

Millennium Challenge Corporation

Burkina Faso II

Constraints

Analysis Report

2020



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UNITED STATES OF AMERICA

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An Analysis Prepared by the Government of Burkina Faso and the Millennium Challenge Corporation
of the United States of America for the Development of a Millennium Challenge Compact

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1 Country Context and Methodology

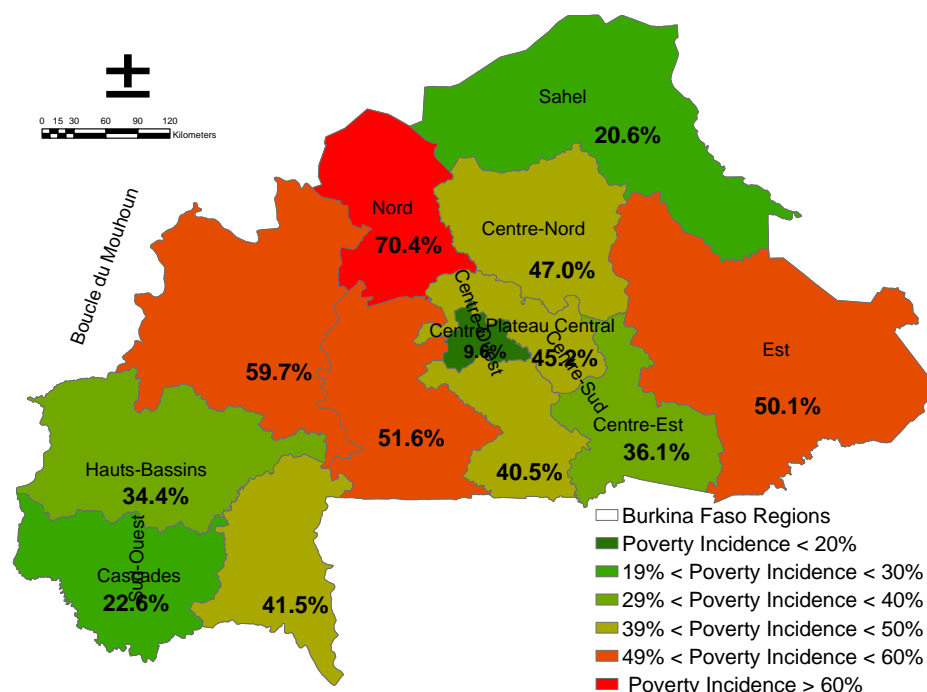
Burkina Faso was deemed eligible to develop a second compact by the Millennium Challenge Corporation (MCC) Board of Directors in December 2016, after successfully completing an initial compact in 2014. The Development Team representing the Government of Burkina Faso and MCC reached agreement on the binding constraints to economic growth for Burkina Faso in August 2017.

1.1 Country Economic Context

Burkina Faso is a francophone West African country with a GDP per capita of \$650 and a population of 18.6 million. Using the World Bank's \$1.90 PPP per day international poverty line, 43.7 percent of its population is considered poor per the 2016 poverty survey. With rising growth in GDP since the early to mid - 1990's, poverty rates have dropped dramatically from 51.1% in 2003, however, due to high rates of population growth, absolute numbers of poor have not dropped substantially. Thus, Burkina Faso remains a high poverty country (World Bank, 2017).

Within Burkina Faso, there are great regional disparities in income and poverty, as well as disparities in socioeconomic status by gender and age (Figure 1-1). Poverty in Burkina Faso is much higher in rural than in urban areas. The most recent data on poverty at national poverty lines shows strong differences by region, with the highest poverty rates in the North, East, Center-West and Boucle du Mouhoun regions (INSD, 2015).

Figure 1-1. Poverty Incidence by Region in Burkina Faso

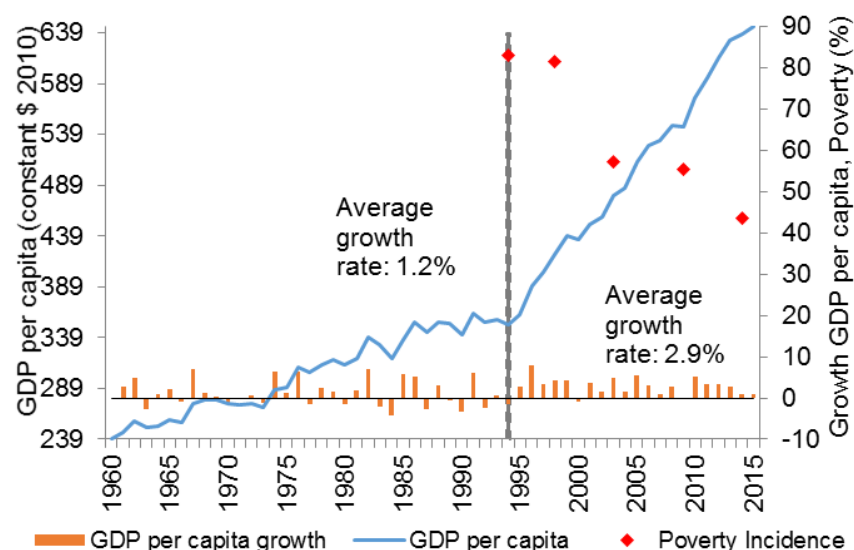


Source: Burkina Faso Institute for National Statistics and Demography (INSD) (2015)

Burkina Faso has experienced consistent growth in GDP per capita in recent years (Figure 1-2). As in many West African countries in the regional monetary union, the devaluation of the CFA Franc in 1994 marks a turning point in Burkina Faso's growth history. Prior to this devaluation, Burkina Faso experienced lower and more variable growth rates, with an average growth rate of GDP per capita of 1.2 percent per year. After the devaluation, growth rates of GDP per capita rose to an average of 2.9 percent per year.

Remarkably, growth performance of Burkina Faso has been slow but steady in the long-run relative to other low income countries (LICs). Paradoxically, this steady slow growth is happening without any notable structural change (Koussoubé et al. 2014).

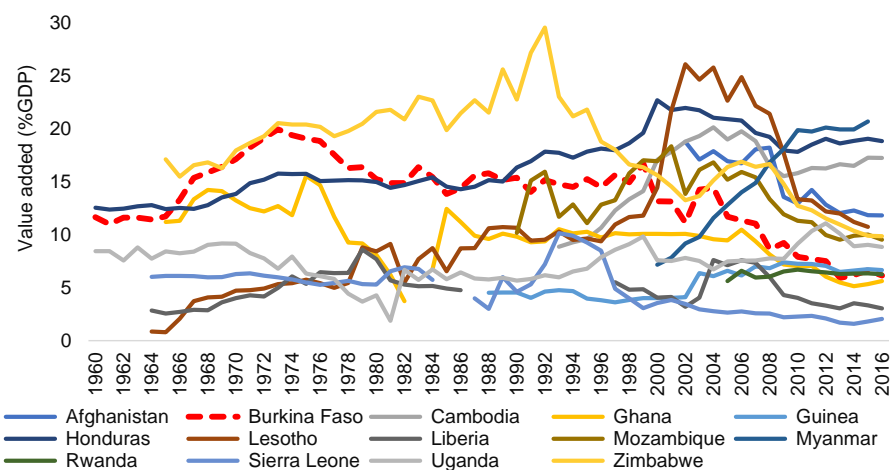
Figure 1-2. Growth and Poverty in Burkina Faso



Source: World Development Indicators (2017)

Despite this consistent growth, manufacturing as a share of value-added in Burkina Faso has fallen steeply both in absolute terms and relative to comparators over the past 25 years (Figure 1-3). The premature decline in share of manufacturing in value-added relative to Burkina Faso's level of development may be an indicator of underlying problems in the economy which erode its comparative advantage in higher value-added products. This decline is not prima facie evidence for a constraint in itself, and is likely partially driven by privatization of state-owned enterprises in the early 1990s. In contrast, exports in mining have increased sharply since 2008, reflecting a recent gold boom. Gold primarily dominates exports in Burkina Faso, followed by raw cotton, other oily seeds, coconuts, brazil nuts and cashews and raw zinc.

Figure 1-3. Burkina Faso's Declining Manufacturing Sector



Source: WDI (2017)

As part of the West African Monetary and Economic Union (UEMOA), Burkina Faso benefits from the following:

- A stable currency with low inflation rates;
- Has good indicators of macroeconomic management;
- Inflation has a relatively low long-run average of five percent;
- Growth rates of government expenditure have been largely under control since 1983;
- The ratio of external debt to GDP has remained low after debt forgiveness under the Multilateral Debt Relief Initiative (MDRI) and the Heavily Indebted Poor Countries (HIPC) debt forgiveness initiative.

One outstanding question, as for other members of UEMOA, is whether the exchange rate is potentially overvalued to the detriment of Burkina Faso's exporters. The evidence on this however, is not conclusive (Etta-Nkwelle et al, 2010).

The challenge for Burkina Faso is how to sustain and strengthen the growth and poverty reduction that it has experienced over the past 25 years. Burkina Faso's agriculture, mining, and service sectors have been engines of overall growth. Development in the agricultural sector in particular has been the largest contributor to steep declines in headcount poverty. However, the recent literature on Africa and structural transformation suggests that manufacturing and services growth, and employment transitions out of agriculture, are key to long-term poverty reduction (McMillan and Harttgen, 2014). Encouraging the creation of value-added in the more factor-and-skills-intensive manufacturing and services sectors may thus be the next chapter in Burkina Faso's poverty reduction story.

To foster its economic growth and poverty alleviation, Burkina Faso could perhaps take advantage of the seemingly relative stability that has prevailed since its successful democratic election in 2016. Still, there are pockets of insecurity, notably in the northern part of the country, following the revolution that ousted president Blaise Compaore in 2014; the failed military coup attempt in 2015; and the terrorist attack in Ouagadougou in 2016 that preceded the election. These places of political instability pose serious challenges to the country as a whole.

1.2 Constraints Analysis Process

The CA process was jointly led by the Development Team from the Government of Burkina Faso (GoBF), *L'Unité de Coordination de la Formulation du second Compact du Burkina* (UCF-Burkina), with support from students from the University of Ouagadougou, and MCC's Burkina Faso II Country Team, which was led by the Economic Analysis (EA) team members. Between February 2017 and August 2017, the technical teams undertook a desk review of available data and evidence on constraints to growth in Burkina Faso and also took part in focus groups and one-on-one consultations with a wide variety of stakeholders, including government, private sector, civil society and non-governmental organizations. The findings of the CA were reviewed by a MCC technical peer reviewer and also by MCC's Practice Leads and were formally validated through both intensive review with the Prime Minister's office and in an in-country workshop held at the end of August 2017.

The CA methodology follows the Growth Diagnostics approach developed by Harvard University economists.¹ The goal of the analysis is to use a systematic, data-driven approach to determine which factors of a country's economy are the greatest constraints to private investment and economic growth. The integrated CA process includes data and analyses from gender and social inclusion (GSI) and finance,

¹ Hausmann, R, Rodrik, D., & Velasco, A. (2005): "Growth Diagnostics". Manuscript, Inter-American Development Bank.

investment and trade (FIT) perspectives. MCC analyses for both sectors was supplemented by contracted services. In the case of GSI, MCC contracted a West African gender and political economy expert to draft an issues paper, which was distributed to the CA team in advance of the first technical mission in April. Under FIT, MCC contracted with Dalberg Global Development Advisors to produce two analyses on finance and productive sectors, respectively. The contributions from these two teams were critical to the analysis of Burkina Faso's economy presented here, and are detailed more in Annexes A and B.

2 Summary of Constraints Identified

The Development Team and MCC identified the following two binding constraints to growth in Burkina Faso:

- 1. High Cost, Low Quality, and Low Access to Electricity:** Burkina Faso has a high cost of electricity and low quality of service, hampering firms' ability to operate in electricity-dependent sectors. Burkina Faso also has very low rates of access to electricity;
- 2. Lack of a Skilled Workforce:** Burkina Faso has low rates of school enrollment and low educational attainment, despite returns to schooling that appear to be increasing over time. This, combined with some specific skills deficits, poses a major obstacle to private investment and entrepreneurship.

Both of these constraints result in high factor costs to firms looking to operate or expand their operations in Burkina Faso. Returns on investment are low, especially in skill- and energy- intensive sectors. In addition, both contribute to the uncertainty of production, and increase risks for firms looking to produce higher value-added products or services. Cheaper and better quality electricity will reduce households' expenditures on energy and improve firms' productivity.

The Constraints Analysis (CA) also identified three other important non-binding constraints related to health, microeconomic risks, and overland transportation. In the area of health, malaria is the greatest contributor to lost disability adjusted life years, while childhood malnutrition is also severe. Costly microeconomic risks to businesses include taxation and tax administration, as well as a burdensome labor code and slow and exorbitant judicial procedures. With respect to transportation, Burkina Faso, a landlocked country, still suffers from poor transportation infrastructure and inefficiencies in trucking services, resulting in high shipping costs, and reduced potential for trade in goods.

