Côte d'Ivoire: Selected Issues

COTE D'IVOIRE

SELECTED ISSUES

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CÔTE D'IVOIRE

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THE GOVERNANCE FRAMEWORK: CURRENT STATE AND THE WAY FORWARD¹

Côte d'Ivoire aspires to reach emerging market status in the foreseeable future. This paper assesses its governance framework and processes against such standards. While overall, recent and ongoing Public Financial Management and tax administration reforms have helped improve relative governance perceptions, Côte d'Ivoire must continue strengthening its governance framework with more holistic and comprehensive reforms, including to upgrade the rule of law and judiciary systems, as well as to bridge the perceptions gap with emerging market countries.

A. Motivation and Context

1. **Over the last decade, Côte d'Ivoire has increasingly focused on making the private sector the main engine of growth.** While the 2012–15 national development plan (NDP) initially focused on strengthening security and rebuilding the economy from a post-conflict situation, the 2016–20 NDP was more specifically targeted at developing the private sector (Côte d'Ivoire, 2015; Côte d'Ivoire, 2016; Box 1). Policy efforts have centered on improving the business environment through sound macroeconomic and fiscal policies, upgraded infrastructure, improved human capital, and structural reforms to streamline regulations and enhance the quality of government services to businesses.
2. **Within that strategy, improving institutions and governance was the first pillar of the authorities' 2016–20 NDP.** Measures to improve governance under the 2012–15 NDP mostly established the legal framework and institutions to address corruption and enhance transparency. Building on these measures, actions under the 2016–20 NDP centered on strengthening the quality of institutions, implementing e-governance, further developing the judicial system, enhancing transparency, and extending the legal framework for consumer protection.
3. **Governance reforms implemented since 2012 have laid a strong foundation, helping improve governance perceptions.** According to the Worldwide Governance Indicator (WGI) indices, Côte d'Ivoire's relative ranking on governance perception has improved since 2011, moving gradually toward levels in emerging market (EM) countries. This was particularly the case for government effectiveness and the regulatory framework (overlapping confidence intervals in Figure 1)—reflecting improvements in regulations pertaining to starting a business, dealing with construction permits, getting credit, paying taxes, and enforcing contracts.² The gap with EM remains somewhat larger for the rule of law and the voice and accountability indices.

¹Prepared by José Gijon, Dominique Simard and Frederic Lambert (all AFR).

²Including by introducing a law regulating all aspects of mediation as an alternative dispute resolution mechanism. See World Bank (2020).

Box 1. Key Governance Milestones Implemented Since 2012

While the government's 2012–15 NDP focused on strengthening security and rebuilding the economy from a post-conflict situation, the 2016–20 NDP centered more specifically on developing the private sector.

In the context of the **National Development Plan 2012–15**, the authorities:

- Ratified the UN convention against corruption in 2012.
- Created the anti-corruption brigade at the *Inspection Générale des Finances* in 2012.
- Instituted the Tribunal of Commerce and strengthened judicial capacities via recruitment and training.
- Established in 2013 the High Authority for Good Governance, the main anticorruption agency, and further reformed it in 2015 to strengthen its governance and operations.
- Instituted the National Secretariat of the Fight Against Corruption.
- Adopted a new mining code aligned with the Transparency Initiative.
- Adopted a law on the code of transparency in public finances.
- Strengthened governance in municipalities by launching a decentralization process in 2013.
- Adopted a law on access to information in 2013 and created the *Commission d'Accès aux Documents d'Intérêts Publics* in 2015.
- Adopted a law on competition.
- Adopted laws on e-commerce and against cyber-criminality.

In the context of the **National Development Plan 2016–20**, whose stated first strategic axis was to strengthen quality of institutions and governance, the authorities:

- Progressed in the implementation of e-government: the electronic filing and payment system is in place, along with the on-line case management system to process value added tax cash refunds; all ministries have been connected to the platform for the dematerialization of public procurement procedures.
- Installed the *Cour des comptes* in 2018 and reinforced it in 2019.
- Extended the requirements for asset declarations to elected local officials and senior civil servants.
- Adopted the law creating the Court of Cassation and the Council of State in 2018 and established the Court of Cassation in 2019. Under amendments to the constitution adopted on March 19, 2020, these entities will have the same status as the *Cour des comptes*; organic laws implementing this reform have been adopted by the council of ministers.
- Established the Superior Council of Magistrature in 2016.
- Adopted in 2016 a law on consumer protection.
- Adopted an integrated IT system to manage the civil service SIGFAE in 2017.
- Modernized the post office by introducing mobile money in 2016.
- Adopted in 2019 the law creating the National Statistics Development Fund.
- Created in 2019 a national observatory on the quality of financial services.
- Published in 2019 the first citizens' guide to the 2019 budget.
- Strengthened regulations on procurement in 2019.

Sources: République de Côte d'Ivoire (2015) « *Revue du Plan national de développement 2012-15* », Tome I, *Rapport de la revue globale*. République de Côte d'Ivoire (2016) « *Plan national de développement 2016-20* », news reports and web sites of the Government of Côte d'Ivoire.

Figure 1. Côte d'Ivoire: World Governance Indicators, 2011–19^{1,2}

Source: Worldwide Governance Indicators, Daniel Kaufmann (Natural Resource Governance Institute and Brookings Institution) and Aart Kraay (World Bank).

1/ Percentile ranks from 0 to 100, with higher values corresponding to better outcomes. The colored bands show the 90-percent confidence interval around the estimated rank. Rankings reflect relative, rather than absolute performance. These are based on composite governance indicators based on over 30 data sources, rescaled and combined to create aggregate indicators using a statistical methodology known as the unobserved components model. Research dataset summarizing the views on the quality of governance are provided by a large number of enterprise, citizen and expert survey respondents. These data are gathered from a number of survey institutes, think tanks, NGOs, international organizations and private sector firms.

2/ These survey-based indicators reflect respondents' perceptions on the quality of governance and should therefore be interpreted with caution.

4. However, as of 2016, there remained a large gap with EMs when it comes to perceptions on corruption. In 2016, three fourth of Ivorian businesses reported corruption as a major constraint to their operations.³ This share was significantly higher than in EMs.

5. This is particularly relevant as cross-country evidence shows that governance is negatively correlated with the level of development, particularly in Sub-Saharan Africa (SSA). Hammadi and others (2019) show that governance (corruption perceptions) is positively (negatively) correlated with per capita GDP in both SSA countries and the rest of the world. While this does not prove a causal link between improvements in governance and growth, their work also highlights empirically that corruption undermines the efficiency of public spending, which in turn

³Enterprise Surveys www.enterprisesurveys.org, The World Bank. The survey was conducted before the implementation of the 2016-20 NDP and may therefore not capture recent improvements.

depresses growth, and that improving multiple aspects of governance could potentially yield substantial payoffs.

Figure 2. Côte d'Ivoire: Impact of Corruption on the Business Environment, 2016

Source: The World Bank, Enterprise Surveys.

<https://www.enterprisesurveys.org/en/data/exploretopics/corruption>

Figure 3. Côte d'Ivoire: Governance and Corruption Perceptions and Level of Development

Sources: Worldwide Governance Indicators, Daniel Kaufmann (Natural Resource Governance Institute and Brookings Institution) and Aart Kraay (World Bank); Penn World Tables; and Hammadi, Mills, Sobrinho, Thakoor, Velloso (2019). Orange dots denote SSA countries and blue dots denote the rest of the world. Dotted lines are fitted linear trends. Higher CCI scores mean higher levels of perceived corruption.

6. **In that context, it is relevant to focus on governance in order to improve the business climate and thus support private-sector-led growth in Côte d'Ivoire.** Given the nexus between governance and growth, this paper assesses the progress in bridging the governance gap with emerging market countries and suggests avenues for accelerating this process based on global governance indicators. Of course, data limitations only allow an assessment up to the latest data point for each indicator, so that more recent changes to the governance framework may not be reflected in this analysis.

B. General Assessment of the Governance Framework

Governance in the Delivery of Public Services

7. **The ongoing digitalization of public services is an important positive reform.**

- ***The digitalization of the tax administration has improved the business environment.*** Digitalization of government services has been a key element of the authorities' strategy in their 2016–20 NDP—an appropriate focus as it removes the human factor from tax revenue collection. Accordingly, digital adoption is associated with a reduction of corruption perception and an increase in trust in tax officials across Africa (Ouedraogo and Sy, 2020).
- ***But much remains to be done to reap the full benefits.*** Digitalization will only be fully effective when all the pieces will be in place. To that effect, the process of assigning each firm a single tax identification number (STIN) has started. In addition, to facilitate the cross-checking of tax declarations, all public administrations (tax and custom administrations, social security agencies, financial institutions) still need to interconnect information systems.
- ***The digitalization of government payments has proceeded more slowly.*** The authorities have initiated the transition to a Single Treasury Account system, deploying an Integrated Public Financial Management system, and implementing e-procurement, but all these reforms are still in progress. Meanwhile, three years into the 2016–20 NDP, the World Bank reported that most government payments remained cash-based, increasing vulnerability to corruption (World Bank, 2019a).

8. **The tax structure complexity undermines the task of the revenue administration.** Taxes levied on income earned by individuals are a mix between schedular and global taxation. Though predominantly the latter in law, the system operates in practice closer to the former due to challenges with compliance and enforcement. Some erroneous cross references in the tax legislation generate inconsistencies. Moreover, some tax incentives leave room for discretion (e.g., on agreeing on conventions with firms to implement the investment code) that can introduce uncertainty and vulnerabilities to corruption.

9. **Côte d'Ivoire fares better in some areas of Public Financial Management (PFM) than others.** Côte d'Ivoire's Public Expenditure and Financial Accountability (PEFA, 2019) highlights that Côte d'Ivoire fares well in the area of procurement and payroll controls, surpassing the average of

EM countries, while its score matches the EM average for the legislative scrutiny of audit reports and the management of public assets. However, Côte d'Ivoire lags EM average on audit practices, transparency, and non-salary expenditure controls.

10. Rules for procurement and Public Private Partnerships (PPP) procedures are relatively well aligned with international best practices, but they currently apply to very few PPP projects. The authorities are deploying a new integrated public procurement system. New contracting and bid methods to be included in the procurement process were published in the *Journal Officiel* in December 2019. However, secondary decrees still need to be adopted and dematerialization procedures are still to be fully implemented. As regards PPPs, the share of those attributed through competitive calls for tender is only currently 20 percent (based on the amounts of the contracts awarded in 2020). Reportedly, a large share of the PPP contracts bypassing the regular procedures are either extensions or renewal of contracts with existing contractors.

11. The payroll management system works relatively well, but the civil service code of ethics needs to be upgraded. While the 2016–20 NDP stated the objective of instituting a code of ethic and discipline that would guide government activities and would upgrade the 2012 code of ethics of civil servants, such new code had not yet been submitted to Parliament as of April 2021.

12. Budgetary transparency, essential for accountability and supporting other elements of the governance framework, is improving. Côte d'Ivoire produces relatively sound financial budgetary information and is improving its public dissemination, including through the regular publication of a citizen's guide to the budget since 2019. Since 2020, a statement on fiscal risks has been annexed to the draft budget presented to parliament on an annual basis, supporting better legislative transparency of the budget. Progress is also underway with the transition to accrual accounting and the shift to program budgeting in line with the WAEMU directives. However,

Côte d'Ivoire continues to have a mediocre score under the latest Open Budget Survey (2019): with a score of 34 out of 100, it is significantly below Benin (49) and Senegal (46) which are the top performers in the WAEMU region. Going forward, public dissemination of budgetary information could be further improved by organizing a public debate ahead of the budget adoption, publishing key data on contracts between the government and businesses and mandating the timely publication of various documents such as financial statements of state-owned enterprises (SOEs), as well as a database of PPPs.

