

March 2018 | First Edition

# CENTRAL AFRICAN REPUBLIC ECONOMIC UPDATE

## *Breaking the Cycle of Conflict and Instability*



**WORLD BANK GROUP**  
Macroeconomics, Trade & Investment



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# ACRONYMS AND ABBREVIATION

<b>BEAC</b>	Bank of Central African States ( <i>Banque des États de l'Afrique Centrale</i> )
<b>CAR</b>	Central African Republic
<b>CEMAC</b>	Central African Economic and Monetary Community ( <i>Communauté Économique et Monétaire de l'Afrique Centrale</i> )
<b>CES</b>	Constant elasticity of substitution
<b>CFAF</b>	Central African CFA Franc
<b>CGE</b>	Computable general equilibrium
<b>CS-REF</b>	Monitoring Committee for Economic Reforms ( <i>Comité de Suivi des Reformes Économiques et Financières</i> )
<b>DDR</b>	Disarmament, demobilization, and reintegration
<b>FPRC</b>	Popular Front for the Rebirth of the Central African Republic ( <i>Front Populaire pour la Renaissance de la Centrafrique</i> )
<b>FFP</b>	Fund for Peace
<b>FSI</b>	Fragile States Index
<b>GNI</b>	Gross national income
<b>GTAP</b>	Global Trade Analysis Project
<b>IMF</b>	International Monetary Fund
<b>ICASEES</b>	Central African Republic Institute of Statistics and Economic and Social Studies ( <i>Institut Centrafricain des Statistiques et des Études Économiques et Sociales</i> )
<b>LRA</b>	Lord's Resistance Army
<b>MINUSCA</b>	United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic ( <i>Mission Multidimensionnelle Intégrée des Nations Unies pour la Stabilisation en République Centrafricaine</i> )
<b>RCPCA</b>	National Recovery and Peacebuilding Plan ( <i>Stratégie de Relèvement et de Consolidation de la Paix en Centrafrique</i> )
<b>SSA</b>	Sub-Saharan Africa
<b>UNDP</b>	United Nations Development Program
<b>UPC</b>	Unity for the Central African Republic ( <i>Unité pour la Centrafrique</i> )
<b>WGI</b>	Worldwide Governance Indicators

# ACKNOWLEDGEMENTS

This is the first edition in a new series of Central African Republic Economic Updates. The series will analyze evolving economic trends in CAR on an annual basis to assist the government and its development partners in identifying emerging opportunities and addressing persistent challenges. Subsequent editions will be prepared in advance of the World Bank Spring Meetings in April. Each edition will present an overview of CAR's evolving macroeconomic position, followed by a detailed exploration of a specific topical subject. The objectives of the series are to strengthen the analytical underpinnings of development policy in CAR and contribute to an informed debate on policy options to enhance macroeconomic management and accelerate progress on the twin goals of eliminating extreme poverty and promoting shared prosperity in a context of state fragility.

This edition was produced by a team led by Souleymane Coulibaly (Lead Economist, Central and West Africa, GMTA1). Section I, Recent Economic Developments, was prepared by Etaki Wa Dzon (Economist, GMTA1) and Moise Tshimenga Tshibangu (Economist, GMTA1). Section II, Breaking the Cycle of Conflict and Instability, was prepared by Souleymane Coulibaly, Michel Maellberg (Senior Public Sector Specialist, GGOAW), Evariste Niyonkuru (Consultant, GGOAC) and Serdar Yilmaz (Lead Public Sector Management Specialist, GGOAC), drawing on the CAR Systematic Country Diagnostics led

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The team would like to thank peer reviewers Birgit Hansl (Program Leader and Lead Economist, EACPF) and Jens Kromann Kristensen (Lead Public Sector Specialist, GGOEA), as well as Sona Varma (Lead Economist, GMTMN) and Chadi Bou (Program Leader, AFCC2), for their constructive feedback. Franck Bousquet (Country Director, AFCC2), Robert Bou Jaoude (CAR Country Manager), Francisco Galvão Carneiro (Practice Manager, MTI), and Yisgedullish Amde (Country Program Coordinator) also provided valuable guidance, advice, and encouragement.

In addition, the team greatly benefited from consultations with key policymakers and analysts in CAR, including officials from the Monitoring Committee for Economic Reforms (CS-REF), the Ministry of Economy, Planning and International Cooperation, the Ministry of Finance and Budget, and the Central African Republic Institute of Statistics and Economic and Social Studies (ICASEES). Finally, the team would like to gratefully acknowledge the cooperation of staff from the International Monetary Fund.

# EXECUTIVE SUMMARY

**A deteriorating security and humanitarian situation is dimming hopes for a robust economic recovery in the Central African Republic (CAR).** After peaking at 4.8 percent in 2015, the annual GDP growth rate slowed to 4.5 percent in 2016 and 4.3 percent in 2017, as renewed insecurity inhibited economic activity, disrupted agricultural, forestry, and mining production, and delayed investment projects. Although public investment rose from 6 percent of GDP in 2016 to an estimated 7.4 percent in 2017, private consumption continues to account for the largest share of GDP. Despite a modest increase in forestry, diamond, and gold exports, the current-account deficit remained large at 8.5 percent of GDP in 2017, from 9.0 percent in 2016. Official grants and foreign direct investment continue to finance the deficit. Reserve coverage fell from 5.5 months of imports in 2016 to 4.4 months in 2017. The inflation rate has stabilized at a moderate level, sliding from 4.6 percent in 2016 to 4.1 percent in 2017, and is expected to reach the CEMAC convergence criteria of 3 percent by 2020.

**The government continued to implement its fiscal consolidation and took corrective action to meet its revenue target for end-2017.** The domestic primary fiscal deficit narrowed from 3.0 percent of GDP in 2015 to 1.1 percent in 2016, which contributed to an overall fiscal surplus (including grants) of 1.6 percent of GDP. The overall fiscal surplus increased to an estimated 1.9 percent of GDP in 2017, yielding a budget surplus of 0.5 percent of GDP. The government is committed to implementing its arrears-clearance plan while continuing its fiscal consolidation over the medium term, and an average annual fiscal surplus of 0.7 percent of GDP is projected for 2018–2020. Total spending will inevitably

rise as the public administration expands its reach further beyond Bangui, but total revenue is expected to return to its pre-crisis level of 9 percent of GDP, and the debt burden is projected to fall from 52 percent of GDP in 2017 to 40 percent by 2020.

**While these positive developments and the peaceful presidential election of 2016 have contributed to a climate of cautious optimism, CAR remains a fragile state.** The 2013 conflict led to unprecedented levels of violence and caused a huge negative shock to CAR's already low level of GDP per capita. The conflict is far from over: the central government currently controls only about 40 percent of the national territory, and numerous armed groups are active across the country. Reestablishing the rule of law, building a capable bureaucracy, and laying the foundation for sustainable growth and poverty reduction will require a carefully calibrated policy agenda. Adopting innovative approaches to public service delivery, such as performance-based financing for health, and fully leveraging the assistance of external partners, the private sector, and civil society could enable the government to begin addressing CAR's extensive development needs in a context of severe capacity limitations and tight budget constraints.

**As it strives to overcome a legacy of fragility and violence, CAR can learn important lessons from the experience of other post-conflict countries.** During consultations conducted in Bangui as part of the preparation of this Economic Update, students and private-sector representatives identified Burkina Faso, Ethiopia, Ghana, Liberia, and Rwanda as CAR's aspirational peers. While these countries have unique histories and idiosyncratic features, each

underwent a period of conflict or severe instability, and each has since stabilized. Together, their experience underscores the importance of fostering the development of civil society to consolidate democratic gains, strengthen public accountability, and enhance transparency, while adopting a pragmatic set of policy and institutional arrangements to gradually but persistently increase the quality of the public administration. CAR can adopt these lessons and adapt them to the specificity of its current crisis. The authorities also need to carefully tailor its structural reform agenda to reflect the country's fragility.

**To inform the design of a policy agenda that effectively balances these objectives, simulation scenarios from a computable general equilibrium model are used to examine some structural-reform scenarios in four important sectors: mining, forestry, services and education.** Under the first scenario, the government would adopt measures to boost commercial mining exports. Under the second scenario, the government would issue new forestry licenses, increasing forestry-product exports. Under the third scenario, the government would implement productivity-enhancing reforms in the service sector, accelerating economic activity and raising income levels among the poorest households. Under the fourth scenario, the government would boost public investment in education to increase the number of skilled workers.

**While all reform scenarios would accelerate growth, the simulated increase in forestry activity would have the largest impact by far, boosting GDP by almost 14 percent over the baseline by 2030.** Moreover, the distribution of returns to growth would be moderately progressive, with an especially positive impact on poorer households. In addition, public revenues would rise dramatically, exceeding the baseline by almost 80 percent by 2030, and exports would increase by more than 40 percent above the baseline, bolstering foreign reserves. Greater

service-sector activity would have the second-largest impact on growth, pushing GDP 4.6 percent above the baseline by 2030, and the returns would be even more progressively distributed. Households at all income levels would benefit, but the gains accruing to the poorest would exceed the gains accruing to the richest households. A growing service sector would also boost exports more than 10 percent above the baseline by 2030. The simulated increase in commercial mining output would yield very limited gains for poor households. While the facilitating the growth of the artisanal mining subsector could potentially have a more positive effect on employment and income, artisanal mining in CAR is deeply problematic. Finally, a simulated increase in the number of skilled workers would have a marginal effect on macroeconomic indicators due to CAR's low levels of educational attainment and the limited capacity of its economy to leverage skilled labor. This finding suggests that, at least in the near term, focusing on improving the quality and accessibility of basic education and vocational training could have a greater impact on labor productivity and household income.

**CAR's political and institutional fragility reflects its long history of misrule.** The government and its development partners now face the daunting challenge of implementing an urgent and far-reaching reform agenda through a set of weak and unstable public institutions. As the international literature demonstrates, pushing fragile states to adopt reforms too quickly risks overwhelming and potentially damaging the limited capacity of the public sector. In this challenging context, the government could begin to break the cycle of conflict and instability by adopting an innovative approach to delivering education and health services, designing a policy agenda that reflects the experience of other post-conflict countries, and prioritizing sectors that have the greatest potential to rapidly generate broad-based gains in employment and income, especially among poor and vulnerable households.





# RECENT ECONOMIC AND POLICY DEVELOPMENTS

*A deteriorating security and humanitarian situation is dimming hopes for a robust economic recovery in CAR. The GDP growth rate slowed from 4.8 percent in 2015 to 4.5 percent in 2016 and 4.3 percent in 2017, and is projected to stabilize at around 5 percent over the medium term. Given CAR's pressing security needs and limited fiscal resources, better expenditure management is critical to ensure value for money in both current spending and capital investment. Meanwhile, the government is striving to restore the efficiency of revenue-collection agencies and expand their presence nationwide. Exports are recovering slowing, heightening security risks, and international aid continues to finance a large current-account deficit.*

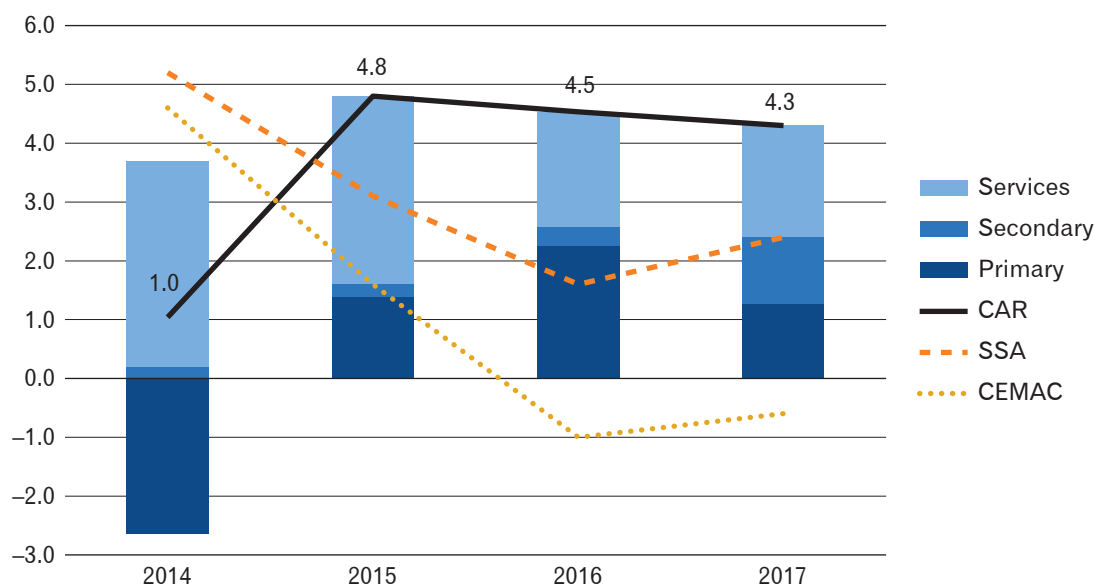
## 1.1 A Tense Security Situation Slows Growth

**While the economy of the Central African Republic (CAR) has continued to expand for a fourth consecutive year, deteriorating security conditions have frustrated hopes for a robust recovery.**

The real GDP growth rate fell from 4.8 percent in 2015 to 4.5 percent in 2016 and 4.3 percent in 2017, as intensifying instability in rural areas disrupted agricultural production, exacerbated transportation bottlenecks, and delayed the implementation of

investment projects. Rising private consumption, fueled by imports of food and other goods along the Bangui-Garoua Boulai corridor, continues to drive growth on the demand side, supported by greater public investment and increased commodity exports. Since 2015, economic growth in CAR has outpaced the average rates for Sub-Saharan Africa (SSA) and Central African Economic and Monetary Community (*Communauté Économique et Monétaire de l'Afrique Centrale*, CEMAC) member states. However, as the security situation deteriorates, CAR's growth is decelerating while the regional averages rise (Figure 1.1).

**FIGURE 1.1** Annual Real GDP Growth Rates by Sector, CAR and Regional Averages, 2014–17



Sources: World Bank and IMF data

Note: The primary sector includes agriculture, forestry, livestock, fishing and hunting. The secondary sector includes construction, manufacturing, and extractive industries. The tertiary sector includes services and public administration.

Private employment is showing some initial signs of recovery, but only in Bangui (Box 1.1).

**For the past four years, the primary sector has driven GDP growth on the supply side.** The primary sector accounted for about 42.3 percent of real GDP growth in 2017, down from 49.9 percent in 2016. Subsistence agriculture contributed 16.0 percent, forestry 11.8 percent, livestock 9.8 percent, and hunting and fishing 4.7 percent. After spiking by 33 percent in 2015, forestry<sup>1</sup> output has continued to grow at a rapid pace, compensating for the slowing expansion of agriculture. Wood production increased by 53.3 percent in 2017 and represented roughly half of total exports. Meanwhile, a worsening security

situation hindered the recovery of agricultural activity<sup>2</sup> during the second half of 2017. Cotton production increased between 2007 and 2012, but remains far below its 1970 level of 60,000 tons. In the wake of the recent conflict, cotton exports have been modest, rising from 495.2 tons in 2016 to 677.2 tons in 2017.<sup>3</sup> The rural population suffered the worst of the violence, and population displacement heavily impacted food security and the livelihoods of smallholder farmers. The conflict has not been decisively resolved, and a worsening security situation caused a steep decline in cotton, cocoa, and coffee production during the first half of 2017.

<sup>1</sup>Although forestry is expanding, fiscal revenue from the forestry subsector fell by about 60 percent, year-on-year. Since average lumber prices in 2017 were higher than in 2016, the cause of this decline in revenues is unclear, and the mechanism for estimating timber prices should be assessed.

<sup>2</sup>The deteriorating security situation is not the only reason for the decline in agricultural activity, as low productivity constrains output even in secure areas. More effective support for the agriculture sector, including the increased provision of improved seeds, fertilizers, and extension services, will be necessary to boost productivity.

<sup>3</sup>World Bank, 2016.

## BOX 1.1 The Employment and Poverty-Reduction Outlook

**The public sector dominates formal employment in CAR, while subsistence agriculture, artisanal mining, and the forestry sector are major sources of informal employment.** As of November 2014, the public sector employed 26,853 civil servants and 7,129 contractual workers. No official statistics of formal employment in the private sector are available, but contractual workers in the public sector likely outnumber formally employed workers in the private sector. In 2011, just 282 formal firms were operating in Bangui and Berberati (CAR's largest and third-largest cities), most employing between 5 and 19 workers. Given the negative impact of the crisis on the economies of both cities, coupled with the effective suspension of formal economic activity in the rest of the country, the total number of formal employees in the private sector is unlikely to exceed 4,000. Meanwhile, despite the decline in agricultural production in the wake of the 2013 crisis, the agricultural sector still accounts for 70 percent of employment. The resumption of artisanal mining is providing some additional informal employment, and anecdotal evidence indicates that processing the waste generated by lumber companies now provides about 4,000 direct jobs. This would make forestry and wood-processing the second-largest formal employer after the public sector.

**Instability and violence have increased the poverty rate.** The last nationally representative household survey was conducted in 2008. The poverty rate was estimated at 50 percent in urban areas, 69 percent in rural areas, and 66 percent nationwide. Estimates based on recent GDP trends suggest that the national poverty rate exceeded 75 percent in 2017. In the 2016 Human Development Index, CAR ranked lowest in the world at 188th out of 188 countries.