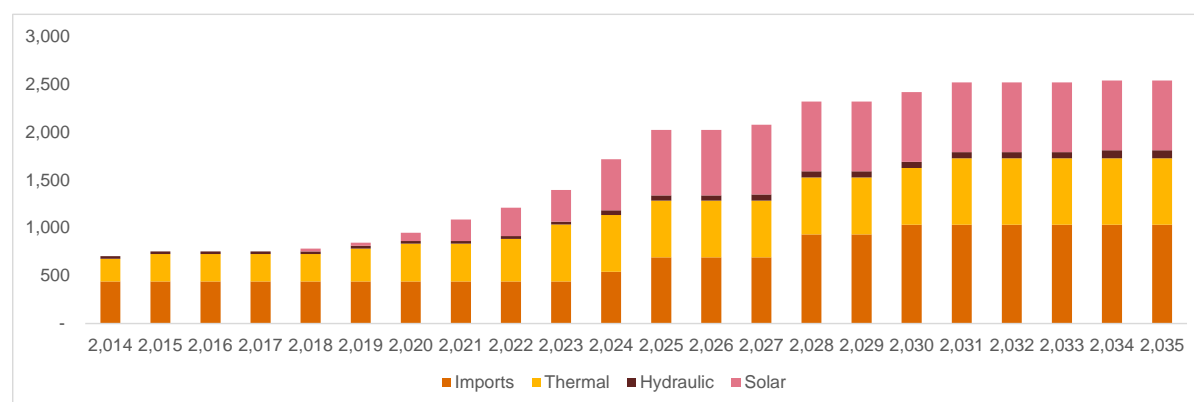
3 Details on Binding Constraints

3.1 Electricity

High cost, poor quality, and low access to electricity are considered to be a binding constraint to growth in Burkina Faso. Burkina Faso's energy sector is characterized by a near monopoly of service provision by the state-owned utility, Société Nationale d'Électricité du Burkina Faso or SONABEL. The sector has been partially liberalized and the Fond de Développement de l'Électrification is involved in production, but SONABEL remains the only actor in charge of transport and distribution. The state-owned Société Nationale Burkinabè d'Hydrocarbures, or SONABHY, remains a monopoly in charge of fuel distribution for the electricity utility.

Electricity supply is expected to rapidly increase in Burkina Faso, largely due to the reinforcement of the transmission lines from both Ghana and Cote d'Ivoire (Figure 3-1).

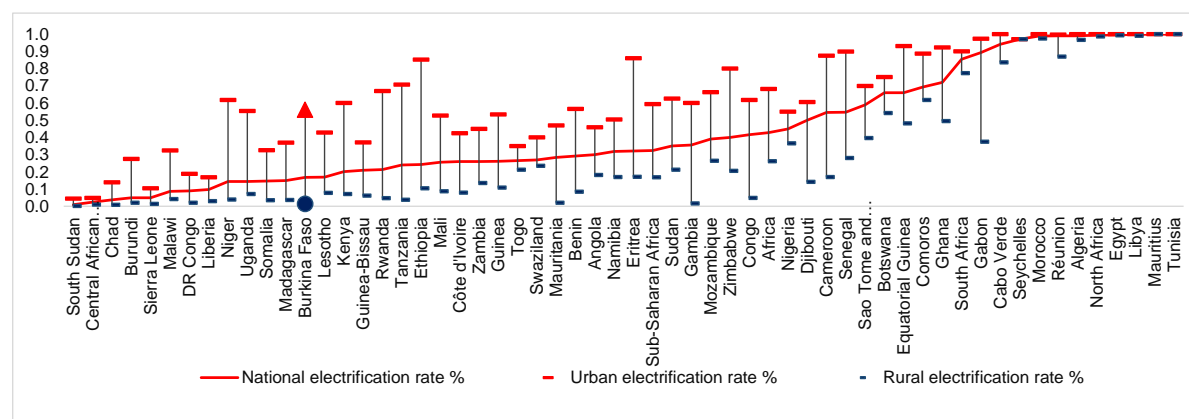
Figure 3-1. Energy Supply in Burkina Faso by Source (GWh)



Source: PWC Financial model (2019)

Despite this expected increase in supply, access to electricity is limited, and current high prices and data on outage frequency and duration suggest that SONABEL is not operating efficiently. Rates of urban access are above 50 percent, but at 3 percent, Burkina Faso has one of the lowest rates of rural electrification in Africa. Due to these low rural electrification rates, combined with Burkina Faso's low rate of urbanization, overall rates of electrification are also low relative to other countries in Africa (Figure 3-2).

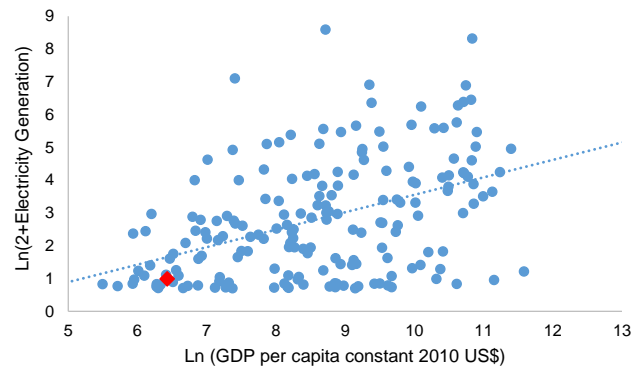
Figure 3-2. Electrification Rates for African Countries show Burkina Faso among the least electrified



Source: Autorite de Regulation du Sous-secteur de l'Electricite, ARSE (2014)

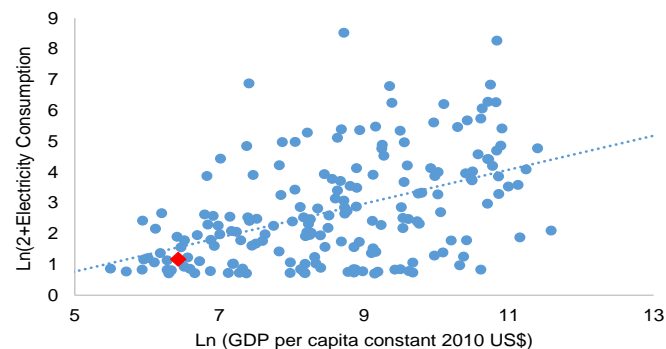
Data on energy production and consumption from the United States Energy Information Administration also show these are low relative to GDP per capita in Burkina Faso (Figure 3-3 and Figure 3-4).

Figure 3-3. Electricity Production versus GDP per Capita



Source: World Bank World Development Indicators (2014)

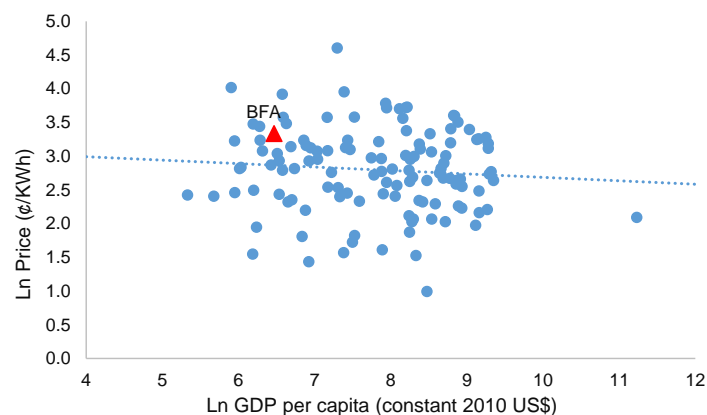
Figure 3-4. Electricity Consumption versus GDP per Capita



Source: World Bank World Development Indicators (2014)

Burkina Faso is an outlier in terms of the cost of energy, measured as the price per kilowatt-hour (KWh). Relative to countries at similar levels of GDP per capita, the World Bank's Doing Business data for 2017 indicate that the price is above trend (Figure 3-5).

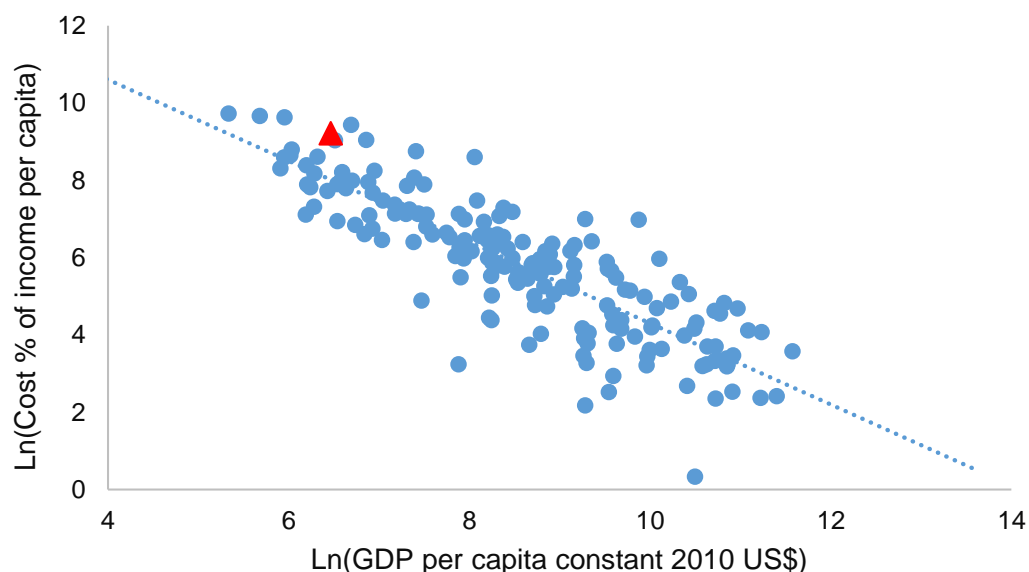
Figure 3-5. Global Prices for Energy (KWh) versus GDP per Capita



Source: Doing Business (2017)

Another measure of cost is the cost of energy as a percentage of income per capita. Again, by this metric, Burkina Faso is an outlier and above trend (Figure 3-6).

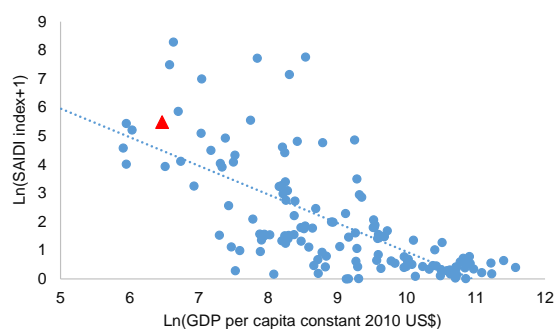
Figure 3-6. Cost of Energy Relative to Income per Capita versus GDP per Capita



Source: Doing Business (2017)

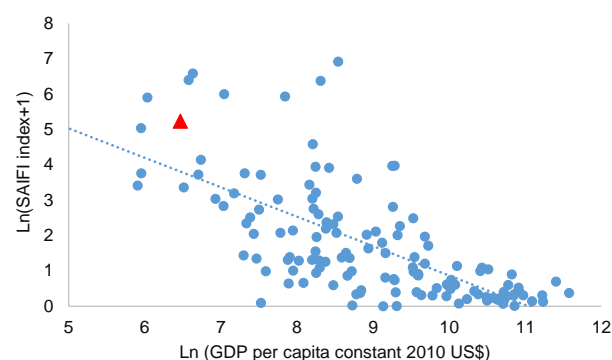
The quality of service is also poor, as reflected in the System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI). Both the SAIDI and SAIFI are significantly above the trend line, when plotted relative to GDP per capita, indicating that Burkina Faso's electricity sector quality of service is relatively low (Figure 3-7 and Figure 3-8). The number of procedures required to get electricity in Burkina Faso is below the average, while the number of days to get electricity is above average, indicating a relatively well functioning operational system with room for improvement.

Figure 3-7. SAIDI versus GDP per Capita



Source: Doing Business (2017)

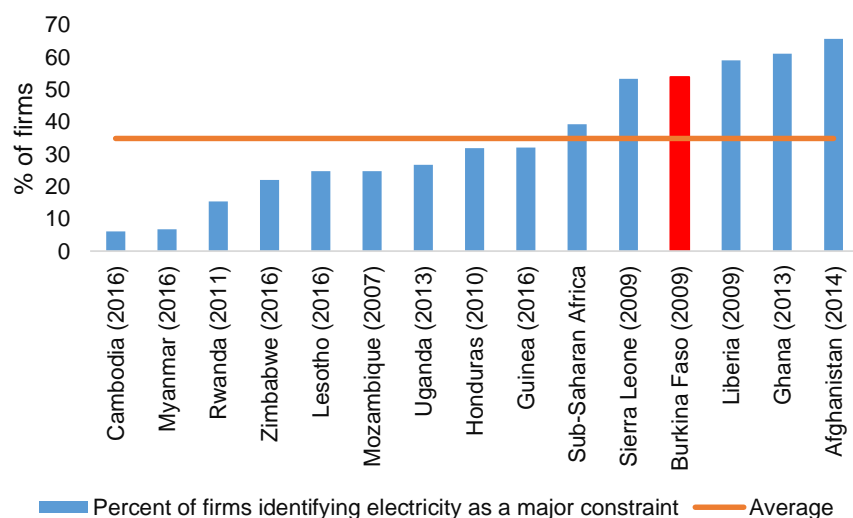
Figure 3-8. SAIFI versus GDP per Capita



Source: Doing Business (2017)

In this environment of low access, high cost and frequent and lengthy outages, it is perhaps not surprising that firms in Burkina Faso consider electricity to be a major constraint. In the World Bank's Enterprise Survey Data, relative to a set of comparator countries, the percentage of firms considering electricity to be a major or severe constraint is high, at above 50 percent (Figure 3-9).