13. The framework to monitor State Owned Enterprises (SOEs) is being reinforced (PEFA, 2019). Large SOE managers are increasingly required to sign performance contracts, although these contracts are not public. The authorities have agreed on the principle of integrating the 20 largest SOEs in the debt sustainability analysis and are gathering the relevant information, so as to integrate the liabilities currently outside the perimeter of the central government budget. The 2014 circular for the governance of SOEs, however, does not include any guidance on the composition of their boards, whereas international best practices (such as OECD SOE principles) typically recommend board composition rules guided by the objective of allowing the exercise of objective and independent judgement.⁴

14. The framework for external audit is relatively sound, but implementation suffers from a lack of resources and transparency gaps. The *Cour des comptes*, created in 2000 and finally installed in 2018, assesses public accounts and the quality of public financial management. The latest PEFA deemed that its efficiency was hindered by inadequate funding, something the authorities have tried to remedy by reinforcing its capacities in 2019.

15. The definition of arrears should meet international standards. The WAEMU directive,⁵ transposed into Ivorian law by decree⁶, indicates that 90 days of non-payment should be counted from the liquidation rather than from when the demand for payment is verified by the government. Short-term cash management should include accurate high frequency revenue and spending forecasts and allow checking cash flow availability to ensure the timely payment of contractor invoices and avoid arrears.

⁴Since 2019, the *Institut National des Administrateurs de Côte d'Ivoire* has been delivering a specific professional Certificate for SOE board members (CASP) to strengthen the skills of SOE board members.

⁵UEMOA, Directive n° 10.2009/CM/UEMOA Portant tableau des opérations financières de l'Etat (TOFE) au sein de l'UEMOA, <http://www.droit-afrique.com/upload/doc/uemoa/UEMOA-Directive-2009-10-tableau-operations-financieres-Etat.pdf>

⁶Article 23 of Décret n° 2014-419 du 09 juillet 2014 portant Tableau des Opérations Financières de l'état (TOFE), http://dgbf.gouv.ci/wp-content/uploads/2015/09/Decret_n_2014-419_du_9_juillet_2014_portant_Tableau_des_Operations_Financieres_de_l_Etat_TOFE.pdf

Financial Governance

16. Côte d'Ivoire has made significant progress when it comes to asset protection and access to finance, but access to land remains an issue. According to the World Bank, Côte d'Ivoire improved greatly over 2011–19 in the areas of property registration, contract enforcement, and insolvency resolution, moving it closer to average EM scores. The creation of a national credit bureau—covering as of today over 3 million individuals and corporations—also strongly factored into the improvement in Côte d'Ivoire's ranking. However, progress was slower for minority shareholders protection and access to land, as converting customary land into private property remains a complex challenge due to the ambiguity of the legal framework and the intricacy and cost of land rights procedures related to village demarcation (World Bank, 2019b).

17. The governance of public banks is being strengthened. Public banks' boards are gradually shifting to a composition comprising two thirds of government representatives and one third of independent members from the private sector and civil society, in line with best international practices. However, more progress is still needed to fully comply with the Basel Core Principles for Effective Supervision, which require that Board membership include experienced non-executive members where appropriate. Moreover, commensurate with the public banks' risk profile, board structures should include audit, risk oversight and remuneration committees with experienced non-executive members.

18. Furthermore, public banks' restructuring plans have relied excessively on public social security institutions' support. The two public social security institutions (CGRAE and CNPS, respectively Caisse générale de retraite des agents de l'état and Caisse nationale de prévoyance sociale) have been involved in all the asset and equity sale operation of public banks in 2019. While these transactions to redress distressed banks were approved by the institutions' respective boards and represented a small share of their overall assets, proper due diligence is needed to contain the transfer of financial risk from one public entity to another, ensure that those operations are indeed accompanied by an improvement of the banks' profitability going forward, and allow a level playing field for purchases by private shareholders.

19. The renationalization of a privatized public bank in 2019 flags issues with the privatization procedure. The authorities took back ownership of a recently-privatized bank as the new owner failed to satisfy the terms of the privatization agreement. This setback raises questions about the due diligence process performed during the privatization. The authorities, drawing lessons from this episode, might need to review the procedural framework and its implementation.

20. Côte d'Ivoire joined the main international Anti Money Laundering (AML) and Combating the Financing of Terrorism (CFT) treaties, but faces implementation challenges. The Basel Institute Governance AML report ranks Côte d'Ivoire 18th in terms of AML-CFT risks out

of 125 countries, far worse than most low middle-income countries.⁷ It is also considered a medium risk country in the US Department of State's AML assessment due to legislative gaps. The key concern relates to the slow development of national legislation following the adoption of international treaties.

Governance in Other Key Economic Sectors

21. Côte d'Ivoire has made considerable progress in enhancing transparency and accountability in the energy and mining sectors. The last Extractive Industries Transparency Initiative report (EITI, 2019) notes progress through the introduction of transparency provisions and of hydrocarbon and mining codes and the allocation of revenues to local governments. Furthermore, the integration of EITI reporting in the governance systems, including via the publication of an online cadaster, has played a key role in improving transparency in the financial relationship between the two SOEs, PETROCI and SODEMI, and the state.

22. Côte d'Ivoire is improving the regulatory framework for agriculture, but governance in key agricultural export sectors could be further strengthened.

- The authorities recently introduced electronic applications for phytosanitary certificates. This has facilitated the **trading of food on markets** and improved Côte d'Ivoire's ranking in the World Bank's Enabling the Business of Agriculture 2019 index (World Bank, 2019b).
- Governance vulnerabilities were identified in a 2017 audit report on **cocoa and coffee sectors** following exporters' financial difficulties (KPMG, 2017). At the time: the board of the Council for Coffee and Cocoa (CCC) had failed to properly address the financial and operational risks of the export licensing system; the selection of exporters did not follow the decision of the technical committee, based on eligibility criteria; and the assignment of export volumes to exporters was uncorrelated with their financial capacity. While the audit report recommended to increase financial guarantees provided by exporters and to institute a board-like committee comprised of members independent from the cocoa export sector to improve CCC risk management, the ensuing communication to the council of ministers referred to on the CCC web site is not publicly available, and the CCC board remains comprised of six government representatives and six representatives of the cocoa, coffee and banking sector. The report also recommended to institute internal controls and audits and better enforce rules of operations; subsequently, a regulation was issued to stipulate the conditions for removal of the agreement to operate and/or export in the cocoa or coffee sector.

⁷The Basel Index (www.baselgovernance.org) aggregates data from publicly available sources such as the Financial Action Task Force (FATF), Transparency International, the World Bank and the World Economic Forum. They include 15 indicators of adherence to AML/CFT regulations, levels of corruption, financial standards, political disclosure and the rule of law.

Rule of Law and Regulations

23. Côte d'Ivoire's ambitious reform program to strengthen the rule of law and judiciary system and buttress market regulations has produced mixed results.

- Despite a comprehensive framework, anticorruption institutions and legislation lack effectiveness.** The High Authority for Good Governance (HAGG), the main anticorruption agency, was established in 2013 and further reformed in 2015 to strengthen its governance and operations. It has seen an increase in public official's asset declarations, from 64 percent in 2017 to 79 percent in 2018, but lacks a strong mandate to enforce compliance, including since it has no capacity to prosecute corruption cases. Despite a publication objective stated in the 2016–20 NDP, these declarations remain unpublished. Anticorruption efforts are also undermined by the large number of anticorruption agencies (eight) and the absence of proper coordination between them. Finally, cooperation between anticorruption and enforcement agencies is limited and the sanctions regime suffers from inconsistencies (UN, 2017), while the WAEMU directive to institute a code of ethics for elected officials has not yet been transposed into the Ivorian framework.
- Côte d'Ivoire's is strengthening judicial services and expanding their network throughout its territory, but more is needed to raise their standards towards international norms.** The Council of State, which counsels the government and is the highest administrative court, and the Superior Council of Magistrates, which aims at guaranteeing the independence of the judiciary and is chaired by the President of Côte d'Ivoire, were instituted by law in 2018. A Court of Cassation was also established in 2019. More recently, the publication of reports on commercial court performance and cases progress contributed to improve transparency. The government continues to expand tribunals of commerce throughout the country and is strengthening human resources and capacities. However, the High Court of Justice, a jurisdiction of the parliament to assess crimes and infractions committed by members of the government, whose creation was envisaged in the 2016–20, is not in place. Moreover, the World Justice Project (2019) reports that Côte d'Ivoire's judicial system remains relatively ineffective at restraining government powers compared to EM countries, relatively more corrupt than in these country comparators, and subject to the government influence in criminal justice.

Figure 5. Côte d'Ivoire: Rule of Law Index^{1/}

Source: World Justice Project (2020) Rule of Law Index, www.worldjusticeproject.org

1/ Quantitative assessment tool designed to offer a detailed and comprehensive picture of the extent to which countries adhere to the rule of law in practice. The dataset presents the overall, factor, and sub-factor scores for the countries and jurisdictions included in each iteration of the index since 2012, where 1 signifies the highest score and 0 signifies the lowest score.

C. Policy Recommendations

To effectively strengthen governance to EM standards and sustainably minimize governance weaknesses, Côte d'Ivoire needs to build on its achievements and accelerate the reform momentum.

24. Addressing persistent governance weaknesses requires a continuous upgrade of institutions and legal and regulatory frameworks. Cross-country evidence shows that governance weaknesses generally tend to persist over the medium-term (IMF, 2019). This implies that strengthening governance requires unwavering effort and is a continuous process of buttressing institutions, policy frameworks and their application, with a strict monitoring of compliance and adequate sanctions. Building on its earlier establishment of institutions and frameworks, Côte d'Ivoire should accelerate the pace of reforms and the implementation of key measures to bridge the governance gap with emerging market countries and prevent the resurgence of corruptions vulnerabilities.

25. Improved governance in revenue collection is being supported by the digitalization of the revenue administration, but more is needed.

The authorities should further ongoing efforts, including by implementing e-invoicing and e-cadaster. Moreover, the electronic cross-checking of tax and payment declarations across different branches of the public administration is critical to promote proper verification of tax liabilities and remove potential discretion by revenue administration officials in the process. Assigning a STIN to each taxpayer, a necessary first step in the process, needs to be finalized. Moreover, tax laws should be reviewed to ensure simplicity and consistency and minimize room for discretion in their application.

26. Building on past achievements in public financial management (PFM) reforms, the authorities need to catch up in key areas to bridge the gap with emerging market countries.

Digitalization of government payments must accelerate to reduce governance vulnerabilities. Where needed, regulations should be modified to enable the connection of national public institutions to the PFM system. Implementation of a full-fledged TSA should be accelerated. To enshrine best standards for the delivery of public services, an upgraded code of conduct for civil servants should be adopted and implemented, competitive calls for tender need to apply to most PPP contracts, and transparency needs to be strengthened, including with the public dissemination of budgetary information. Accountability of public officials would be much enhanced by strengthening the means and implementation of external and internal audits and controls, and buttressing governance of SOE boards according to best international practices.

27. Financial intermediation will be further improved by addressing remaining governance vulnerabilities in the banking sector.

Boards of public banks would benefit from being structured according to the Basel Core Principles for Effective Supervision, including in the composition of committees dedicated to audits, risk oversight and remuneration. Recourse to social security funds to buttress ailing public banks should be resisted going forward. Following the recent episode when a privatized bank has to be brought back within public ownership, the regulatory and legal framework for privatization and its implementation would need to be reviewed. The protection of assets needs to be further strengthened and the property rights for land assets requires significant reforms. Finally, AML/CFT legislation needs to be swiftly adopted and implemented to mirror Côte d'Ivoire's commitments towards international treaties.

28. While considerable progress was accomplished in the governance of the energy and mining sectors, more is needed in the agriculture sector.

The authorities are encouraged to finalize implementing the recommendations of the cocoa sector audit as swiftly as possible.

29. Finally, to bridge the gap with emerging markets, Côte d'Ivoire needs to ramp up its reinforcement of the rule of law and judiciary system.

Effectiveness of its comprehensive framework of anticorruption institutions and legislation would be greatly enhanced by strengthening its enforcement capacities, including by allowing anti-corruption entities to prosecute corruption cases and by imposing more transparency about violations. Moreover, the WAEMU code of ethics for elected official should be transposed in national legislation. Finally, all pending reforms envisaged in the 2016-20 NDP should be rapidly implemented.