**Restoring security is a prerequisite for sustainable poverty reduction.** Armed groups continue to hold sway over about 60 percent of CAR's territory, causing large-scale forced displacement. Multiple armed groups control key diamond- and gold-mining sites, cutting off a major source of employment and income from the national economy. Access to basic social services is limited in Bangui and almost nonexistent outside the capital. If the real GDP growth rate averages 4.0 percent over the medium term, as projected, the poverty rate should slightly decline from a peak of 77 percent in 2013 to 74 percent by 2019, with per capita GDP edging up from about FCFA 10,000 in 2013 to about FCFA 13,000 in 2019. However, restoring state control over the entire national territory remains a fundamental development challenge.

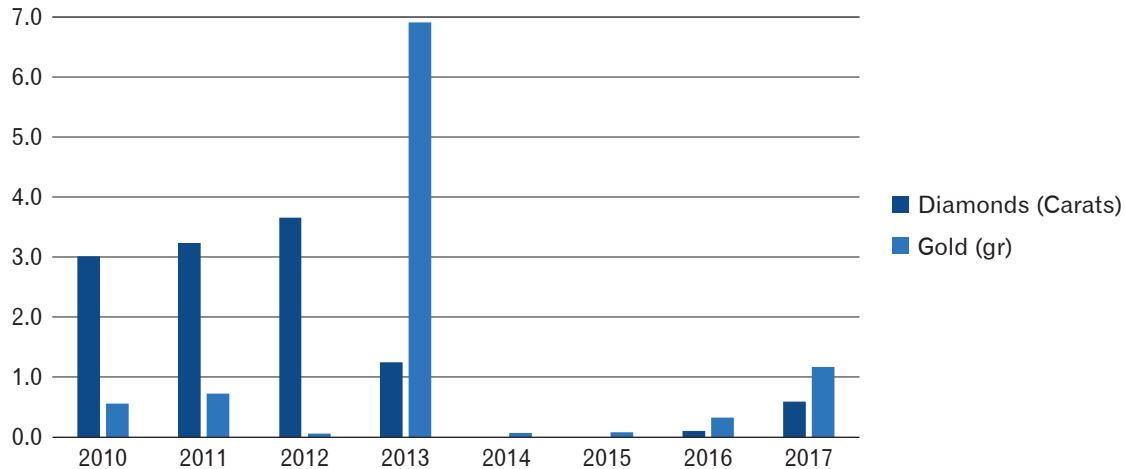
**The secondary sector grew at a robust rate of 7.2 percent in 2017.** The secondary sector, which mainly consists of manufacturing (including wood processing), construction and mining, represents about 16 percent of GDP. The manufacturing subsector has expanded at a rate of 2.0 percent since 2015, led by the food industry. In 2017, an expanding wood-processing subsector boosted manufacturing to almost 5 percent of GDP. The construction subsector's contribution to GDP rose from 4.0 percent in 2010 to 5.5 percent in 2017. Donor-funded projects and a substantial increase in public investment as part of the government's reconstruction program

contributed to the expansion of both construction and public utilities, which grew by 5 percent. The mining subsector experienced the fastest growth, albeit from a very low post-crisis base. Mining's contribution to GDP is estimated at just 0.5 percent, but the adverse security situation in mining areas likely results in significant underreporting. Prior to a 2013 embargo, diamonds accounted for nearly half of CAR's total exports. The country produced an estimated 10,957 carats of diamonds in 2016,<sup>4</sup>

<sup>4</sup> <https://www.kimberleyprocess.com/en/central-african-republic/#2015>

FIGURE 1.2

### Diamond and Gold Production by Volume, 2010–17 (thousands of carats and grams)



Source: The Central African Republic Institute of Statistics and Economic and Social Studies (*Institut Centrafricain des Statistiques et des Études Économiques et Sociales*, ICASEES)

and diamond production is projected to reach 59,985 carats in 2017, a roughly six-fold increase. CAR produces fewer diamonds than regional leaders such as Botswana (31.4 million carats), Democratic Republic of Congo (14.7 million carats), and Angola (8.3 million carats),<sup>5</sup> and the ongoing embargo reduces diamond production and official exports. The Kimberly Process members have decided to partially lift an embargo on diamond exports from the CAR, imposed since May 2013. Exports resumed only from certain sites in the “green zone”, under government control. Official gold exports tripled from 32.9 kg in 2016 to 117.5 kg in 2017 (Figure 1.2).

**Trade-related activities continued to dominate the tertiary sector in 2017.** Trade, transportation, telecommunications, and non-merchant services comprise the bulk of the service sector, which accounts for approximately 38 percent of CAR’s GDP. Services grew by 4.2 percent in 2017, the same

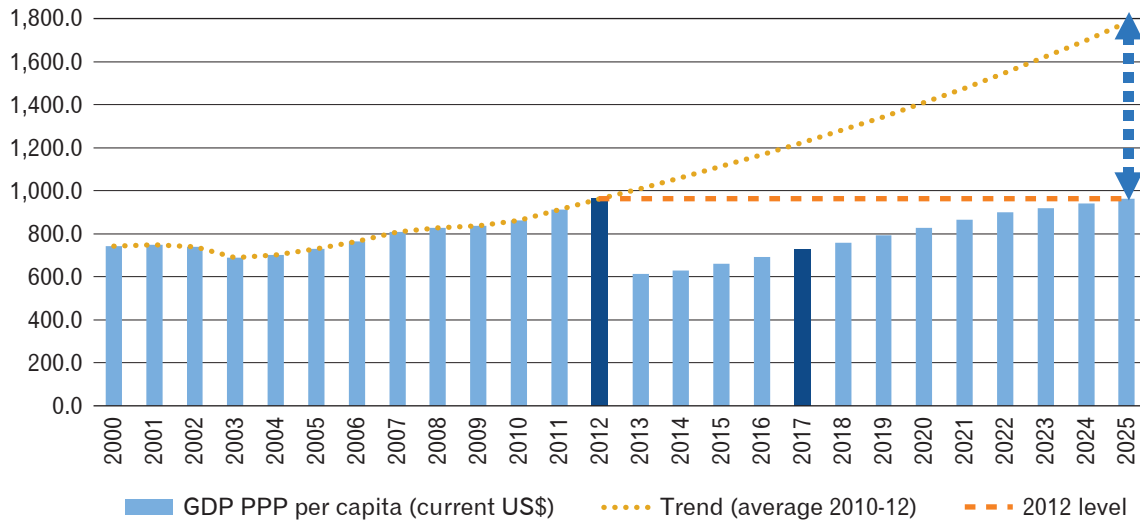
rate as in 2016. The government’s efforts to secure control over Bangui and other cities such as Bambari and Berberati have facilitated trade and commerce, but weak rural infrastructure and lingering insecurity continue to inhibit the growth of the service sector. Moreover, the limited reach of telecommunications and financial services are binding constraints on economy-wide growth.

**An anemic recovery is extending the conflict’s negative economic impact.** The real GDP growth rate averaged 3.5 percent between 2009 and 2012. In 2013, GDP plunged by 36 percent. Since 2014, growth has averaged 3.7 percent, just slightly above its pre-crisis level. Persistent security challenges have made it impossible to rebuild destroyed capital, both physical and social, or to restore confidence in the business climate. Current projections indicate that per capita GDP will not return to its 2012 level until 2025 (Figure 1.3). To return to its pre-crisis trajectory, CAR’s economy would need to grow at a rate of over 10 percent per year for the next three years.

<sup>5</sup>These comparator-country figures are for 2016.

FIGURE 1.3

### The Impact of the Conflict on per Capita GDP (US\$ in purchasing-power-parity terms)



Source: Estimates and projections based on World Bank and IMF data

## 1.2 CEMAC Monetary Policy Tightens in Response to Dwindling Regional Reserves

**As economic growth slowed and CEMAC tightened its monetary policy stance, CAR's inflation rate eased from 4.6 percent in 2016 to 4.1 percent in 2017.** However, rising insecurity disrupted aggregate supply, while the ongoing resettlement of displaced persons boosted aggregate demand, keeping the inflation rate above the 3 percent CEMAC convergence criterion. The food-price inflation rate fell from 4.5 percent in 2016 to 3.9 percent in 2017, but resurgent violence will continue to put upward pressure on consumer prices—especially food prices.

**CEMAC monetary policy is managed at the regional level by the Bank of Central African States (*Banque des États de l'Afrique Centrale,***

**BEAC), which prioritizes controlling inflation and maintaining the CFA franc's peg to the euro.**

The BEAC supported structural adjustments among member countries after the oil-price slump in 2014 led to a sharp rise in statutory advances and a rapid drawdown of foreign-exchange reserves. The BEAC's relatively loose monetary policy stance negatively affected the external balance: regional reserves decreased from 5.1 months of imports in 2013 to 2.3 months of imports in December 2016. In CAR, statutory advances quickly exceeded the BEAC's ceiling, as the country's shallow financial sector proved unable to support continued growth (Box 1.2).

**In contrast to other CEMAC member states, the deterioration of CAR's monetary position was driven by renewed conflict rather than by the collapse of global oil prices.** In March 2017, the BEAC responded by raising its main policy rate by 50 basis points to 2.95 percent, causing broad money to decline from 5.8 percent of GDP in 2014

## BOX 1.2 The Financial Sector

**C**AR's underdeveloped financial sector plays a limited role in supporting economic growth. The financial sector is shallow, and bank supervision is weak. The banking system comprises four commercial banks, 11 microfinance institutions, two postal banks, two insurance companies, and a social security fund. The government relies more on the regional market than some of its peers, which increases uncertainty. For example, the government mobilized CFAF 18 billion in early 2017, yet it failed to secure an additional CFAF 4 billion in May 2017 after launching the second of five planned auctions. Inadequate infrastructure and deficiencies in the legal, judicial, prudential and regulatory frameworks inhibit both the entry of new financial institutions and the growth and diversification of existing institutions.

**While CAR's financial sector has expanded modestly in recent years, the country's financial intermediation levels remain among the lowest in the world.** Credit to the economy stabilized at 18 percent of GDP over 2016–17, up from 4 percent in 2014. Financial-soundness indicators suggest that banks remain resilient, although the high level of nonperforming loans (NPLs) is a source of concern. All banks meet the new standard for regional reserve requirements adopted by the BEAC's monetary policy committee in March 2017. The average capital-adequacy ratio appears high, rising from 32 percent in December 2016 to 40 percent in June 2017, but due to unreliable data, capital buffers may be significantly overestimated. Credit risk has not improved since 2013, and NPLs have consistently exceeded 25 percent of gross loans. About half of NPLs are part of the large stock of outstanding government payment arrears. Bank lending is largely focused on short-term loans to the public sector, leaving banks exposed to sovereign risk. Liquid assets represented 31 percent of total assets in 2017, unchanged from 2016, and deposits have increased by 13 percent since June 2016. Deposits rose from 75 percent of gross loans at end-2015 to 105 percent at end-June 2017.

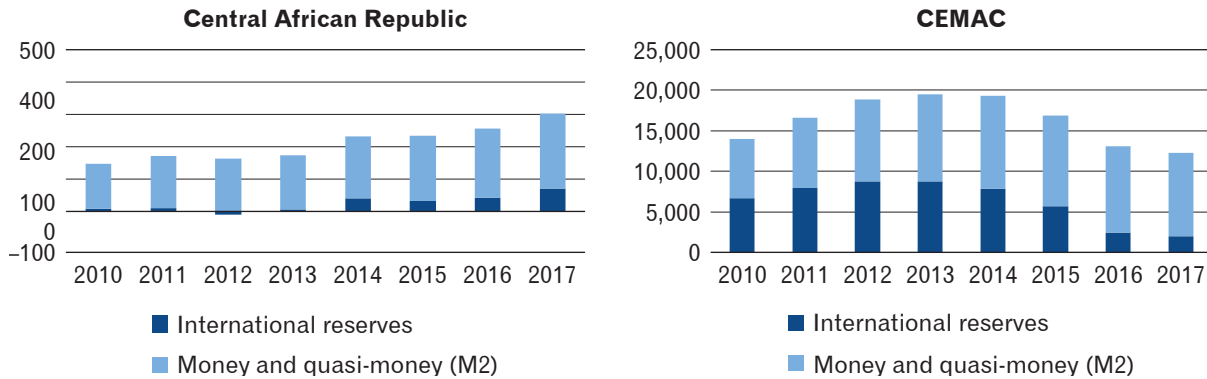
to 1.1 percent in 2017. Nevertheless, broad-money growth exceeded expectations, as transfers by NGOs and the partial repatriation of export receipts drove a sharp rise in net foreign assets. In 2018, the BEAC's efforts to ease pressure on the region's external balances are expected to cause further monetary tightening. Low regional reserves and the prospect of tighter monetary policies by the European Central Bank are expected to keep monetary conditions tight across the region.

**The current-account deficit worsened in absolute terms in 2017 as imports soared.** The current-account deficit rose from CFAF 94.7 billion, or 9.1 percent of GDP, in 2016 to an estimated CFAF 95.5 billion, or 8.5 percent of GDP, in 2017. Although the income-transfer deficit narrowed from CFAF 3.2 billion in 2016 to CFAF 1.7 billion in 2017, rising oil imports and a widening services-trade deficit caused

the overall terms of trade to deteriorate. Nevertheless, reserve coverage remains high at 4.4 months of imports, above the CEMAC average of 2.7 months (Figure 1.4).

**The implementation of the 2017–2021 National Recovery and Peacebuilding Plan (*Stratégie de Relèvement et de Consolidation de la Paix en Centrafrique, RCPCA*) and ongoing disarmament, demobilization, and reintegration (DDR) efforts boosted demand for service imports in 2017.** The primary income deficit, which mainly reflects salary repatriation by international workers, widened gradually from an estimated CFAF 0.6 billion in 2016 to CFAF 1.6 billion in 2017 as the government began implementing the RCPCA. During 2018–19, the service trade deficit is expected to reach CFAF 2.4 billion and will be financed by a combination of foreign direct investment, grants, and debt inflows.

**FIGURE 1.4** The Growth of International Reserves and Broad Money, 2010–17 (CEAF billions)



Source: BEAC data

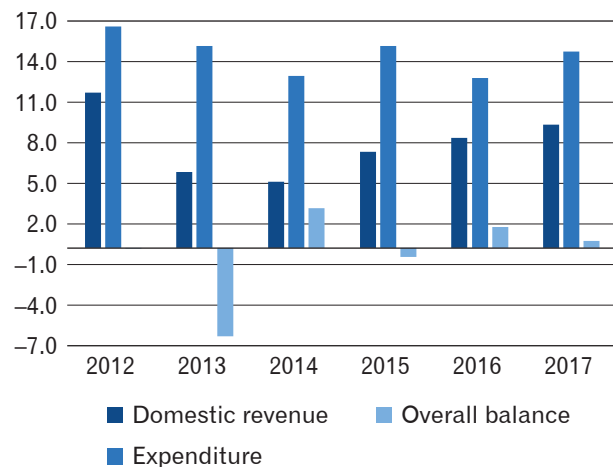
### 1.3 The Government’s Fiscal Consolidation Efforts Focus on Revenues in the Context of a Constrained Business Environment

**CAR’s fiscal position remains favorable in 2017 despite increased spending pressure.** Priority investments in infrastructure and public institutions, as well as the need to reequip security forces, have shifted the burden of fiscal consolidation to the revenue side. Between 2016 and 2017, efforts to strengthen tax and customs administration boosted total domestic revenues by 0.9 percentage point of GDP. Meanwhile, primary expenditures rose from 9.2 percent of GDP in 2016 to 10.8 percent in 2017, reflecting increased public investment. This narrowed the fiscal surplus from 1.3 percent of GDP in 2016 to 0.5 percent in 2017 (Figure 1.5). Borrowing from the BEAC and foreign creditors financed the investment budget.

**Domestic revenue has increased gradually, in line with CAR’s slow economic recovery.** Domestic revenue rose from 8.2 percent of GDP in 2016 to 9.1 percent in 2017, reflecting stronger excise and

customs controls and closer monitoring of tax exemptions. However, CAR still has the lowest level of domestic revenue collection among CEMAC countries (Figure 1.6). Taxes on domestic goods and services contribute 46 percent of total revenue, but value-added tax (VAT) plays an increasingly important fiscal role (Figure 1.7). While the authorities’ efforts to strengthen revenue collection yielded positive

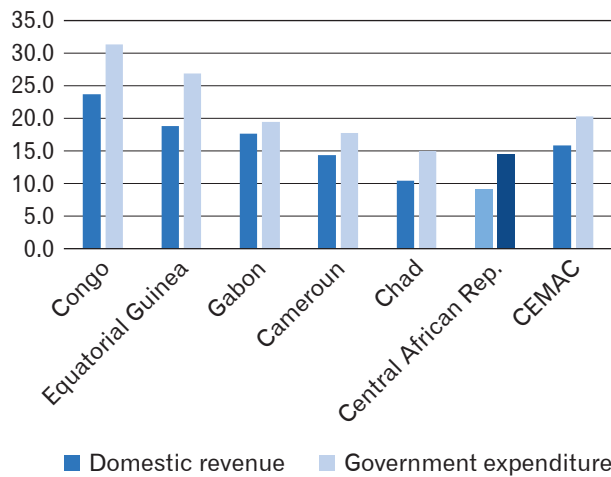
**FIGURE 1.5** Domestic Revenue and Expenditures, CAR, 2012–2017 (% of GDP)



Sources: World Bank and IMF data

FIGURE 1.6

### Domestic Revenue and Expenditures, CEMAC Member States, 2017 (% of GDP)



Source: IMF data

results, tax revenue in 2017 was still just 80 percent of its 2012 level, a decline of 2.4 percentage points of GDP. Domestic revenue in CAR remains well below the 2016 SSA average of 16.4 percent of GDP, and donor support finances 30–40 percent of the budget.