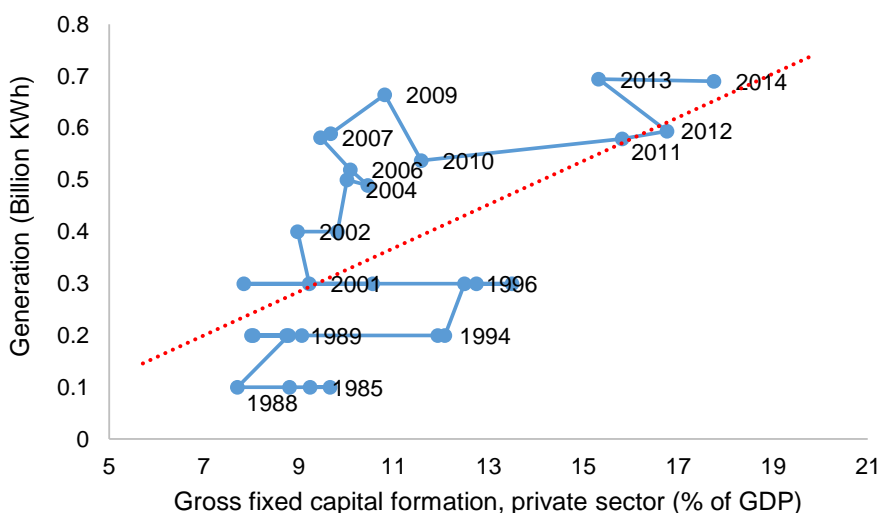
Figure 3-9. Firms Considering Electricity a Major or Severe Constraint



Source: World Bank Enterprise Survey (2009)

When comparing measures of electricity sector output and access to growth and investment, analysis reveals a possible correlation with private investment and growth. According to the World Bank's Doing Business 2017 there is a positive relationship between electricity generation and gross fixed capital formation as a percentage of GDP². Similarly, access to electricity as a percentage of the population is reported to be positively associated with gross fixed capital formation as a percentage of GDP. Finally, additional data from the U.S. Department of Energy on annual electricity generation in Burkina Faso shows a positive correlation between energy generation and investment, captured by the gross fixed capital formation in the private sector as a share of GDP (Figure 3-10).

Figure 3-10. Total Electricity Generation and Investment in Burkina Faso

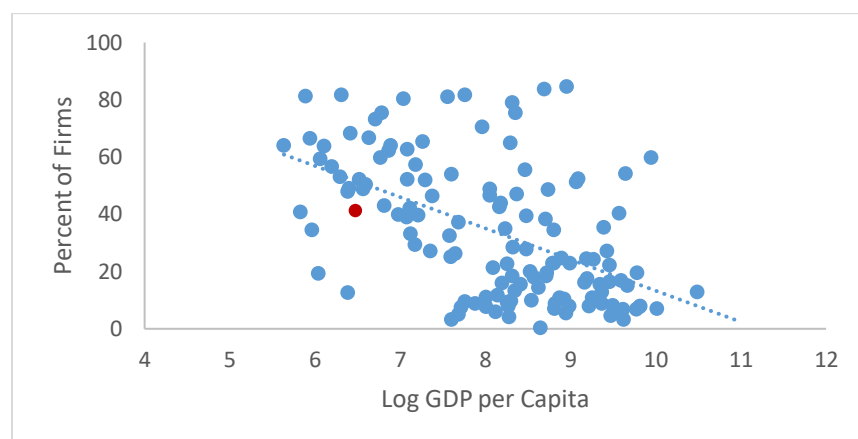


Source: WDI (2017) and U.S. Department of Energy

² The World Bank: <https://www.doingbusiness.org/>

In terms of circumventing the constraint, generator use among manufacturing firms is high but not high relative to comparators, according to Enterprise Survey Data (Figure 3-11).

Figure 3-11. Generator Use in Burkina Faso Relative to GDP per Capita

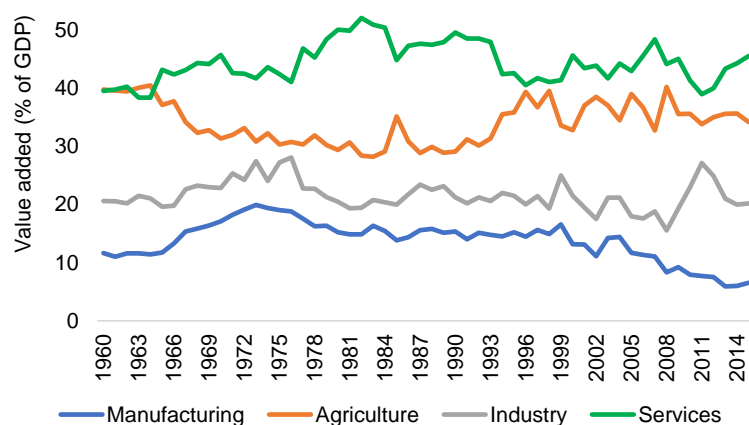


Source: Enterprise Survey (2009)

Of the manufacturing firms surveyed, 41.2 percent report using a generator. Since energy is such a pervasive issue among low income countries, this usage is still slightly below the average for countries at similar levels of GDP. We note that Burkina Faso's relative poor performance on indicators of access, price and quality may influence the sample of firms that are able to survive in this energy-scarce environment, with implications for how to interpret the data on generator use.

Finally, we report that energy-intensive manufacturing has been relatively declining as a share of GDP (Figure 3-12). There are many factors that may have contributed to this decline, i.e. the privatization of state-owned enterprises. In fact, privatization of state-owned enterprises under the auspices of the structural adjustment led to a decline of less efficient manufacturing firms.

Figure 3-12. Burkina Faso Energy-Intensive Manufacturing Sector Composition compared to value added GDP over Time



Source: WDI (2017)

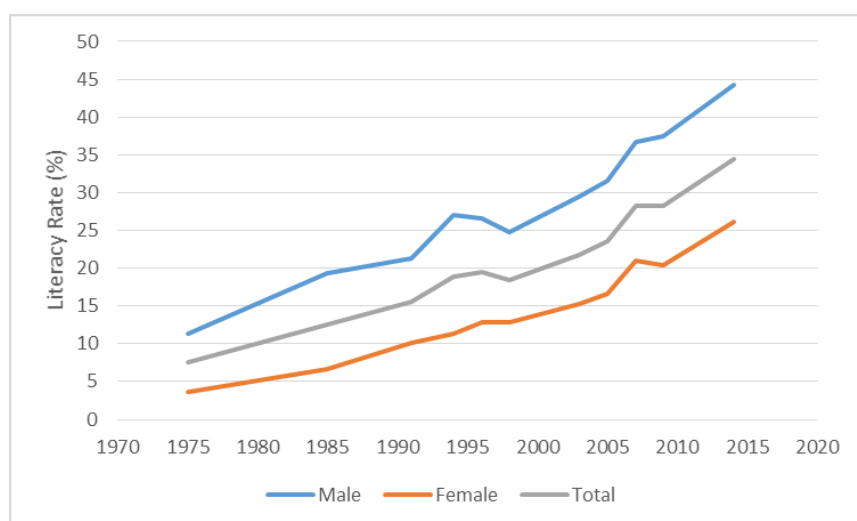
The drop in energy-intensive manufacturing is potentially a sign of energy-reliant firms disappearing in a constrained environment. Energy-scarce Burkina Faso's decline in this sector was more severe than for

comparators, many of whom also experienced episodes of privatization. Overall, the evidence suggests that the high cost and low quality of energy is a binding constraint to growth in Burkina Faso.

3.2 Education

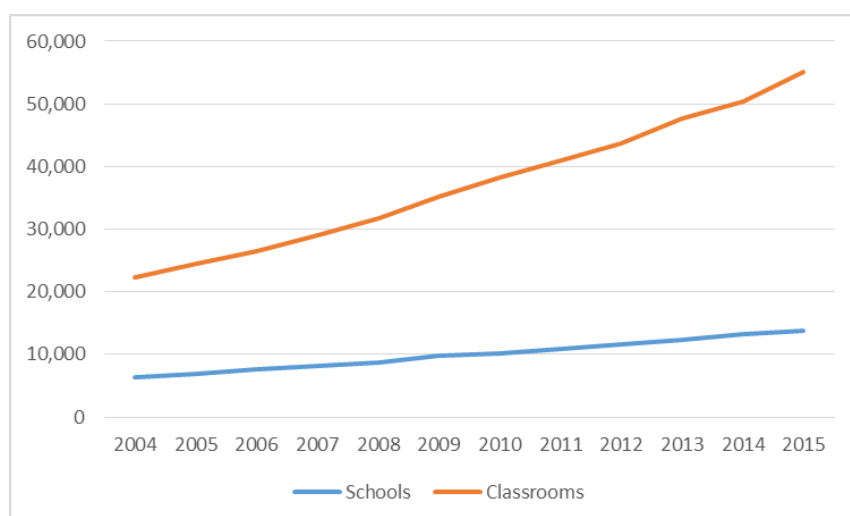
Education was also identified as a binding constraint to growth in Burkina Faso. Despite its low education context, Burkina Faso has shown some improvements in education indicators over time. Literacy has almost doubled among men since 2000, and women have enjoyed swift gains as well (Figure 3-13). Resources devoted to education, as measured by the number of schools and classrooms have been increasing, as both schools and classrooms have doubled or more than doubled since 2004 (Figure 3-14). Gender gaps in education are narrowing, and gross enrollment rates for primary school have reached near parity in the last three years of data. There is some indication that the quality or productivity of education has increased.

Figure 3-13. Rising Literacy Rates in Burkina Faso



Source: WDI (2017)

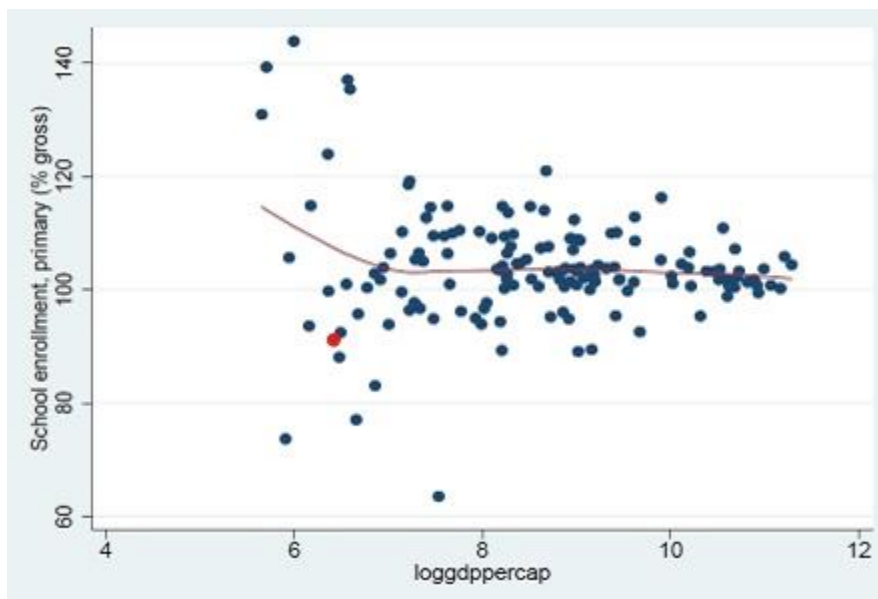
Figure 3-14. Rising Numbers of Schools and Classrooms in Burkina Faso



Source: WDI (2017)

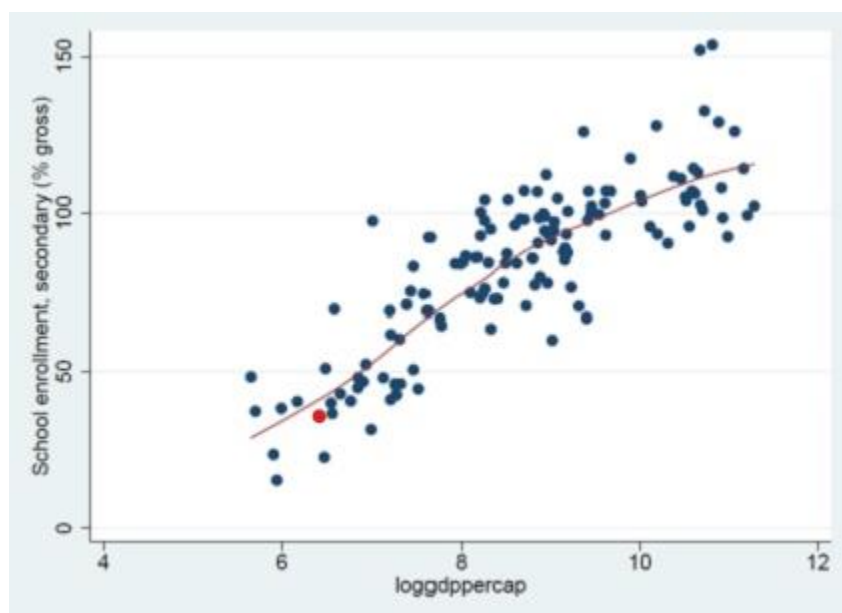
Despite these improvements, there is considerable room for progress. Literacy rates, educational attainment and primary and secondary net enrollment rates in Burkina Faso are among the lowest in the world. Burkina Faso had a total literacy rate of 38 percent in 2015, with literacy rates of 28 percent for women and 48 percent for men. In a 2014 household survey, 77.3 percent of individuals 22 years of age and older had not completed primary school. Only 22.7 percent of individuals 22 years of age and older had completed primary school, while approximately 12.2 percent of individuals had completed secondary school or above. Burkina Faso's net enrollment rate for primary school, calculated as the share of primary age children enrolled, was 69.9 percent in 2015, while its secondary net enrollment rate was 26.5 percent. Its primary and secondary gross enrollment rates are low for countries at comparable GDP levels (Figure 3-15 and Figure 3-16).