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SUSTAINING CÔTE D'IVOIRE'S GROWTH SPELL: WHAT WILL IT TAKE?¹

In both its 2012–15 and 2016–20 [National Development Plans \(NDP\)](#), Côte d'Ivoire stated as its overarching goal the transformation of the country into an emerging economy.² Prior to the COVID-19 pandemic, the country had achieved eight years of continuous strong growth performance, raising per capita income by more than 50 percent over 2011–19. The Covid-19 pandemic has brought to a halt the very strong growth trend. Nonetheless, the relative resilience of the economic and the resumption of most activities bode well for a return to strong growth in 2021. The authorities are finalizing their 2021–25 (NDP) and have expressed interest in an analysis of the determinants of sustained growth. Indeed, to achieve emerging market status, the country will have to maintain strong growth for many years to come. To help identify what this will require, this note benchmarks the characteristics of Côte d'Ivoire's recent pre-COVID growth spell against the experience of other countries that have managed to achieve sustained growth episodes since 1950, and econometrically investigates the drivers of such growth episodes. It finds that Côte d'Ivoire's recent growth spell shares some of the early features of sustained growth episodes observed elsewhere. To continue its growth spell, however, it will be critical for the country to: a) maintain a conducive macroeconomic environment; b) turn around its declining productivity trend including by accelerating structural transformation; and c) enhance the human capital of its workforce.

A. Introduction

- 1. Côte d'Ivoire was one of the fastest growing economies worldwide in the eight years preceding the Covid-19 pandemic.** Growth had reached on average 8.2 percent per year over 2012–19. As a result, real GDP per capita growth averaged 5.5 percent over 2012–19, translating into a roughly 41 percent rise in average income levels over the period.³
- 2. The authorities' policy agenda has been geared towards reaching emerging market status.** Their economic program has been focused on creating a stable and growth-enabling macroeconomic environment and improving the business climate. More recently, the government has also ramped up policies to make growth more inclusive. The country has gained international recognition for its efforts and has regularly tapped international financial markets as a frontier economy.
- 3. It will take decades of continuous growth to reach the ranks of emerging countries.** It took success stories like Thailand and Malaysia 30 years to triple their income from Côte d'Ivoire's

¹Prepared by Rasmane Ouedraogo (AFR) and Genet Zinabou (FAD) with excellent research assistance from Jiakun Li (IEO) and Céline Bteish (AFR).

²Côte d'Ivoire (2016), "Economic Development Documents—National Development Plan, 2016–20". International Monetary Fund, Washington, D.C.

³Due to data availability at the time of writing, 2011–2015 growth numbers are calculated using INS GDP data with base year 1996, whereas 2016–2019 are calculated using INS GDP data in base year 2015.

current level of GDP per capita of \$2,271 USD (Figure 1). During this time, both countries experienced negative shocks, notably the Asian and Global Financial Crises of 1997 and 2008, but managed to recover relatively quickly. Thailand last had Côte d'Ivoire's current level of GDP per capita in 1988; in 2018, 30 years later, its GDP per capita had grown roughly threefold in real terms, to \$6,500 USD. Malaysia began its growth spurt even earlier, surpassing Côte d'Ivoire's current income level in 1966 reaching Thailand's current income level 28 years later in 1999, and posting GDP per capita of \$12,486 USD in 2019, comparable to the income level of Brazil and above that of China.

4. The experience of comparator success stories highlights the necessity to sustain growth at high rates to reach upper middle-income status within one to two generations.

Thailand has averaged GDP per capita growth of 4.1 percent since 1988, while Malaysia has averaged 3.9 percent since 1971. The experience of China and the Asian Tigers (Hong Kong, Taiwan, Singapore, South Korea) were similar, with higher average growth rates sustained for even longer periods.

5. East-Asian growth experiences also support the proposition that growth can initially be driven by factor accumulation but must eventually be carried by increases in productivity.

Krugman (1994) termed this phenomenon “perspiration” vs. “inspiration”, where perspiration refers to factor accumulation through investments in physical and human capital, while inspiration represents productivity gains. Achieving sustained productivity growth is generally more difficult,

which on a global scale makes long episodes of sustained growth less frequent than shorter ones. Diao et al. (2019) highlight the importance of structural change (such as the movement of resources from low- to high-productivity sectors) for many countries in the early stages of development, while in the long-term, productivity growth is usually driven by technological change (Helpman 2009).

6. Against this background, this paper investigates the characteristics of the recent growth episode in Côte d'Ivoire and compares them to the experience of countries that have managed to achieve sustained periods of growth in the past. The first section presents a set of stylized facts about Côte d'Ivoire's recent growth spell relative to comparator growth episodes that lasted for 10 years or longer (labeled as "sustained growth episodes"). The second section econometrically investigates the drivers of growth spell duration on a global sample of spells lasting a minimum of 5 years, with a view to identifying what distinguishes sustained growth episodes from the more common shorter-lived growth spells. From this analysis, the last section draws policy recommendations as to how Côte d'Ivoire can sustain growth going forward.

7. The paper finds that while Côte d'Ivoire's recent growth spell shares some of the early features of sustained growth episodes elsewhere, it urgently needs to boost productivity and invest in human capital. The economy so far exhibits limited structural change and is starting at a lower level of human capital than most comparators—both elements that the analysis highlights as important drivers of growth in the medium-run. It is therefore imperative that the country accelerates progress in these areas to sustain growth and eventually reach emerging market status.

B. Benchmarking Côte d'Ivoire's Recent Growth Spell

8. To benchmark Côte d'Ivoire's recent growth episode, "sustained growth episodes" are identified from a global sample spanning 1950–2018. Specifically, a country is classified as experiencing a "sustained growth episode" when the following criteria are met:

- (i) The country exhibits at least 10 consecutive years of positive real per capita growth;
 - (ii) Average annual per capita growth during that period exceeds 2 percent;
 - (iii) No subsequent reversal of GDP per capita has occurred.
- To further tailor the list of comparators to Côte d'Ivoire's experience, the sample of countries is restricted to non-fuel exporters whose GDP per capita at the start of the growth episode is below \$3,996 in 2018 US dollars.⁴

9. Compared to other work on growth spells, the criteria do not require growth to have accelerated in the initial year. Moreover, instead of the common threshold of 2 percent per capita

⁴\$3,996 was the 2018 maximum threshold of GNI for being classified as a lower-middle income economy according to the [World Bank](#). While GNI will not necessarily equal GDP, application of this rough threshold is meant to exclude countries at a much higher level of development at the start of their sustained growth episode than the current level in Côte d'Ivoire.

growth in each consecutive year, we impose the less stringent conditions of maintaining positive per capita growth and an *average* per capita growth rate of 2 percent or higher. This choice is motivated by our focus on explaining *long sustained growth episodes* rather than unusually high growth episodes—which are often relatively short (Hausman et al. 2005, Berg et al. 2012, IMF 2017). Our more flexible algorithm can also capture prolonged growth episodes that are temporarily slowed by exogenous shocks such as global economic crises, as long as they do not lead to income reversals.

10. 52 sustained comparator growth episodes are identified via this algorithm, with median duration of 16 years and median average annual per capita growth rate of 4.6 percent. This sample is split into two groups (dubbed “high growth” and “low growth”) based on the magnitude of growth during the spell (above/below the group median of 4.6 percent), which allows the comparison of Côte d’Ivoire’s recent growth experience to countries that experienced periods of relatively higher and lower sustained growth. Countries such as Singapore, South Korea, Thailand, Malaysia, and Indonesia are captured in the “high growth” group, as are growth spells in China (starting in 1977), Vietnam (starting in 1981), and India (starting in 1992). The algorithm also captures perhaps lesser known, but equally impressive long growth episodes in Bhutan, Bulgaria, and Laos. Annex Table 1 provides the full list of countries and years included in each group.

11. Côte d’Ivoire’s experience over 2012-19 is benchmarked in four key areas: the composition of growth, macroeconomic environment, production structure, and social inclusiveness. For both Côte d’Ivoire and the two comparator groups, the period of observation is divided into the first seven years of the growth spell and the rest of the spell.⁵ This makes it possible to compare Côte d’Ivoire’s recent growth episode to the early years of comparator countries’ growth spells and simultaneously explore which characteristics are associated with sustained growth of high and low magnitudes in the longer term.⁶

Composition of Growth

12. Total Factor Productivity (TFP) growth drove a large part of Côte d’Ivoire’s growth since 2012 but is slowing down, while the contribution of physical capital accumulation is growing (Figure 2). A similar pattern is observed across the early and later parts of the comparator growth episodes, which goes somewhat against the argument that TFP growth should over time become the main driver of growth.⁷ The decline in Côte d’Ivoire’s TFP growth over time is probably

⁵For Côte d’Ivoire, 2019 or the latest year available is used.

⁶Note that the “later” average for each of the comparator groups is not directly comparable to the average during the first 7 years, as after year 10, the relative weights of the countries begin to change depending on the final length of the country’s growth spell. Moreover, for some indicators there are missing data in certain years and for certain countries, such that in practice, the weight of each country in “all subsequent years” depends both on the length of its growth spell and its data coverage.

⁷A possible explanation is that the economies which we are capturing in our algorithm remain, even after 10 years of continuous growth, in a relatively early part of their development path, where returns to capital are still high.

in part associated with the rebound in early 2010s from the poor performance during the 2000s.⁸ However, it is a somewhat worrisome finding given the central importance of TFP in driving long-term growth and also when comparing the more recent TFP contribution to growth in Côte d'Ivoire's (about 1 percent in 2019) with the average TFP growth rates of 2½ percent sustained by high growth comparators in the later years of their sustained growth spells.

13. On the demand side, private investment growth is playing an important role in sustaining growth. This is true both for the high-growth comparators, where private investment grew particularly in later growth spell years, and Côte d'Ivoire, where private investment has been consistently high at about 2½ percent real growth annually. Meanwhile, the contribution of public investment to growth has been less important in Côte d'Ivoire in recent years, particularly in 2018–19 when public investment growth was curtailed as part of the authorities' fiscal consolidation

⁸The contributions to growth are calculated using a growth accounting framework that assumes a standard constant-returns-to-scale Cobb-Douglas production function, and perfect competition (Solow, 1957). Using this framework, growth is decomposed into growth from physical capital, human capital, working-age population, and TFP (which is the residual).

efforts. Maintaining strong private investment growth and creating space for public investments will be key to generating productivity gains and maintaining high growth rates.

Macroeconomic Environment

14. Côte d'Ivoire's fiscal deficit has been comparable to that of other growth episodes, but with a significantly weaker revenue-to-GDP ratio (Figure 3). The fiscal consolidation efforts over 2017–19 kept Côte d'Ivoire's deficit in line with that of both comparator groups, which averaged budget deficits below 3 percent of GDP in the later years of their growth episode. However, Côte d'Ivoire lags significantly behind both comparator groups on revenue mobilization. Furthermore, the tax-to-GDP ratio has remained virtually unchanged over the last 8 years, constraining the country's ability to finance the upgrade in public goods and services that have characterized sustained growth episodes.

15. Côte d'Ivoire currently compares favorably on its debt-to-GDP ratio, but the trend is upward, unlike among comparators. Côte d'Ivoire benefited from external debt relief under HIPC over 2009–12, which provided the space to jumpstart much-needed infrastructure investment and address pressing development needs. Debt ratios have since remained below the long-term levels observed in high-growth comparators. However, this must be weighed against the equally lower levels of revenue in Côte d'Ivoire, which exacerbate debt service-to-revenue ratios.⁹ In addition, the upward trend of recent years stands in sharp contrast to the experience of comparators, where strong growth allowed for both fiscal space to invest and a downward trend in debt.

16. Côte d'Ivoire's domestic savings rate compares well to that of comparators (Figure 4). The savings rate has been significantly above the rates observed in the early years of comparator growth spells and roughly in line with high-growth comparators' long-term saving rates. However, the country's savings rate is showing signs of declining since 2015, whereas both comparator groups significantly raised their savings rates over time to finance higher investment.

17. Côte d'Ivoire's expansion has been accompanied by a relatively small current account deficit, linked in large part to its idiosyncratic trade surplus. However, the country's small current account deficit is also connected to its relatively lower level of domestic investment, which is contributed to by still limited FDI inflows. Both groups of comparators had higher average FDI inflows than Côte d'Ivoire in the early years of their spells and saw these inflows increase to on average 3.5 percent of GDP in later years, while FDI to Côte d'Ivoire shows little upward trend.