FIGURE 1.7

### Revenue Composition, 2012–17



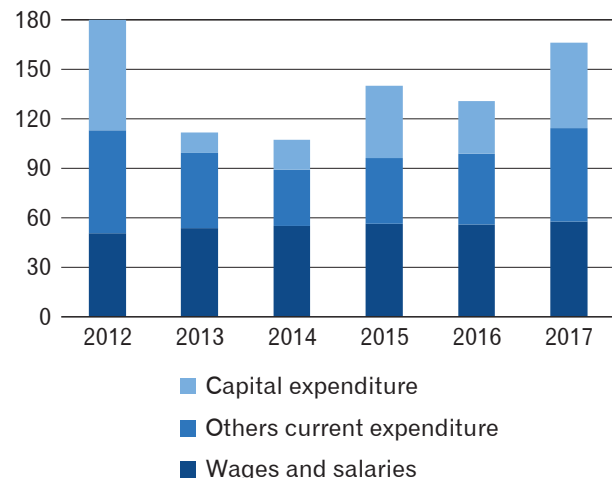
Source: World Bank and IMF data

**The expenditure-consolidation effort has focused on tightening control over the wage bill, demonstrating the government's commitment to fiscal discipline.** Although current primary expenditures rose from 9.0 percent of GDP in 2016 to 9.8 percent in 2017, this trajectory remains consistent with the government's commitment to fiscal consolidation and reflects better expenditure controls, especially over the wage bill (Figure 1.8). Following an audit of the civil-service payroll, the wage bill fell from 5.4 percent of GDP in 2016 to 5.2 percent in 2017. Transfers and subsidies rose from 1.7 percent of GDP in 2016 to 2.5 percent in 2017. Fiscal discipline has facilitated the ongoing resolution of domestic payment arrears, a prerequisite for accelerating private economic activity and a priority under the program monitored by the IMF and the World Bank. The payment of domestic arrears reached 2.5 percent of GDP in 2017, and the public debt stock declined from 69.2 percent of GDP in 2014 to 51.8 percent in 2017 (Figure 1.9).

**The implementation of the RCPCA boosted investment-related expenditures in 2017.** Capital

FIGURE 1.8

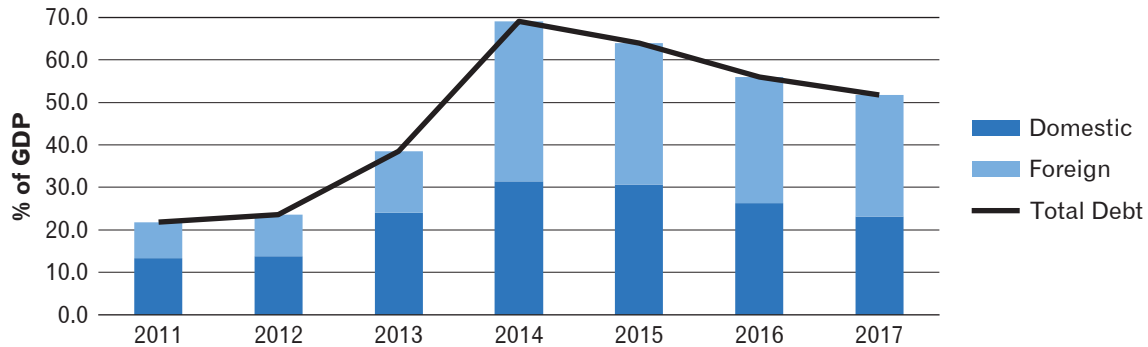
### Expenditure Composition, 2012–17



Source: World Bank and IMF data



**FIGURE 1.9** The Level and Composition of the Public Debt Stock, 2011–17 (% of GDP)



Source: World Bank and IMF Data

spending rose from 3.1 percent of GDP in 2016 to 4.3 percent in 2017, about 2 percentage points below its pre-crisis level. The share of external financing (including grants) remained high at 78 percent of total capital spending, but domestically financed capital spending rose from 0.3 percent of GDP in 2016 to 0.9 percent in 2017. Donor financing contributed FCFA 44.9 billion of the FCFA 55.0 billion spent on RCPA projects. Accelerating the implementation of structural reforms will be necessary to restore fiscal sustainability, strengthen the public investment management framework, and expand the fiscal space for priority investment projects.

#### 1.4 CAR's Outlook Is Positive, but the Security Situation Remains a Major Source of Downside Risk

**CAR's economic outlook hinges on the consolidation of stability, increased investment, and accelerating export growth.** The GDP growth rate is expected to stabilize at around 5.0 percent over the medium term. As public consumption is expected to support the modest recovery, this projection is contingent on the implementation of the government's National Recovery and Peacebuilding Plan. Diamond and wood-product exports are forecast to rise, and

increases in cotton production and exports are anticipated after the government clears its arrears in the sector in 2017. Imports of equipment are expected to remain high as public and private investment continue to recover. The government is committed to implementing its arrears-clearance plan, which should contribute to an average fiscal surplus of 0.7 over 2018–2020. Total expenditures will increase as the public administration expands its presence further beyond Bangui, and total revenue is expected to return to its pre-crisis level of 9 percent of GDP. The annual inflation rate is expected to fall to 3.6 percent in 2018 and reach the CEMAC convergence level of 3 percent by 2020.

**Although security in Bangui has significantly improved, intercommunity tensions and clashes between armed groups continue to plague the country.** Instability and violence prevent public services and humanitarian organizations from reaching a large share of the people affected by the crisis. The UN High Commission for Refugees estimated that over 688,000 people were internally displaced at end-2017, a 60 percent increase from 2016, and more than 540,000 people had fled to neighboring countries. The atrocities committed during 2017 underscore the need to accelerate the DDR process and revitalize economic growth. Primary-sector activities in resource-rich areas are key drivers of future

growth, yet they are especially vulnerable to insecurity and violence. Ongoing instability also threatens food security and the provision of basic services.

**Beyond the security sector, a failure to implement the reforms needed to restore sound economic management is the chief source of downside risk.** Revenue collection is significantly below its pre-crisis level, the public administration remains weak, and CAR depends on external financing to cover some of its primary expenditures and most of its capital spending. In the context of a tightening regional monetary policy, expenditure rationalization needs to complement revenue measures to continue the fiscal consolidation while protecting poor households. Over the medium term, fiscal stability will be crucial to sustain growth and increase revenue collection. Any threat to the continuity of the structural reform agenda, or to overall fiscal discipline, could derail even the modest recovery achieved thus far.

**The ability of the government and other stakeholders to effectively promote good governance in a post-conflict environment is a further source of downside risk.** The complex demands of restoring peace while adopting administrative reforms to improve governance will strain CAR's limited institutional capacity. Public institutions must ensure security, promote economic growth, and provide social services efficiently and equitably. Managing a humanitarian crisis is often a long and difficult process, and in CAR's case this process is complicated by the regional threat of Boko Haram, which is active in neighboring Cameroon and Chad. The swift resolution of the humanitarian crisis and the successful return of refugees and displaced persons should create additional fiscal space to invest in institutional capacity-building.

**The main source of external risk is the dependence of the public finances, and especially the RCPCA, on international aid.** In November 2017, the new administration convened a donor conference in Brussels, at which CAR's development partners committed US\$2.3 billion to support the RCPCA, launch the DDR process, and initiate the reform of the security sector. External resources are vital to stability and growth, and even a moderate disruption in the flow of international assistance could rapidly weaken the government's fiscal position. In addition to multilateral institutions, CAR relies heavily on bilateral partners and regional organizations. CAR's high level of dependence on numerous development partners to provide long-term support threatens fiscal stability, economic growth, and the consolidation of the peace process.

**Despite recent positive developments and a climate of cautious optimism following the peaceful presidential election of 2016, CAR remains a fragile state.** CAR's fragility has a strong cyclical aspect, as each unresolved crisis lays the foundation for the next. Escaping this self-reinforcing equilibrium and achieving robust and sustainable poverty reduction will require addressing deep structural challenges, including regional inequalities and the limited presence of the public administration outside Bangui. To accomplish this complex and difficult task, the government will need to fully leverage its human and natural capital while strengthening its public institutions, and Section II examines relevant lessons from the experience of other post-conflict countries. As the proper sequencing of reforms is especially vital in a context of limited institutional capacity, Section III presents a quantitative assessment of the long-term impact of several policy alternatives currently being considered by the authorities.

## BREAKING THE CYCLE OF CONFLICT AND INSTABILITY

*The Central African Republic (CAR) has experienced successive cycles of violence and conflict. Since gaining its independence from France, CAR has completed just two peaceful transitions of power, one in 1993 and one in 2016. The country's most recent major conflict began in early 2013 and remains unresolved, leaving an impoverished and traumatized population exposed to further exploitation by armed groups. The central government currently controls only about 40 percent of the national territory, and numerous armed groups are active across the country. Reestablishing the rule of law, building a capable bureaucracy, and laying the foundation for sustainable growth and poverty reduction will require a carefully calibrated policy agenda. Drawing on lessons from the experience of other post-conflict countries could enable the government to formulate an effective strategy for addressing CAR's extensive development needs in a context of severe capacity limitations and tight budget constraints.*

**The political and institutional fragility of the CAR reflects its history, marked by a weak institutional effectiveness.** The public administration displays the superficial aspects of effective governance—organizational charts, ranks, official documents, bureaucratic procedures, etc.—but lacks both the institutional incentives and substantive

capabilities necessary to execute its core functions. This situation, known as “isomorphic mimicry,” reflects both cynicism and manipulation by leaders who deliberately prioritized the image of good governance over actual administrative competence and the lack from reformers' side of an accurate sense of the time and effort required to develop an effective public sector.

## BOX 2.1 CAR Fragility Assessment

**C**AR's state fragility stems from a complex set of causes. A 2015 World Bank Fragility Assessment, prepared with support from the UN and CAR's bilateral partners, identified six key drivers of fragility:

- 1. A lack of social cohesion at every level of society.** Pervasive mistrust between communities, ethnic and religious groups, and state and non-state actors contributes to cycles of violence and enables ruthless leaders to capitalize on unresolved grievances.
- 2. The concentration of political power among a small elite with little popular legitimacy.** CAR's political institutions do not effectively incorporate the democratic preferences of citizens into public policy, and its public administration lacks the capacity to provide an adequate supply of public goods and services. Consequently, the state is widely perceived as distant, abstract force controlled by an insular elite.
- 3. Socioeconomic and political disparities between Bangui and the rest of the country and between the eastern region and the northern, southern and western regions.** Political power is concentrated in Bangui, as is the supply of public goods and services. The inability of the state to provide public services outside the capital or ensure security across the national territory has exacerbated ethnic, regional, and class grievances and facilitated the emergence of armed groups.
- 4. Elite capture of scarce natural resources.** Former governments and armed groups have a long history of exploiting the country's gold and diamond reserves for private gain.
- 5. Impunity.** The failure to punish war criminals or provide justice to victims of violence has created an environment of impunity that contributes to vicious cycles of conflict and revenge.
- 6. Persistent insecurity.** The government's inability to provide basic security contributes to multiple forms of criminality, including weapons trafficking, illegal diamond- and gold-mining, banditry, extortion, and poaching.

Consequently, CAR and its development partners now face the daunting challenge of implementing an urgent and far-reaching reform agenda through a set of weak and unstable public institutions. As the international literature demonstrates, pushing fragile states to adopt reforms too quickly, even if those reforms are necessary and desirable, risks overwhelming and even damaging the limited capacity of the public sector. This chapter reviews CAR history to identify the root causes of its fragility (Box 2.1), and then looks at the experience of other countries that went through similarly lengthy fragility periods to identify entry points to start breaking the cycle of conflict and fragility.

## 2.1 The Drivers of Fragility and Instability in CAR Are Deeply Rooted in Its History<sup>6</sup>

**As early as the fifteenth century, the area that is now CAR was subject to large-scale systematic violence.** The northern and eastern parts of the territory were subject to military incursions from powerful sultanates in Chad (Waddai) and Sudan (Darfur). During the nineteenth century, the development of

<sup>6</sup>This section is a quote from CAR Systematic Country Diagnostics.

new slave-trading routes expanded slaving raids deep into the interior, weakening social cohesion and forcing people to seek refuge in remote and inaccessible regions. By the late precolonial era, CAR was only sparsely inhabited. Various ethnic groups lived in villages scattered across the territory, often regarding each other with profound distrust.

**The colonial period laid the foundation for state institutions, but violence and discrimination undermined the process of state formation.** European colonial powers arrived in the mid-1880s, and in 1906 the territory of Oubangui-Chari was declared a French colony. The French invested little in local infrastructure and institutions, instead governing through a system of concessions to private companies. These companies demanded that the local population produce rubber and contribute tax revenue, and communities that failed to meet these demands were punished severely. While the French colonial government attempted to establish the basis for an effective political and administrative state, these efforts came later and were less vigorous than in other French colonies. During the colonial period, urban centres were established, a road network was built, and new crops such as cotton, coffee, and palm oil were introduced.

**The initial post-independence period was marked by regimes that promoted economic development, but also reinforced the patronage systems and authoritarian governance of the colonial era.** CAR achieved independence from France in 1960. However, the new country's social contract was not based on the premise that citizens would pay taxes to the government in exchange for public services and security, but rather that the state would continue to violently exploit the population for the benefit of a small but powerful elite. CAR's first post-independence leaders, David Dacko and Jean-Bédél Bokassa, attempted to build the capacity of public

institutions and promote social and economic development, but both did so in the service of a one-party state predicated on clientelism and exploitation.

**Bokassa's rule was especially brutal and corrupt, but even after he was deposed in 1979 CAR's administrative systems and social institutions continued to deteriorate, and would-be rulers increasingly appealed to ethnic identity as the basis of political support.** By the late 1990s, rival national leaders had begun exploiting local conflicts and enlisting criminals and militia groups in a struggle for dominance. Shifting alliances between political leaders, rebel movements, militia groups, and criminal organizations resulted in a complex pattern of factional violence and inter-community grievance that continues to undermine national cohesion.<sup>7</sup>

**Three military mutinies between 1996 and 1997 catalysed a violent political conflict that led to a bloody coup attempt in 2001 and culminated in a 2003 rebellion in which President Angel-Félix Patassé was ousted by François Bozizé.** In 2004, rebel groups in the north launched a civil war against the Bozizé regime. Peace agreements were negotiated in 2007 and 2008, but disputes regarding their implementation and the failure of the subsequent DDR process<sup>8</sup> plunged the country into a renewed conflict in 2012. Rebel groups formed the Séléka Coalition under the leadership of Michel Djotodia and advanced on Bangui. Djotodia ultimately overthrew Bozizé and became president in 2013.

**After taking power, Djotodia attempted to dissolve the Séléka, but most of its component groups refused to disarm, becoming known as the ex-Séléka.** Though the Séléka was largely composed of Muslims and members of pastoralist

<sup>7</sup> Chauvin and Seignobos, 2013.

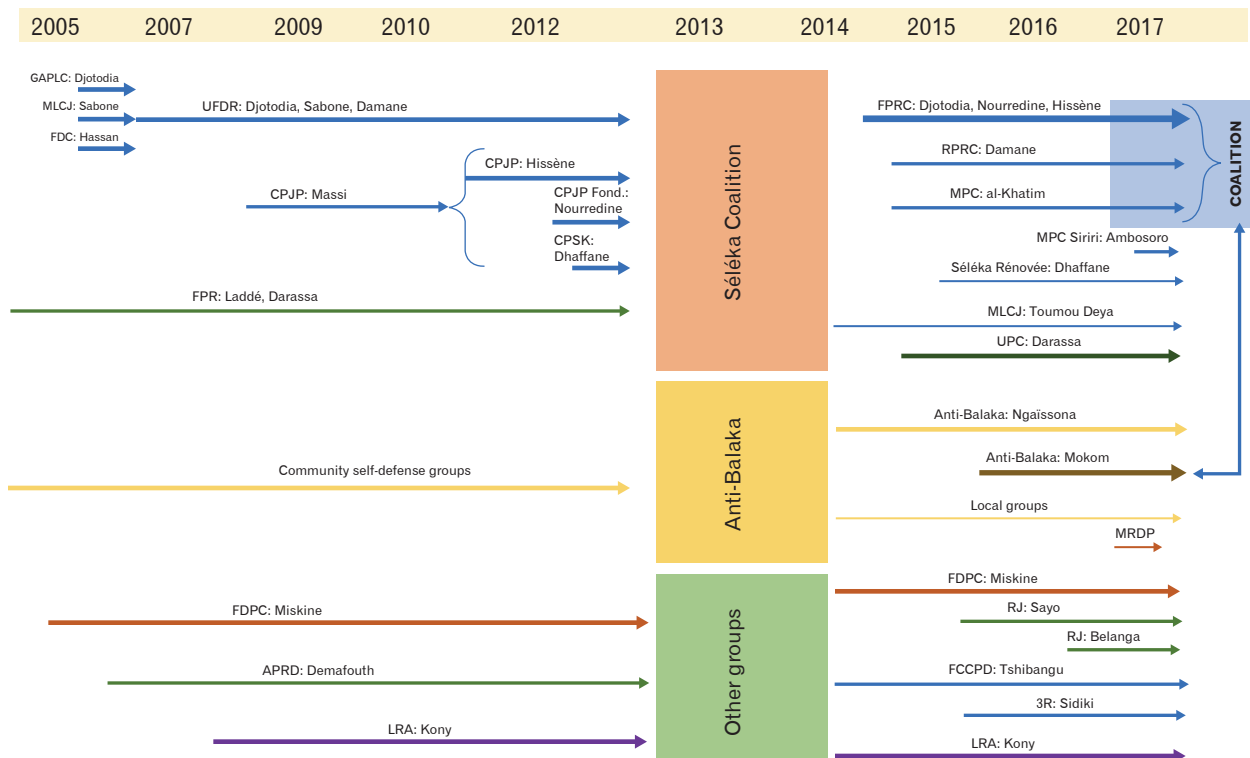
<sup>8</sup> *Fragility Assessment*, World Bank, 2016.

groups, the coalition was driven primarily by political objectives. By contrast, the ex-Séléka strongly identified with the interests of Muslim pastoralists and leveraged pre-existing conflicts with other ethnic and religious groups into an escalating cycle of inter-community violence. Christian and animist farming communities responded by forming or scaling up local self-defence militias, which became known collectively as the anti-balaka. The increasingly ethnic and sectarian nature of the conflict resulted in widespread atrocities against civilians, in some cases verging on genocide. As the fighting dragged on, armed groups fragmented and proliferated (Figure 2.1), greatly complicating efforts to negotiate a resolution. Following an intervention by French and African Union forces in 2014, Djotodia

resigned. An interim government was established, and reconciliation process was launched, which culminated in May 2015 in the Bangui Forum.

