

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.

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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.

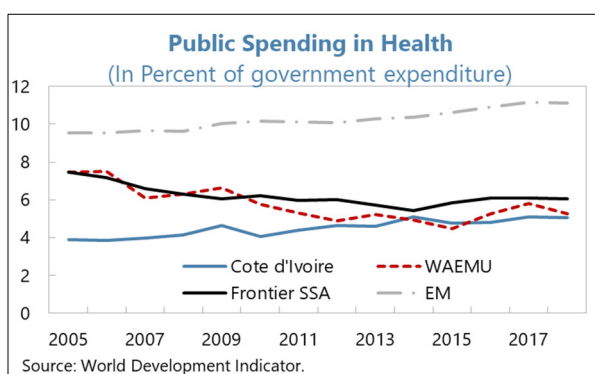
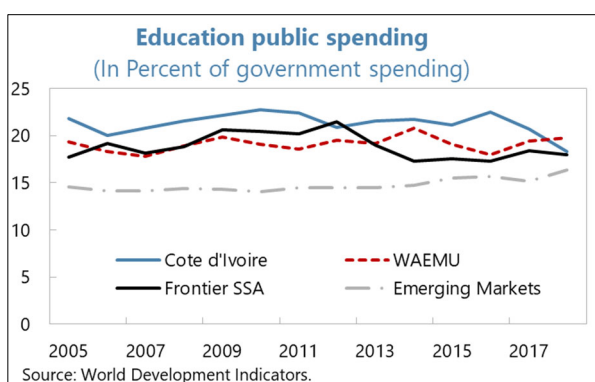
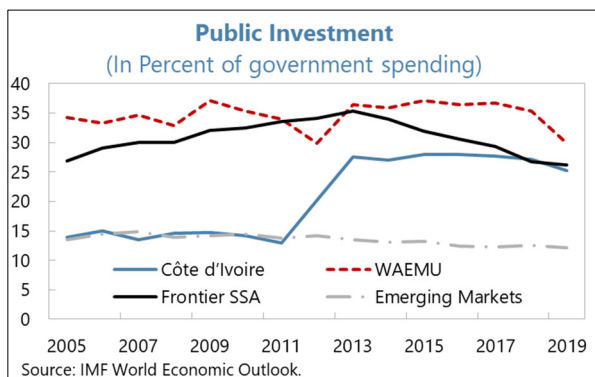
The rise in productive spending was mainly focused on public investment, which rose from 13 to 25 percent of total expenditure between 2011 and 2019. By contrast, health spending increase is less sharp, from 4.4 percent of GDP in 2011 to 5.1 percent of total expenditure in 2018, and education spending 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.

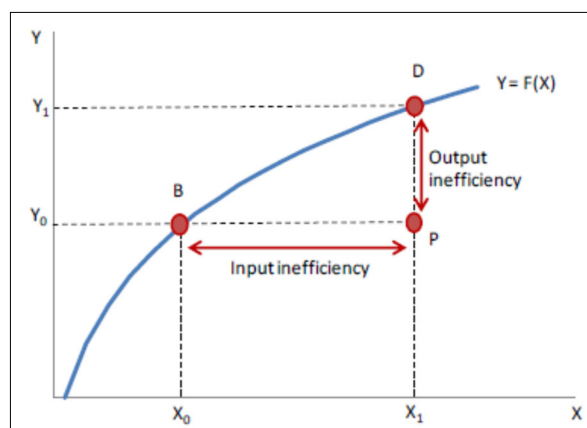
Box 1. Measuring Efficiency Using Frontier Methods

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.

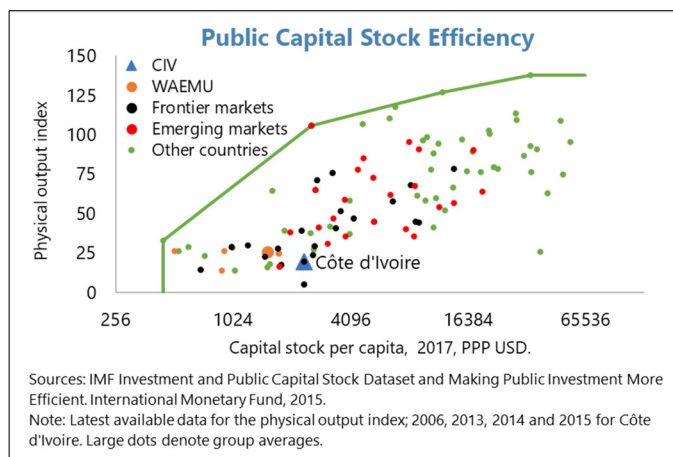


8. Based on quantitative output measures, the efficiency of public investment is assessed to be low. We first relate public investment spending and its translation into capital stock per capita⁴ to a “physical output index” which combines different measures of economic

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*.