18. Côte d'Ivoire's growth spell has been accompanied by very low inflation and a relatively competitive real exchange rate (relative to trend).¹⁰ Membership in the West African Monetary Union and its currency's peg to the euro has allowed for unusually low inflation in Côte d'Ivoire relative to comparators. Moreover, as in comparator countries, Côte d'Ivoire's growth spell has been accompanied by a negative deviation in the real effective exchange rate from its long-run trend, although this deviation was relatively small until 2019. This suggests that Côte d'Ivoire's exchange rate has been relatively competitive in recent years.

⁹To limit the influence of outliers, comparator debt service is calculated as the median of the average of each spell during the first seven years and the median of all observations in remaining years.

¹⁰To limit the influence of outliers, comparator inflation is calculated as the median of the average of each spell during the first seven years and the median of all observations in remaining years. To measure the position of the real exchange rate, we run an HP filter on the long-term trend of each country's real effective exchange rate and recover deviations from the trend. Ghana's growth spell from 1984 to 1999 is excluded from the sample due to the unusually high negative deviation from trend in the early years of this spell.

Figure 4. Macroeconomy – General

Sources: World Bank, World Development Indicators; IMF, World Economic Outlook; and IMF staff estimates.

Structure of Production

19. The Ivorian economy is showing only tentative signs of structural transformation (Figure 5). It is starting out with a significantly lower share of agriculture and a higher share of services than the selected comparator economies. While high-growth comparator economies saw a marked increase in the share of the industrial sector over time (confirming the importance of structural transformation), there has been only modest growth in the relative size of the Ivorian

industrial sector since 2012 and a contraction in manufacturing.¹¹ Nurturing the growth of industry and particularly manufacturing thus remains one of the main challenges facing the Ivorian economy.

20. While Côte d'Ivoire's exports are relatively diversified, they consist primarily of non-processed agricultural products and, if anything, have become less diversified over the last eight years. Manufactured goods made up only 10 percent of total merchandise exports in 2019, a decline compared to previous years. Meanwhile, comparator countries that experienced sustained growth episodes generally started out with almost double the share of manufactures in exports and continued growing this share over time.

¹¹Given that rebased GDP data is only available since 2015, the accompanying figure only shows 2015–18. However, analysis of backward spliced data using historical sectoral growth rates calculated under old, non-rebased GDP confirms limited growth of the industrial sector and, in particular, the manufacturing sector.

Social Inclusion and Human Capital

21. Côte d'Ivoire scores somewhat lower than comparators on measures of equal distribution of income and opportunity, but higher on access to electricity (Figure 6). The country has both a higher Gini index and a lower ratio of female to male school enrollment than high-growth comparators in the early and later years and low-growth comparators in later years. On the other hand, access to electricity is much more widespread in Côte d'Ivoire today than it was during comparator countries' growth spells in the early years. The implementation of the social program (PSGouv) by the government contributed to the strong improvement in access to electricity in Côte d'Ivoire, mainly in rural areas.

22. Notwithstanding recent improvements in school enrollment, Côte d'Ivoire also appears to lag comparators on education outcomes. Its adult literacy rate stood at 47 percent in 2018, revealing a substantial gap compared to the level from which both groups of comparators started their sustained growth spells (around 60 to 70 percent). Côte d'Ivoire compares more favorably on primary and secondary school enrollment rates as well as on infant mortality, while overall life expectancy remains below that observed in comparator growth spells in later years. However, recent PASEC scores show that the quality of primary schooling remains weak (See SIP on spending efficiency).

Takeaways of the Benchmarking Exercise

23. Overall, Côte d'Ivoire's recent growth spell shares some promising features of the early years of growth in comparator countries that went on to experience sustained growth spells. Côte d'Ivoire's growth was kickstarted by strong TFP growth and has been accompanied by buoyant private sector investment. In addition, over 2012–18, Côte d'Ivoire ran smaller budget and current account deficits, exhibited a stronger savings rate and had lower inflation and debt ratios than the identified comparators in the first seven years of their growth spell.

24. Nonetheless, some important differences emerge that could pose headwinds to growth going forward. TFP growth is showing signs of slowdown compared to comparators while FDI and the overall investment have remained relatively low. Meanwhile, low literacy (a proxy for human capital) and limited signs of structural transformation may impact long-term growth prospects, given that they are highlighted by the literature as key drivers of labor productivity gains. Finally, the low revenue-to-GDP ratio is likely to constrain the government's ability to sustainably finance much-needed public goods and services. Economies that grew for long periods of time at high growth rates generally ran limited deficits, reduced their debt burdens, achieved strong health and education levels, attracted investment and had a high share of exports and production coming from manufacturing in later years. Côte d'Ivoire will need to expend considerable effort to reach their level.

Figure 6. Social Inclusion and Human Capital

Sources: World Bank, World Development Indicators; IMF, World Economic Outlook; and IMF staff estimates.

C. What Matters for Sustaining Growth? An Econometric Approach

25. To further investigate the findings of the benchmarking exercise, this section conducts econometric analysis to identify what matters most for achieving sustained growth.

More specifically, it investigates to which extent the factors examined in the preceding descriptive analysis plus some additional variables predict the occurrence of sustained growth episodes in a global sample of countries covering 1950-2018.

Methodology

26. A distinction is made between growth episodes that ended before their tenth anniversaries and longer ones. We continue to define sustained growth episodes as in the previous section (as elaborated in paragraph 8) but expand the sample by dropping the initial income criterion, so as to improve the statistical power of the regressions to follow. As a counterfactual to the “sustained growth episodes” (lasting 10 years or longer), we define “non-sustained growth spells” as shorter episodes of continuous, positive real per capita growth, again averaging above 2 percent annually, but lasting only for 5 to 9 years.^{12,13} This then allows us to investigate what characteristics distinguish “sustained growth episodes” from “non-sustained growth spells” and draw implications for Côte d’Ivoire, which prior to the Covid-19 pandemic had seen eight years of continuous growth.¹⁴

27. The probability of the growth spell extending beyond 10 years (versus lasting only 5 to 9 years) is estimated based on various economic characteristics. To that effect, we run several versions of the following regression, estimated as a linear probability model:

- $\Pr(\text{Duration}_s \geq 10) = \beta_0 + \beta_1 X_{s,t1} + \beta_2 \Delta X_{s,t2} + \mu_s$
- Where s subscript denotes the spell, X is a vector of variables we expect might predict the sustainability of a growth spell, t_1 contains years 1 to 5 following the start of the spell, and t_2 contains years 6 to 9. μ_s is the error term. A given variable $x_{s,t1}$ in $X_{s,t1}$ is measured as the average value of x_s over years 1 to 5, whereas a given $\Delta x_{s,t2}$ in $\Delta X_{s,t2}$ is the difference between the average value of x_s in years 6 to 9 and $x_{s,t1}$. In the instances where x represents a flow variable already measured as a percent change, we simply include the

¹²We follow the existing literature in defining 5 years of consecutive growth as the minimum criteria of a growth spell (see e.g., Hausman et al. (2005)).

¹³Defining the sample this way yields 285 growth spells (excluding Côte d’Ivoire’s since 2012) of which 118 last 10 years or longer. The median duration of growth spells is 9 years. 49 growth spells that are ongoing in 2018 but have lasted less than 10 years so far are dropped as it is impossible to know whether they will continue. We also drop 51 growth spells for which we do not have comparable early year GDP per capita (i.e. measured in constant US dollars), which we require as a control.

¹⁴We conducted two robustness tests that varied the cutoff duration for a sustained growth spell, using 8 years and 12 years instead. Results are mostly stable with some differences in statistical significance of results. Notable differences are: private investment growth comes out as more strongly predictive of sustained growth spells when either the 8- or 12-year cutoff is used, external and overall debt ratios are no longer significant under the 12-year cutoff, and the coefficient on changes in FDI over time flips to negative significance under the 8-year cutoff.

average over years 6 to 9 without subtracting the average in years 1 to 5. β_1 is meant to identify what early characteristics of growth spells (realized in the first five years) predict a sustained growth episode (i.e. a growth spell lasting 10 years or longer), whereas β_2 identifies what additional changes occurring in years 6 to 9 are associated with sustained growth duration.

28. One important caveat is the potential for reverse causality in interpreting β_2 . As by construction, sustained growth spells generally have higher growth rates in years 5 to 9 than non-sustained spells, changes in explanatory variables during these years may be driven by higher growth rather than the other way around. This must be paid particular attention when the explanatory variable of interest is measured as a percent of GDP.

29. Within this framework, we test the role of the external and domestic macroenvironment, the structure of production, social inclusion, and the business environment in sustaining growth. The set of explanatory variables considered is expanded from those in the descriptive section to capture characteristics in the external environment, governance and institutions, and infrastructure. Annex Table 2 lists all variables used in the analysis. Given the limited sample size, we estimate relatively parsimonious models, and follow Berg et al. (2012) in controlling only for initial GDP per capita and external shocks. It is thus possible that some of the regressions suffer from omitted variable bias.

30. Compared to prior studies, the contribution of this paper is its specific focus on distinguishing between the characteristics of growth in the early versus the later years of a sustained growth spell. Moreover, by assigning each identified growth spell equal weight in the estimations, our method is less prone to capturing primarily the characteristics of outlier growth successes such as China. China's uninterrupted growth spell since 1977 is assigned the same weight as Ethiopia's growth spell that started more recently in 2004.

Results

External Environment

31. Growth spells that begin at a time when global growth is strong are less likely to last (Table 1). Conversely, stronger global growth in years 5–9 helps extend the life of a spell. This suggests that global economic conditions can both kick-start and extend growth episodes, but that a growth spell initiated by strong external demand is, ceteris paribus, less likely to last. Conversely, neither global financial conditions (proxied by the initial level and subsequent changes in the US interest rate) nor terms of trade influence the probability of achieving sustained growth. Overall, these results suggest that sustained growth is unlikely to be attained simply as a result of benign global conditions.

Table 1. The Effect of External Conditions on the Probability of a Sustained Growth Spell	
Initial GDP per capita	-0.001
	(0.002)
Δ Terms of trade, t1	0.007
	(0.006)
Global real growth, t1	-0.171***
	(0.038)
US interest rate, t1	0.008
	(0.012)
Δ Terms of trade, t2	0.007
	(0.006)
Global real growth, t2	0.194***
	(0.037)
Δ US interest rate, t2	0.011
	(0.014)
Constant	0.327~
	(0.211)
Adjusted R-squared	0.102
Observations	243
Notes:	
1) Robust standard errors in parentheses	
2) ***p<0.01, **p<0.05, *p<0.10, ~ p<0.15	
3) A coefficient of 0.01 means that all else equal, an increase of 1 unit in the explanatory variable raises the probability of a sustained growth episode by 1 percentage point.	

32. Following Berg et al. (2012), we control for external economic conditions in all subsequent regressions. Since terms-of-trade shocks and the US interest rate are insignificant, we control only for real world economic growth. In addition, we always control for initial GDP per capita, which generally enters with a negative sign and is significant depending on the other variables included in the model, indicating that countries starting from a lower income level are more likely to experience sustained growth episodes, conditional on having had a five-year growth spell already.

Domestic Macroeconomy

33. Sustained growth episodes are associated with declining fiscal deficits and debt ratios and higher public savings rates (Table 2). Although a higher deficit in the first five years does not affect the chances of a growth spell lasting beyond 10 years, countries that continued growing to year 10 or longer were more likely to lower their deficits in years 6 to 9 than countries that did not. This result is consistent with the practice of prudent and countercyclical fiscal policy in later years and suggests that accumulation of fiscal imbalances is particularly detrimental in the later part of the growth spells—presumably because the compounding effects of lax fiscal policy eventually start

to weigh on the economy and affect overall confidence. These results suggest that Côte d'Ivoire should aim to rely on higher tax revenues to finance more productive and inclusive spending, rather than altering fiscal deficit targets. The analysis moreover reveals that countries whose governments save more are more likely to grow for over a decade.