**The forum set the country on a path toward elections and a return to constitutional order.** A new constitution was adopted by popular referendum in December 2015, receiving 93 percent of the vote with 38 percent of eligible voters participating. The new constitution expanded the power of the legislature, established a Senate to complement the existing National Assembly, and set a two-term limit on the presidency. Former Prime Minister Faustin Archange Touadéra won the presidential runoff election in February 2016 with 62 percent of the vote. Incoming Prime Minister Simplicie Sarandji named several

**FIGURE 2.1** The Proliferation of Armed Groups in Central African Republic, 2005–2017



Source: Nathalie Dukhan, 2017. Splintered Warfare. Alliances, affiliations and agendas of armed factions and politico military groups in the Central African Republic. The Enough Project.

of the president's former rivals to the 23-member cabinet formed in April 2016, a move hailed as an important step toward political inclusiveness. The government was reshuffled in September 2017 to incorporate representatives from a wider range of political factions and armed groups.

**While the Bangui Forum and the elections formally put an end to the transition, CAR is not yet a post-conflict country.** The security situation has been deteriorating since mid-2016, and the continued fragmentation of armed groups has contributed to rising violence. Although the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA) is unpopular among some segments of the population, it remains vital in the absence of effective domestic defense and security forces. Numerous factional groups continue to perceive violence as a more expedient means of advancing their interests than engagement in the revamped political process. Until the government can either integrate these groups into national politics or pacify them through the lawful actions of an effective national security apparatus, MINUSCA's continued presence will remain necessary.

**Many armed groups have complex or ambiguous objectives, which often combine elements of self-defense, community representation, and control over resources.** Some armed groups are essentially organized crime networks that exist for financial gain, while others are self-defense groups fighting for specific ethnic or territorial constituencies. Both types may exploit local grievances to gain legitimacy, but they tend to have very limited political or ideological objectives, if any. The anti-balaka are typically based in specific villages or regions, while ex-Séléka groups such as the Union for Peace in CAR (*Union pour la Paix in Centrafrique*, UPC) attempt to secure control over the transhumance corridors

used by pastoralists. Though ostensibly defensive, both the anti-balaka and UPC have repeatedly engaged in aggressive violence. The Popular Front for the Rebirth of CAR (*Front Populaire pour la Renaissance de Centrafrique*, FPRC) has close ties to Chad, and its stated goal is to secure the independence of the northern regions from the country. Though both are majority-Muslim ex-Séléka factions, the UPC and FPRC represent different ethnic groups and are engaged in a violent struggle for control over parts of the Ouaka and Haute-Kotto regions. In addition to these and other domestic armed groups, the Lord's Resistance Army (LRA) has been active in CAR since the late 2000s, when a renewed offensive by the Ugandan military pushed it across the border in search of safety and resources.

**Pacifying CAR's armed groups will require a pragmatic, multifaceted response combining coercion, sanctions, containment, and cooptation.**<sup>9</sup> The difficult task of establishing security is further complicated by the need to meet the expectations of political factions and armed groups that have already joined the political process. Moreover, the government must meet these expectations in a context of low public revenues, sluggish growth, weak institutional capacity, and extreme political polarization.

**Reestablishing the rule of law, building a capable bureaucracy, and laying the foundation for sustainable growth and poverty reduction will require a carefully calibrated policy agenda.** Stability is a prerequisite for development, but in an environment where the rule of law is weak, establishing stability requires the state to leverage the power of individuals over specific constituencies, which inevitably leads to corruption and rent-seeking.

<sup>9</sup>Schneckener, Ulrich 2009: Spoilers or Governance Actors? Engaging Armed Non-State Groups in Areas of Limited Statehood, SFB-Governance Working Paper Series, No. 21, Research Center (SFB) 700, Berlin, 2009.

However, uncontrolled corruption can also provoke instability by undermining public confidence in the government while encouraging interest groups to vie for control over public resources. Reasserting the rule of law will require the government to co-opt powerful interests without enabling corruption or elite capture. Public officials must be incentivized to serve the public, rather than advancing the personal interests of patrons or the parochial goals of specific ethnic or political groups. Finally, the government must progressively expand the provision of public goods and services, and explicitly link its actions to both the democratically expressed will of its citizens and their contributions to public revenue.

**A recent World Bank Systematic Country Diagnostic for CAR identified three necessary conditions for breaking the cycle of instability and conflict: establishing security, addressing grievances, and fostering equitable and inclusive social and economic development.** Persistent insecurity is arguably the most important obstacle to poverty reduction. Every new violent clash between armed groups creates additional displacement, destroys private property, erodes the state's capacity to provide services, and complicates the efforts of humanitarian agencies. Addressing grievances is vital to maintain long-term stability, as the effective provision of justice by public institutions delegitimizes violence. Equitable service provision, including social transfers, is also critical to reduce poverty, build human capital, and enhance the ability of households to engage in productive activities. Finally, promoting broad-based growth and job creation can weaken incentives to engage in violence and criminality for economic gain. However, ensuring stability and addressing grievances are preconditions for economic growth. As it strives to overcome a legacy of fragility and violence, CAR can learn important lessons from the experience of other post-conflict countries.

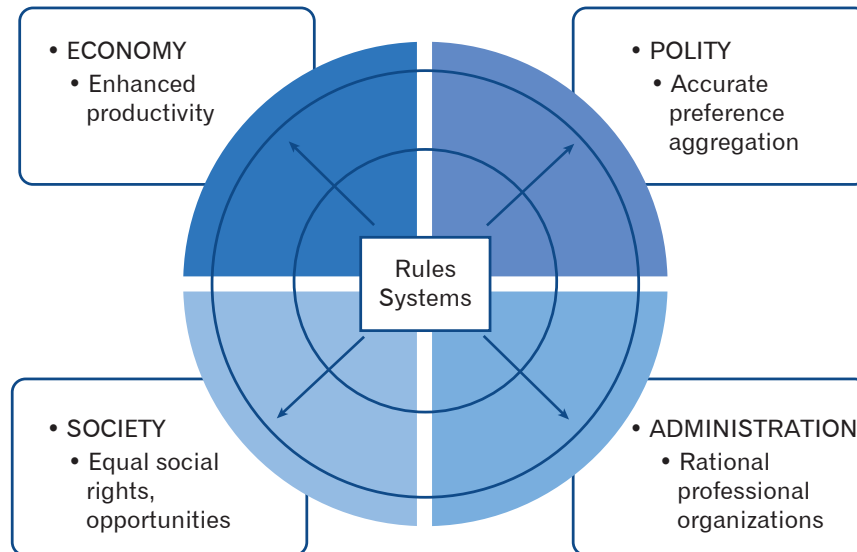
## 2.2 Building a Capable Public Administration: Historical Lessons

**Development can be defined as a fourfold process of economic, political, administrative, and social transformation.** As countries develop, their economies grow more productive, their public policies more accurately reflect the preferences of their citizens, their public administrations become capable of carrying out more complex tasks, and rights and opportunities become more equitably distributed. This process is driven by an evolving system of sociopolitical rules—the behavioral norms and expectations that underpin relationships between individuals, civil society, the private sector, and the state (Figure 2.2). During transitional periods, individuals will face multiple conflicting rules systems, creating stress and conflict that can derail the development process. In this context, the following section examines the administrative capability of CAR's government to affect the course of events across a wide variety of domains, including law and order, infrastructure, economic regulation, and contract enforcement.

**This analysis uses three sets of indicators to measure the different dimensions of administrative capacity.** These are the Fragile State Index (FSI) indicators, data from the Mapping Report on Human Rights Violations, and the World Bank's Worldwide Governance Indicators (WGI).<sup>10</sup> Projections based on historical values can shed light on how long it might take a fragile state like CAR to progress from its current level of administrative capability to an indicative threshold consistent with basic stability and

<sup>10</sup> However, the WDI indicators themselves might be sensitive to isomorphic mimicry. If so, they would assess how closely a country conforms to the superficial aspects of an effective public administration, rather than how effective its public administration actually is.



**FIGURE 2.2** The Fourfold Process of Development

Source: Pritchett and de Weijer, 2010.

adequate governance. These sets of indicators also tend to demonstrate that restoration and consolidation of a State capable of tackling fragility factors, restoring security, enforcing the rule of law and initiating and implementing good governance reforms are essential for strong, sustainable and inclusive growth as well as to poverty reduction.

### *Lessons from the Fragility States Index*

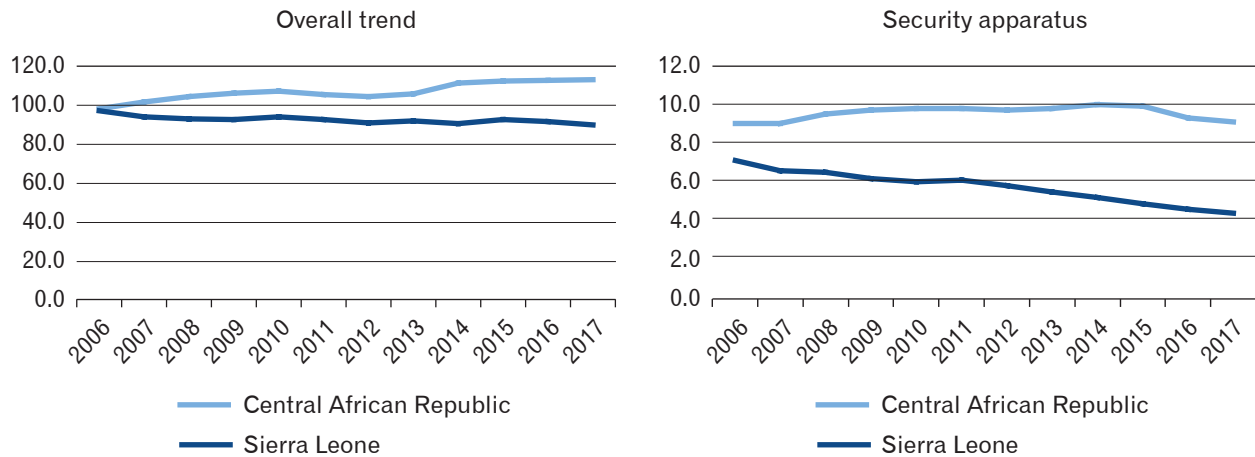
**For almost 25 years, the Fund for Peace has used an analytical framework known as the Conflict Assessment System Tool (CAST) to compile the FSI.** The CAST framework is designed to measure the vulnerability of states to collapse, and it can be applied to pre-conflict, conflict, or post-conflict situations. The methodology uses both qualitative and quantitative indicators, relies on publicly available data, and produces quantifiable results. The FSI comprises twelve risk indicators divided in four categories: cohesion indicators, economic indicators, political indicators, and social indicators. Four FSI

indicators are especially relevant to CAR: (i) the security apparatus, (ii) economic decline and poverty, (iii) public services, and (iv) human rights and the rule of law. Higher FSI indicator scores imply greater vulnerability to state collapse. Countries are ranked according to their aggregate FSI scores, and lower global FSI rankings are correlated with high poverty rates, highlighting the fundamental importance of security to sustainable poverty reduction.

**The “security apparatus” indicator measures security threats to a state.** It reflects violent incidents such as battles, combat fatalities, rebellions, mutinies, coups, and terrorism. It also includes organized crime and criminal homicides, and the presence of state-supported paramilitaries, independent militias, mercenary groups, and other potential combatants. While large-scale conflict has now ceased, CAR’s security situation remains extremely tenuous. Despite the presence of elected authorities in the leadership of the country, the central government currently controls only about 40 percent

FIGURE 2.3

### Aggregate Fragile States Index Scores and “Security Apparatus” Indicator Scores, Central African Republic and Sierra Leone, 2006–2017



Source: FSI database.

of the national territory, while armed groups continue to control much of the national territory and relations between communities remain tense. In 2017, CAR ranked 176th out of 178 countries on the security apparatus indicator, and its score deteriorated from 8.9 in 2006 to 9.0. By contrast, Ghana ranked 106th, with a score of 2.0, reflecting the country’s dramatic strides toward restoring security after the succession of many military coups between 1978 and 1981. Sierra Leone had a score of 7.0 as recently as 2006, but its score dropped to 4.3 in 2017 as the government continued to consolidate the security situation (Figure 2.3). The CAR’s poor performance under the “security apparatus” indicator results from the deterioration of the security situation on the ground where every new violent clash between armed groups creates additional displacement, destroys private property, erodes the state’s capacity to provide services, and complicates the efforts of humanitarian agencies. As rightfully highlighted in the recent Systematic Country Diagnostic for CAR, persistent insecurity is arguably the most important obstacle to poverty reduction.

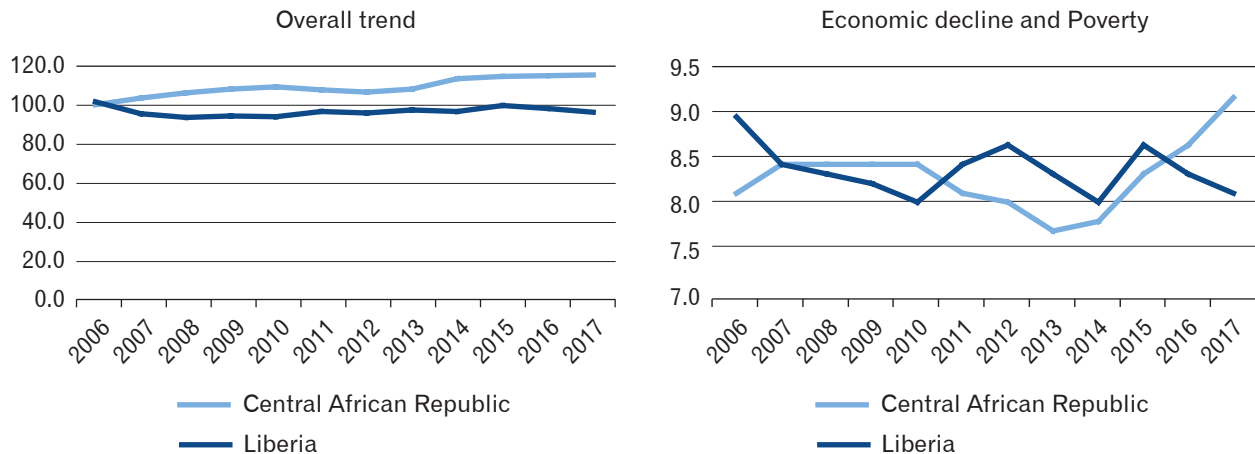
**The FSI’s “economic decline and poverty” indicator reflects the tendency of bleak economic prospects and high levels of poverty to erode the stability of the state.** Its sub-indicators include per capita income, gross national product, the unemployment rate, inflation, productivity, debt, poverty rates, and the business climate, and it accounts for shocks to commodity prices, trade revenues, and foreign investment, inter alia. Despite its abundant natural resources—which include uranium, oil, gold, diamonds, cobalt, timber, wildlife, large amounts of arable land, and robust hydrological systems—CAR remains one of the poorest countries in the world and one of the most unequal countries in Sub-Saharan Africa, with the region’s fourth-highest Gini coefficient.<sup>11</sup> CAR’s score on the “economic decline and poverty” indicator deteriorated from 8.1 in 2006 to 9.1 in 2017 (Figure 2.4).

**Liberia’s experience yields several important lessons for CAR.** As it attempted to overcome its own

<sup>11</sup> World Bank, Policy Note, Poverty, 2016 and World Development Indicators 2015.

FIGURE 2.4

### Aggregate Fragile States Index Scores and “Economic Decline and Poverty” Indicator Scores, Central African Republic and Liberia, 2006–2017



Source: FSI database.

history of fragility, conflict, and misrule, Liberia’s “economic decline and poverty” indicator score gradually improved from 8.9 in 2006 to 8.1 in 2017 (Figure 2.4). This trend reflected the country’s gradual economic recovery after the end of its second civil war in 2003, as well as a return to competent macroeconomic management under the transitional government and the administration of former President Ellen Sirleaf Johnson. It also suggests that, if peace is fully restored and maintained, more than a decade of sound economic policies will likely be required for CAR’s economic and poverty indicators to approach Liberia’s current levels.