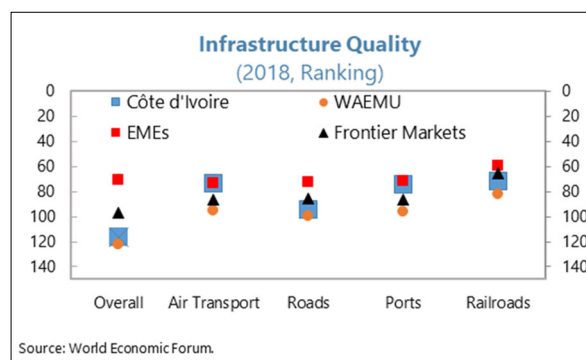
infrastructure (length of road network, electricity production, and access to water) and social infrastructure (number of secondary teachers and hospital beds). There are long delays in data collection, and infrastructure stocks have been built over a long period of time, so that this analysis reflects 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”.



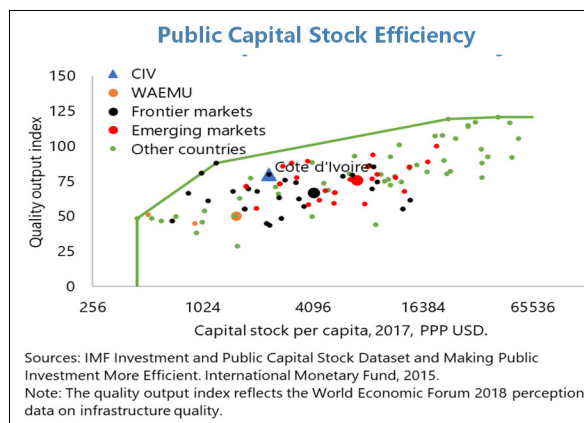
9. A similar analysis based on qualitative indicators delivers a more positive assessment.

- 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

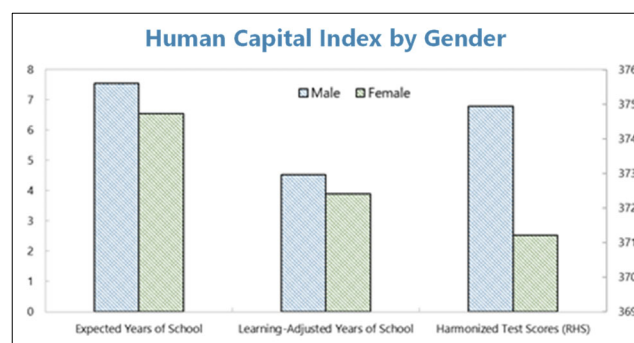
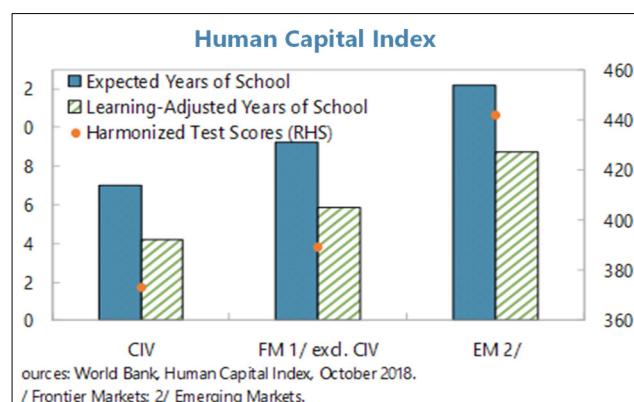
implement the 2003 decentralization law. Finally, systematic cost analysis and feasibility assessments for new projects would improve targeting toward the most pressing needs.

- 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.