Table 2. The Effect of Public Finances on the Probability of a Sustained Growth Spell

	(1)	(2)	(3)	(4)	(5)
Fiscal balance, t1	-0.476				
	(1.169)				
Δ Fiscal balance, t2	2.940***				
	(0.974)				
Public saving, t1		1.056**			
		(0.526)			
Public consumption, t1		-0.588			
		(0.674)			
Public investment, t1		0.168			
		(0.739)			
Δ Public saving, t2		2.476**			
		(1.054)			
Δ Public consumption, t2		-1.083			
		(1.440)			
Δ Public investment, t2		1.198			
		(0.843)			
Debt, t1			-0.098		
			(0.145)		
Δ Debt, t2			-0.383**		
			(0.150)		
External debt, t1				-0.194**	
				(0.075)	
Δ External debt, t2				-0.346***	
				(0.095)	
Government Revenue, t1					-0.217
					(0.370)
Δ Government Revenue, t2					1.243
					(1.052)
Controls for initial GDP and global growth	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.132	0.142	0.137	0.159	0.097
Observations	165	168	142	180	169

Notes:

1) Robust standard errors in parentheses

2) ***p<0.01, **p<0.05, *p<0.10, ~ p<0.15

3) A coefficient of 0.01 means that all else equal, an increase of 1 unit in the explanatory variable raises the probability of a sustained growth episode by 1 percentage point. The baseline propensity of a sustained growth episode is roughly 40 percent.

34. Furthermore, spells that start out with relatively high levels of external debt are less likely to last. While initial overall debt ratios do not come out significantly for the probability of sustained growth episodes, the level of *external* debt does seem to matter, both initially and in years 5 to 9. Indeed, a 1 percentage point higher external debt-to-GDP ratio during the first five years of a spell reduces the likelihood of growing for 10 years or longer by roughly 5 percent.

35. The revenue-to-GDP ratio is not significant in predicting sustained growth episodes, even though its change over years 5 to 9 enters with a positive coefficient. The insignificance of the revenue ratio combined with the negative significance of fiscal imbalances later in the growth spell suggests that a high level of government expenditure is not critical to achieving sustained growth. This would be explained if countries that achieved sustained growth with relatively low revenue-to-GDP ratios were particularly effective at leveraging private sector investment or if these countries had high public expenditure efficiency. Given the still significant development needs and low education levels in Côte d'Ivoire and its sub-optimal public spending efficiency, particularly in health and education,¹⁵ the country will likely need a combination of higher revenue, greater private investment, and spending efficiency gains to support growth going forward.

36. Other domestic macroeconomic variables also seem to predict growth sustainability (Table 3).

- **Higher domestic savings rates and increasing investment are common characteristics of sustained growth episodes.** While the initial level of investment does not come out significant, sustained growth episodes are associated with a growing share of investment in GDP, including private investment¹⁶. The domestic savings rate matters initially and even more so over time.
- **Exchange rate overvaluation (relative to trend) and high initial inflation appear harmful to achieving sustained growth.** While the level of inflation in years 6 to 9 enters with a positive sign, it is not significant. Meanwhile, positive deviations from an HP-filtered time trend in the real effective exchange rate have significant negative effects on growth sustainability, both in the early and later years, confirming that external competitiveness can play an important role in supporting long-term growth (as argued by e.g. Rodrik (2008)).
- **Trade openness, financial openness, and the private credit to GDP ratio do not predict the length of growth episodes.** Both the initial levels and subsequent growth of all three variables enter insignificantly.

¹⁵See SIP "Potential for Productive Public Spending Efficiency Gains to Support Inclusive Growth".

¹⁶Although private investment does not enter significantly in the main specification, it enters with a large positive coefficient and is significant in robustness tests that use 8 and 12 years as the cut-off for defining sustained growth spells.

Table 3. The Effect of the General Macroeconomy on the Probability of a Sustained Growth Spell

	(1)	(2)	(3)	(4)	(5)	(6)
Log of inflation, t1	-0.046~					
	(0.036)					
Log of inflation, t2	0.050					
	(0.038)					
REER trend deviation, t1	-0.065**					
	(0.025)					
Δ REER trend deviation, t2	-0.046**					
	(0.019)					
Domestic Saving, t1		0.353~				
		(0.222)				
Investment, t1		0.034				
		(0.505)				
Δ Domestic Saving, t2		1.324***				
		(0.426)				
Δ Investment, t2		1.124*				
		(0.709)				
Trade openness, t1			0.032			
			(0.091)			
Δ Trade openness, t2			0.127			
			(0.219)			
Financial openness, t1				-0.002		
				(0.011)		
Δ Financial openness, t2				-0.009		
				(0.011)		
Private investment, t1					-0.012	
					(0.569)	
Δ Private investment, t2					1.202~	
					(0.792)	
Private credit, t1						-0.021
						(0.154)
Δ Private credit, t2						-0.203
						(0.349)
Controls for initial GDP and global growth	Yes	Yes	Yes	Yes	Yes	Yes
adj_R-squared	0.083	0.109	0.126	0.096	0.237	0.140
N	277	203	248	220	83	186

Notes:

1) Robust standard errors in parentheses

2) ***p<0.01, **p<0.05, *p<0.10, ~ p<0.15

3) A coefficient of 0.01 means that all else equal, an increase of 1 unit in the explanatory variable raises the probability of a sustained growth episode by 1 percentage point.

Structure of Production

37. The analysis unambiguously shows that the structure of production and its evolution over time are important predictors of sustained growth episodes.

- **An increasing share of manufacturing in GDP and more diversified exports predict more sustained growth.** Both the initial share of manufacturing in GDP and its change over time are significant predictors of a sustained growth spell. While the share of manufacturing in exports does not come out significant, diversification of exports does.
- **Countries that manage to sustain their growth spells, do so through both capital accumulation and TFP growth (Table 4).** While initially higher rates of TFP growth and capital accumulation do not predict longer growth spell duration and initial TFP growth even enters negatively, both variables are highly significant and positive in later years, with a particularly strong role of capital accumulation.¹⁷ The growing significance of capital accumulation in years 5 to 9 confirms the findings from section B and suggests that capital accumulation, at least in the medium-term and particularly when driven by the private sector, plays a key role in sustaining growth.
- **Greater initial FDI inflows also predict sustained growth, while neither ICT imports nor patents per capita are significant.** This may reflect the stage of development of most of the countries in the sample, who are, at the time of observation, still far from the innovation frontier, and thus better positioned to adopt existing technologies, including through FDI.

Business Environment and Infrastructure

38. Of the limited indicators available to measure infrastructure, an increase in fixed telephone lines per capita is the only significant predictor of sustained growth (Table 5). To the extent that telephone subscriptions are a good proxy for infrastructure development, this suggests that sustained growth spells are associated with improving infrastructure.¹⁸ The percent of the population with electricity access, on the other hand, does not enter significantly. The insignificance of overall electricity access should, however, not be taken to mean that energy infrastructure, particularly for the industrial sector, does not matter for sustaining growth.

¹⁷The negative sign on initial TFP growth could reflect business cycle dynamics or unsustainable catch-up growth. In the case of Côte d'Ivoire, one possible reason underpinning the high observed TFP growth in the initial years of the growth spell is a catch-up effect following the 2002-2011 civil war. As these tailwinds subside, more sustainable drivers of TFP growth will need to be identified to continue the country's growth spell.

¹⁸While nowadays, fixed telephone lines are less important than mobile phones, many of the growth spells we study began during a time when fixed telephones were still the dominant form of communication. A measure of the number of mobile telephone subscriptions per capita was insignificant.

Table 4. The Effect of Production Structure on the Probability of a Sustained Growth Spell

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Manufactured exports, t1	0.001						
	(0.001)						
Δ Manufactured exports, t2	0.002						
	(0.003)						
Export diversification, t1		0.584**					
		(0.234)					
Δ Export diversification, t2		0.332					
		(0.795)					
TFP growth, t1			-0.025*				
			(0.015)				
Capital growth, t1			-0.047				
			(0.042)				
TFP growth, t2			0.095***				
			(0.016)				
Capital growth, t2			0.160***				
			(0.045)				
Manufacturing VA, t1				0.009*			
				(0.005)			
Δ Manufacturing VA, t2				0.050***			
				(0.013)			
FDI, t1					1.347*		
					(0.701)		
Δ FDI, t2					0.595		
					(0.751)		
ICT imports, t1						-0.052	
						(0.538)	
Δ ICT imports, t2						0.863	
						(1.997)	
Patents per capita, t1							0.130
							(0.094)
Δ Patents per capita, t2							-0.009
							(0.144)
Controls for initial GDP and global growth	Yes	Yes	Yes	Yes	Yes	Yes	Yes
adj_R-squared	0.119	0.102	0.280	0.132	0.124	0.192	0.117
N	245	251	237	223	174	85	132

Notes:

1) Robust standard errors in parentheses

2) ***p<0.01, **p<0.05, *p<0.10, ~ p<0.15

3) A coefficient of 0.01 means that all else equal, an increase of 1 unit in the explanatory variable raises the probability of a sustained growth episode by 1 percentage point.

Table 5. The Effect of Infrastructure and Business Environment on the Probability of a Sustained Growth Spell				
	(1)	(2)	(3)	(4)
Electricity access, t1	-0.001			
	(0.002)			
Δ Electricity access, t2	-0.007			
	(0.012)			
Fixed telephone lines, t1		-0.003		
		(0.003)		
Δ Fixed telephone lines, t2		0.016**		
		(0.007)		
Polity2 score, t1			0.001	
			(0.005)	
Δ Policy2 score, t2			0.003	
			(0.014)	
WGI, t1				-0.066
				(0.077)
Δ WGI, t2				0.298
				(0.255)
Controls for initial GDP and global growth	Yes	Yes	Yes	Yes
adj_R-squared	0.082	0.104	0.129	0.083
N	136	272	243	126
Notes: 1) Robust standard errors in parentheses 2) ***p<0.01, **p<0.05, *p<0.10, ~ p<0.15 3) A coefficient of 0.01 means that all else equal, an increase of 1 unit in the explanatory variable raises the probability of a sustained growth episode by 1 percentage point. The baseline propensity of a sustained growth episode is roughly 40 percent.				

39. Two different measures of governance are insignificant, contrasting a large literature which suggests that economic governance matters for long-term growth. Both the polity2 index and the first principal component of the Worldwide Governance Indicators (WGI) fail to predict sustained growth, although changes in the WGI during years 5 to 9 enter with a positive coefficient.¹⁹ The insignificance of the polity2 index may be driven by its focus on political (as opposed to economic) governance, while the imprecisely estimated coefficient on the change in the WGI could be explained by the relatively low sample size and lack of variations (this data series is available only starting in 1996). By contrast, several recent works

¹⁹The polity2 score measures the quality of executive recruitment, constraints on executive authority and political competition on a scale of -10 to +10, where -10 represents the lowest extreme (i.e. hereditary monarchy) and +10 the highest extreme (i.e. consolidated democracy). Meanwhile, the Worldwide Governance Indicators score countries on six dimensions of governance (Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption); we construct the first principal component of these six dimensions, with higher levels of the resulting index representing stronger governance.

find an important association between economic governance and long-term growth (see Hammadi et al. 2019, IMF 2019, Berg et al. 2012).

Human Development and Inclusion

40. The analysis further reveals a critical role of health, education and economic inclusion in growth sustainability (Table 6).

- **High inequality hampers growth sustainability.** The initial Gini index enters with a particularly strong negative coefficient, while the change is also negative but not significant, which may have to do with high persistence in this indicator. The ratio of female to male school enrollment enters with relatively large and positive but imprecisely estimated coefficients. Meanwhile, initially higher civil liberties (a measure of individual rights and freedom) positively predict sustained growth episodes (further improvements appear to go in the opposite direction, but carry poor significance).²⁰
- **Lower infant mortality and improvements in basic education outcomes are strongly associated with sustained growth** (see also SIP on spending efficiency). Both the initial level and subsequent change in infant mortality enter with the expected negative sign, while for literacy and primary school enrollment, changes over time seem to matter more than initial levels. The coefficient on changes in literacy over the growth spell is particularly strong, while neither secondary nor tertiary enrollment rates enter significantly. Given the initial low level of development of the average country in the sample, literacy and primary school completion likely proxy most effectively for the average skill level of the labor force, underlining the importance of human capital in sustaining growth.