**The FSI’s “public services” indicator measures the government’s ability to execute its core functions and serve the needs of its citizens.** The indicator encompasses access to healthcare, education, and water and sanitation, as well as transportation and electricity infrastructure. It also reflects the state’s ability to protect its citizens from violence by providing effective police and security services. The indicator also accounts for the distributional equity of public service provision across household income levels, between regions, and between rural and urban areas.

**CAR’s protracted security crisis damaged the state’s already weak capacity to provide essential public goods and services.** Due to intensifying insecurity and the breakdown of the civil service payroll system, by end-2016 only an estimated 5 percent of civil servants remained in postings outside of Bangui. The insecurity has led several officials and state agents in the provinces of the country to abandon their posts. Unpaid teachers left their posts, school facilities were looted or destroyed, and teacher recruitment and training were disrupted. The formal school system effectively ceased to function for two full academic years, and some schools did not resume normal operations until early 2015. The crisis also undermined CAR’s healthcare system. Approximately 28 percent of health facilities have been either damaged or destroyed, or cannot function due to insecurity or a lack of medical supplies and equipment. The healthcare system suffers from a deficit of around 2,000 qualified personnel, and provincial healthcare facilities face especially acute shortages of doctors, midwives, qualified nurses, and even nursing assistants. Nationwide, approximately

2 million people are food insecure, food reserves in rural areas are still 40–50 percent below the pre-crisis average, and thousands of children under the age of five suffer from severe, acute, or moderate malnutrition. Aside from donor-funded programs, social protection systems for poor and vulnerable groups are almost nonexistent. Infrastructure remains extremely limited. In 2010, the entire country had less than 25,000 km of roads, and by 2015 mobile telecommunications networks covered only 59 percent of the population.

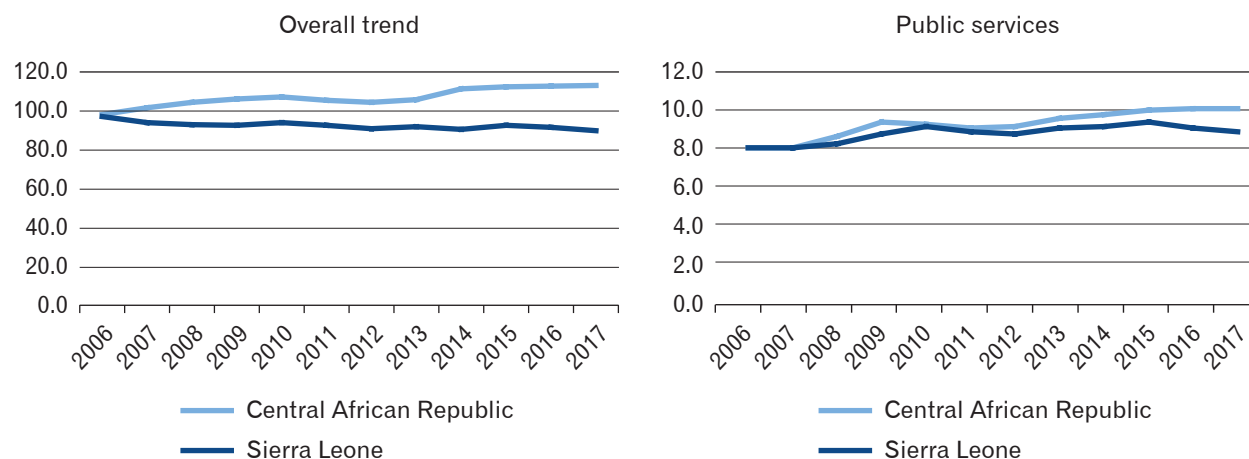
**The FSI indicator for public services worsened substantially between 2006 and 2017, rising from 8.0 to 10.0.** Sierra Leone’s experience underscore the challenge of restoring public services in a post-conflict country. Although its civil war ended in 2002, Sierra Leone’s FSI score for public services deteriorated from 8.0 in 2006 to 8.8 in 2017. CAR experienced an even more severe deterioration over the same period, and rebuilding the government’s capacity to provide vital public goods and services will be a long and difficult process.

**The FSI’s “human rights and rule of law” indicator examines the state’s ability and willingness to safeguard basic human rights and its respect for personal and political freedoms.** The indicator attempts to measure violations of legal, political, and social rights, including the rights of individuals, groups and institutions. It encompasses the harassment of the press, the politicization of the judiciary, the internal use of military force for political purposes, and the repression of political opponents, as well as incidents of politically motivated violence against civilians. CAR’s score on the human rights and rule of law indicator worsened dramatically from 7.5 in 2006 to 9.7 in 2017, having peaked at 10.0 in 2015 (figure 2.6). By comparison, Sierra Leone’s 2006 score was similar to CAR’s at 7.0, but steadily improved to 5.3 in 2017 as the country remained at peace (Figure 2.6).

**In addition to the FSI, a 2017 mapping report by the United Nations Human Rights Office of the High Commission for Human Rights (OHCHR) extensively documented human rights violations in CAR since 2003.** The report was based

**FIGURE 2.5**

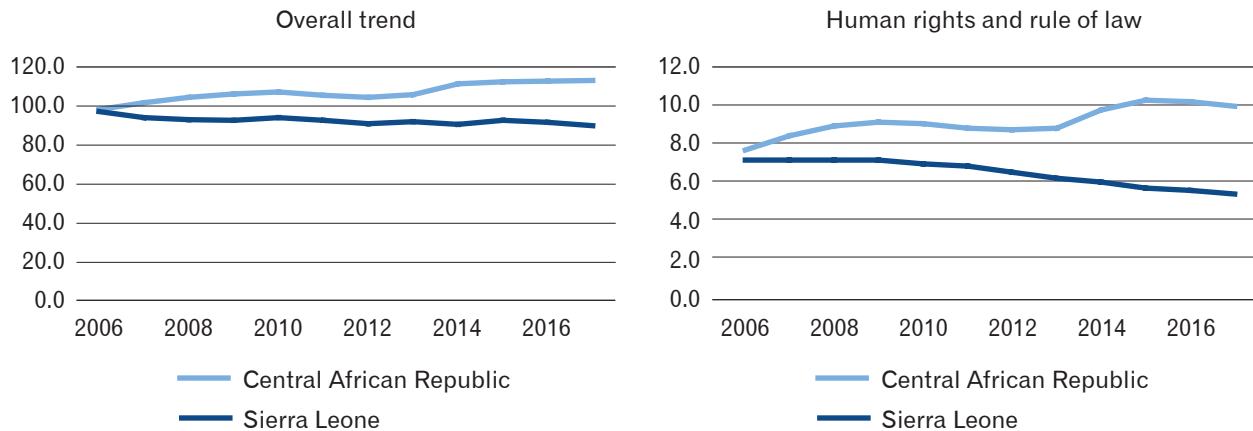
**Aggregate Fragile States Index Scores and “Public Services” Indicator Scores, Central African Republic and Sierra Leone, 2006–2017**



Source: FSI database.

FIGURE 2.6

### Aggregate Fragile States Index Scores and “Human Rights and Rule of Law” Indicator Scores, Central African Republic and Sierra Leone, 2006–2017



Source: FSI database

on recommendations made during an international seminar in Bangui in September 2015, which followed the Bangui Forum in May 2015. It was designed to support the commitment of the government and the international community to redress human rights abuses, provide justice for victims, and prevent unresolved grievances from provoking future conflicts.

**The mapping report identified 620 serious violations of human rights and international humanitarian law.**<sup>12</sup> These included 32 incidents between January 1, 2003 and May 8, 2005, 69 incidents between

<sup>12</sup>The mapping project team began by conducting a desk review of information from more than 1,200 public and confidential sources, including reports by the UN agencies, NGOs, the media, and academic researchers. The team also investigated previously unverified reports, visited the sites of alleged incidents, and conducted interviews with around 120 victims, witnesses, public authorities, religious and community leaders, human rights advocates, and alleged perpetrators. A gravity threshold was used to identify incidents revealing “serious violations of international human rights law and international humanitarian law,” which included killings, torture, sexual and gender-based violence, and cruel, inhuman, or degrading treatment, as well as other violations of fundamental human rights, including systematic discrimination.

May 9, 2005 and December 20, 2008, 158 incidents between December 21, 2008 and March 23, 2013, and 361 incidents between March 24, 2013 and December 31, 2015. The report revealed the extent to which CAR’s recent conflict was marked not only by serious violations of civil and political rights, but also by large-scale violations of economic and social rights, including rights to health, education, and housing. The key lesson to be learned is that violations of human rights have a negative impact in the CAR and is contributing to keeping the country as one of the least developed in the world. CAR ranked last in the UN’s Human Development Index, a tool which measures development indicators among 188 countries in the world.

### *Lessons from the World Bank’s Worldwide Governance Indicators*

**The World Bank’s Worldwide Governance Indicator (WGI) database confirms the importance of empowerment rights—specifically voice and accountability—to development in conflict-affected countries.** Since 1996, the WGI database

has recorded indicators of six key dimensions of governance: voice and accountability, political stability and the absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. The WGI measure the quality of governance in over 200 countries based on almost 40 data sources produced by over 30 organizations worldwide and have been updated annually since 2002. The “voice and accountability” indicator captures the population’s perceived degree of democratic participation, freedom of expression, freedom of association, and freedom of the press. Since the late 1990s, voice and accountability scores have tended to increase among CAR’s benchmark comparators, with the notable exception of Ethiopia, while CAR’s score has declined (Figure 2.7).

**Ghana and Burkina Faso have made steady progress in improving voice and accountability, and Liberia made dramatic gains after its 2005 election.** Ghana has peacefully transferred power between elected leaders and opposing political parties for almost two decades, due in large part to

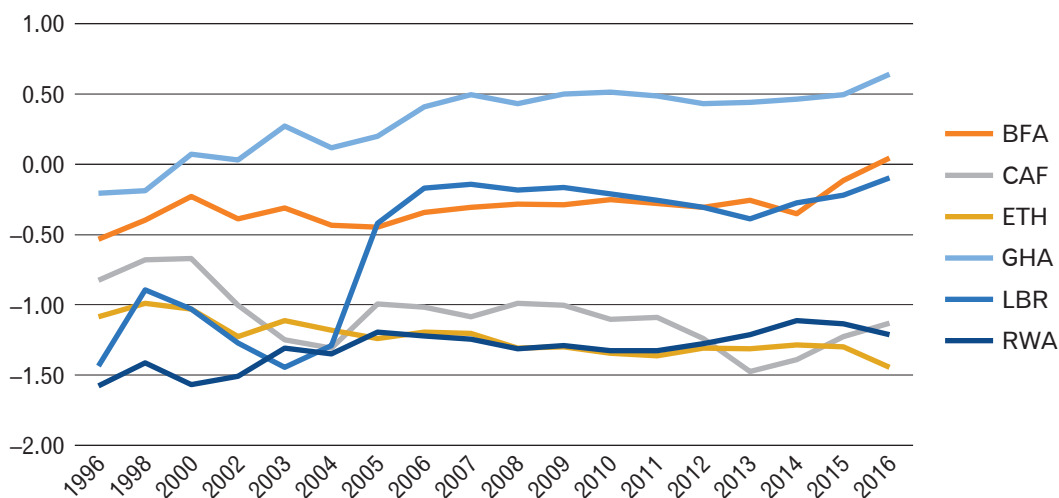
its robust civil society. In Burkina Faso, civil-society groups successfully challenged former President Blaise Compaoré’s attempt to alter the constitution to eliminate term limits, and after a volatile but brief transitional period, democracy was restored. In 2017, Liberia completed the first democratic transfer of power from an incumbent President to an opposition candidate. The highest WGI scores for voice and accountability in these countries highlight the vital role of civil society in promoting political stability and facilitating socioeconomic development.

### 2.3 Breaking the Cycle of Conflict and Instability: Lessons from the International Experience

**Though CAR faces profound challenges, the experience of other post-conflict countries can yield important lessons as it strives to overcome a legacy of violence and instability.** The peaceful elections in 2016, the positive outcome of the Brussels Conference, and progress in the ongoing

**FIGURE 2.7**

**Worldwide Governance Indicator Scores for “Voice and Accountability,” Central African Republic and Comparator Countries, 1996–2016**



Source: World Governance Indicators database (World Bank).

DDR and security-sector reform processes present cause for cautious optimism. In this context, examining the experience of comparable countries such as Burkina Faso, Ghana, Liberia, and Rwanda can enable policymakers to develop a reform strategy that leverages CAR's limited social, political, and economic assets to consolidate peace and security.

**During consultations conducted in Bangui as part of the preparation of this Economic Update, students and private-sector representatives identified Burkina Faso, Ethiopia, Ghana, Liberia, and Rwanda as CAR's aspirational peers.** While these countries have unique histories and idiosyncratic features, each underwent a period of conflict or severe instability, and each has since stabilized. Together, their experience underscores the importance of actively promoting the development of civil society to consolidate democratic gains, strengthen public accountability, and enhance transparency, while adopting a pragmatic set of policy and institutional arrangements to gradually but persistently increase the quality of the public administration.

### *Lessons from Burkina Faso*

**Burkina Faso has a long history of political instability, coups, and autocratic rule.**<sup>13</sup> After achieving independence from France in 1960, President Maurice Yameogo quickly established a one-party dictatorship. President Yameogo was overthrown by Colonel Sangoule Lamizana in a 1969 military coup. Though his initial rule was highly autocratic, President Lamizana ushered in a brief period of political liberalization in the 1970s. However, after a succession of coups in 1980, 1982, and 1983, President Thomas Sankara assumed power and ruled until 1987, when he was killed in a final coup led by Blaise Compaoré.

<sup>13</sup> Quoted from Polity IV 2010 Report on Burkina Faso (<http://www.systemicpeace.org/polity/BurkinaFaso2010.pdf>).

**Faced with increasing domestic and international pressure to reform the political system, the Compaoré government ratified a new multi-party constitution in 1991.** Compaoré won the presidency in November 1991, though the election was marred by widespread claims of fraud and an opposition boycott. Major opposition candidates again boycotted the 1998 election, citing government intimidation and weaknesses in the electoral code, but Compaoré defeated two minor party candidates in an election that international observers described as substantially free and fair. In 1999, President Compaoré announced that he was establishing a consultative committee to further democratize the electoral process in Burkina Faso. The committee revised the electoral code, established an independent electoral commission, expanded the opposition's access to the state media, and sponsored a constitutional amendment limiting the presidency to two five-year terms. In October 2005, the Constitutional Council ruled that this term limit did not apply to Compaoré, as it had been enacted during his second term in office. Facing a divided opposition, Compaoré was reelected in November 2005 and again in November 2010.

**In 2014, President Compaoré attempted to alter the constitution to enable himself to remain in office for a fifth consecutive term.** However, powerful civil society movements—supported by some elements of the military—mobilized mass demonstrations demanding that Compaoré respect constitutional term limits. Following a brief political crisis, Compaoré was forced to resign the presidency on October 31, 2014. A transitional government organized peaceful elections a year later. Roch Marc Christian Kaboré won the election and was sworn in on December 29, 2015.

**The popular movement that diffused Burkina Faso's 2014 political crisis and maintained constitutional order was rooted in the country's**

**robust civil society.** For decades, Burkina Faso's civil society has consolidated its political clout and credibility. Labor unions are especially powerful in Burkina Faso, and grassroots youth organizations have successfully leveraged social media to support political mobilization. The strength of civil society has been vital to decreasing the involvement of the military in politics, consolidating empowerment rights, and promoting voice and accountability. While Burkina Faso continues to face major development challenges, freely contested elections are an increasingly well-established social and political norm, and civil society will continue to serve as an accountability system and a self-correction mechanism, allowing policymakers ample latitude for trial and error by providing a robust sense of public ownership over the policy process.

### *Lessons from Ghana*

**Like Burkina Faso, Ghana has experienced a series of coups, the first of which ousted President Kwame Nkrumah less than ten years after independence.** Nkrumah was succeeded by a military junta led by General Frederick Akuffo. In 1979, Flight Lieutenant Jerry Rawlings led a coup that ousted Akuffo and installed a civilian administration under President Hilla Limann.<sup>14</sup> The Limann government, however, quickly fell into public disfavor amid widespread allegations of corruption. Rawlings engineered a second coup in December 1981, which deposed the Limann government. Rawlings established a military government, banned all political parties, and launched an extensive reform program.

**As Ghana's political situation stabilized, the public increasingly called for greater political openness.** In 1992, the Rawlings government responded by adopting a new constitution and lifting the ban

on political parties in May. However, the opposition boycotted legislative elections held later that year, citing inadequate time to prepare their campaigns. Rawlings won presidential elections in 1992 and 1996, then stepped down in 2001 in accordance with the Ghanaian constitution's presidential term limits. Rawlings was succeeded by opposition candidate John Kufuor. Kufuor took office in January 2001 and, through the setting up of the Truth and Reconciliation Commission<sup>15</sup>, set out to promote national reconciliation among Ghanaians. The mandate of the Commission was to establish "an accurate and complete historical record" of alleged human rights violations and abuses related to the killing, abduction, disappearance, detention, torture, ill-treatment, and seizure of property during three periods of unconstitutional government between March 6, 1957 and January 6, 1993.