Figure 3-15. Primary School Gross Enrollment Rates



Source: WDI (2017)

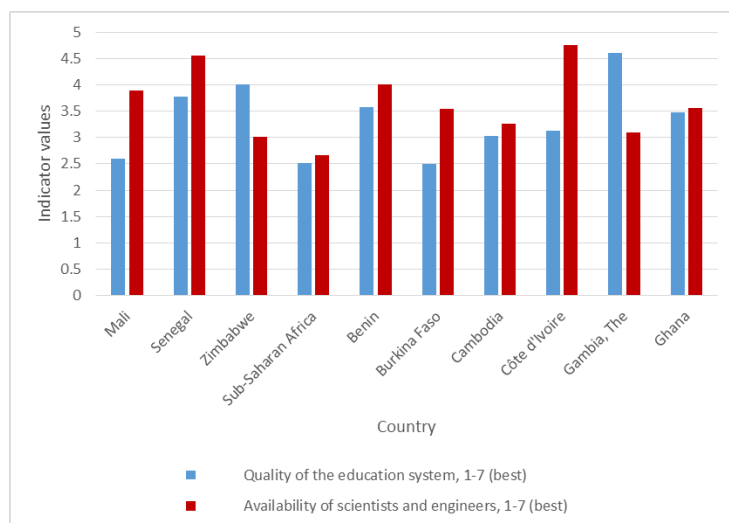
Figure 3-16. Secondary School Gross Enrollment Rates



Source: WDI (2017)

The quality of schooling and availability of technically trained or high skilled workforce (scientists and engineers) are low relative to other comparator countries as measured by the World Bank's CPIA indicators, and average for francophone West African countries as reflected in Programme d'Analyse des Systèmes Educatifs de la CONFEMEN (PASEC) test scores (Figure 3-17).

Figure 3-17. World Bank CPIA Scores of Education Quality



Source: World Bank Country Policy and Institutional Assessment (2016)

Although low rates of enrollment and low attainment may reflect low demand for skills rather than low supply, there are two types of evidence available that suggest that supply is a concern.

- First, in World Bank Enterprise Surveys in Burkina Faso, firms, especially larger firms, report that worker skills are a constraint. Among companies with over 50 workers, over 70 percent report that worker skills are a moderate, major or severe constraint to their operations and growth. Among smaller

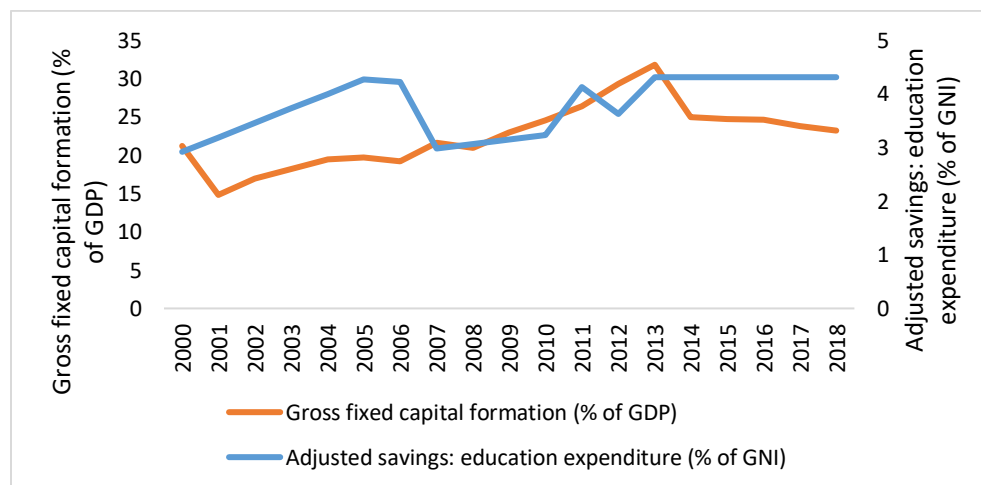
firms with five workers or fewer, over 55 percent of companies report that worker training and qualifications are a moderate, major or severe obstacle. In qualitative interviews, firms and industries demanding skilled workers also reported a mismatch in skills, in which educated workers do not have the necessary technical, or other abilities to be productive on the job;³

- Second, the evaluation of the Burkinabé Response to Improve Girls' Chances to Succeed (BRIGHT) program implemented through the Burkina Faso Threshold Program and Compact I indicates that increasing the supply of classrooms and other complementary interventions boosted enrollment and primary school completion for girls, as well as test scores. This evaluation suggests that supply constraints may indeed be binding, and that the supply of educated and skilled workers would potentially increase with additional resources for education. It is important to also note the limitation of this evidence as the BRIGHT program had limited scope.

Rates of return to schooling, while near the global average of 9.6-10 percent per year for all workers 15 and older, are high relative to the global average for younger workers under 30, who have come out of the education system more recently. While rates of return are 8.7 percent per year for the full sample, limiting the sample to workers under 30 raises rates of return to 14.2 percent per year. It appears that a key reason behind this increase in rates of return to schooling for younger workers is that the quality or productivity of schooling has improved, as conditional on years of schooling. Younger workers are more likely to be able to read, write, and do basic math. Equipped with these skills, which have a labor market return above and beyond years of schooling, younger workers are enjoying greater labor market returns on their educational investments. The returns to education estimate for younger workers better reflects the quality or productivity of current educational investments, more so than an estimate including older workers. Thus the CA concludes that the price of skills is relatively high in Burkina Faso.⁴

In terms of a relationship between education and growth of investment, increases in educational attainment precede an increase in private investment, although there is no indication that the relationship is causal (Figure 3-18).

Figure 3-18. Relationship Between Schooling and Investment in Burkina Faso



Source: WDI (2017), Burkina Faso Enquête Multisectorielle Continue (2014)

³ Anecdotally, the CA team was also told that the electricity utility had tried to hire for 19 positions in the previous year, but was only able to fill 3 positions due to a shortage of qualified candidates.

⁴ Note that in the context of Burkina Faso, unemployment rates and rates of labor market inactivity are low.

Firms also attempt to circumvent the educational constraint by providing training to workers using their own resources or other external resources. In survey results reported by the Institut National de la Statistique et de la Démographie (INSD), 45 percent of companies reported using means other than state-supported education and training to seek development for their workers. Also, the electricity utility reported to the CA team that they, along with an association of 17 firms through the Chamber of Commerce, had established an institute to train electricians and electrical engineers to meet the demands of their companies. It has also been reported to the CA team that the gold mining sector, which is the country's largest exporting sector, uses foreign workers to fill most of its skilled worker vacancies.

Finally, skill-intensive firms are relatively scarce in Burkina Faso, and where they do exist, they do not employ very many workers. Companies engaging in activities such as civil engineering, mining, and information and communications technology (ICT) make up less than 1 percent of companies and employment in firms in a firm survey of Burkina Faso, according to the INSD. Additional data on availability of skilled labor in the service sector may be needed to disentangle the skills mismatch from the skills problem, but these data were not available when the CA was conducted.

Taken together, the burden of the evidence on quantities, price, correlations with growth, circumventing the constraint and “camels and hippos” suggests that low access to a skilled workforce is a binding constraint to growth in Burkina Faso.

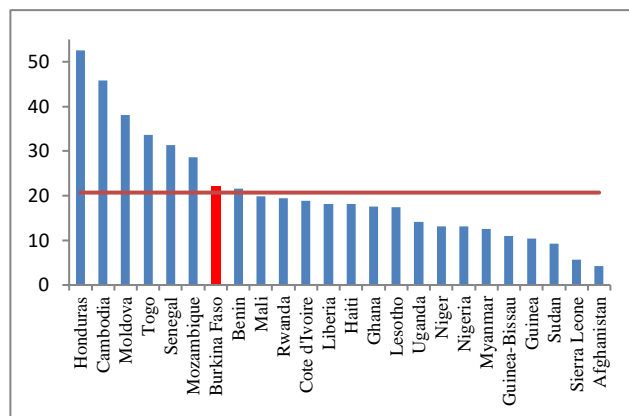
4 Details on Non-Binding Constraints

4.1 Cost of Finance

Domestic credit to the private sector (% GDP) in Burkina Faso is slightly higher than the average of the comparator countries. Over the 2011-2015 period, domestic credit to the private sector was 22.2 percent of GDP, compared with an average of 20.7 percent for all comparator countries (Figure 4-1). Among the Economic Community of West African States (ECOWAS) countries, only Togo and Senegal recorded relatively higher levels of domestic credit to the private sector than Burkina Faso.

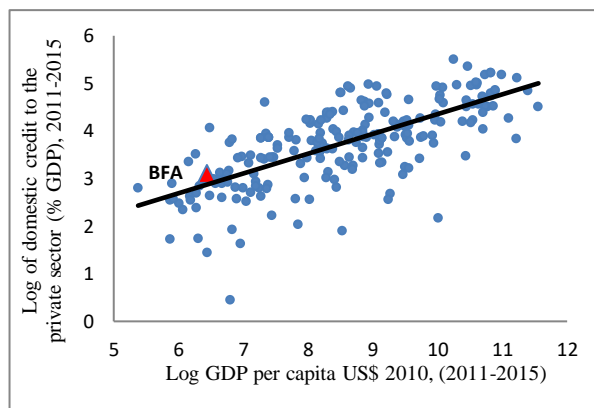
By broadening the comparison to a larger set of countries (Figure 4-2), the level of domestic credit to the private sector in Burkina Faso is slightly above the global trend after adjusting for GDP per capita. This means that Burkina Faso has a slightly higher level of domestic credit to the private sector than countries with similar GDP per capita, signaling that financing does not appear to be a major constraint in Burkina Faso.

Figure 4-1. Domestic Credit to the Private Sector (% GDP), 2011-2015



Source: WDI (2017)

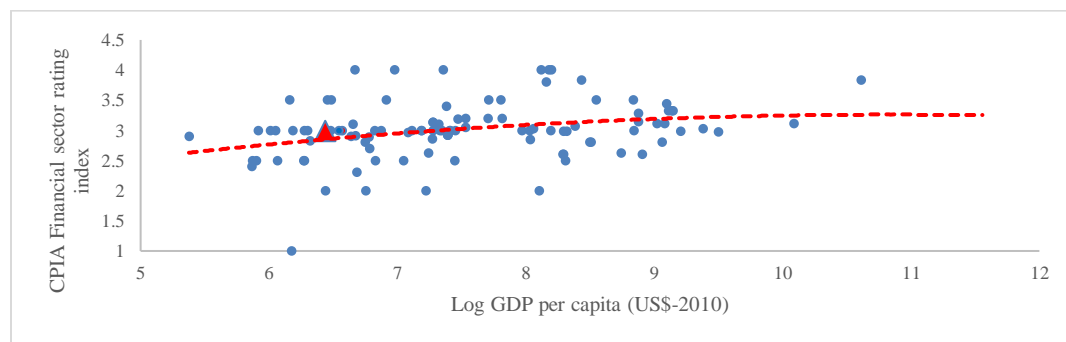
Figure 4-2. Domestic Credit to the Private Sector and GDP per capita, 2011-2015



Source: WDI (2017)

A plot of the CPIA score for the quality of the financial sector and GDP per capita (Figure 4-3) shows that Burkina Faso is above the global trend. The quality of its financial sector is better than the average of countries with a level of GDP per capita equivalent to its own, thanks to rather conservative and strict central bank regulations on financial institutions.

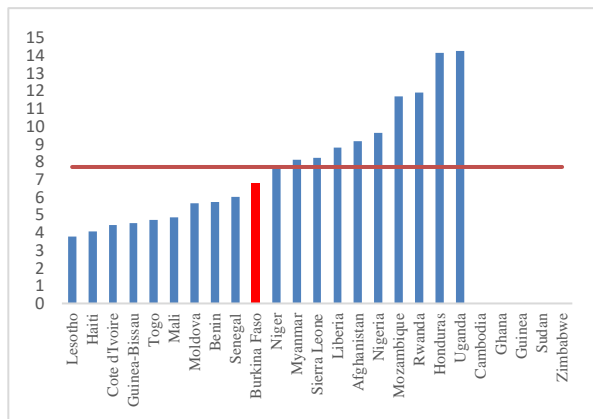
Figure 4-3. Quality of the Financial Sector versus GDP per capita, 2011-2015



Source: WDI (2017)

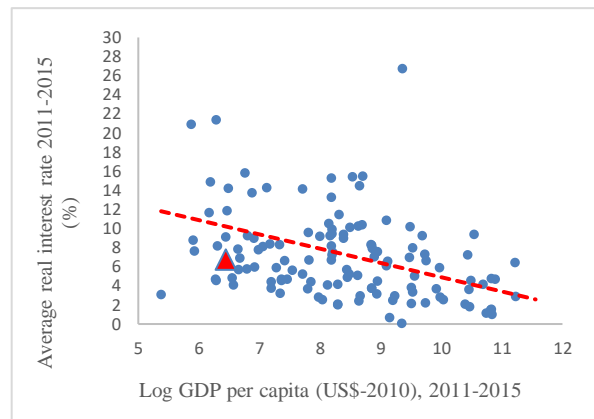
The comparative analysis of the real interest rate shows that the cost of credit is relatively lower in Burkina Faso. In fact, in 2011-2015, Burkina Faso's real interest rate was 6.8%, compared to 7.7% for all comparator countries (Figure 4-4). Among the twenty comparator countries for which data are available, Burkina Faso ranks 10th among countries with a real lower interest rate. Six countries in the West African Economic and Monetary Union (UEMOA) zone have lower real interest rates than Burkina Faso. Also, Figure 4-5 shows that in a wider set of countries, Burkina Faso is below the global trend in credit cost. It has a real interest rate below the average of countries with similar GDP per capita.

