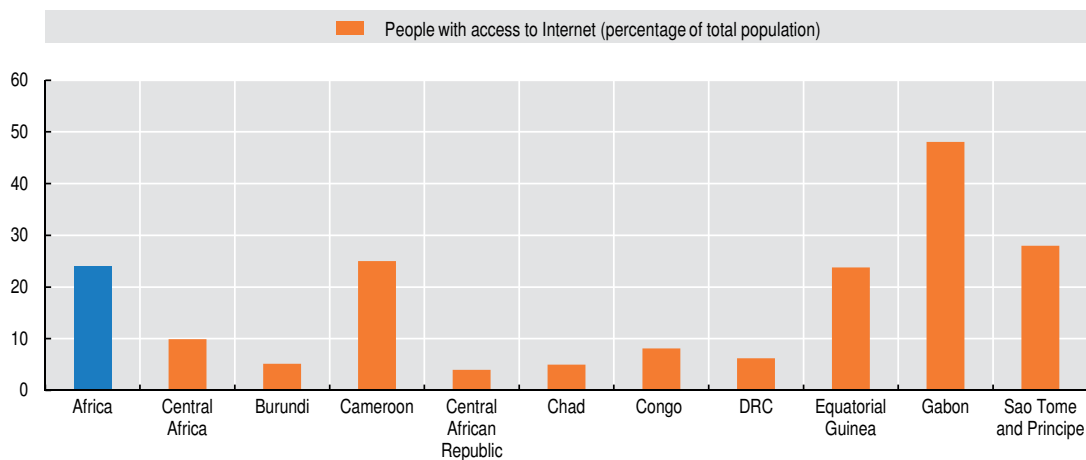
### Annex 4.A2. Central Africa's statistical annex

Figure 4.A2.1. Average employment by gender, 2000-15 (percentage)



Source: Authors' calculations based on ILO (2017), ILOStat.  
 StatLink <http://dx.doi.org/10.1787/888933783627>

Figure 4.A2.2. Internet penetration rates in Central Africa (percentage of the population), in 2016

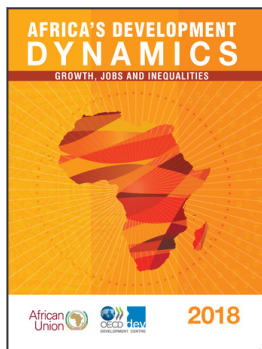


Source: Authors' calculations based on UNDESA (2017) and ITU (2016) databases.  
 StatLink <http://dx.doi.org/10.1787/888933783646>

## References

- AfDB (2011), “Central Africa”, *Regional Integration Strategy Paper (RISP) 2011-15*, African Development Bank, Abidjan, <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/RISP%20CENTRAL%20AFRICA-ECCAS%20English%20FINAL.pdf>.
- AfDB/OECD/UNDP (2017), *African Economic Outlook 2017: Entrepreneurship and Industrialisation*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/aeo-2017-en>.
- AfDB/OECD/UNDP (2016), *African Economic Outlook 2016: Sustainable Cities and Structural Transformation*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/aeo-2016-en>.
- AfDB/OECD/UNDP (2015), *African Economic Outlook 2015: Regional Development and Spatial Inclusion*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/aeo-2015-en>.
- AfDB/OECD/UNDP/UNECA (2013), *African Economic Outlook 2013: Structural Transformation and Natural Resources*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/aeo-2013-en>.
- Barro, R. (2000), “Inequality and growth in a panel of countries”, *Journal of Economic Growth*, Vol. 5(1), pp. 5–32.
- Barro R.J. (1991), “Economic growth in a cross-section of countries”, *Quarterly Journal of Economics*, vol. 106(2), pp. 407-443.
- De Melo, J., M. Nouar and J.-M. Solleder (2017), “Integration along the Abuja road map”, *FERDI Working Paper* n° 191, July 2017, [www.ferdi.fr/fr/node/3850](http://www.ferdi.fr/fr/node/3850).
- Djemmo Fotso, A. (2014), “The potential effects of the ECCAS free trade area on trade flows”, *MPRA Paper*, n° 59863, <https://mpra.ub.uni-muenchen.de/59863/>.
- GGDC/UC Davis (2017), *Penn World Table 9.0*, Groningen Growth and Development Centre, <https://www.rug.nl/ggdc/productivity/pwt/> (database consulted January 2018).
- Hugon, P. (2006), “Conflits armés, insécurité et trappes à pauvreté en Afrique”, *Afrique contemporaine*, vol. 218(2), De Boeck Supérieur, pp. 33-47, doi:10.3917/afco.218.47.
- ICA (2017), *Infrastructure Financing Trends in Africa – 2016*, Infrastructure Consortium for Africa, Abidjan.
- IIAG (2017), *2017 Ibrahim Index of African Governance: Index Report*, Mo Ibrahim Foundation, London.
- IMF (2018), *World Economic Outlook*, International Monetary Fund, Washington, DC, <http://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx>, (database consulted April 2018).
- IMF (2017a), *World Economic Outlook*, International Monetary Fund, Washington, DC, <http://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx>, (database consulted January 2018).
- IMF (2017b), *Regional Economic Outlook: Sub Saharan Africa – Restarting the growth engine*, International Monetary Fund, Washington, DC, <http://www.imf.org/en/Publications/REO/SSA/Issues/2017/05/03/sreo0517>
- IMF (2016), *Central African Economic and Monetary Community (CEMAC) Common policies of member countries – Press release, staff report and statement by the executive director*, International Monetary Fund Country Report n°16/277, Washington, DC, <https://www.imf.org/external/pubs/ft/scr/2016/cr16277.pdf>.
- ITU (2016), *Country ICT data* (database), International Telecommunication Union, <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>.
- Odejimi, O. and D. Bellingham-Young (2014), “A policy pathway to reducing teenage pregnancy in Africa”, *Journal of Human Growth and Development*, vol. 24(2), pp. 135-141, <http://dx.doi.org/10.7322/jhgd.79915>.
- OECD (2018), *Alignment Assessment of Industry Programmes with the OECD Minerals Guidance*, OECD Publishing, Paris, <http://mneguidelines.oecd.org/Alignment-assessment-of-industry-programmes-with-the-OECD-minerals-guidance.pdf>
- OECD (2016a), *Collaborative Strategies for In-Country Shared Value Creation: Framework for Extractive Industries*, OECD Development Policy Tools, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264257702-en>
- OECD (2016b), *Sub-Saharan Africa – The Social Institutions and Gender Index (SIGI) Regional Report*, OECD Publishing Paris, <https://www.genderindex.org/>.
- OECD (2015), *Annual Report on the OECD Guidelines for Multinational Enterprises 2014: Responsible Business Conduct by Sector*, OECD Publishing, Paris, [https://www.oecd-ilibrary.org/governance/annual-report-on-the-oecd-guidelines-for-multinational-enterprises\\_19990952](https://www.oecd-ilibrary.org/governance/annual-report-on-the-oecd-guidelines-for-multinational-enterprises_19990952).
- OECD (2014), *Social Institutions and Gender*, <https://data.oecd.org/inequality/social-institutions-and-gender.htm> (database accessed January 2018).