**Partisan infighting continued in 2004 and 2006 but remained largely within the bounds of conventional politics.** While political intrigue negatively affected the policy process, over time the government significantly reduced the involvement of the military in politics and reduced corruption. Since 2000, multiple peaceful transfers of power have yielded impressive economic dividends, and Ghana's reputation for stability has enabled it to attract substantial investment and build a diverse economy. Like Burkina Faso, Ghana faces significant challenges, but a strong civil society continues to reinforce political stability and democratic governance.

### *Lessons from Liberia*

**Liberia has a long history of political instability, civil war, and violence between competing ethnic groups and political factions.**<sup>16</sup> Liberia

<sup>14</sup> Polity IV 2010 Report on Ghana (<http://www.systemicpeace.org/polity/Ghana2010.pdf>).

<sup>15</sup> The National Reconciliation Commission Act, 2002.

<sup>16</sup> Ibid.



was established in 1821 as a homeland for freed US slaves. Despite hostility from the indigenous population, the small minority of Americo-Liberian settlers swiftly established themselves as the ruling political class in Liberia. Although indigenous groups comprised 95 percent of the population, they were politically and economically marginalized.

**Following violent unrest in the late 1970s, President William Tolbert was overthrown in a coup by Master Sergeant Samuel Doe in 1980.** President Doe's ten-year rule, which favored his indigenous Krahn ethnic group, was widely unpopular and marked by increasing levels of ethnic violence. Liberia's first civil war broke out in December 1989, and President Doe was executed. Liberia then descended into chaos, as numerous warlords competed for political power and economic resources. The Economic Community of West African States (ECOWAS) brokered a ceasefire in November 1990, but the interim government had little control outside the capital city of Monrovia. Most of the country was controlled by Charles Taylor, head of the National Patriotic Front of Liberia, and competing warlords. A brutal seven-year conflict ensued in which over 200,000 Liberians were killed and most of the population was internally displaced.

**Liberia's first civil war officially ended in 1996 with the Abuja Peace Accords.** Elections were held in July 1997, after most rebel groups had transformed their militias into political parties. Charles Taylor won the presidency with more than 75 percent of the vote, and his party won over three-quarters of the seats in the legislature. While opposition parties raised allegations of electoral fraud, international observers declared the elections free and fair, and all but one of the competing political parties eventually accepted the election results.

**Even after the 1997 elections, insecurity and factional fighting continued to plague Liberia.**

Many faction leaders made no serious attempts to reconcile their differences through the political process, and civil unrest increased. In 1999, rebel forces launched an insurgency in the north of the country. In early 2001, President Taylor remobilized 15,000 of his own former guerilla fighters to combat the insurgency. By 2002 the violence had spread to the outskirts of Monrovia, severely destabilizing the central government. The security situation continued to deteriorate, and by March 2003 over 100,000 displaced people lived in camps on the outskirts of the capital as rebel forces continued their march toward Monrovia.

**Under intense domestic and international political pressure, Charles Taylor resigned from office in August 2003.** A transitional government was formed, which included representatives from rebel factions and the former Taylor regime. Sporadic violence continued to plague the countryside, and factional groups actively resisted a UN-backed disarmament effort, but by late October 2004 the DDR process was largely complete. In November 2004, the leaders of the three largest factions signed an agreement disavowing violence and pledging to dissolve their paramilitary wings, which enabled them to run for office in the 2005 elections.

**Liberia's experience underscores the importance of controlling corruption and fostering a robust civil society in a post-conflict environment.** Despite its history of fragility and conflict, Liberia's International Country Risk Group score for corruption control rose steadily from 0 in the early 1990s to 1 in the late 1990s, 2 during the 2000s, and 2.5 after 2010. This trend appears to reflect a robust and consistent public demand to reduce corruption, as both Ellen Sirleaf Johnson, first elected in 2005, and her successor, George Weah, elected in 2017, campaigned on promises to fight corruption. Johnson Sirleaf's credentials as a former World Bank and

UN staff member made her an especially credible advocate for good governance. However, Liberia's bureaucratic quality remains extremely poor, reflecting its long history of weak governance and cyclical conflict. President Weah has called on members of the country's large diaspora to return and bolster the stock of human capital in both the private and public sectors. CAR faces a similar situation, and an appeal to qualified members of the diaspora to serve in the public administration could rapidly enhance its bureaucratic quality.

### *Lessons from Rwanda*

**Rwanda has emerged from genocide and state failure to become one of the world's leading economic reformers.** Rwanda's profound ethnic divisions can be traced back to its precolonial history, but multiple colonial powers deliberately exploited those divisions to entrench their dominance. In 1959, an increasingly politicized Hutu majority—with the support of the Belgian military—launched a revolt that overthrew the Tutsi monarchy. In September 1961, the Party of the Hutu Emancipation Movement (PARMEHUTU) won an overwhelming victory in a UN-supervised referendum. After Rwanda achieved independence from Belgium in 1962, PARMEHUTU leader Gregoire Kayibanda became the country's first president.

**In the postcolonial period, Hutu hegemony was maintained through the systematic persecution of Tutsis and the increasing subversion of democratic institutions to Hutu nationalism.** Amid rising ethnic violence in the early 1970s, Kayibanda was ousted by Major General Juvenal Habyarimana in a bloodless coup. President Habyarimana dissolved the National Assembly, abolished all autonomous political activity and reinforced the state ideology of Hutu supremacy. In 1975, Habyarimana established a one-party state dominated by Hutus

from his political base in the north of the country, which controlled Rwandan politics for the next fifteen years. In 1991, facing an insurgency from Tutsi-led rebels in Uganda as well as mounting political pressure from domestic Hutu opposition parties, Habyarimana declared his intention to reestablish a multiparty system. However, the Habyarimana government made only modest efforts at political liberalization.

**Rising ethnic violence ultimately led to the 1994 Rwandan genocide.** As the Tutsi-led military offensive escalated in early 1993, President Habyarimana signed a peace agreement that included sharing power with both the Hutu opposition and the Tutsi rebels. However, Habyarimana failed to implement the agreement, as extremists within the Hutu power movement began to dominate both the political discourse and government policy. Habyarimana was killed in April 1994 when his airplane was shot down as it approached Kigali airport. As the country descended into anarchy, Hutu militias began massacring Tutsis and Hutu opponents. A wave of violence engulfed the country, and over 800,000 Tutsis were killed. However, Tutsi-led rebel forces captured Kigali, driving the Hutu militias into neighboring countries, and established an interim government.

**Pasteur Bizimunga, a Hutu, became president in 1994, but real executive power was held by Vice President Paul Kagame, a former leader of the Tutsi insurgency.** Kagame became president in March 2000, and a new constitution ratified in June 2003 ended the interim government and established a basis for new elections. The government registered eight political parties, but banned the major opposition party, which it accused of promoting a divisive ideology. In August 2003, President Kagame won a landslide victory over two Hutu candidates. International observers reported that although the election was a positive step toward democratization, it was marred by numerous election irregularities

and political intimidation. President Kagame was reelected in 2010, winning over 93 percent of the vote in an election that international observers deemed highly problematic. In 2017, at the end of his second and ostensibly final term, Kagame altered the constitution to allow himself to remain in power until 2034.

**Over the past 20 years, Rwanda has achieved a remarkable transformation, from a failed state scarred by genocide to a world leader in structural reform.** However, Rwanda's democratic process remains deeply flawed. President Kagame ran unopposed in the 2017 election, and one of his most outspoken critics, Diane Rwigara, was placed under house arrest and barred from running for office. Rwanda's scores on indicators of voice and accountability, respect for physical integrity, and empowerment rights, are comparable to those of CAR, yet its scores for bureaucratic quality and corruption control are far higher. A sustained focus on improving the business environment has accelerated growth, while a robust social protection system continues to strengthen human development indicators. Nevertheless, the indefinite extension of Kagame's rule has heightened the uncertainty surrounding future transitions of power, casting Rwanda's future into doubt. It is imperative that policymakers in CAR draw the correct lesson from Rwanda's experience: although development does not require robust democratic institutions or the reliable enforcement of political rights,

fostering a strong civil society has proven highly effective in stabilizing social and political dynamics in fragile states, and respect for democratic processes diffuses the volatility inherent in one-party rule.

**The experience of these four comparator countries yields important lessons for CAR.** The stabilization of political systems in Burkina Faso and Ghana highlights the importance of fostering a robust civil society to anchor the democratic process. Liberia's history reveals how stable, credible political institutions that enjoy broad popular support are vital to enable conflicting interest groups to resolve disputes without resorting to violence. The country's return to democratic rule also underscores the importance of combatting corruption and ensuring accountability and transparency in the public sector. Finally, Rwanda's experience in the wake of the genocide highlights the dramatic progress that can be achieved when a government commits to structural reform and bureaucratic capacity-building. As CAR strives to overcome its legacy of violent conflict, drawing on these lessons can help policymakers craft an agenda for consolidating political stability, safeguarding essential human rights, and progressively expanding the government's ability to serve the needs of its citizens, calling on its Diaspora as needed. This will be necessary to implement the public policies discussed in the last part of this first edition of the CAR Economic update.



## THE SIMULATED IMPACT OF ALTERNATIVE POLICIES ON INCLUSIVE GROWTH AND POVERTY REDUCTION

*CAR's policy agenda must be carefully tailored to reflect the country's institutional fragility and limited administrative capacity. In this context, the following section presents a computable general equilibrium model for CAR, which is used to evaluate alternative reform scenarios in the mining, forestry, services, and education sectors. Under the first scenario, the government would adopt measures to boost industrial mining exports. Under the second scenario, the government would issue new forestry licenses, increasing forestry-product exports. Under the third scenario, the government would implement productivity-enhancing reforms in the service sector, accelerating economic activity and raising income levels among the poorest households. Under the fourth scenario, the government would boost public investment in education, increasing the number of skilled workers. While all four reform scenarios would accelerate growth, the increase in forestry activity projected under the second scenario would have by far the largest impact on inclusive growth, followed by the reforms to increase productivity in the service sector projected under the third scenario.*

**CAR's structural reform agenda must be carefully designed to account for the country's limited institutional capacity and history of conflict.**

The international literature yields important lessons to inform the pace and sequencing of reforms. Bazzi and Blattman (2014) find that rising public revenue from oil or minerals lowers the risk and length of war, which suggests that an increase mining and/or forestry activity could support the peace process, but only if resource revenues are properly managed. Miguel et al. (2004) find that inclusive growth tends to reduce conflicts in Sub-Saharan Africa. Collier et al. (2003) find that policies designed to promote social inclusion, such as public education, help reduce post-conflict risks and promote broad-based growth by signaling the government's commitment to a peaceful and inclusive society. Multiple studies also highlight the importance of business-climate reforms—including measures to clarify and enforce property rights—in reviving investment in the urban economy, which in CAR is dominated by the service sector.

**Policy changes can generate complex, indirect effects on economic activity across sectors and socioeconomic groups; by estimating these effects, a well-designed computable general equilibrium (CGE) model can inform sound policy decisions.** CGE models can project the impact of proposed reforms or shocks on a range of macroeconomic indicators, including the national accounts (growth, consumption, investment, and the fiscal balance) and the external accounts (exchange rates, the trade balance, the debt stock, and the current account). CGE models also can capture the distributive impact of a policy—a critical feature, as the successful implementation and long-term sustainability of economic policies depend in part on policymakers' ability to manage their distributive effects. This chapter uses CGE model for CAR to simulate the effects of four alternative policy scenarios. A

description of the model's methodology is included in a technical annex.

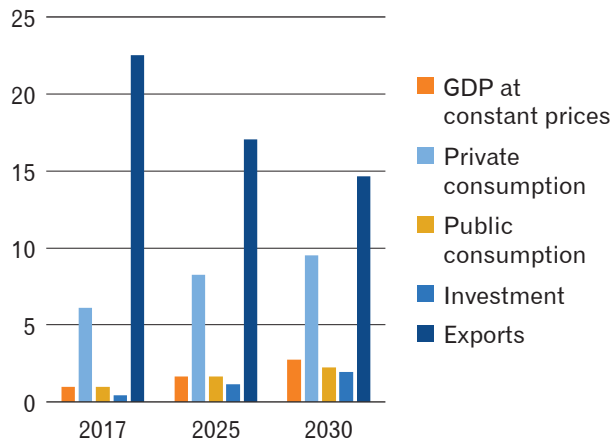
### 3.1 Scenario 1: Increased Mining Exports

**High transportation costs reduce CAR's competitiveness.** The road between Bangui and the port of Douala in Cameroon is the country's most vital trade link. However, the road is not fully paved, and poor road conditions impose substantial costs in terms of both delays and vehicle damage. These costs are exacerbated by the prevalence of administrative barriers, both formal and informal, which proliferated during the crisis, and by long customs-clearance times at the port of Douala. In addition to weak infrastructure and high administrative costs, security risks discourage transportation firms from operating in CAR.

**Under the first projection scenario, reducing transportation and trade costs is assumed to boost mining exports to the level that prevailed before the civil war.** Transaction costs are modelled as a traditional "iceberg effect": transportation is treated as a source of exogenous friction that is fixed and proportional to the value shipped. The simulation calibrates iceberg transaction costs based on a 70 percent increase in mining exports in 2017. Rising mining exports would cause the real exchange rate to appreciate, generating an increase in import volumes in response to the additional export income. Higher income from the expansion of trade would also support increased consumption. These demand effects would cause GDP to rise to about 1 percent above the baseline in 2017 and more than 2 percent above the baseline in 2030 (Figure 3.1), as rising incomes bolster domestic savings and investment. Under this scenario, the overall fiscal deficit would narrow sharply between 2017 and 2025 and vanish by 2030 (Figure 3.2).

**FIGURE 3.1**

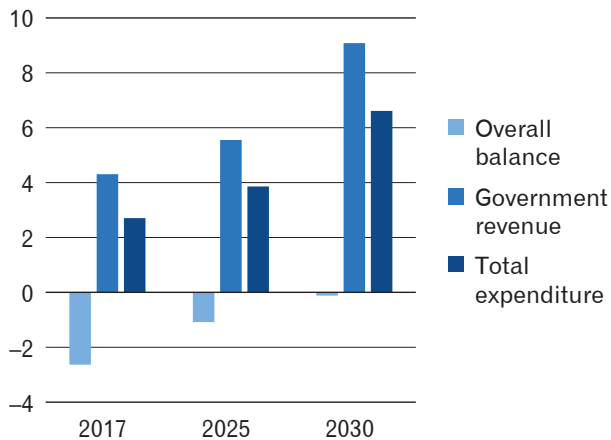
**GDP Growth Decomposition under Scenario 1 (% deviation from the baseline)**



Source: World Bank staff calculations.

**FIGURE 3.2**

**The Public Finances under Scenario 1 (% deviation from the baseline)**



Source: World Bank staff calculations.

**Increasing mining exports would have important consequences for other sectors.**

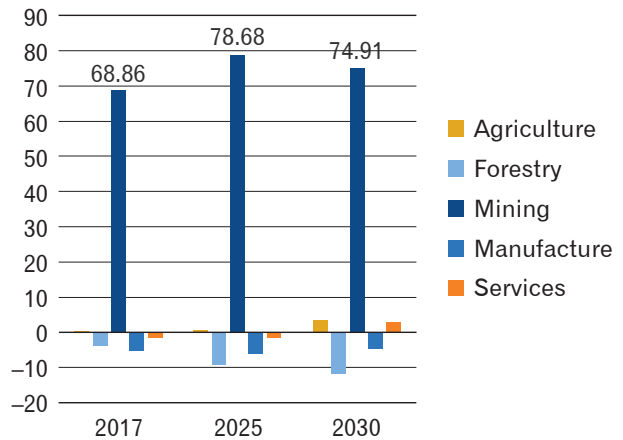
Production would decline in all sectors except agriculture (Figure 3.3), as rising mining exports would cause the real exchange rate to appreciate (Figure 3.4), reducing the competitiveness of tradeable goods such as forest products and manufactures. In addition, growing demand for labor and capital in the mining sector would increase production costs in other sectors. However, this effect is small for agriculture—despite its reliance on the same pool of unskilled labor demanded by the mining sector—as rising incomes would boost demand for agricultural products. The effect is also small for the service sector. Although services, like mining, are capital intensive, the substitutability of capital between the two sectors is limited.

**All income groups would benefit from increased mining exports, but households in the wealthiest decile would benefit far more than households at any other income level.**

By 2030, households from all ten income deciles would have higher incomes relative to the baseline (Figure 3.5). However, wealthier

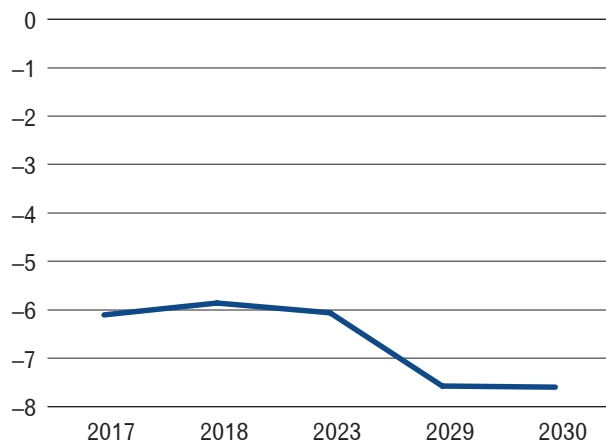
**FIGURE 3.3**

**Sectoral Growth under Scenario 1 (% deviation from the baseline)**



Source: World Bank staff calculations.