Takeaways of the Econometric Exercise

41. Results from the econometric analysis further underscore the vital importance of structural transformation, human capital and social inclusion in achieving sustained growth. Compared to growth spells that lasted 5 to 9 years, spells that went on to year 10 and beyond were fueled by a rising share of manufacturing, greater export diversification, low inequality and improvements in health and education over time. These remain key challenges for Côte d'Ivoire.

²⁰This result may appear at odds with the insignificance of the polity2 and WGI indices in Table 5. While there is some overlap of concepts these indices aim to measure, civil liberties is the least focused on economic governance.

Table 6. The Effect of Human Capital and Social Inclusion on the Probability of a Sustained Growth Spell

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Civil liberties, t1	0.046*							
	(0.024)							
Δ Civil liberties, t2	-0.080~							
	(0.054)							
Gini index, t1		-0.015***						
		(0.005)						
Δ Gini index, t2		-0.024						
		(0.018)						
Infant mortality, t1			-0.003***					
			(0.001)					
Δ Infant mortality, t2			-0.014**					
			(0.006)					
Literacy, t1				0.206				
				(0.219)				
Δ Literacy, t2				5.533***				
				(1.854)				
Primary enrolment, t1					0.260			
					(0.185)			
Δ Primary enrolment, t2					0.721*			
					(0.379)			
Secondary enrolment, t1						0.124		
						(0.131)		
Δ Secondary enrolment, t2						0.026		
						(0.512)		
Tertiary enrolment, t1							-0.277	
							(0.224)	
Δ Tertiary enrolment, t2							0.084	
							(0.634)	
Female to male enrolment ratio, t1								0.373
								(0.276)
Δ Female to male enrolment ratio, t2								1.765
								(1.399)
Controls for initial GDP and global growth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
adj_R-squared	0.110	0.160	0.096	0.142	0.118	0.115	0.118	0.104
N	232	151	278	143	223	206	188	196

Notes:

1) Robust standard errors in parentheses

2) ***p<0.01, **p<0.05, *p<0.10, ~ p<0.15

3) A coefficient of 0.01 means that all else equal, an increase of 1 unit in the explanatory variable raises the probability of a sustained growth episode by 1 percentage point.

42. Moreover, the analysis confirms the significant role that prudent fiscal policy and increasing involvement of the private sector play in prolonging growth spells. Sustained growth episodes were more likely to be accompanied by improving budget balances, falling debt ratios, and increasing private investment than non-sustained growth spells. As the descriptive analysis highlights, Côte d'Ivoire is well-positioned to emulate these trends, but must exercise strong fiscal discipline, while working to both increase domestic revenue mobilization and create a business environment conducive to private investment.

43. By contrast, global conditions cannot be relied upon to sustain long-term growth. While strong global growth can both kick-start and prolong the length of a growth spell temporarily, spells that start out during global booms are, *ceteris paribus*, less likely to last. Notwithstanding potential (temporary) tailwinds from global conditions, it is only through sound macroeconomic and structural policies that Côte d'Ivoire will be able to generate the right conditions for long and sustained growth.

D. Policy Implications

44. The new National Development Plan (NDP) 2021-25 is an opportunity to jumpstart structural reforms to reach emerging market status. Côte d'Ivoire needs to maintain sound macroeconomic policies, accelerate structural transformation, and make high-quality investments in human capital. In particular, the weak TFP performance most recently should be a wake-up call to reinforce the reform agenda momentum as the country emerges from the pandemic.

45. Following the necessary fiscal relaxation to fend off the health and economic effects of the COVID-19 pandemic, it will be essential to gradually consolidate the fiscal position. This will ensure public debt sustainability, avoid crowding out the private sector as the recovery takes hold and restore buffers to address future potential shocks. At the WAEMU level, it will also preserve regional external stability.

46. Meanwhile, stronger domestic revenue mobilization is key to create fiscal space for much-needed investments in public goods and services and enhancing inclusiveness. While additional room exists to improve revenue administration and widen the tax net by reducing informality, the authorities should also reform tax policy to level the playing field across businesses and encourage competitiveness. Stepping up efforts to collect tax revenue, including through the reduction of tax exemption, broadening of the tax base, and strengthening of tax administration, will be crucial to finance development projects outlined in the new national development plan 2021-25.

47. Further improving the business environment will help attract private investment and accelerate structural transformation. Côte d'Ivoire has made important progress on upgrading the business climate, but significant room for improvement remains. Specific areas to focus on include making it easier to trade across borders, obtain construction permits, fostering digitalization of public services and access electricity, as well as improving protection of minority investors. Moreover, given the central role of economic governance in creating a fair and conducive business

climate, in which competition can flourish and resources are channeled into productive uses, reforms to strengthen governance should be accelerated.²¹ Moreover, fostering development of the financial sector and improving access to financial services for small and medium enterprises and low-income households will help finance much needed private investment, which is expected to be a key driver of growth under the NDP 2021-25. Policies to boost domestic savings will also be essential.

48. Vertical policies, geared towards specific sectors, can also be useful, provided they are targeted, transparent and minimize budgetary costs. Côte d'Ivoire's focus on agrobusiness and transformation of cocoa and cashew aligns well with the country's existing comparative advantages in the raw production of these commodities. However, the current approach to promoting these sectors relies too heavily on tax incentives, which should be reviewed regularly to ensure they are in line with best practices.²²

49. Export diversification towards higher value-added products will be key and can only be achieved through greater competitiveness. Export diversification and a growing share of manufactured products in exports have been important components of sustained growth episodes. However, Côte d'Ivoire lags significantly behind on this front and recent efforts to accelerate the transformation of cocoa and cashew have failed to materialize in a pickup in the manufacturing sector, including because of strong global competition. Identifying the structural bottlenecks faced by businesses in these sectors and implementing a coherent strategy to alleviate them, while encouraging intra-industry competition, are critical tasks. Further diversification away from cocoa and cashew is also of high priority, while reduction of non-tariff trade barriers, including through the implementation of the African Continental Trade Agreement, would aid regional trade integration and expand export markets.

50. Côte d'Ivoire urgently needs to upgrade the human capital of its workforce, as it consistently falls short in measures of education and health outcomes.²³ Without a concerted effort to fill these gaps as quickly as possible, human capital will be a major constraint to growth, as the labor force will lack the basic skills required to support the growth of high-value added industries. Rebalancing the spending mix towards primary education and exploiting the substantial room that exists on spending efficiency both in health and education are promising avenues in this regard. Higher, but above all, better spending on basic education and health will also help narrow social inequalities and boost the population's resilience in the face of shocks such as the COVID-19 pandemic. The government's social program (PSGouv) has been instrumental in the improvement of social indicators in recent years, and the authorities can build on this experience to continue implementing social policies necessary to increase human capital and promote inclusive growth.

²¹See SIP on "The Governance Framework: Current State and the Way Forward"

²²"Good" tax incentives are generally (i) targeted towards exporting firms; (ii) not limited to large investments; (iii) temporary; and (iv) cost-based rather than profit-based (IMF, 2015).

²³See also SIP on "Potential for Productive Public Spending Efficiency Gains to Support Inclusive Growth".

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Annex I. Growth Episodes Used in the Benchmarking Exercise

Group 1 is "high growth", group 2 is "low growth"

Group	Country	Start Year	End Year	Duration	Mean Annual Growth PC
1	Armenia	1994	2008	15	9.8
1	Tonga	1977	1987	11	9.6
1	Botswana	1966	1991	26	8.8
1	Georgia	1995	2008	14	8.5
1	Ethiopia	2004	2018	15	8.4
1	China	1977	2018	42	8.3
1	Myanmar	1999	2018	20	8.2
1	Korea	1963	1979	17	7.7
1	Singapore	1965	1984	20	7.6
1	Grenada	1964	1980	17	6.4
1	Brazil	1971	1980	10	6.2
1	Sierra Leone	2000	2014	15	5.9
1	Bulgaria	1951	1988	38	5.8
1	Cambodia	1991	2008	18	5.4
1	St. Lucia	1969	1979	11	5.3
1	Rwanda	2004	2018	15	5.3
1	Bhutan	1976	2018	43	5.2
1	Cabo Verde	1992	2008	17	5.2
1	India	1992	2018	27	5.2
1	Indonesia	1968	1997	30	5.1
1	Vietnam	1981	2018	38	5.1
1	Thailand	1958	1996	39	5.1
1	Paraguay	1969	1981	13	4.9
1	Lao P.D.R.	1989	2018	30	4.9
1	Tajikistan	1997	2018	22	4.8
1	Uzbekistan	1997	2018	22	4.8
1	Malaysia	1963	1974	12	4.4
2	Panama	1959	1973	15	4.3
2	Mozambique	2001	2018	18	4.1
2	Ghana	2001	2014	14	4.1
2	Bangladesh	1989	2018	30	4.0
2	Liberia	2004	2013	10	4.0

Group	Country	Start Year	End Year	Duration	Mean Annual Growth PC
2	Grenada	1982	1991	10	3.9
2	Turkey	1962	1978	17	3.9
2	Uganda	1992	2011	20	3.7
2	Guyana	2006	2018	13	3.7
2	Zambia	1999	2014	16	3.7
2	Nepal	2003	2015	13	3.6
2	Sri Lanka	1972	1991	20	3.6
2	St. Vincent and the Grenadines	1964	1986	23	3.5
2	India	1980	1990	11	3.3
2	Pakistan	1978	1992	15	3.3
2	Lesotho	1996	2016	21	3.3
2	Tanzania	1997	2018	22	3.3
2	Kosovo	2005	2018	14	3.2
2	Eswatini	1964	1974	11	3.0
2	Togo	2008	2018	11	2.9
2	Kenya	2009	2018	10	2.8
2	Nepal	1988	2001	14	2.8
2	Philippines	1965	1981	17	2.6
2	Lao P.D.R.	1966	1976	11	2.6
2	Ghana	1984	1999	16	2.5

Annex II. Variables Used in the Benchmarking and Econometric Analyses

Variable	Definition	Source
GDP per capita	Real GDP per capita, constant national currency or USD	WEO; WDI; Maddison Project
Real capital growth	Real growth of gross capital formation (in percent), percent	WEO; staff estimates
Real TFP growth	Residual from decomposition of real GDP growth into physical capital, human capital, working-age population, using a standard constant-returns-to-scale Cobb-Douglas production function (in percent), percent	WEO; staff estimates
Real Public Investment growth	Real growth of public gross fixed capital formation, percent	WEO; staff estimates
Real Private Investment growth	Real growth of private gross fixed capital formation, percent	WEO; staff estimates
Investment	Nominal investment, percent of GDP	PWT
Public Investment	Public gross fixed capital formation, percent of GDP	WEO
Private Investment	Private gross fixed capital formation, percent of GDP	WEO
Fiscal Balance	General government net lending/borrowing, percent of fiscal year GDP	WEO
Government Revenue	General government revenue, percent of fiscal year GDP	WEO
Government Gross Debt	General government gross debt, percent of fiscal year GDP	WEO
External Debt	Total external debt, percent of GDP	WEO
Debt Service	Total debt service paid in percent of GDP	WEO
Domestic Savings	Gross domestic savings, percent of GDP	WDI
Public Saving	Gross public national savings, percent of GDP	WEO
Public Consumption	Public consumption expenditure, percent of GDP	WEO

Current Account Balance	Balance of Payments, Current Account, Total, Net (BPM6), percent of GDP	WEO
CPI Inflation	Consumer Prices, period average, percent change	WEO
HP-filtered REER	Deviation of real effective exchange rate (based on CPI) from standard HP-filtered trend, percent	Information Notice System, staff estimates
Trade Openness	Sum of exports and imports, percent of GDP	WEO
Financial Openness	Sum of global financial assets and liabilities, percent of GDP	WEO
Private Credit	Credit to the Private Sector, percent of GDP	IFS
ICT imports	Information and communication technology goods imports (percent of total goods imports)	WDI
Patents per capita	Sum of patent applications by residents and nonresidents (per 1000 people)	WDI, WEO
Electricity access	Percentage of population with access to electricity	WDI
Fixed telephone lines	Fixed telephone subscriptions (per 100 people)	WDI
Polity2	Quality of executive recruitment, constraints on executive authority and political competition, measured on a scale of -10 to +10, where -10 represents the lowest extreme (i.e. hereditary monarchy) and +10 the highest extreme (i.e. consolidated democracy).	Polity IV Project – Center for Systemic Peace
WGI (Worldwide Governance Indicators)	Standardized first principal component of scores on six dimensions of governance (Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption)	The Worldwide Governance Indicators (WGI) project, by the Natural Resource Governance Institute, Brookings Institute, and World Bank
Civil liberties	The sum of scores on fifteen civil liberties indicators (scale of 1-60)	Freedom House
Value-added of Agriculture	Agriculture, value added, percent of GDP	WDI
Value-added of Manufacturing	Manufacturing, value added, percent of GDP	WDI; staff estimates
Value-added of Industry	Industry, value added, percent of GDP	WDI
Value-added of Services	Services, value added, percent of GDP	WDI