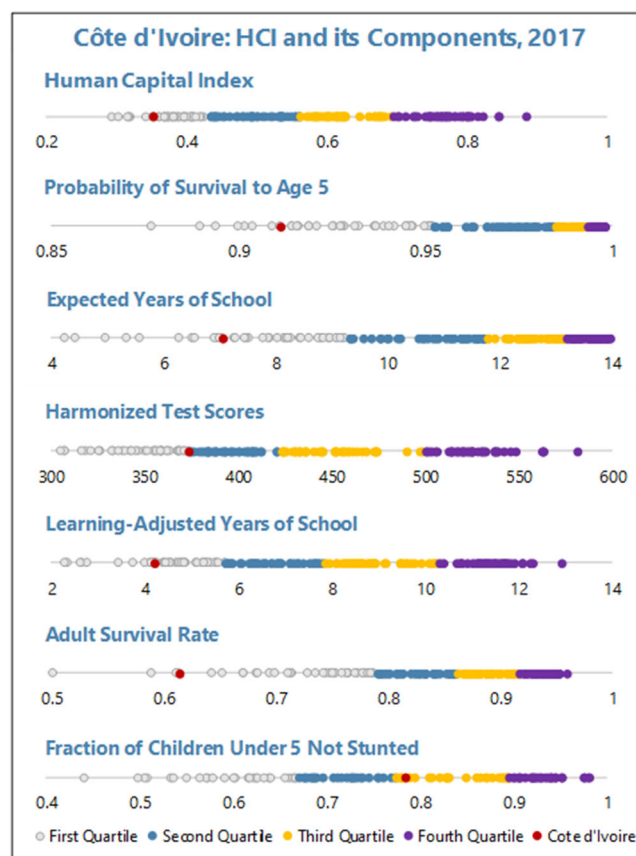
D. Public Investment in Human Capital

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



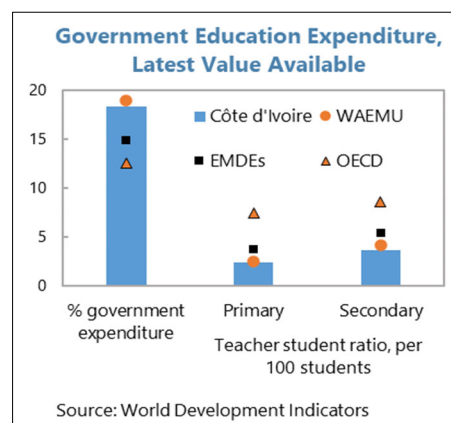
expect to attain by age 18. Most of the sub-indices compare poorly with countries in the region and those in the same income group: (i) a child born in Côte d'Ivoire today will be only 35 percent as productive when she grows up as she could be if she enjoyed complete education and full health; (ii) 22 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).



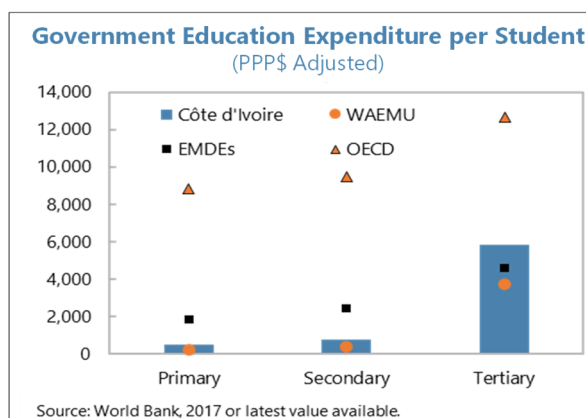
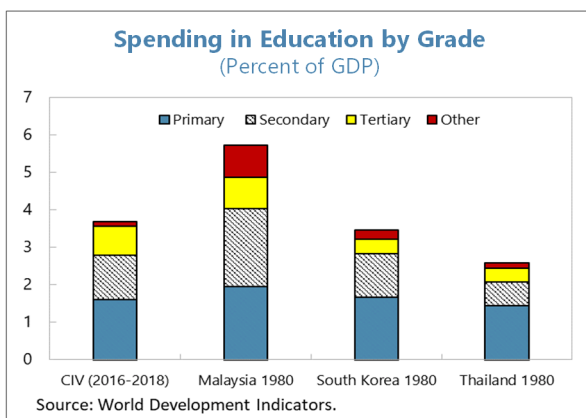
Structure of Public Education Expenditure

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.