**FIGURE 3.4** Exchange-Rate Dynamics under Scenario 1 (% deviation from the baseline)



Source: World Bank staff calculations.  
Note: Negative values imply real exchange-rate appreciation.

households would tend to benefit much more than poorer ones, and a large premium would accrue to households in the top income decile. This regressive distribution of returns reflects the capital intensity of the mining sector, where more than 70 percent of value addition is captured by private capital owners

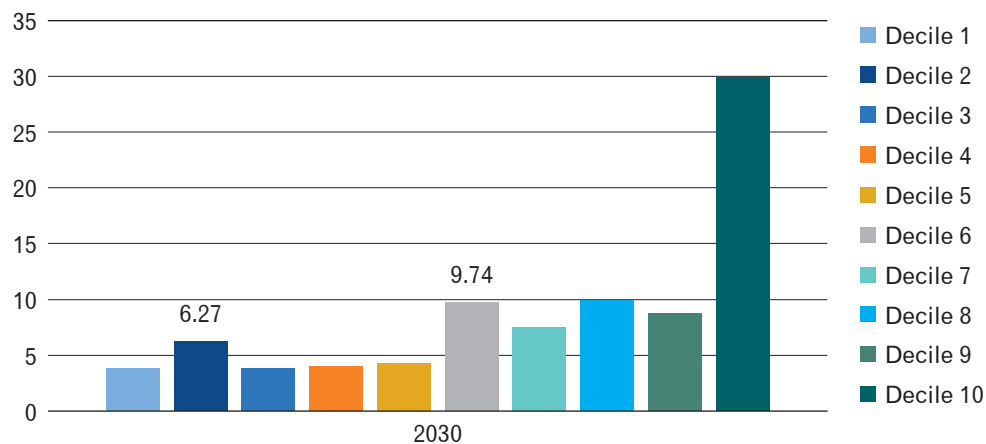
and the government. By promoting responsible artisanal mining alongside large commercial mining operations, the government could increase the returns that accrue to poorer households.

### 3.2 Scenario 2: Increased Forestry Exports

**Prior to the 2013 crisis, CAR's forestry sector represented over 6 percent of GDP, roughly half of total exports, and about 10 percent of public revenue.** It also employed a significant workforce in remote regions, providing about 4,000 direct jobs and 6,000 indirect jobs. Under the country's revenue-sharing framework, forestry companies were required to pay local communities about FCFA 1 billion per year. CAR has an estimated 5.4 million hectares of forested area: 3.8 million hectares in its southwest region and another 1.6 million in the southeast. Thus far, industrial logging has taken hold only in the southwest, and the country retains vast unexploited forestry potential.

**The second scenario simulates an increase in forestry-product output driven by the issuance**

**FIGURE 3.5** Real Consumption Growth by Income Decile under Scenario 1 (% deviation from the baseline)



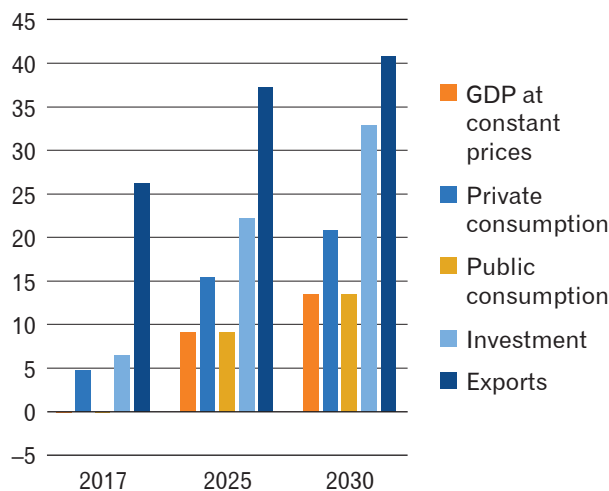
Source: World Bank staff calculations.



**of new forestry licenses.** It projects an increase in forestry exports necessary to balance the government budget by 2030. Under this scenario, production would rise by 70 percent above the baseline in 2017 and by more than 110 percent in 2030. Rising forestry exports would boost real GDP by about 5 percentage points above the baseline in 2017 and by almost 14 percentage points in 2030 (Figure 3.6). The model assumes that the government would use the additional revenue generated by increased forestry exports to reduce the fiscal deficit (Figure 3.7). The resulting improvement in the government's fiscal position would accelerate public debt repayment and limit the need for new borrowing. The consequent reduction in the crowding-out effect of public borrowing would increase private investment and boost growth.

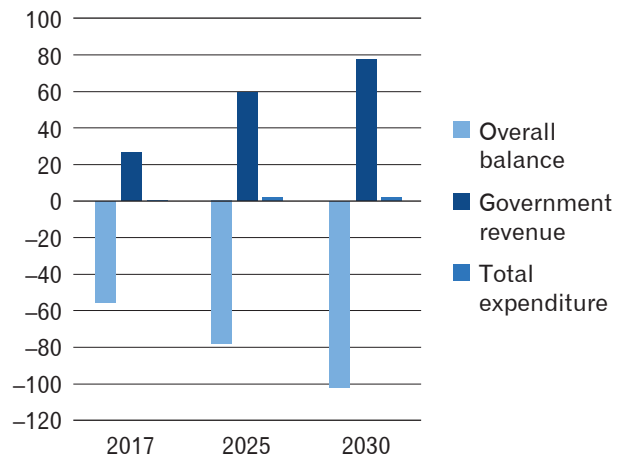
**Rising forestry exports would have sectoral effects similar to those caused by the increase in mining exports simulated under the previous**

**FIGURE 3.6** GDP Growth Decomposition under Scenario 2 (% deviation from the baseline)



Source: World Bank staff calculations.

**FIGURE 3.7** The Public Finances under Scenario 2 (% deviation from the baseline)



Source: World Bank staff calculations.

**scenario.** Real exchange-rate appreciation (Figure 3.8) would cause production to fall in other export-oriented sectors, such as mining and manufacturing, while agricultural output would remain largely unchanged (Figure 3.9). However, unlike in the previous scenario, rising forestry exports would increase production in the service sector.

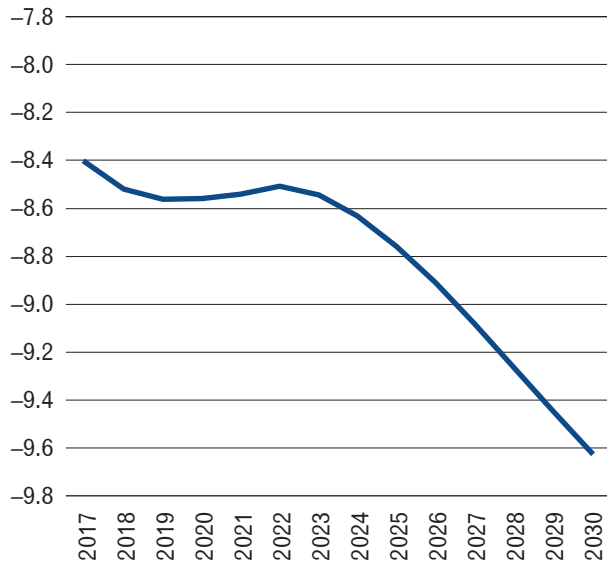
**The simulated increase in forestry production would benefit households in all income groups.**

Under this scenario, household income levels for all groups would be at least 15 percent above the baseline scenario by 2030 (Figure 3.10). Poorer households would benefit because unskilled labor represents about 45 percent of the value added by the forestry sector, and wealthier households would benefit because capital also represents 45 percent of value added in the sector.<sup>17</sup> In addition, rising government revenue under this scenario would lower

<sup>17</sup> The production tax equals about 50 percent of the value added by the forestry sector.

**FIGURE 3.8**

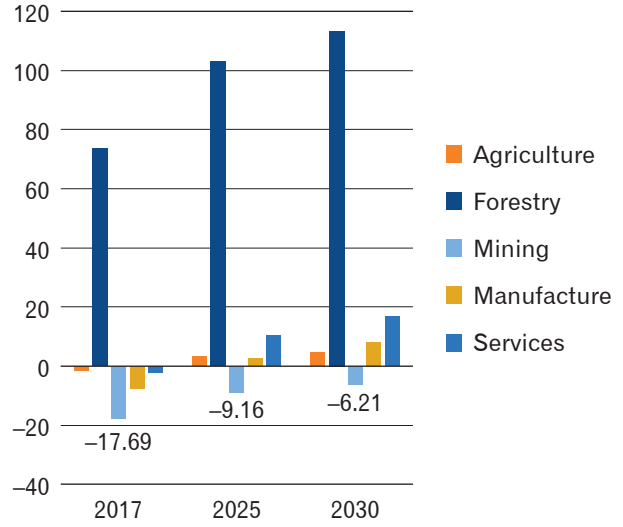
**Exchange-Rate Dynamics under Scenario 2**  
(% deviation from the baseline)



Source: World Bank staff calculations.  
Note: Negative values imply real exchange-rate appreciation.

**FIGURE 3.9**

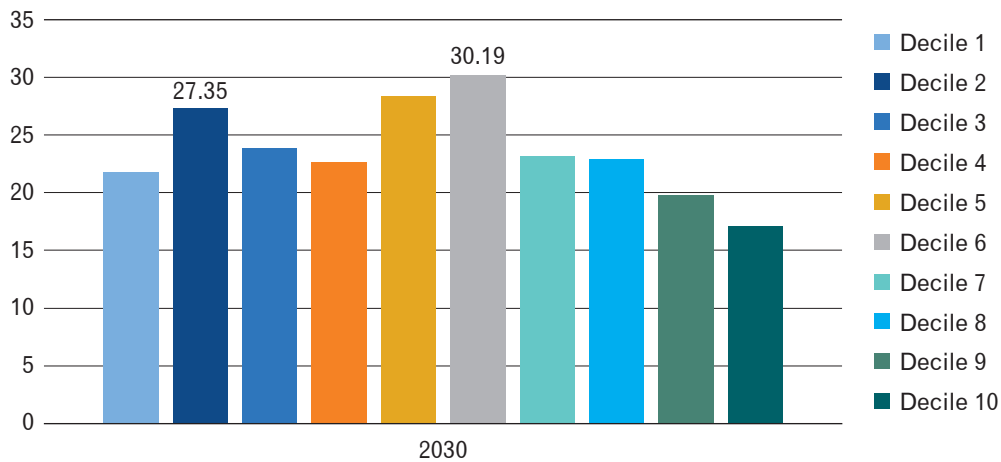
**Sectoral Growth under Scenario 2**  
(% deviation from the baseline)



Source: World Bank staff calculations.

**FIGURE 3.10**

**Real Consumption Growth by Income Decile under Scenario 2**  
(% deviation from the baseline)



Source: World Bank staff calculations.

the fiscal deficit, which would increase private investment and further boost the incomes of the wealthiest households.

### 3.3 Scenario 3: Increased Service-Sector Productivity

**The low productivity of the service sector is a significant obstacle to growth in CAR.** Basic public services such as piped water, electricity, and healthcare are limited in scope and inadequate in both quantity and quality. Deficiencies in water and sanitation services cost CAR an estimated US\$64 million per year, or nearly 4.5 percent of annual GDP, in additional healthcare costs and lost productivity.<sup>18</sup> The health sector suffers from low immunization rates, dilapidated infrastructure, a lack of qualified staff, limited geographical coverage, and inadequate monitoring and epidemiological surveillance capabilities.

**Implementing productivity-enhancing reforms in the service sector could accelerate economic activity and boost incomes among the poorest households.** A 10 percent improvement in productivity would increase value addition in the service sector by 8 percent over the baseline by 2030 and accelerate growth in other sectors, especially mining, manufacturing, and forestry (Figure 3.11).<sup>19</sup> Enhanced service-sector productivity would also add 5 percent to GDP by 2030 (Figure 3.12).

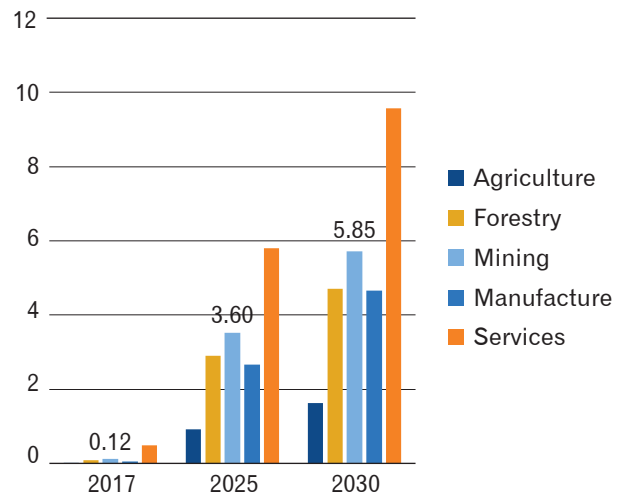
**Under this scenario, poor households would experience the greatest percentage increase in consumption.** Consumption among households in the bottom 40 percent of the income distribution would rise by 4.5 percent over the baseline by 2030,

<sup>18</sup> World Bank, 2016.

<sup>19</sup> The cost of the investment necessary to generate this improvement is not included in the simulation, and these results should be interpreted as representing the upper end of the possible effects.

FIGURE 3.11

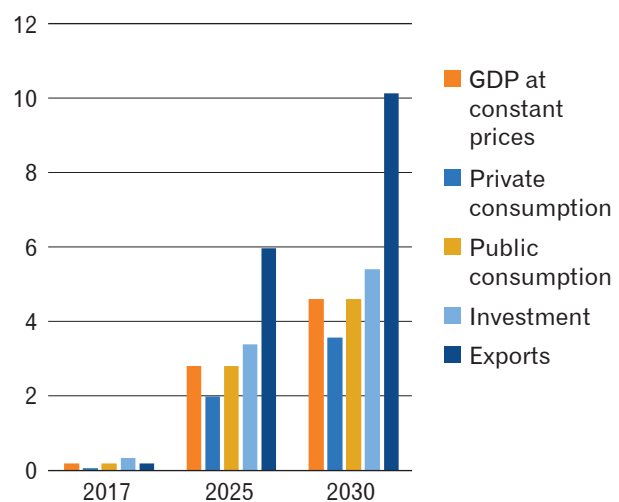
**Sectoral Growth under Scenario 3 (% deviation from the baseline)**



Source: World Bank staff calculations.

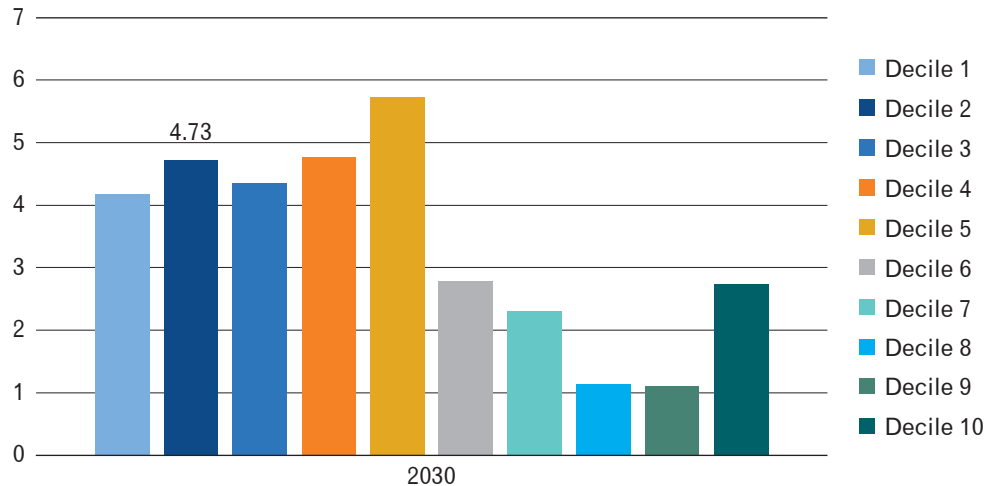
FIGURE 3.12

**GDP Growth Decomposition under Scenario 3 (% deviation from the baseline)**



Source: World Bank staff calculations.

**FIGURE 3.13** Real Consumption Growth by Income Decile under Scenario 3 (% deviation from the baseline)



Source: World Bank staff calculations.

while consumption among households in the top 60 percent would rise by 2.5 percent (Figure 3.13). The distribution of returns would favor lower-income households because unskilled labor would contribute 30 percent to the total increase in value added by the service sector, while skilled labor would contribute just 16 percent.