Share of Manufactures in Exports	Manufactures exports (percent of merchandise exports)	WDI
Export Diversification (descriptive)	Inverse of a Herfindahl-Hirschman Index of export concentration using SITC rev. 2, 4-digit product codes, (0-1)	Atlas of Economic Complexity, staff estimates
Export Diversification (regressions)	Inverse of Export Diversification Index, which reflects the sum of intensive- and extensive-margin Theil indices	IMF; Cadot et al. (2011)
Foreign Direct Investment	Balance of Payments, Net Direct Investment, (BPM6), percent of GDP	WEO
GINI index	Area between the Lorenz curve and a hypothetical line of absolute equality, percent	WDI
Gender Parity Education Index	Ratio of girls to boys enrolled at primary and secondary levels in public and private schools (0-1)	WDI
Literacy Rate	Percentage of people ages 15 and above who can both read and write	WDI
Gross Primary School Enrollment	Ratio of total primary school enrollment, regardless of age, to the population of relevant age (percent)	WDI
Gross Secondary School Enrollment	Ratio of total secondary school enrollment, regardless of age, to the population of relevant age (percent)	WDI
Gross Tertiary School Enrollment	Ratio of total tertiary school enrollment, regardless of age, to the population of relevant age (percent)	WDI
Infant Mortality Rate	Number of infants dying before reaching one year of age, per 1,000 live births	WDI
Life Expectancy	Life expectancy at birth, total (years)	WDI
Terms of Trade	Terms of trade in goods, percent change	WEO
US interest rate	US Effective Federal Funds Rate, percent	FRED
Global real growth	Global real GDP growth, percent	WEO

POTENTIAL FOR PRODUCTIVE PUBLIC SPENDING

EFFICIENCY GAINS TO SUPPORT INCLUSIVE GROWTH¹

Enhancing efficiency of public spending is crucial to achieve ambitious social and infrastructure objectives, especially in a context of limited fiscal resources. This paper presents an analysis of the composition of public spending in Côte d'Ivoire and provides an assessment of the efficiency in infrastructure, education, and health spending. By benchmarking Côte d'Ivoire to peer WAEMU, frontier, and emerging market economies, available data suggest that substantial efficiency gains are possible. Efficiency of public spending is all the more urgent in light of the additional pressure put on health and education services by the Covid-19 crisis.

A. Motivation

1. Productive public spending is a prerequisite to sustain strong and inclusive growth in Côte d'Ivoire. The country has experienced one of the strongest growth rates in the world over 2012-2019. However, social and infrastructure needs remain substantial, and will remain critical for the authorities' strategy to reach emerging market status.² Moreover, strengthening education and health services is not only needed to provide the right skills to the workforce to sustain fast growth, but it is also instrumental to ensure that the country is resilient to adverse health events and that growth is inclusive.

2. Needs are large while government's resources are limited. Côte d'Ivoire, like many countries at a similar development level, is finding it challenging to boost domestic revenue mobilization, hindered by a large informal sector and substantial tax exemptions to the private sector.

3. In that context, improving outcomes does not necessarily entail increasing spending; rather a lot can be achieved by spending better. Indeed, given Côte d'Ivoire's ambitious Sustainable Development Goals (SDGs),³ providing better services will be key. Under budget constraints, increasing public spending outcomes may require a better allocation from less to more productive uses, and a better use of scarce public resources—which is what this paper investigates. Productive public spending encompasses here public investment and spending in health and education. The rest of the paper is organized as follows: the first section explores the share of public spending allocated to productive uses, the second section assesses room for efficiency gains for public investment, while the third section analyzes potential in human capital—education and health.

¹Prepared by Jean-Marc Fournier (FAD); Anna Fruttero (SPR); and Hermann Yohou (AFR).

²See SIP on "Sustaining Côte d'Ivoire's Growth Spell: What Will it Take" for a detailed analysis of the features associated with sustained growth episodes.

³17 Sustainable Development Goals were adopted in September 2015 by the United Nations Assembly as part of the 2030 Development Agenda.

B. Allocating Public Resources to Productive Spending

4. The government has given priority to productive spending since 2011. The rise in productive spending was mainly focused on public investment, which rose from 13 to 25 percent of total expenditure between 2011 and 2019. By contrast, health spending increase is less sharp, from 4.4 percent of GDP in 2011 to 5.1 percent of total expenditure in 2018, and education spending recently declined somewhat as a share of public expenditure. Over the same horizon, the share of total expenditure in total economy has risen, so that as a share of GDP the rise of productive public spending is sharper.

5. While public investment and education spending in percent of total expenditure are close to peers, health expenditure remains low. Public spending in education is slightly above peers, while physical capital expenditure is close to peers. However, health expenditure is much lower than in emerging markets, though it is close to WAEMU and frontier market countries. This gap is even sharper when considering health expenditure as a share of GDP.

6. These developments beg the question of the efficiency of that spending. Is the government getting the best of these increased allocation? A particular attention to efficiency is also warranted because scaling up spending can challenge government capacities (e.g., Presbitero 2016). To answer that question, we investigate next how amounts spent compare to outcomes in each sector.

C. Public Investment in Physical Capital

Public Investment Efficiency Analysis

7. The analysis of public investment efficiency is carried out by comparing public investment spending and outcomes. To that effect, we related measures of public investment outcome to the amount spent for a wide range of countries worldwide and compute from that the

“efficiency frontier”, that is, the best in terms of efficiency that can be observed globally (Box 1). Outcomes are gauged with available quantitative measures such as length of road networks or with perceptions of infrastructure quality. We also use this methodology for education and health spending later in the paper.

Box 1. Measuring Efficiency Using Frontier Methods

Frontier methods compare a given country to benchmark countries that get the most of a given set of inputs. For instance, let us consider a country P which is spending X_1 and obtains an output Y_0 , where Y_0 could be for instance the length of the road network in the country, an education test score, or a health achievement indicator. An alternative country D which is more efficient, obtains a better outcome with the same level of spending. The distance between country P and country D indicates the extent to which country P could improve efficiency to reach the same outcome as D . This distance is named output inefficiency. Alternatively, one can also compare country P with country B which obtains the same output with the lowest possible level of spending X_0 . This distance is named input inefficiency. The best performers among all countries reflect an “efficiency frontier” which relates for each level of spending X the best outcome $F(X)$ achieved worldwide. The Data Envelopment Analysis (DEA) is one of the methods enabling the estimation of this efficiency frontier which “envelops” all countries. This framework is widely used to assess public spending efficiency (e.g. IMF, 2015; Garcia-Escribano and Yue Liu 2017, and Baum et al., 2020).

The analyses can be carried out with one or several outputs and one or several inputs. The figure reports an example with one input and one output to show a simple graph in two dimensions. But a production process can require several inputs and deliver several outputs. The DEA can be extended to such cases. For instance, the government needs both money and technology to build infrastructures. The Efficiency analysis used for the Public Investment Management Assessment (PIMA) thus uses two inputs: the public capital stock as a measure of money spent and GDP per capita to approximate the access to technology. In that case, results are relative, reporting efficiency for a given level of development.

In this paper we focus more on output inefficiency rather than input inefficiency.

This is because, in Côte d'Ivoire, high public service needs suggest that efficiency gains should be geared toward improving outcomes rather than cutting spending.

8. Based on quantitative output measures, the efficiency of public investment is assessed to be low. We first relate public investment spending and its translation into capital stock per capita⁴ to a “physical output index” which combines different measures of economic

⁴The public capital stock data is computed as the accumulated value of public investment over time adjusted for depreciation. The depreciation is similar across countries. This is thus the capital stock that would prevail if all countries had the same efficiency. Consequently, mismatches between this measure and an outcome measure are likely to reflect inefficiencies. Information on public and private investment and GDP comes from a combination of the National Accounts of the Penn World Tables (PWT, version 9.1) and the IMF World Economic Outlook (WEO, April 2019 vintage). See Gupta and others (2014) and Kamps (2006) for details on the calculation in the *IMF Investment and Capital Stock Dataset*.

infrastructure (length of road network, electricity production, and access to water) and social infrastructure (number of secondary teachers and hospital beds). There are long delays in data collection, and infrastructure stocks have been built over a long period of time, so that this analysis reflects an average efficiency level of past investments over a long period of time. Recent progress that would not be reflected in the analysis include the effective implementation of the social

plan of the government (*PSGouv*), such as the electrification of more 900 villages per year in 2019 and 2020 against 260 per year over 2011–2018. Also, the analysis abstracts from country-specific features such as mountains, heavy rains, or temperature which may affect costs and outcomes. This analysis shows that, despite a public investment stock above the WAEMU country average, the outcomes are below the WAEMU average. In addition, outcomes are substantially below those of both the FM and EM countries, and generally very far from the “efficiency frontier”.

9. A similar analysis based on qualitative indicators delivers a more positive assessment.

- Quantitative output measures take time to be collected, and do not adequately capture the quality of infrastructure—meaning that the analysis above might not reflect the full picture in terms of public investment efficiency. To complement it, World Economic Forum (WEF) perception indicators observed in 2019 are thus considered. The main advantages of these indicators are that the survey (i) is timely, (ii) measures quality, which is complementary to quantitative measures, and (iii) reflects perception by private-sector decision-makers whose view would normally matter for foreign investment decisions. On the other hand, these data may be biased toward infrastructure quality in large cities or firm needs and are inherently subjective, so these need to be read with care.
- Infrastructure quality indicators suggest a less negative picture. Côte d'Ivoire ranks 116th on the WEF overall quality of infrastructure, against an average rank of 97 for FMs and 71 for EMs. Moreover, the assessment is mixed: the quality of air transport and ports is close to average perception in EMs—reflecting high quality when it comes to international trade. In contrast, perceptions on road and railroad networks—providing connections between remote regions and the coast—are below EM averages and close to WAEMU and FM averages. The WEF survey

thus suggests more potential to reap productivity gains from road and railroad investment projects, which, by better targeting investment towards less economically developed regions, could also make growth more inclusive.

- Based on this qualitative output measure, the assessment of efficiency of public investment in Côte d'Ivoire is more positive. The quality of infrastructure output is slightly above emerging market average even if the capital stock level is well below. One area for improvement would be the domestic transportation network (road and railways).

10. Once accounting for Côte d'Ivoire's development level, public investment efficiency appears broadly appropriate, as highlighted in the 2017 Public Investment Management Assessment reflecting data available in 2016 (PIMA, Fouad et al. 2017). The PIMA provides a complementary angle since, in its analysis of efficiency, it also takes into account the level of available technology, approximated with GDP per capita (Box 1). By doing so, the analysis regards as normal that a country with a lower access to technology obtains weaker results. With this metric, the analysis using quantitative output measure reveals an efficiency score slightly below the sub-Saharan Africa average. By contrast, it reports an efficiency score close to 1—the maximum—using a qualitative measure of infrastructure, suggesting that given the degree of access to technology, the perception is satisfactory. This may reflect the strong provision of trade transport infrastructures. By contrast, the provision of social infrastructure, especially hospitals, is lagging and this is rather captured with the quantitative indicator. In sum, this analysis suggests that there is some room to improve efficiency and that a particular focus on social infrastructure is warranted.