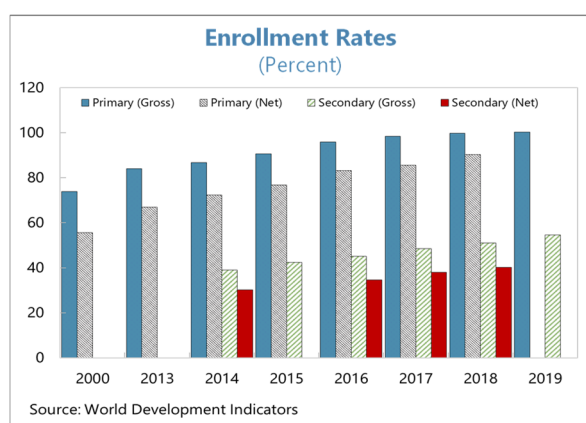
15. Also, the composition of education spending may need rebalancing and attention should be devoted to quality of education. Côte d'Ivoire spends significantly more per student in tertiary than other WAEMU and EMDEs, and substantially less than EMDEs in primary. Over 2016-18, over 20 percent of education 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.

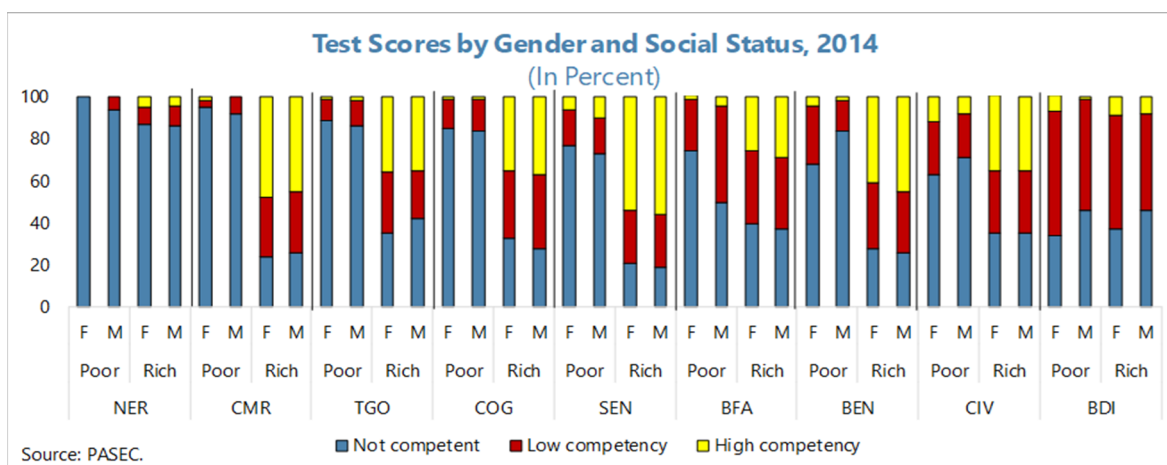
Education Spending Efficiency Analysis

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

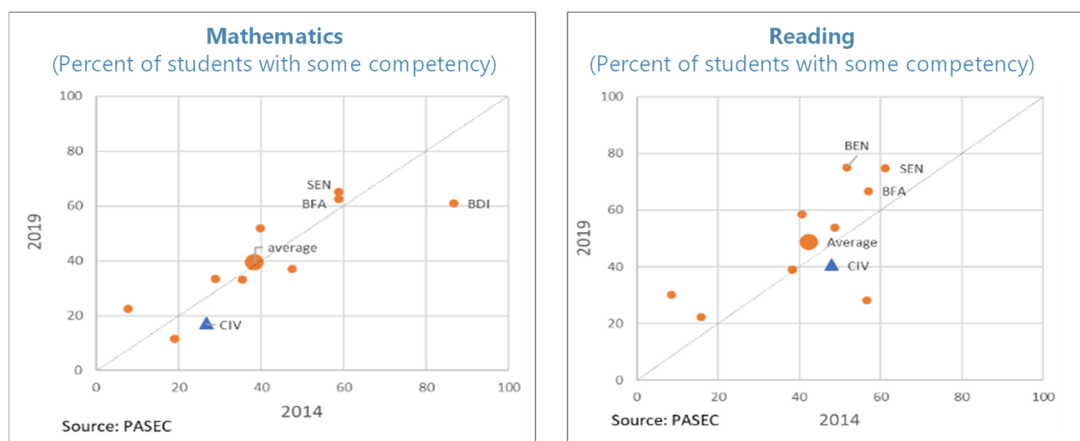
⁵Education spending is reported as a share of GDP before transition to the SNA 2008 here due to delays in reporting in cross-country databases. With the revised GDP level, education spending to GDP ratio would be lower.

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.