Figure 4-4. Average Real Interest Rate 2011-2015 (%)



Source: WDI (2017)

Figure 4-5. Real Interest Rate versus GDP per capita, 2011-2015



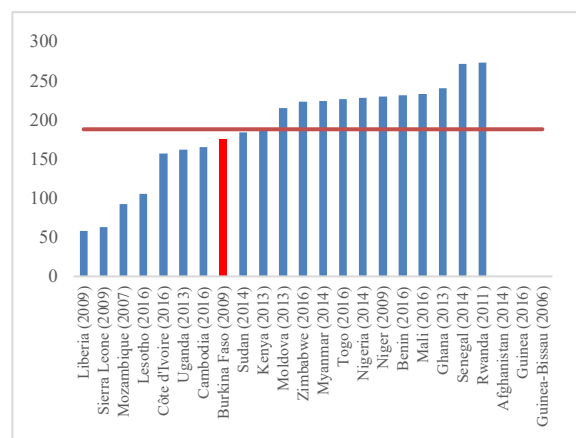
Source: WDI (2017)

According to a study conducted in 2012⁵, the lack of guarantees is the leading cause of rejection of bank credit to Small and Medium Enterprises and Small and Medium industries (SMEs/SMIs). About two-fifths of SMEs/SMIs had their credit applications rejected due to lack of collateral. The requirements for bank guarantees are related to the high level of risks carried by SMEs/SMIs. This is because banks with larger share of credits extended to risky SMEs will receive poor ratings from the central bank, which limit their ability to borrow at central bank rates.

However, compared with the comparator countries and with all the countries whose data are available, the amount of collateral requested by the banks (in % of the requested credit) is lower than the average (Figure 4-6 and Figure 4-7). The amount of bank guarantees represents 175.3% of the amount of credit requested in Burkina Faso against an average of 187.8% for all the comparator countries. Burkina Faso is the second country in the WAEMU zone (after Côte d'Ivoire) and the fourth country in the ECOWAS zone with the lowest required bank guarantees.

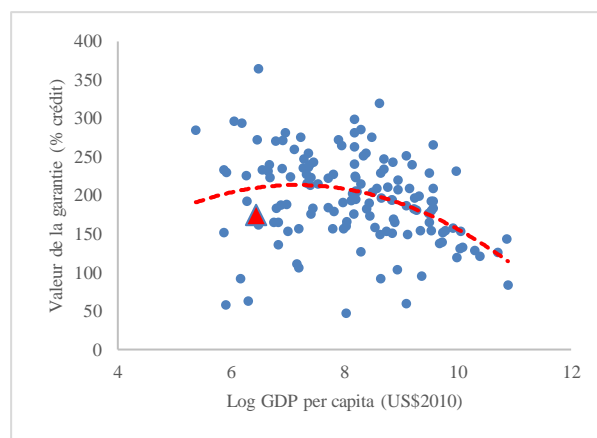
⁵ Soubeiga and Strauss, 2013.

Figure 4-6. Amount of Collateral Requested (in % amount of credit)



Source: World Bank Group data, Enterprise Survey (2017)

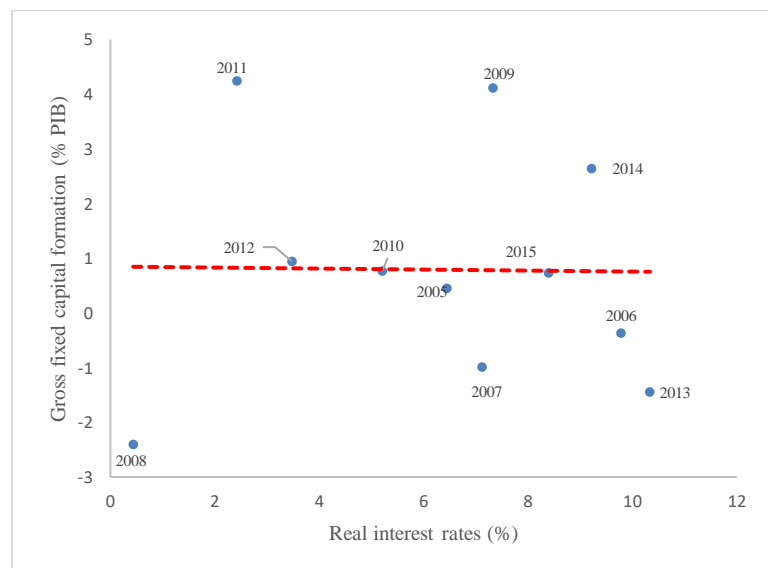
Figure 4-7. GDP per capita versus Amount of Collateral Requested (in % of loan amount)



Source: WDI (2017), Enterprise Survey databases (2017)

Moreover, the analysis of the relationship between the interest rate and private investment (Figure 4-8) over the period 2005-2015 shows a low correlation between private investment and the real interest rate in Burkina Faso. Indeed, the coefficient of correlation between these two variables is -0.0136, but not statistically significant, which indicates that a fall in the interest rate leads to a marginal increase in private investment. So, the cost of funding is not a major constraint of private investment in Burkina Faso.

Figure 4-8. Correlation between the real interest rate and private investment in Burkina Faso, 2005-2015



Source: WDI (2017)

To determine if firms by-pass the traditional banking system to access credit, we looked at the relative size of the micro-finance sector and its relative growth rate. The supply of microcredits has evolved between 1.5% and 2% of GDP between 2007 and 2016, not a substantial growth rate over the 10 year period.

When we compare the growth rate of micro-finance institutions coverage rate against the traditional banking coverage rate, we note that traditional banking grew at a faster rate than micro-finance implying limited bypassing by firms to non-traditional sources of credit.

4.2 Macroeconomic Stability

From 1960 to 2016, Burkina Faso's macroeconomic policy has had three main periods:

1. The period of macroeconomic policy before the adjustment policies from 1960 to 1983;
2. The period of adjustment policies (self - adjustment and Structural Adjustment Programmes) from 1984 to 1999;
3. The period of macroeconomic policy conducted under the WAEMU Convergence Pact from 2000 to now.

The inflation rate behaved differently over these three periods. The period 1960 - 1983 was marked by a strong volatility of the annual inflation rate. The period 1984 - 1999 was marked by relative control of inflation, except in 1994, when the effect of the devaluation on prices was not totally contained. The period 2000 - Present is one in which inflation has been the most stable.

Over the last decade, from 2006 - 2010, Burkina Faso's inflation rate was 2.9% and 1.6% in 2011 - 2015, compared with an average inflation rate of 7.7% in 2006 - 2010 and 6.2% in 2011 - 2015 for all the comparator countries. In each of these two sub-periods, Burkina Faso was among the countries with the lowest annual inflation rate. During the period 2011 - 2015, Burkina Faso was the third country in the ECOWAS zone with the lowest annual inflation rate. It is positioned after Niger and Senegal which recorded respective inflation rates of 0.9% and 1.2% during this period.

This evidence indicates that inflation is not a constraint on economic growth or private investment in Burkina Faso. Indeed, inflation has been low (below 3%) over the past decade, while both economic growth and private investment have been weak. The high level of private investment in the period 1996 - 2000 is linked to the privatization of enterprises, while that of 2011 - 2015 is linked to mining investments. The value of the coefficients of determination confirms that the correlation between the growth rate and inflation and private investment and inflation is low.

The fact that the dollar or Euro are not commonly used is an indication that economic agents do not have to use a relatively stable currency to circumvent existing price increases and currency depreciation.

In conclusion, the tests show that inflation is not a constraint for private investment and economic growth in Burkina Faso.

4.3 Microeconomic Risks

Microeconomic Risks, including Labor-Related Taxation and Regulation and the Judiciary were identified as serious growth issues, although not binding constraints to growth in this analysis.

Property Rights

Property rights in Burkina Faso have been protected and improved by legal reforms put in place by the constitution of 1991, among other documents. According to indices from the Heritage Foundation, the property rights score in Burkina Faso is relatively high compared to other countries at the same GDP per capita level. Although procedures for transferring property have been streamlined as a result of the World Bank's Doing Business program, indicators of the costs of transferring property remain high.

Corruption

Perceptions of corruption in Burkina Faso are high, although the World Bank's CPIA scores show some mild improvement in transparency in public institutions. Given this mixed evidence we do not identify corruption as a constraint to growth in Burkina Faso.

Taxation

While taxes as a percentage of profits have been falling overall in Burkina Faso, and are average relative to comparators, taxation presents a potential issue for future growth. In the World Bank's Enterprise Survey, a large majority of firms report that taxation and tax administration are a major or very severe obstacle to business, although the survey does not distinguish between overall taxation and labor taxation.

Labor Regulation

In terms of labor regulation, although the minimum wage and other aspects of the labor code are about average relative to comparators, the ratio of the minimum wage to labor productivity is somewhat high relative to other comparator countries. Half or more of firms report that the labor code is a moderate, major or severe obstacle to business operations and growth in the Enterprise Survey for Burkina Faso, with larger firms more likely to report that it is a severe obstacle.

Judiciary

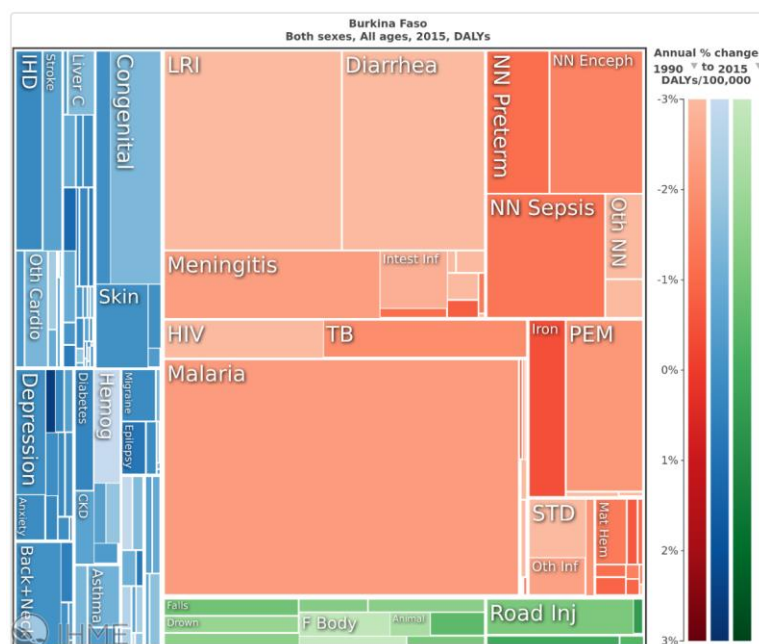
Finally, the judiciary may pose a challenge for firms in Burkina Faso, particularly in sensitive industries such as finance. While Doing Business indicators of delays related to contract execution are low, the cost of contract execution is high. In the Enterprise Survey, firms report very low confidence in Burkina Faso's judicial system. Firms also report that the judiciary is an obstacle to business at rates that are higher than would be expected based on GDP levels alone. There is a negative correlation between the cost of executing contracts and private investment. Finally, interviews with the bar association of Burkina Faso indicated that use of arbitration to circumvent the court system was on the rise.

4.4 Health

Health was identified to be a serious growth issue although not a binding constraint to growth in this analysis.

Although life expectancy has been rising and mortality rates have been dropping, health indicators point to deficiencies in both child and adult health in Burkina Faso. Burkina Faso is an outlier among comparator countries in terms of its malaria burden. Malaria is the greatest contributor to disability-adjusted life years (DALYs) lost for both adults and children overall (IHME, 2015), and poses the greatest problem for the south of the country (Figure 4-).

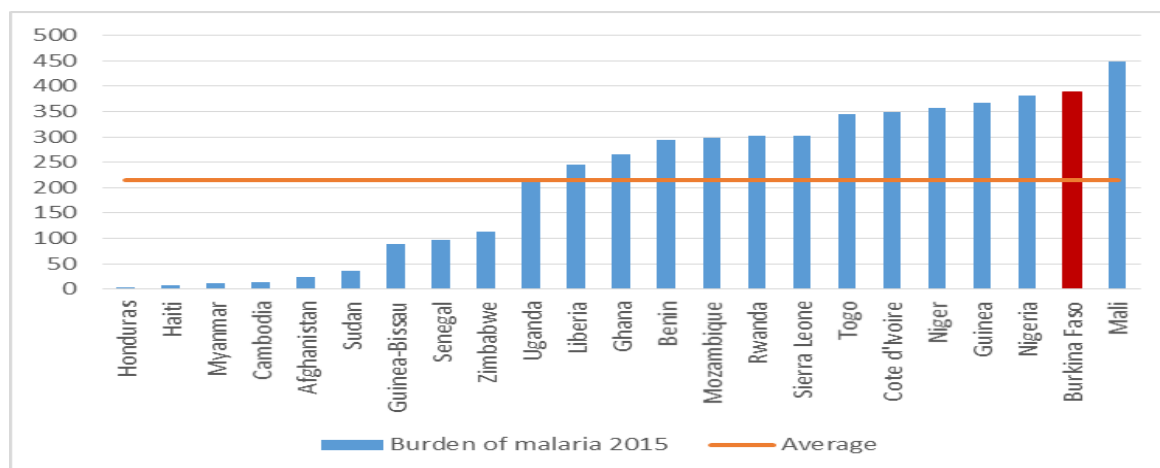
Figure 4-9. DALYs Lost by Cause in Burkina Faso



Source: Institute for Health Metrics and Evaluation (2015)

Malaria incidence is high relative to comparator countries (Figure 4-). Childhood undernutrition is severe as well, particularly in the East and Sahel regions. Nutrition data from the World Health Organization show that Burkina Faso performs poorly relative to comparators on measures on childhood nutrition. In particular, its rates of low weight-for-age and low weight-for-height are significantly greater than rates for sub-Saharan Africa as a whole and greater than rates for most comparators. While rates of stunting overall are lower than the average for sub-Saharan Africa, they are higher than the average for sub-Saharan Africa in the East and Sahel regions, at 43 and 47 percent respectively.