- OECD/ATAF/AUC (2017), *Revenue Statistics in Africa 2017*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264280854-en-fr>.
- OECD/DAC (2017), *Global Aid Prospects and Projections*, <http://www.oecd.org/dac/financing-sustainable-development/global-aid-prospects-and-projections.htm> (database consulted January 2018).
- UNCOMTRADE (2017), *United Nations Commodity Trade Statistics*, <http://comtrade.un.org/db/> (database consulted January 2018).
- UNCTAD (2017), *UNCTADstat*, United Nations Conference on Trade and Development, Geneva, <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=95> (database consulted January 2018).
- UNDESA (2017), *World Population Prospects: The 2017 Revision* (customised searches of the Internet site), Population Division, United Nations Department for Economic and Social Affairs, New York, NY.
- UNDP (2017), *Income Inequality Trends in sub-Saharan Africa: Divergence, Determinants and Consequences*, United Nations Development Programme, Paris.
- UNDP (2016), *Human Development Report*, <http://hdr.undp.org/en/data> (database consulted January 2018).
- UNESCO (2015), *Education for All Global Monitoring Report 2015 - Regional Overview: Sub-Saharan Africa*, United Nations Educational, Scientific and Cultural Organisation, Paris.
- UNHCR (2018), “CAR: Displacement reaches unprecedented levels in 2017”, United Nations High Commission for Refugees (UNHCR), <http://www.unhcr.org/uk/news/briefing/2018/1/5a6701184/car-displacement-reaches-unprecedented-levels-2017.html> (consulted 28 March 2018).
- UNHCR (2017), “UNHCR launches urgent appeal to help Burundian refugees”, United Nations High Commission for Refugees (UNHCR), <http://www.unhcr.org/fr/news/briefing/2018/1/5a672ae8a/rca-deplacements-populations-precedent-2017.html> (consulted 28 March 2018).
- UNICEF/ICRW (2015), *Child Marriage, Adolescent Pregnancy and Family Formation in West and Central Africa: Patterns, trends and drivers of change*, United Nations Children’s Fund and International Center for Research on Women, Dakar.
- World Bank (2018), *Doing Business: Reforming to Create Jobs*, World Bank, Washington, DC. <http://www.doingbusiness.org/-/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB2018-Full-Report.pdf>.
- World Bank (2017a), *World Development Indicators* (database), <https://datacatalog.worldbank.org/dataset/world-development-indicators>.
- World Bank (2017b), *Doing Business in OHADA 2017*, World Bank, Washington DC, <http://www.doingbusiness.org/Reports/regional-reports/ohada>.
- World Bank (2015), *The State of Social Safety Nets 2015*, World Bank, Washington, DC. <http://documents.worldbank.org/curated/en/415491467994645020/The-state-of-social-safety-nets-2015>.



**From:**  
**Africa's Development Dynamics 2018**  
Growth, Jobs and Inequalities

**Access the complete publication at:**  
<https://doi.org/10.1787/9789264302501-en>

**Please cite this chapter as:**

African Union Commission/OECD (2018), "Dynamics of growth, jobs and inequalities in Central Africa", in *Africa's Development Dynamics 2018: Growth, Jobs and Inequalities*, OECD Publishing, Paris/African Union Commission, Addis Ababa.

DOI: <https://doi.org/10.1787/9789264302501-12-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).