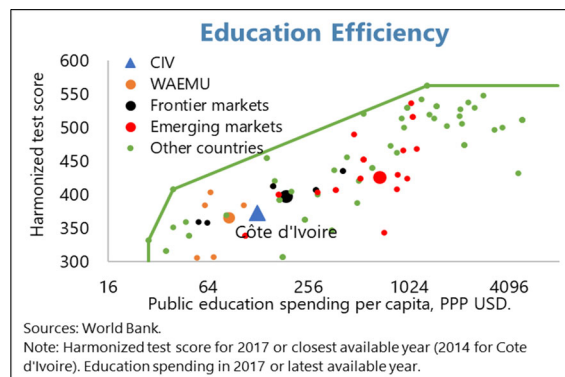
19. Moreover, these outcomes have worsened over five years. The recently released data from PASEC 2019 paint a bleak picture. Côte d'Ivoire students had worse outcomes both in mathematics and reading. At the same time, the rise in enrollment rates has improved access to students from disadvantaged backgrounds—the 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.



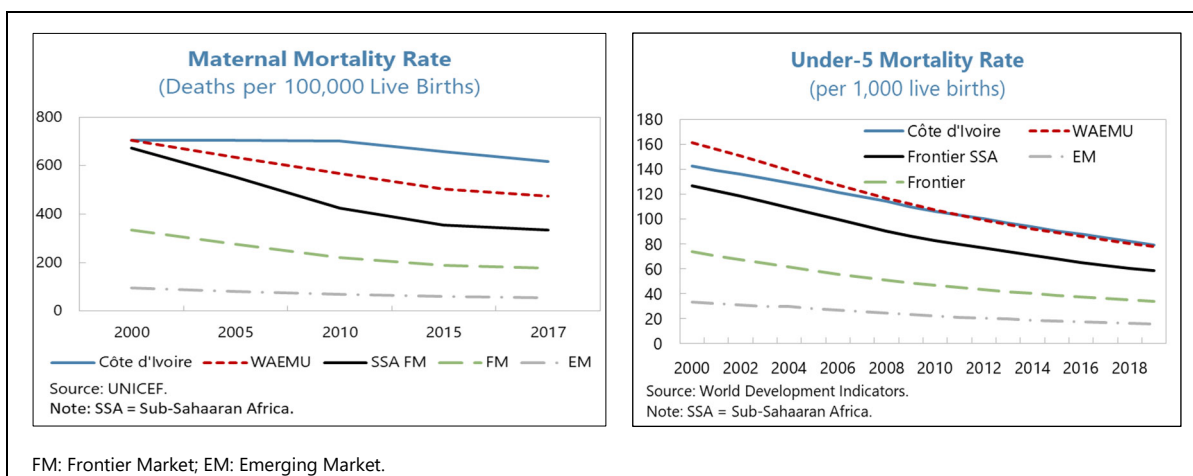
Health Spending Efficiency Analysis

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.

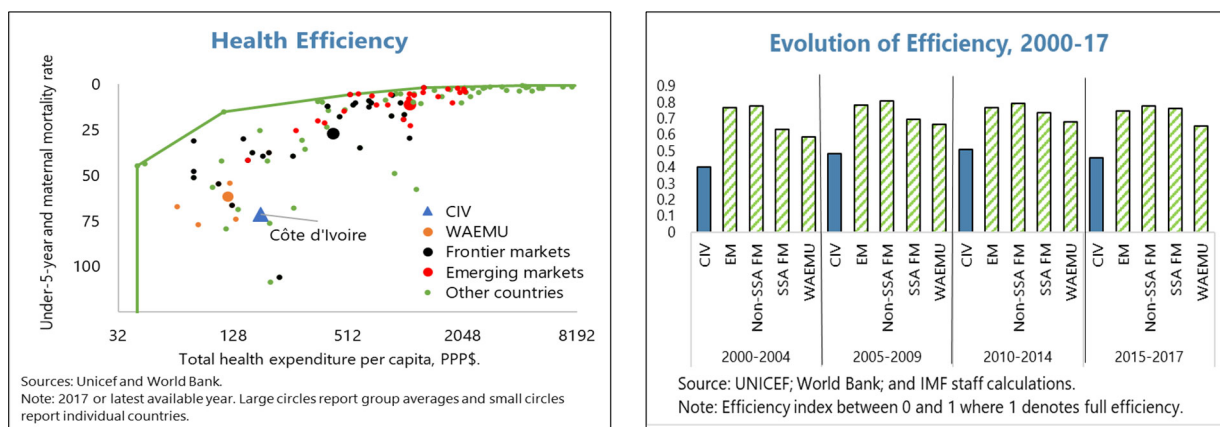
22. Much better health outcomes are achieved with similar health spending in other countries. For instance, in Rwanda the maternal and under-5-year mortality rates are twice smaller with less per capita public health spending. Sri Lanka is at the frontier with even better results and slightly lower spending. 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.