Figure 4-10. Burden of Malaria in Burkina Faso and Comparator Countries (in million cases)

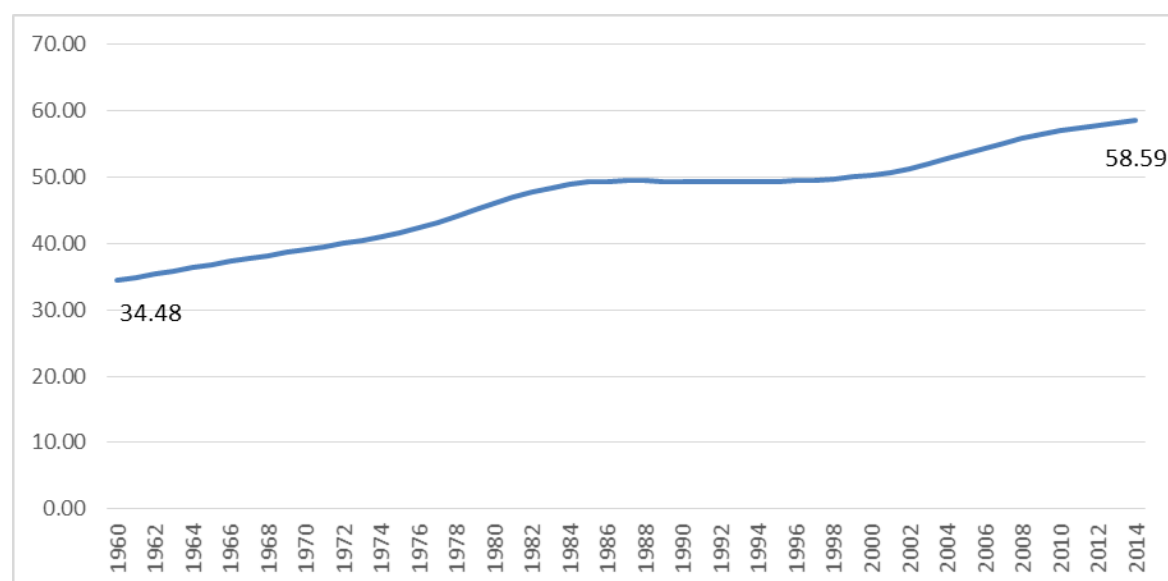


Source: World Health Organization (2017)

Better health is associated with higher incomes and test scores in Burkina Faso. Analysis of individual-level income data, linked to data on negative health episodes, indicate that adult health may have a causal effect on productivity and income. Among workers over the age of 15, in a health-augmented Mincer regression, a negative health episode during the last four months was associated with a loss of income of 6 percentage points. Nineteen (19) percent of adults over the age of 15 experienced a negative health episode in the four months prior to being surveyed. Controlling for household fixed effects, a negative health episode was associated with an 8 percentage point decrease in income. In addition, evidence from a randomized controlled trial of school-based feeding and take-home rations for girls in rural northern Burkina Faso indicates that nutrition interventions increase both enrollment and math test scores (Kazianga et al, 2012).

The evidence for a link between health and growth is mixed. When examining long-run trends in mortality and life expectancy in Burkina Faso, there is no indication that health impacts investment and growth rates. Growth rates increased during the 1990s while improvements in life expectancy stagnated, it has since started to grow in the early 2000s from 50 to 58 today (Figure 4-). However broader economic literature suggests that health may have a positive impact on growth in income per capita, as long as growth in output outstrips population increases. These increases are also indications of overall welfare improvements (Weil, 2007; Bloom and Canning, 2000).

Figure 4-11. Life Expectancy in Burkina Faso (years)



Source: WDI (2017)

4.5 Non-Energy Infrastructure

Roads

Burkina Faso's first Compact included a large \$194 million investment in roads. Although the results of the Compact I investment remain to be seen, the quality and quantity of roads as well as the price of transport services continue to be a problem for the country. In a landlocked country such as Burkina Faso, road infrastructure is critical for the growth of both local commerce and international trade. Lack of road infrastructure can limit the movement of goods and services and increase transaction costs, hindering economic growth.

Burkina Faso has a network of about 15,304 km of roads, and approximately 3,642 km of them are paved. The road network has been expanding slowly, and Burkina Faso has a deficit in terms of both road density and quality relative to comparator countries. Although it is close to the average, the price of transport services is somewhat high relative to the average among comparators. Finally, there is a positive correlation between value-added from the transport sector and investment.

Anecdotal, although the evaluation has not been completed, there has been limited traffic density on roads rehabilitated and built under Compact I. The MCC and Core Teams are working to obtain the relevant data on traffic counts. As such, roads were not identified as a binding constraint to growth in this analysis.

Railroads

The railroad network in Burkina Faso has about 623 km of rail but only 517 km of this network is in use. The network consists of a single line linking Kaya to Ouagadougou and Abidjan. It has been under concession since 1994. The Ivorian conflict was an impediment to the financial and economic profitability of the railroads for many years.

The railroad does not seem to be a major constraint to growth. The quality of the rail is average and we cannot confirm a significant correlation between the railroads crises and GDP growth. However, it is worth noting that expanding the railroad network (e.g. adding spurs) could improve the quality of roads, through which all goods are transported, and lower the cost of transportation of goods and people.

Ports

Burkina Faso is a landlocked country, but 90% of imported goods come through ports. Imported goods transit through different ports including Abidjan (Cote d'Ivoire), Cotonou (Bénin), Lomé (Togo), and Tema and Takoradi (Ghana). In addition, Burkina Faso has two dry ports managed by Bolloré Port (SETO, TRCB-Ouagadougou and TRCB-Bobo Dioulasso). Using multiple ports creates competition and reduces the risk of service interruptions.

Port infrastructure does not seem to be a major constraint in Burkina Faso. Burkina Faso ranks slightly worse than the average among selected comparators in port performance, but when compared to a larger set of countries it performs slightly above the trendline. However according to Foster and Briceño-Garmendia (2010), many enterprises continue to see ports in Burkina Faso as a major problem, particularly when it comes to customs procedures to remove goods from the ports.

Airports

Burkina Faso has two underutilized international airports. The quality of these airports is average or slightly worse than average. Available seats for passengers arriving or departing are below average. However demand for seats remain below supply. Corroborating the CA finding, Marc Raffinot and Alain Siri (2015) also found there is no urgent need for additional airport infrastructure.

4.6 Market Failures in Innovation

To measure the opportunity cost of innovation and sophistication, we relied on the rate of adoption of technology in Burkina Faso and compared it across comparator countries. The assumption here is that a higher adoption rate implies higher return, holding everything else constant. If a technology is profitable, more people are expected to adopt it. We find lower than average adoption rate of technology (both nationally and at the firm level) in Burkina Faso, controlling for GDP, implying low return to innovation. In other words, the opportunity cost of technology is not high in Burkina Faso.

We note a negative correlation between private investment and innovation, on the one hand, and between public investment and innovation, on the other. Adoption of innovation does not necessarily lead to higher private investment.

The share of processed exports destined for both firms and households has been sharply declining since 2005. Burkina Faso's exports of high-technology products are in a good position compared to other countries. Less than 15% of manufactured products exported from Burkina Faso are high-technology products. But this share has been falling since 2013 to around 6.5% in 2015, because gold and raw cotton became first and second export products over the same period. Technology-intensive firms are slowly becoming relatively less prevalent in Burkina Faso. Although mining is attracting technology-intensive upstream value chain activities, most of them do not spillover into the rest of the economy. Despite this downward trend, high-tech exports as a share of manufactured exports is relatively higher than the average of comparator countries.

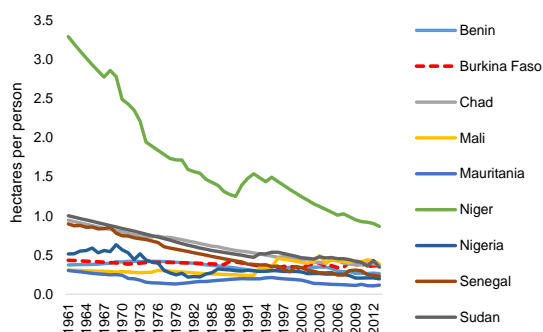
We conclude that market failures in innovation are not a binding constraint to growth.

4.7 Natural Capital

Land

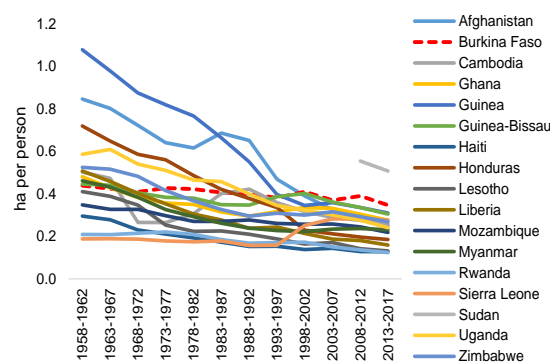
Levels of arable land per capita and cultivated area per capita have been constant in Burkina Faso, while declining in many comparator countries. When considering croplands over the period 2004 - 2014, Burkina Faso is just below the average for all the comparator countries but slightly above average when excluding Niger as illustrated in Figure 4-. When considering cultivated land (Figure 4-), we also note that Burkina Faso is near the top of the group of comparator countries.

Figure 4-12. Croplands 2004-2014 in comparator countries



Source: WDI (2017)

Figure 4-13. Cultivated Land 2004-2014



Source: WDI (2017)

Using the World Bank's Doing Business data, we also considered both land registration and the administration process. We note that compared to other countries with similar GDP, Burkina Faso's registering property score and land administration quality scores stand at average and above the average, respectively.

Variation in arable land and cropland is negatively related to changes in per capita income (Figure 4-14). This shows that because of very low yields, the extension of farmlands does not result in a significant

increase in production. These low yields are due to the non-land related constraints that are still hampering the agricultural sector.

Figure 4-14. Correlation between Croplands and Income per capita

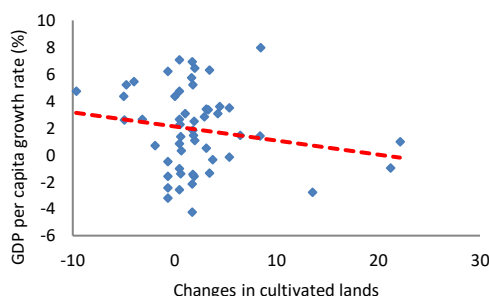
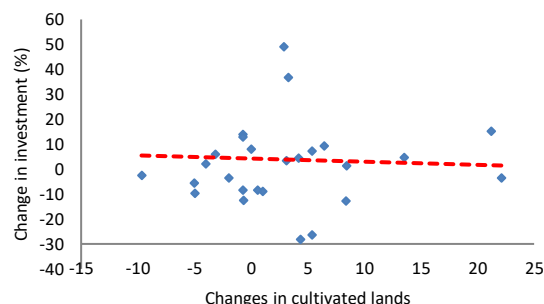


Figure 4-15. Correlation between Croplands and Investment



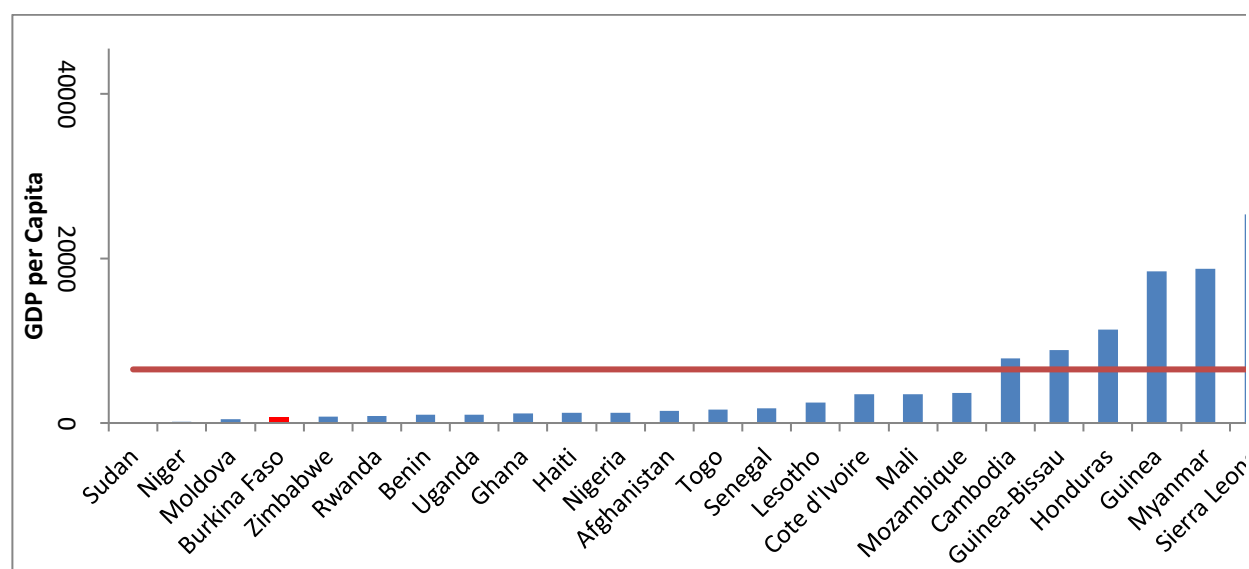
Source: WDI (2017)

The weak correlation between cropland and investment, as illustrated in figure 4-15, plus the results of the price test lead us to conclude that land is not a binding constraint to private investment.

Water

When comparing internal renewable water resources per capita with comparator countries (average of comparators in red line), Burkina Faso is clearly water scarce as illustrated in Figure 4-16. Even when we account for country economic size, Burkina Faso is water scarce.