Scope for Policies to Improve Public Investment Efficiency

11. As Côte d'Ivoire aims to reach emerging market status, there is scope to strengthen public finance management for public investment along the way:

- Based on the last PIMA, stronger public investment management could further improve the efficiency of public investment (Fouad et al 2017). The authorities have followed some of the PIMA recommendations on the regulatory framework, including on multi-year programming to improve an effective planification. In addition, the implementation of program budgeting, for the first time with the 2020 budget, provides an opportunity to clarify public investment allocation. There remain gaps in terms of effective implementation. For example, there are still sizeable differences between planned spending in the multi-year investment program and the draft budget law; the coordination between local governments and the central government could be further improved; and decrees are missing to

implement the 2003 decentralization law. Finally, systematic cost analysis and feasibility assessments for new projects would improve targeting toward the most pressing needs.

- The increasing reliance on Public-Private Partnerships (PPPs) should be implemented with clearer rules. The authorities have increased reliance on PPPs to fill infrastructure needs, and by inviting private participation in infrastructure development and service provision, PPPs can help improve efficiency. Yet, for this to happen, a strong governance framework is needed to manage risks and avoid unexpected costs (Irwin et al. 2018). This should include transparent rules to ensure a level-playing field. In 2018, 85 percent of the value of PPPs granted in Côte d'Ivoire was attributed through exceptional procedures. Hence a review of processes would be warranted at this stage to identify how this share could be reduced, including through streamlining procedures to ensure all actors in the public administration and private businesses community have the capacity to implement the regular procedures.
- The recent public procurement reform needs to be fully implemented. In line with WAEMU procurement directives, the reform aims at facilitating e-procurement and strengthening transparency, including by establishing a person in charge in each ministry. While the reform will contribute to ensuring accountability and a fair selection of the best bids, its implementation needs to be carefully monitored, as switching to e-procurement requires effective information technology tools and adequate training. Furthermore, payment delays need to be contained, including during the transition toward the new public procurement law.

D. Public Investment in Human Capital

12. As a pre-requisite to reach emerging market status, infrastructure investment needs to go hand in hand with investment in education and health to accumulate human capital. Human capital underpins growth through the capacity to absorb and adapt new technology, to innovate, and to diversify the economy from low- to high-productivity sectors (structural transformation). Spending in human capital is thus critical, not only in terms of the amount spent, but also in terms of its efficiency at delivering high outcomes.

13. Human capital in Côte d'Ivoire represents a significant constraint. Côte d'Ivoire ranks 149 out of 157 countries in terms of the Human Capital Index—a composite index that measures the amount of human capital a child born today can

expect to attain by age 18. Most of the sub-indices compare poorly with countries in the region and those in the same income group: (i) a child born in Côte d'Ivoire today will be only 35 percent as productive when she grows up as she could be if she enjoyed complete education and full health; (ii) 22 percent of children are stunted, thus at risk of long-term cognitive and physical limitations; (iii) expected years of school for a child who starts school at age 4 are only 4.2 years and by end of primary school, young Ivorians read and calculate less well than young Burundians, or Senegalese; (iv) an Ivorian child spends on average half the time in school than one in emerging countries; and (v) education outcomes are even lower for women. These represent significant constraints as several critical skills affecting productivity are generally acquired at school (Morisset 2017).

Structure of Public Education Expenditure

14. Côte d'Ivoire's share of public expenditure allocated to education is high, although education spending as a share of GDP is below WAEMU peers. The government of Côte d'Ivoire allocates about one fifth of public expenditure to education, close to the Frontier Market average and above the Emerging Market average. However, this is a high share within a relatively small total expenditure to GDP ratio. As a share of GDP, education expenditure in Côte d'Ivoire (3.3 percent in 2018) is below Frontier Market (4 percent in 2018) and Emerging Market (4.3 percent in 2018) averages.

15. Also, the composition of education spending may need rebalancing and attention should be devoted to quality of education. Côte d'Ivoire spends significantly more per student in tertiary than other WAEMU and EMDEs, and substantially less than EMDEs in primary. Over 2016-18, over 20 percent of education expenditure have been directed to tertiary education and just about 40 percent to primary. Thailand and South Korea in the early 1980s when at a similar level of per capita income were giving more priority to primary education, and Malaysia was spending a substantially larger share of GDP in primary and secondary

education.⁵ It would be essential to ensure sufficient resources are available for adequate quality primary and secondary schooling.

16. The successful push to increase enrollment is still far from complete, especially in secondary school, but it adds to the challenges of improving education achievements. As a result of deliberate efforts to provide education for all, enrollment has increased substantially at all levels, although the goal of universal primary education has not yet been reached. Gross enrollment in primary schools has increased by over 20 percentage points since 2000, reaching 100 percent in 2018.

Net primary enrollment also increased substantially reaching 90 percent in 2018. Despite improvements, enrollment in secondary is still low, with more than half of eligible children not attending secondary schooling in 2018. The increased enrollment can add to challenges to ensuring the quality of education, for example if the supply of teachers does not keep up with enrollment, increasing the pupil-teacher ratio.

Education Spending Efficiency Analysis

17. Despite relatively high education spending, Côte d'Ivoire is doing very poorly in terms of quality and learning. Quality of learning at school is a very broad concept, the analysis focuses here on learning core competencies in reading and mathematics. Like in many other West and Central African countries, students are not sufficiently competent in reading and mathematics, with only 3 percent of grade 6 students with high level of competency in mathematics, and 83 percent

⁵Education spending is reported as a share of GDP before transition to the SNA 2008 here due to delays in reporting in cross-country databases. With the revised GDP level, education spending to GDP ratio would be lower.

not competent in 2019.⁶ In reading, 22 percent are highly competent, and 60 percent are not competent.

18. The gap in learning outcomes between children from rich and poor households is substantial. According to the 2014 test scores, among rich households, 35 percent of children achieved a high level of competency, and 35 percent are not competent. Among poor households, 63 (71) percent of girls (boys) are not competent, while only 12 (8) percent of girls (boys) are highly competent. Results are also substantially lower in rural area, where the share of poor households is higher.

19. Moreover, these outcomes have worsened over five years. The recently released data from PASEC 2019 paint a bleak picture. Côte d'Ivoire students had worse outcomes both in mathematics and reading. At the same time, the rise in enrollment rates has improved access to students from disadvantaged backgrounds—the share of end-of-primary students with at least one parent who is illiterate has increased from 66 in 2014 to 77 in 2019 percent in the PASEC survey. The decline of test scores may thus reflect difficulties to provide effective education to students from disadvantaged background.

⁶Grade 6 corresponds to age 11 ("6ème" in Côte d'Ivoire).

20. Côte d'Ivoire is far from the efficiency frontier when it comes to education spending.

When looking at education outcomes in terms of the World Bank harmonized test scores to ensure to the extent possible cross-country comparability beyond French speaking SSA countries, (Patrinos and Angrist 2018), Côte d'Ivoire fares poorly compared to peers.⁷ Côte d'Ivoire spends more than WAEMU countries without higher results on average. For example, Burkina Faso spends twice less than Côte d'Ivoire and obtains the 2nd highest test score among WAEMU country, only slightly below Senegal. Kenya has significantly higher education outcomes, close to the frontier, with only slightly more spending per capita.

Health Spending Efficiency Analysis

21. Health outcomes are also lagging, despite rising public health spending. Public spending in health has more than double in real terms over the last decade. The growth rate in health spending has been faster than in FM and EM, although levels in percent of GDP remain very low compared to these groups. At the same time, the maternal mortality rate decreased by only 6 percent and the under-5-year mortality rate by 10 percent between 2015 and 2018, far below the 30 to 50 percent targeted in the authorities' Health National Development Plan (PNDS, 2016–20). These two indicators may not reflect all health outcomes, but they are effective in gauging efficiency as they are relatively easy to measure and they reflect the capacity of the health system to take care of vulnerable patients – the youngest and their mothers. The weak outcomes highlight the need to improve public health efficiency so that higher spending can translate into lower mortality rates. These also indicate that the effects of preexisting health issues are substantially larger than those of the Covid-19 pandemic. For instance, about 60,000 children are dying before the age of 5 each year in Côte d'Ivoire, against 137 reported Covid-19 deaths in 2020.⁸ This section thus focuses on these preexisting weaknesses.

22. Much better health outcomes are achieved with similar health spending in other countries. For instance, in Rwanda the maternal and under-5-year mortality rates are twice smaller with less per capita public health spending. Sri Lanka is at the frontier with even better results and slightly lower spending. Low outcomes in Côte d'Ivoire thus seem to reflect weak health spending efficiency (Bissouma-Ledjou et al., 2018).

⁷This harmonized test score is making use of 2014 PASEC data.

⁸See Staff Report for the latest developments related to the Covid-19 pandemic in Côte d'Ivoire.

23. A Data Envelopment analysis indeed shows that Côte d'Ivoire has one of the least efficient health systems.⁹ On average over the last two decades, Côte d'Ivoire is the second worst performer according to this analysis. This remains true since 2015, a period over which health spending efficiency is deteriorating, suggesting that the government is spending more on health without reaping the corresponding gains.¹⁰

24. The difficulty in providing public health service to the whole population likely contribute to the inefficiency. Only one fifth of health expenditure is public, and the share of out-of-pocket health expenditure is higher than in frontier or emerging markets. As a result, health services may be too expensive for a large part of the population, which forego health care or fall in extreme poverty in case of a health accident (World Bank, 2019). By contrast, increased prepayment and pooling can potentially result in efficiency gains from enhanced bargaining power of purchasers (World Bank, 2019). PSGouv achievements may mitigate concerns on health inequalities,

⁹We use a combination of the maternal and under-5-year mortality rates as proxy of health outcomes and add external health spending (donors) to public health spending. In addition, several parameters (such as private health spending, access to improved water and sanitation facilities) are added to control for other drivers of health outcomes. 5-year averages of inputs (3 years for the last subperiod) are associated with the subsequent outcome, as policies can affect outcomes with delay.

¹⁰The weak efficiency and decline are robust to alternative efficiency analysis with different sets of inputs.

including with building school latrines in rural areas and accelerating the deployment of a universal health coverage scheme. Its enrolled population has increased by more than fifty percent in 2020 to reach 2.9 billion persons. Buttressing health capacity will be necessary to ensure that those enrolled can effectively benefit from health services.

E. Conclusion

25. Without improvement in productive public spending efficiency, with particular urgency for education and health, reaching emerging market status will remain difficult.

While public capital investment efficiency appears appropriate, this is still potential for improvements compared to FM and EM peers. Furthermore, spending efficiency lags peers in the area of education and health.

26. A well-targeted approach would also enhance inclusiveness. A common strategy is a potential to improve outcomes by better targeting public services toward those who need it the most. Public investment needs are larger for road and railway connection toward the hinterland, education needs at the primary level are large and low-income households need a better access to health services. Strengthening productive spending efficiency can thus yield a double dividend in both boosting productivity and reducing inequality.

27. This diagnostic should be followed by a careful design of efficiency enhancing policy measures. Options include public finance management policies, including stronger governance,¹¹ as well as enhancing public investment management (including spending plans, regional allocation, and cost/feasibility assessments), standardizing PPPs procedures, and improving public procurement. Decision makers also need to have the appropriate information to identify spending inefficiencies. The transition to program budgeting in 2020 provides such an opportunity to improve spending classification transparency, develop performance-related tools and better link spending to policy objectives (Wiest et al., 2019). More systematic public reports with improved quality and timeliness would strengthen incentives to fix inefficiencies. Finally, beyond overall improvement to public finance management, sectoral policy reforms urgently need to be designed in the area of education and health, in collaboration with international agencies where appropriate.

28. Of course, data limitations prevent the possibility of a complete picture. Most of the analysis in this study requires data which are internationally comparable, which occasionally is available only with a lag. Hence more recent changes to the efficiency of public spending may not be reflected in this analysis.

¹¹See SIP on "The Governance Framework: Current State and the Way Forward".

29. Cognizant of the need to deliver better services, the authorities are planning ambitious policies to deliver better public services within the forthcoming national development plan. Objectives would include increasing schooling enrollment rates, creating new classrooms, and recruiting teachers. The plan would also aim at increasing education spending efficiency via measures to improve governance, recruitment, training, monitoring, and evaluation of teachers, including with recruitment of monitoring staff and reliance on new technologies. As pertains health, the authorities aim at increasing life expectancy and reducing maternal and infant mortality rates. This would be achieved by increasing the share of health spending in government spending, building new infrastructures, reducing the health personnel coverage disparities between regions, promoting innovative digital technologies to support the health system, and strengthening the program for universal access to health care.

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