### 3.4 Scenario 4: Increased Investment in Education

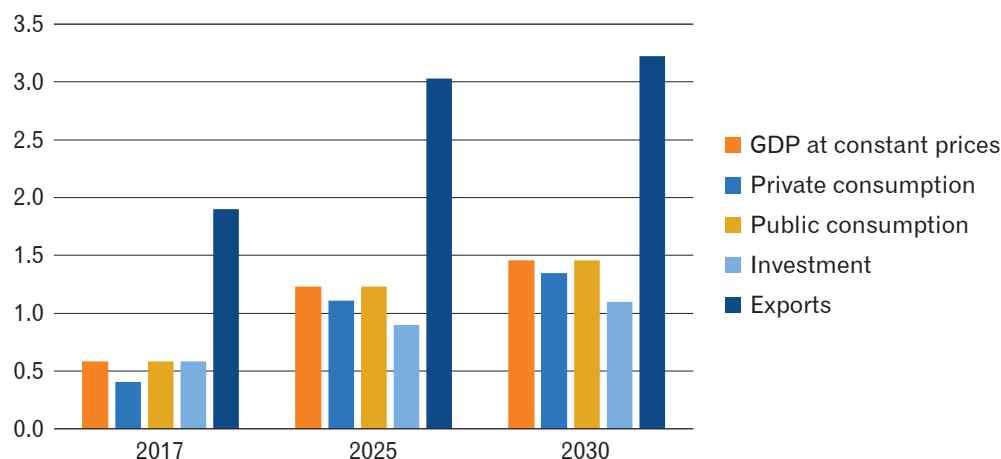
**Public investment in education in CAR has declined for over two decades.** Due to limited tax revenues and the low budgetary priority accorded to education, only 1.45 percent of GDP was devoted to the sector in 2005, the lowest share of any African country and far below the continental average of 3.7 percent. In 2012, public education spending declined further to 1.2 percent of GDP and represented just 7.8 percent of total spending. Education spending fell from 28 percent of public expenditures (excluding debt service) in 1996 to just 14 percent in 2005.

**Educational outcomes are extremely poor.** The gross primary enrollment rate is 87 percent, and the completion rate is just 45 percent, indicating serious internal dysfunction in the education system. The quality of the learning environment is generally very low: most schools lack adequate infrastructure, equipment and materials, and there are not enough teachers to meet demand. Many existing teachers are underqualified, and a growing number are parents recruited to serve as teachers on an ad hoc basis.

**Under the fourth scenario, an increase in public education spending would boost the number of skilled workers by 10 percent.** Given CAR's low education indicators and underdeveloped industrial and service sectors, increasing the number of skilled workers would raise GDP by just 2 percent over the baseline by 2030.<sup>20</sup> However, as skilled workers earn

<sup>20</sup> Because the simulation does not incorporate education costs, these results can be interpreted as the upper end of possible effects.

**FIGURE 3.14** GDP Growth Decomposition under Scenario 4  
(% deviation from the baseline)



Source: World Bank staff calculations.

higher wages than unskilled workers, aggregate household income would rise. Moreover, this effect would be progressive, and the income level of poor households would rise by 1.2 percent relative to the baseline (Figure 3.14). The increase in the supply of skilled workers would lower the average wage of skilled workers by about 3.5 percent relative to the baseline, while a commensurate reduction in the supply of unskilled workers would increase their average wage by about 0.4 percent.

**These results suggest that policymakers should focus on strengthening basic education and vocational training.** CAR's economy requires workers with basic levels of education and job-specific skills. Sustainably increasing the underlying productivity of the labor force will require investment in early childhood development and primary education. While more advanced levels of education will become increasingly valuable as the economy develops, given the country's current budget constraints the most effective approach will be to strengthen primary education and vocational training to equip workers with the basic skills and

specific competencies demanded by growing economic sectors such as forestry, mining, and services.

**The simulations presented above are subject to several important caveats.** First, while the simulations are consistent with the macroeconomic framework for CAR, they are primarily illustrative. Moreover, the model's results are determined in part by the assumptions and calibrating parameters described above and detailed in the technical annex. For example, the assumption that all surplus revenue arising from the simulated policy changes would be allocated to investment significantly influences the results. In addition, although the baseline scenario reflects the structure of CAR's economy as closely as possible, data quality and availability affect the accuracy of the model. Notwithstanding these limitations, the CGE model provides valuable insights to inform the government's policy agenda.

**While all four reform scenarios would accelerate growth, the increase in forestry activity under scenario two would have the largest impact by far, boosting GDP by almost 14 percent over the**

**baseline by 2030.** This certainly reflects the good regulation and administration of this sector despite the security challenges. Moreover, the distribution of returns to growth would be moderately progressive, with an especially positive impact on households in the second, fifth and sixth income deciles. In addition, public revenues would rise dramatically, exceeding the baseline by almost 78 percent by 2030, and exports would increase by more than 40 percent above the baseline, bolstering foreign reserves.

**Greater service-sector activity under the third scenario would have the second-largest impact on growth, pushing GDP 4.6 percent above the baseline by 2030, and the returns would be even more progressively distributed.** Households at all income levels would benefit, but the gains accruing to households in each of the bottom five income deciles would exceed the gains accruing to any of the top five. A growing service sector would also boost exports more than 10 percent above the baseline by 2030.

**Increased mining activity under the first scenario would have a relatively weak impact on growth, but this finding is sensitive to the model's specifications.** The CGE model examines capital-intensive commercial mining, as opposed to relatively labor-intensive artisanal mining. Furthermore, the simulated 70 percent increase in legal diamond exports is highly conservative, given the level of exports that prevailed before the 2013 crisis. While artisanal mining has the potential to generate significant improvements in employment and income, the artisanal subsector is overwhelmingly informal and unregulated. Moreover, artisanal mining is a potential driver of conflict and instability.

**Finally, the increase in skilled workers simulated under the fourth scenario would yield very modest economic gains, highlighting the inability of CAR's underdeveloped economy to make effective use of skilled labor.** The simulated increase in skilled workers has the weakest impact on macroeconomic variables of any scenario. Although skilled workers are in short supply, CAR's economy lacks sophisticated industrial and service sectors that could fully leverage the value of skilled workers. In this context, policymakers should focus on strengthening basic education and expanding access to vocational training.

**Although the simulations did not look at the agriculture sector, it can provide a solid economic opportunity and help to break the cycle of conflicts and instability.** An estimated 75 percent of the population depends on agriculture, and 85 percent of communes report agriculture as primary economic activity, and 35 percent report livestock as secondary economic activities. Within the primary sector, subsistence agriculture, livestock rearing and hunting and fishing are key activities contributing respectively 32, 14 and 8 percent to overall GDP in 2016. Yet, according to UN-OCHA, half the population (2.5 million people) needs humanitarian assistance and though CAR has a favorable environment for agriculture, close to 1.3 million people (28 percent of the population), are food insecure. Policies and reforms to promote a productive agriculture sector can therefore provide a solid economic opportunity and help break the cycle of conflicts and instability. This will be examined further in the upcoming editions of the Central African Economic Update.

# CONCLUSION

**D**espite a gradual improvement in macro-economic indicators and a climate of cautious optimism following the peaceful presidential election of 2016, CAR remains a fragile state. The 2013 conflict led to unprecedented levels of violence and caused a huge negative shock to an already low GDP per capita. Moreover, the conflict has not been decisively resolved. Reestablishing the rule of law, building a capable bureaucracy, and laying the foundation for sustainable growth and poverty reduction will require a carefully calibrated policy agenda. Adopting innovative approaches to public service delivery in health and education, and fully leveraging the assistance of external partners, the private sector, and civil society could enable the government to begin addressing CAR's extensive development needs in a context of severe capacity limitations and tight budget constraints.

**As it strives to overcome a legacy of fragility and violence, CAR can learn important lessons from the experience of other post-conflict countries.** Lessons from comparator countries underscore the importance of actively promoting the development of civil society to consolidate democratic gains and progressively reduce the influence of the military on institutions, while strengthening

public accountability, enhancing transparency, and progressively enhancing the quality of the public administration, leveraging the Diaspora as needed.

**CAR's structural reform agenda must also be carefully tailored to reflect the country's fragility.** The results of the CGE model indicate that, while multiple reform scenarios would accelerate growth, an increase in forestry activity could boost GDP well above the baseline. Greater service-sector activity could also accelerate growth, with an especially progressive distribution of returns. By contrast, an increase in commercial mining activity would have a very limited impact on the welfare of poor households. While the facilitating the growth of the artisanal mining subsector could potentially have a more positive effect on employment and income, artisanal mining in CAR is deeply problematic. Finally, a simulated increase in the number of skilled workers would have a marginal effect on macroeconomic indicators due to CAR's low levels of educational attainment and the limited capacity of its economy to leverage skilled labor. This finding suggests that, at least in the near term, focusing on improving the quality and accessibility of basic education and vocational training could have a greater impact on labor productivity and household income.

**CAR's political and institutional fragility reflects its long history of misrule.**

CAR and its development partners now face the daunting challenge of implementing an urgent and far-reaching reform agenda through a set of weak and unstable public institutions. As the international literature demonstrates, pushing fragile states to adopt reforms too quickly, even if those reforms are necessary and desirable, risks overwhelming and even damaging the limited capacity

of the public sector. In this challenging context, the government could begin to break the cycle of conflict and instability by adopting an innovative approach to delivering education and health services, designing a policy agenda that reflects the experience of other post-conflict countries, and prioritizing sectors that have the greatest potential to rapidly generate broad-based gains in employment and income, especially among poor and vulnerable households.



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# TECHNICAL ANNEX: DESIGNING A COMPUTABLE GENERAL EQUILIBRIUM MODEL FOR CAR

**T**he CGE model for CAR presented below is a single-country variation on the World Bank's global CGE model.<sup>21</sup> The model is calibrated based on a social-accounting matrix (SAM) comprising 24 economic activities, 24 sectors, 6 productive factors, and 10 household types. The CAR CGE model is recursive and dynamic: it explicitly models the convergence of prices and volumes to their new values. This approach links a series of static equilibria with a set of equations, which update, in every period, the main macroeconomic variables. The static block is presented first, followed by the dynamic block.

## *The Static Model*

**The static model is developed from the neoclassical structural-modeling approach pioneered by De Melo *et al.* (1982).**<sup>22</sup> As most of the model's underlying assumptions are common in the CGE literature, this section discusses only four

methodological aspects: (i) the production function, in order to highlight the mechanism through which productivity-enhancing investment in the agricultural sector affects the economy; (ii) the macroeconomic closure assumptions, in order to examine how additional revenues generated by various reforms are allocated and to assess their impact on economic performance; (iii) household consumption, in order to emphasize the distributional effect of structural reforms in different sectors; and (iv) international trade, in order to highlight the role of the Armington constant elasticity of substitution (CES) function and the small country-level assumption regarding the treatment of tradable goods.

**The model describes an economy with 24 sectors producing 24 commodities.** All sectors are assumed to produce under conditions of constant returns to scale and perfect competition, implying that the prices for all goods equal the marginal cost of production. Producers maximize their profits by minimizing production costs under the constraint of a multilevel production function. At the top level, total output is the sum of value added and intermediate outputs produced, following a Leontief production

<sup>21</sup> Van der Mensbrugge, 2005.

<sup>22</sup> The theoretical framework relies on neoclassical assumptions, including constant returns to scale and perfect competition, where firms maximize profits to determine output supply and factor demand. See, e.g.: de Melo and Tarr, 1992.

technology. At the second level, intermediate outputs are estimated by combining all products in fixed proportions, also per a Leontief structure, and total value added is obtained by aggregating the contributions of capital, labor, land, and natural resources.

**Factor markets are assumed to be perfectly competitive.** The labor market comprises 6 types of labor distinguished by education level and compensation structure: “unskilled” denotes workers with incomplete secondary education; “semi-skilled” denotes workers who have completed secondary education and who may have an incomplete tertiary education; and “skilled” denotes workers who have completed tertiary education. Workers in each of the three education levels are classified as either “salaried” or “non-salaried.” Each type of labor is assumed to be perfectly mobile between sectors, implying a uniform wage for each labor type across all sectors, which is determined by economy-wide labor supply and demand. The capital stock is fixed within each period, and demand determines how capital is allocated across sectors. In other words, capital is fully mobile across sectors, and the rate of return is the same for all sectors.

**The model includes 10 categories of households distinguished by income decile.** Households receive both wage and nonwage income, including remittances and capital gains. Remittances are denominated in foreign currency. Households use income for consumption, income-tax payments, savings, and transfers. The shares of income-tax payments and savings in total household income are assumed to be constant. The consumption of a product by a household is determined by a Stone and Geary linear expenditures system (LES) utility function.<sup>23</sup> This function decomposes the consumption

of a given product into incompressible and discretionary consumption. The allocation of household consumption across products depends on relative prices and income elasticities, which are sector-specific in this model.

**Macroeconomic closure rules determine how macroeconomic balances recover after a shock.** These closure rules specify how the model achieves: fiscal equilibrium (i.e., balanced government accounts), capital-account equilibrium (i.e., balanced investment and savings accounts), and external equilibrium (i.e., balanced transactions with the rest of the world). The CAR model includes specific closure rules for each equilibrium.

**The government earns revenue through production taxes, export taxes, import tariffs, sales taxes, and income taxes.** All tax rates are fixed at base-year levels. Public current and capital expenditures are also fixed as shares of real GDP. This implies that government savings (i.e., the primary balance) is endogenous and adjusts to clear the government balance. Foreign and domestic borrowing close the gap between public investment and public saving. The composition of public borrowing (i.e., the ratio of foreign borrowing to domestic borrowing) is fixed at the base-year value. Alternative government closure assumptions are included in the simulated energy- and transportation-subsidy reform scenarios.

**A savings-driven closure is assumed to fix the savings rates of all households and firms.** Aggregate investment—which, together with an exogenous rate of depreciation, determines the next period’s capital stock—adjusts to ensure that investment equals savings. The volume of available savings is determined by an exogenous level of foreign saving, endogenous government saving, and households who save a fixed share of their after-tax income. In this context, an increase in government revenue due to the removal

<sup>23</sup> Stone, 1954.

of subsidies would boost savings, stimulating current investment and accelerating future growth.

**External closure is achieved by adjusting the real exchange rate.** It is assumed that CAR is a price taker in international markets. International prices are exogenous, while the current-account balance equals (exogenous) foreign savings. Changes in the real exchange rate, and thus in domestic prices, generate corresponding changes in the volumes of imports and exports demanded to meet the current-account target. The main implication of this closure assumption in the context of CAR is that an increase in commodity exports causes the real exchange rate to appreciate, reducing the competitiveness of the non-commodity sectors—a classic symptom of “Dutch disease.”

**This model follows the Armington assumption of imperfect substitution between imports from different countries.**<sup>24</sup> Import demand is estimated via a nested CES function, which aggregates, at the first level, domestic and imported goods and, at the second level, imported goods from various trading partners. Export supply is symmetrically modeled as a constant elasticity of transformation (CET) function. At the top nested level, producers allocate their output to domestic or foreign markets according to relative prices; at the bottom level, exports are distributed to different destination markets. Trading partners identified in the 2015 SAM include the CEMAC member states and the rest of the world (ROW).<sup>25</sup> As CAR is a price taker in international markets, import demand and export supply do not affect global prices. In other words, international trade reflects the small-country assumption. Accordingly, import and export prices are exogenously determined.

<sup>24</sup> See Armington (1969) for further details.

<sup>25</sup> The calibrated version of this model includes only one trade partner, ROW.

## *The Dynamic Model*

**Although it has certain drawbacks, the recursive dynamic CGE model used in this study is easier to set up and solve than a model based on an inter-temporal optimization-resolution approach.**<sup>26</sup> The dynamic path follows the neoclassical growth framework (i.e., the Solow growth model), implying that the long-run economic growth rate is determined by three main factors: capital accumulation, the growth of the labor supply, and increases in productivity. The stock of capital is endogenous and depends on the historical rate of return to capital, while labor supply and productivity growth are exogenous.

**The capital stock in each period is the sum of depreciated capital from the previous period and new investment.** The capital stock is endogenous, since investment is determined by the available public and private savings in the previous period and the availability of external financing. The allocation of capital across sectors depends on the return to capital in each sector in the previous period. The maximum stock of labor available in each period increases with the growth rate of the working-age population (ages 15–64), which is obtained from World Bank population forecasts.

**For the final determinant of growth, the LINKAGE model assumes technological progress specific to each sector and factor of production.** Productivity changes are derived from a combination of variables, but they also involve a degree of judgement. First, agricultural productivity is assumed to be factor-neutral and exogenous, and is set equal to estimates from empirical studies.<sup>27</sup> Productivity in the manufacturing and service sectors

<sup>26</sup> See Van der Mensbrugge (2005).

<sup>27</sup> See, e.g., Martin and Mitra, 1999.

is labor-augmenting, and productivity growth is assumed to be persistently higher in manufacturing than in services. A baseline scenario is constructed from these assumptions before the simulations are run. In the baseline scenario, the GDP growth rate is exogenous.

### *Data Sources and Model Parameters*

**The model is solved year-by-year from the 2001 base year through 2030.** To generate a dynamic solution, certain assumptions are made regarding the evolution of the exogenous variables. Baseline growth is calibrated using the near- and medium-term assumptions of the World Bank's Macro-Fiscal Model (MFMod). Assumptions regarding the evolution of remittances, foreign direct investment, and the overall capital account are derived from IMF sources. Assumptions for years beyond the MFMod projection period, which ends in 2020, are based on trends for 2017–2020. The maximum quantity of labor available in each period reflects World Bank population projections for the 15–64 age cohort, but

the actual quantity of labor supplied in each period is determined endogenously by the model.

**The SAM, which is used to calibrate the CGE model, is a comprehensive data framework encompassing both social and economic indicators.** The SAM captures the interaction between production, income, consumption and capital accumulation by domestic and external institutions in a single square matrix. The SAM also establishes an initial equilibrium, in which every agent's expenditures must equal its receipts, in the form of equal column and row sums. Beyond the SAM, several external parameters are necessary to calibrate behavioral functions for consumer preferences, production technology, and commodity trade. This analysis uses the parameters provided by the Global Trade Analysis Project (GTAP) model.<sup>28</sup>

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<sup>28</sup>The GTAP elasticities appear to be consistent with the literature, as the agricultural subsectors have lower elasticities than the service subsectors.





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