Figure 4-16. Internal Renewable Water Resources per capita

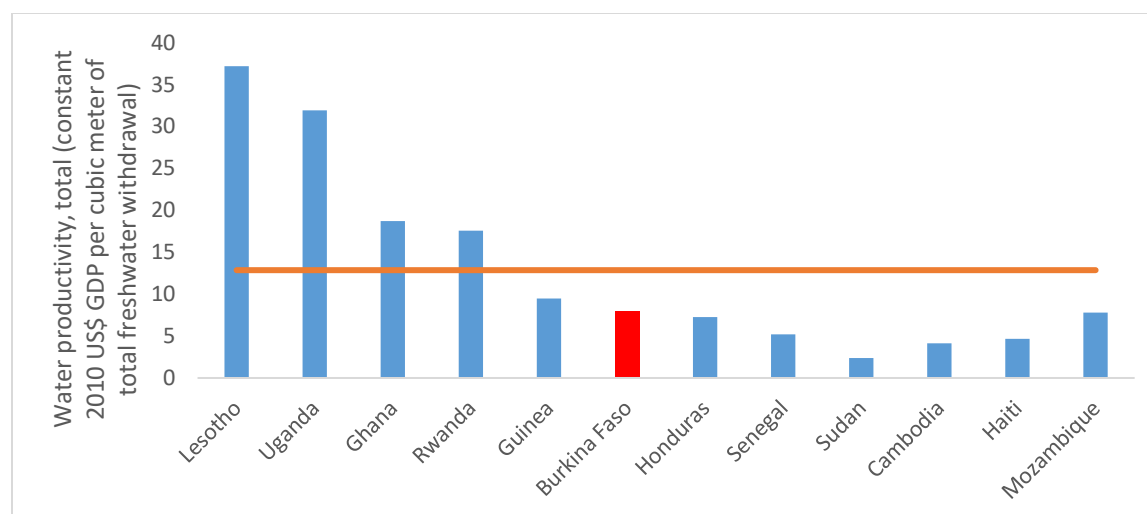


Source: WDI (2017)

We compared water productivity across countries as a proxy for the price of water. Water productivity relates to the amount of yield per unit of water used. Water productivity is a good measure of

the opportunity cost of water. When we compare water productivity across comparator countries (average in horizontal axis), it tells us that water, as currently used for crop production, may or may not be best suited for that use as illustrated by the difference in yields across comparator countries. For Burkina Faso, we argue that there is room for improvement in water as illustrated in Figure 4-.

Figure 4-17. Water Productivity



Source: WDI (2017)

The correlation between renewable water resources, and both GDP and investment show mixed results. While the correlation between renewable water resources and GDP per capita is positive, it is negative when considering the case of investment.

The widespread use of zai planting/soil improvement technique is an indication that farmers are facing water resource constraints to their production activities. Less land is allocated to water-intensive agricultural production, such as rice because water is a constraint in Burkina Faso.

5 Conclusion

MCC is founded on the principle that private sector-led economic growth is critical for achieving sustainable development that raises standards of living and improves human development. Recognizing that private sector investment is low in most low income countries, MCC uses the constraints analysis to identify the binding constraint to private sector investment. In Burkina Faso, the economists identified high cost, low quality, and low access to electricity and lack of a skilled workforce as binding constraints to private investment and thus limiting economic growth and poverty reduction.

Addressing these constraints will bring about economic growth in a number of ways. Reliable electricity promises to yield transformational changes in an economy by increasing the share of productive firms. Reliable electricity will for example increase share of high productivity sectors such as manufacturing in the economy. In Burkina Faso, we anticipate that reliable electricity will in the short term reduce the cost of production for existing firms as they will no longer need to rely on expensive generators. In the long term, reliable electricity will increase the share of electricity intensive firms, including those operating in the manufacturing sector. By generating more job opportunities, these structural changes will be the platform on which growth and poverty reduction will occur.

In Burkina Faso, we anticipate that addressing the skills gap will yield heterogeneous increase in labor productivity that will vary across age of the trainees. However, the gestation period for the realization of this anticipated benefit is rather uncertain as it is contingent on skill demands of the market.

6 Annexes

6.1 Annex A: Gender and Social Inclusion Dimensions

6.1.1 Poverty Profile

Burkina Faso's poverty statistics paint a complex and, at times, contradictory picture. Several measures of poverty have seen significant reductions. For example, by 2016, the poverty headcount ratio at \$1.90 a day (2011 PPP) was 43.7 percent. Compared to its level of 55.3 percent in 2009, the poverty rate has decreased by 12 percentage points. Using national poverty lines, that trend is consistent with the trend in poverty headcount. The Gini index was at 35.3 percent in 2014 (World Bank 2017). This is also a significant decrease when compared to the figure of 39.9 percent calculated by the Institut National de la Statistique et de la Démographie for 2009 (INSD, 2015). Not only have absolute numbers of poor declined in both urban and rural areas by international measures, but the depth of poverty has declined significantly (from 15.1 to 9.7 percent) and its severity has decreased sharply (6.7 percent to 3.3 percent) according to national figures (INSD, 2015). That said, according to the INSD, the 20 percent most affluent shared 44.1 percent of total consumption in 2014 (INSD, 2015). The income held by the lowest 20 percent was 8.3 percent in 2016, which indicates a rise from its 2010 level of 6.7 percent (World Bank, Burkina Faso country profile 2016).

While national averages seem promising, they hide enormous disparities. In 2014, the urban areas demonstrated considerably lower poverty rates (14 percent) while the rural areas experienced much greater degrees of poverty (48 percent). According to INSD (INSD, 2015), rural poverty contributes to 92 percent of the national incidence of poverty, accounting also for 93.4 percent of the depth of poverty and 94.0 percent of its severity.

Regional disparities in poverty incidence are noteworthy. The Central East region (which includes Ouagadougou) has a poverty rate of 9.3 percent and is four times less poor than the national average (and is even less poor than the national urban average). The Sahel (21 percent), the Cascades (22 percent) and the Hauts-Bassins (34 percent) regions are also well below the national average. The regions with the highest poverty rates are the North (70.4 percent), the Boucle du Mouhoun (59.7 percent) and the Centre-Ouest (51.7 percent) (INSD, 2015).

6.1.2 The Position of Women

Women in Burkina Faso are greatly disadvantaged. The country ranks 185 out of 188 countries in the 2016 UNDP Gender Development Index (GDI). The GDI reflects gender inequalities in achievement in the same three dimensions of the HDI: health (measured by female and male life expectancy at birth), education (measured by female and male expected years of schooling for children and mean years for adults aged 25 years and older); and command over economic resources (measured by female and male estimated GNI per capita). The female HDI value for Burkina Faso is 0.375 in contrast with 0.429 for males, resulting in a GDI value of 0.874, placing the country into the Low Human Development category.

While Burkina Faso has one of the highest fertility rates in the world with 5.6 births per woman, access to reproductive health care is low. In 2015, only 66 percent of births were attended by skilled health personnel and only 34 percent of women married or in union used any contraceptive method (Global Gender Gap Report, 2015). For every 100,000 live births, 371 women die from pregnancy related causes, and the adolescent birth rate is 108.5 per 1,000 women of ages 15-19 (UNDP 2016). While the maternal mortality rate declined by almost 49 percent over the past 25 years, [from 727 maternal deaths per 100,000 live births in 2005 to 371 in 2015 (World Bank, 2015)], it remains high and far from the target of a 75 percent reduction as set in the United Nations Millennium Development Goals.

While the legal status of women has been clearly defined in several key legislations and policies (e.g. the 1989 Family Code, the 1996 legislation prohibiting Female Genital Mutilation, and the 2009 National Gender Policy), customary practices still discriminate against, and marginalize, women. For example, the difference between legislation and customary practice regarding age at marriage disadvantages women and girls. The Family Code sets the minimum legal age for marriage at 17 years for women and 20 for men. However, the incidence of girl child marriage (before the age of 18) is upwards of 53 percent (with 10 percent of girls married before 15) and the average age at first marriage is 17.8 years, both higher than regional averages (OECD SGI, 2016). This is significant, as age of marriage is correlated with educational attainment, health and spacing of children, and economic achievement.

More than 40 percent of married women live in polygamous marriages within which the poverty incidence is higher, and levirate marriage although forbidden by law, is still practiced. In addition, “Older women are more likely than older men to suffer violations of their rights in the form of violence and abuse, for example because of witchcraft accusations often leveled at older women.” (CEDAW Report, July 2010).

Burkina Faso has had several agrarian reforms in the last two decades (1984, 1991 and 1996). Under the most current law, land ownership is vested with the state, but can be transferred to private persons. Under the law, men and women have equal land rights. While national legislation does not formally discriminate against women, in rural areas customary law is respected. Upon marriage, a man is expected to allocate to his wife land for her own agricultural activities. Women control the crops they grow (although these must be used to meet the household subsistence needs) and a share of the crops grown through their labor in their husbands’ fields. A 2010 household survey found that 54 percent of men are the sole owners of a home, compared to 5 percent of women. In addition, 51 percent of men declared that they owned land, compared to 32 percent of women. In most cases, men were the sole owners of the land (37 percent) (Demographic and Health Survey, or DHS, 2010). The practical result of this customary land ownership arrangement is that women are unable to claim land as an asset for collateral when seeking credit, which in turn further marginalizes their participation in the economy.

In 2009, Burkina Faso passed a law requiring political parties to have a minimum of 30 percent female candidates on their candidates list for legislative and local elections. But by the November 2015 elections, only 14 women were elected to parliament, representing 11 percent of the 127 seats. Burkina Faso ranks 153 out of 193 for gender parity in parliament on the 2016 GDI. This disparity is a clear example of an instance in which names on a candidate list have not translated to substantial elected representation, as the law originally intended.

In the 2010 DHS, 15 percent of women reported experiencing sexual and/or physical violence by an intimate partner in their lifetime. Forty-four percent of women believe that a husband is justified in beating his wife for at least one of the reasons cited (burning the food, arguing with her husband, going out without telling him or refusing to have sex with her husband).

Burkina Faso does show progress with regards to eradicating Female Genital Mutilation (FGM), criminalizing the practice in 1996 and again in a 2005 law on reproductive health. In addition, a national action plan for 2009-2013 was put into place, calling for ‘Zero Tolerance for Female Genital Mutilation.’ Although FGM prevalence is still high in Burkina Faso (76 percent of women reported having had the procedure done [UNICEF 2016]), evidence suggests a steady decline in the practice. Burkina Faso is one of the few countries in the region to have prosecuted perpetrators under laws banning FGM.

6.1.3 Gender, Social Inclusion, and Human Capital

In spite of recent investments, Burkina Faso is burdened with a legacy of under-education. The adult literacy rate in Burkina Faso is one of the lowest in the world with only 30.8 percent of literate adults (World Bank

2015)⁶. Disparities in literacy are significant both between urban and rural areas, where literacy rates are 62.9 percent and 19.2 percent respectively, and also between the sexes, with literacy rates of 42.5 percent for men and 19.7 percent for women (World Bank, 2015). Educational enrollment in Burkina Faso follows a pattern found in many of the sub-continent's countries, with rates falling after primary school, especially for rural students and, in particular, girls. In 2015, the primary school enrollment rate was 69 percent for boys and 66 percent for girls. At the secondary level, the numbers are 23 percent and 20 percent, respectively. Only 3 percent of girls make it to the tertiary level of education, which is half of the boys' ratio (6 percent) [World Bank, 2015]. In 2016, Burkina Faso ranked 123 out of 144 countries overall in terms of female educational attainment (World Economic Forum, 2016).

The likelihood of access to paid employment (modern sector jobs) for a Burkinabé woman is correlated with her education, peaking with a high school education. When compared to non-educated women, Burkinabé women who obtain secondary education increase their probability of getting a wage-earning job by 28.1% and those obtaining higher education by 62.5 (IMF, 2016). Furthermore “single women have better access to wage employment than single men with the same education level, except for higher education where the percentages of men and women in wage employment are almost equal” (IMF, WP/16/118 2015). However, these opportunities for educated women drastically diminish when they marry.

6.1.4 Gender, Social Inclusion, and Energy

The vast majority of Burkinabé live in a situation of energy poverty, defined as the lack of adequate modern energy for the basic needs of cooking, heating and lighting as well as the delivery of basic energy services for schools, health centers and other community infrastructure and income generation (IEA, 2013). Approximately 13.1 percent of the Burkinabé had access to electricity in 2012 (WB, data.org) and less than 5 percent in rural areas. While the country's rate of electrification is currently about 25 percent in terms of territorial coverage, less than 20 percent of households have electricity, with an energy supply that is not reliable (with frequent power failures) and comparatively expensive. (Rapport annuel de la zone franc, 2016). In Burkina Faso, access to the electricity grid is one of the best proxies for household poverty status.

With the overwhelming bulk of the electrical grid found in urban areas, choice of and access to energy is determined by location of residence. Urban households not attached to the costly electric grid must purchase fuel. Though dated, a 1995 resource notes that an urban family in Burkina Faso typically spends 20 percent of its income on fuels (Barnes, 1995). Most rural households rely on biomass for their energy needs. Biomass is often of low quality, emitting smoke and particulates that are harmful to health. Collecting biomass is also labor intensive, and several hours a day are spent in gathering it (Reddy, 2000). Furthermore, due to climate change and desertification, the supply of biomass fuel is becoming scarcer, increasing the distance to the source of supply and raising the level of effort required to collect it.

In Burkina Faso, women and children experience the brunt of energy poverty to a greater degree than men. This includes an increased burden by women and children in the labor intensive tasks of productive work and reproductive household responsibilities, as well as greater exposure to the health risks linked to solid fuel use. The WHO, in evaluating negative effects of cooking with solid fuels, has strong evidence that solid fuel use causes pneumonia in children under five, and chronic obstructive respiratory disease (COPD) in adult women. There is “moderate” evidence linking solid fuel use to adverse pregnancy outcomes, lung cancer in adult women, tuberculosis and cataracts. (Legros, 2009). An African, multi-country household survey that included Burkina Faso and Ghana found that 87 percent of rural trips to collect biomass are on foot, with women completing 65 percent of the total (or 71-96 percent of all domestic-related trips) and

⁶ Defined as being age 15 or above and able to read and write.

carrying an average daily load equivalent to 20 kilograms over a distance ranging from 1.4 to 5.3 kilometers (Malmberg-Calvo, in ECOWAS, 2006).