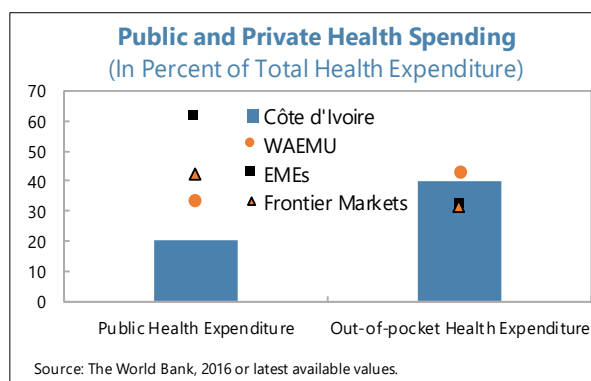
¹⁰The weak efficiency and decline are robust to alternative efficiency analysis with different sets of inputs.

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.

References

- Andre, N. 2017. Mission d'assistance technique sur la modernisation des ressources humaines. IMF Technical Assistance Report.
- Baum, A., T. Mogues, and G. Verdier. 2020. "Getting the Most from Public Investment." In *Well Spent: How Strong Infrastructure Governance Can End Waste in Public Investment*, edited by G. Schwartz, M. Fouad, T. Hansen, and G. Verdier. Washington, DC: International Monetary Fund.
- Tania Bissouma-Ledjou, Hermann Djédjé Yohou, David Lago Gouali, Alexandre Guébo, Hélène Barroy, Laurent Musango, Yameogo Jean-Marie Vianny. 2018. *Espace budgétaire et efficience en Côte d'Ivoire : quelles marges de manoeuvre ?* Brazzaville : Organisation mondiale de la Santé, Bureau régional de l'Afrique.
- Fouad et al. 2017. Evaluation de la Gestion des Investissements Publics – PIMA. IMF Technical Assistance Report.
- Garcia-Escribano, M. and C. Yue Liu. 2017. Expenditure Assessment Tool (EAT). IMF Technical Notes and Manuals.
- Gupta, S., and others, 2014, "Efficiency-Adjusted Public Capital and Growth," *World Economic Development*, Vol. 57, Issue C: pp. 164–78.
- IMF. 2015. Making Public Investment More Efficient, *IMF Staff Report*.
- IMF. 2019. Domestic Arrears in Sub-Saharan Africa: Causes, Symptoms, and Cures. IMF Sub-Saharan Africa Regional Economic Outlook.
- Irwin, T.; S. Mazraani and S. Saxena. 2018. How to Control the Fiscal Costs of Public-Private Partnerships. IMF How To Note No. 18/04.
- Kamps. 2006. "New Estimates of Government Net Capital Stocks for 22 OECD Countries, 1960–2001" *Staff Papers*, International Monetary Fund, Vol. 53, No. 1, pp. 120–50.
- Kapsoli and Teodoru. 2017. Benchmarking Social Spending Using Efficiency Frontiers. IMF Working Paper No. 17/197.
- Morisset, Jacques; Ndem, Andre Francis. 2017. Le défi des compétences, pourquoi la Côte d'Ivoire doit reformer son système éducatif? (French). Côte d'Ivoire economic update; no. 4. Washington, D.C. : World Bank Group.
- PASEC (2016). PASEC2014 – Performances du système éducatif ivoirien : Compétences et facteurs de réussite au primaire. PASEC, CONFEMEN, Dakar.

Patrinos and Angrist. 2018. Global Dataset on Education Quality Working Paper Serie No. 8592. The World Bank.

Presbitero, A. 2016. "Too Much and Too Fast? Public Investment Scaling-Up and Absorptive Capacity." *Journal of Development Economics* 120: 17–31.

Wiest, B., M.-L. Lelong, P. Roumegas and C. Wendling. 2019. Renforcer la transparence et valoriser l'information portant sur les Finances Publiques. IMF Technical Assistance Report.

World Bank. 2018a Procuring Infrastructure Public-Private Partnerships 2018.

World Bank 2018b. World Development Report 2018: Learning to Realize Education's Promise.

World Bank. 2019. High-Performance Health Financing for Universal Health Coverage (Vol. 2): Driving Sustainable, Inclusive Growth in the 21st Century (English). Washington, D.C. : World Bank Group.