6.1.5 Trafficking in Persons

The U.S. Department of State considers Burkina Faso a Tier 2 country in terms of Trafficking in Persons. Tier 2 designation is given to countries that “do not fully meet the TVPA’s minimum standards but are making significant efforts to meet those standards.” In its 2016 report, the U.S. Department of State writes that Burkina Faso is “a source, transit, and destination country for women and children subjected to forced labor and sex trafficking.” Burkinabé children are transported to Cote d’Ivoire, Mali and Niger for forced labor or sex trafficking. *Confiage*, sending a child to live with a relative or friend in order to attend school, is practiced in Burkina Faso and can potentially render a child vulnerable to exploitation. Traffickers recruit women for seemingly legitimate employment in Lebanon, Qatar, Saudi Arabia and various European countries but then subject them to forced prostitution.

Burkina Faso is a transit country for traffickers transporting children from Mali to Cote d’Ivoire, and is a destination for children subjected to trafficking from neighboring countries, including Ghana, Guinea, Mali and Nigeria. Women from other West African countries are falsely recruited for employment in Burkina Faso and subsequently forced into prostitution, involuntary labor in restaurants, or domestic servitude in private homes.

The GoBF has not yet fully met the minimum standards for the elimination of trafficking; however, it is making significant efforts to do so. The GoBF reported an increase in the number of prosecutions and convictions of trafficking offenders, has begun to regulate the unregistered Koranic schools that subject students to forced begging, and continues to train authorities and social workers on victim protection. It also increased its funding for victim services (United States Department of State Trafficking in Persons Report 2016).

6.1.6 Child Labor

As in many developing country contexts, children in Burkina Faso are often required to assist their household to meet subsistence needs. The United States Department of Labor (DOL) found in 2015 that 42.1 percent of Burkinabé children aged 5 to 14 are economically productive (working), which is comparable with other countries in the sub-region. Child labor includes activities like animal raising, agricultural planting and weeding, domestic labor and street work such as selling. The worst forms of child labor in Burkina Faso are found in cotton production and the mining sector, where children are routinely forced to carry heavy loads and are exposed to pesticides, cyanide and mercury, as well as illicit activities like begging, drug trafficking and commercial sexual exploitation.

In the same 2015 report the DOL commended the GoBF for making significant advancements in efforts to eliminate the worst forms of child labor. The Government adopted a revised mining code that includes new provisions prohibiting child labor in mines. The Government also renewed its annual National Action Plan to Combat Trafficking and the National Program for the Fight against Child Labor on Artisanal Gold Mining Sites and Quarries. In an effort to improve data collection efforts related to child labor, the Ministry of Social Action and National Solidarity established a basic integrated data system on child protection that is linked to all 45 Committees for Vigilance and Surveillance throughout the country. However, a lack of labor inspectors and limited resources for the systematic enforcement of child labor laws impede government efforts to protect children from engaging in the worst forms of child labor.

6.2 Annex B: Finance and Productive Sector Analysis

A Productive Sector Analysis by Dalberg found that agriculture, agro-processing, extractives, livestock and renewable energy emerge as high-potential sectors. Specifically, while agriculture and livestock are already leading growth sectors, agro-processing and solar energy are emerging as high-potential sectors for future growth. Meanwhile, the extractives sector, is a current driver of economic growth and offers opportunities to bolster rural economic development by offering professional skills development opportunities, exploring renewable energy investments and catalyzing the growth of a local manufacturing sector, as other countries with strong mining industries have done. The analysis also found that the Burkinabé economy struggles to grow due to constraints in human capital (such as a lack of basic business and technical skills) and market failures (restrained access and broken linkages, along with poor infrastructure and burdensome customs regulations). Additional detail is given below, taken from the Executive Summary to the Dalberg presentation on the Financial Sector.

Burkina Faso has the potential to make major economic strides but faces challenges to its development. Indeed, with an annual population growth rate of 3% and an increasingly youthful population, the country is poised for the emergence of a more dynamic economy. However, only 34% of the population has a secondary education and the unemployment rate hovers at 14%. Furthermore, the Burkinabé economy remains dependent on gold and cotton exports, which together account for nearly 90% of the country's exports and render the country vulnerable to fluctuations in volatile gold and cotton prices. Thus, while the outlook for future economic growth in Burkina Faso is promising, the country must take sizeable steps to harness its demographic potential and diversify its economy.

Agriculture, agro-processing, extractives, livestock, and renewable energy emerge as high-potential sectors. Specifically, while agriculture and livestock are already leading growth sectors, agro-processing and solar energy are emerging as high-potential sectors for future growth. Meanwhile, the extractives sector is a current driver of economic growth and offers opportunities to bolster rural economic development by offering professional skills development opportunities, exploring renewable energy investments and catalyzing the growth of a local manufacturing sector, as other countries with strong mining industries have done.

Despite the potential of these sectors, there exist **three major constraints** that impede their growth:

- **Human capital is a primary constraint that manifests across both the informal and formal sectors.** In the informal sector, companies lack: (i) basic business skills, such as financial literacy and accounting and (ii) technical skills, which stem from an absence of training on how to produce to high quality standards. However, these challenges persist in the formal sector as well. Indeed, formal sector enterprises need training in business development services, such as developing competitive products and creating coherent growth strategy plans. And even for those business owners who have received a formal education, a lack of practical and technical field experience makes the process of starting and scaling a business much more challenging than SME owners initially anticipate;
- **Market failures are another overriding constraint to growth,** with restrained market access and broken market linkages impeding all high-potential sectors. A poor road network and corrupt customs officials limit the ability of producers to bring their products to both domestic and external markets. Weak local value chains and the prohibitive cost of input materials challenge the ability of producers to assemble products and sell them competitively;
- **Access to finance is a major constraint, mainly for emergent sectors in which existing companies are already somewhat capitalized.** For example, in order to be operational, solar energy companies and agro-processing units already have some degree of financial management skills. Despite these

skills, however, they struggle to access finance because banks are unfamiliar with their businesses and hesitant to extend credit to SMEs. This is particularly problematic in these two sectors, which tend to consist of medium-sized businesses that require sizeable investments in expensive machinery to scale. On the other hand, agriculture and livestock businesses tend to be run on a small-scale and require basic financial management training to even apply for loans appropriately, let alone use the funds effectively. For the smaller firms in these sectors, basic human capital needs to be developed before extending financial access to make sure that loans are used capably and to foster banks' confidence in lending to these sectors in the future;

- **While access to energy and ICT are limited, both pose only moderate constraints to growth, as larger firms have found ways to adapt to little access, while small/informal firms largely do without.** Interviews with stakeholders identify that the primary barrier to accessing energy and ICT is *not* the lack of infrastructure, but a lack of both business skills and financial access. This barrier inhibits businesses' ability to strategize about – and invest in – improved infrastructure. Thus, improving SMEs' awareness of business development strategies and increasing their access to credit would help them obtain the capital needed to invest in energy and internet access.

Within this context, there are three high-potential mechanisms to address these challenges for MCC to consider moving forward:

- **Strengthen human capital:** Providing apprenticeships and skills workshops enable the local workforce to improve their technical expertise and financial management skills. Ultimately, improving workforce capacity can unlock the potential of Burkina Faso's growing young population to find gainful employment and galvanize economic growth;
- **Facilitate access to affordable primary materials:** Encouraging public-private partnerships could enable SMEs to access heretofore expensive and inaccessible inputs, such as drought-resilient seeds, affordable animal fodder and high-quality solar technology. Indeed, improving access to primary materials would drive greater economic growth by allowing SMEs in high-potential sectors to attain critical inputs, achieve a greater profit margin and invest further in their businesses;
- **Improve financial access:** Providing flexible financial resources to banks, such as guarantee funds and refinancing capital, would encourage their lending to SMEs in priority sectors, particularly if these financial resources were coupled with training for banks in how to recognize valuable and viable projects in non-traditional and inherently riskier sectors.

As MCC and the GoBF move forward with compact development, they can consider further analysis in these high-potential sectors to identify specific program interventions that will help unlock sustainable and inclusive development.

An additional Financial Sector analysis found that while SME growth is essential for the development of the Burkinabé economy, many SMEs struggle to access finance due to challenges in the supply, demand, intermediation and enabling environment of/for suitable financial products. Despite these challenges, access to finance is not a primary constraint to growth but rather a symptom of other underlying factors which make SMEs unbankable, risky investments. SME risk factors include poor managerial and business skills, significant human capital challenges, and multiple market failures. With a failure rate of over 90% within five years, banks are reluctant to develop and/or offer tailored financial products to help SMEs meet their growth prospects. Improving the conditions for profitability and success for SMEs should be the first step in helping to increase their access to affordable, long-term capital. Ultimately, this type of intervention has the potential to drive the Burkinabé economy forward. Additional detail is given in the summary below from Dalberg.

SMEs comprise approximately 80% of all firms in Burkina Faso and catalyzing their growth is a priority of the Burkinabé government's economic development strategy. And, while SME growth is essential for the development of the Burkinabé economy, many struggle to access finance due to challenges in the supply, demand, intermediation and enabling environment of/for suitable financial products. Specifically:

- **On the supply side, financial institutions offer few attractive financial products to small and medium enterprises.** Burkina Faso's financial services sector is dominated by banks, all of which are risk-averse and have strict collateral requirements (120% of the loan) that are rarely met by small and medium-sized businesses. Micro-finance institutions (MFIs), which are intended to work with small businesses, struggle to raise capital and, even when they offer loans, their interest rates range from 15-17%, which is cost-prohibitive for most SMEs;
- **On the demand side, medium-sized enterprises in capital-intensive sectors face an unmet need for finance.** These enterprises are either too large for micro-finance institutions or unable to meet bank criteria to access credit, resulting in a major financing gap. Mesofinance could help to fill this gap but remains nascent in Burkina Faso. In addition, high sector informality and low SME financial literacy mean that most enterprises are unable to absorb a major influx of credit even if approved for a loan. In this context, some enterprises opt not to approach banks in the first place;
- **Intermediation remains a critical challenge in Burkina Faso given significant information asymmetry between financial institutions and businesses.** Most businesses are unaware of the specific policies that are in place to support their growth including financial products and offerings which might be more suitable for their needs. Furthermore, banks and government entities often lack direct communication channels to SMEs;
- Finally, while regional bodies and the Burkinabé government have made efforts to improve access to finance, **the enabling environment remains problematic.** Public inclusion funds cannot access sufficient finance to lend to under-served segments; the limited reach and scale of credit bureaus means that MFIs have limited access to information; and poor protective measures for minority investors makes it challenging for SMEs to attract investment.

Burkina Faso's financial sector could be functioning more effectively. Nonetheless, despite these challenges, **access to finance is *not* a primary constraint to growth but rather a symptom of other underlying factors** which make SMEs unbankable, risky investments. For example:

- **Almost universally, SMEs in Burkina Faso have poor managerial and business skills.** Many are unable to produce reliable financial statements when requested, meet minimum accounting standards or produce a basic business plan. Since banks prioritize management skills in the evaluation of loan applications, most SMEs are deemed to be unattractive candidates and unsuitable for loans. And even if many SMEs had more finance, they would likely struggle to put the additional capital to good use given their poor business skills;
- **SMEs face significant human capital challenges, struggle to retain talented staff, and are unable to produce high-quality, competitive products or adapt to market conditions given their talent gap.** Banks use the enterprises' team as one proxy to assess the viability of the business. In the absence of being able to put forth a high-quality team, SMEs do not appear to be credit-worthy;
- **SMEs grapple with multiple market failures.** The Burkinabé private sector is characterized by high and unreliable input costs; a large informal sector that pushes down prices and quality for formal sector enterprises; and uncontrolled imports that further contribute to lower prices. When combined with high costs of production due to an energy monopoly and poor infrastructure, most SMEs in Burkina Faso are not competitive within their respective markets, nor can they articulate to a financial institution how they will overcome these obstacles.

Thus, when faced with an SME applicant with poor business and management skills, human capital challenges and the inability to compete and be profitable, banks will not extend a loan. In this way, **low access to finance is a symptom of these underlying factors which must be addressed before SMEs can reliably access finance and help drive the Burkinabé economy forward.** Within this context, actors such as MCC might consider a combination of financial sector and business environment interventions to help catalyze economic growth in Burkina Faso. Specifically:

- **In the short-term, actors can work to (i) stimulate the growth of non-bank financial institutions and (ii) consider increasing financial institutions' access to alternative resources to compel them to engage in more flexible lending and provide finance tailored to the needs of SMEs.** Stakeholders such as Société Financière de Garantie Interbancaire du Burkina (SOFIGIB) and the Central Bank might be suitable partners in such an approach, particularly in the provision of more affordable and flexible guarantee instruments;
- **In the medium-term, stakeholders can help reinforce SMEs' management skills with business development services and training.** Entities, such as the Maison des Entreprises, charge for these services. MCC and partners might consider scaling these services and making them more accessible to small businesses, many of which cannot afford them;
- **In the long-term, stakeholders can help address some of the more fundamental issues of SME competitiveness** by improving human capital, encouraging more sector formality and working in high-priority industries to address ongoing market failures (e.g., high input costs, monopolies, etc.).

With a failure rate of over 90% within five years, banks are reluctant to develop and/or offer tailored financial products to help SMEs meet their growth prospects. **Thus, improving the conditions for profitability and success for SMEs should be the first step in helping to increase their access to affordable, long-term capital.** Ultimately, this type of intervention has the potential to drive the Burkinabé economy forward.

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