



COUNTRY PRIVATE SECTOR DIAGNOSTIC

CREATING MARKETS IN MALI

Mobilizing the Private Sector for
Economic Resilience and Recovery

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ABBREVIATIONS AND ACRONYMS

AGEFAU	Universal Access Fund Management Agency (Agence de Gestion du Fonds d'Access Universal)
AMADER	National Agency for the Development of Domestic Energy and Rural Electrification (Agence Malienne pour le Développement de l'Energie Domestique et l'Électrification Rurale)
AML/CFT	anti-money laundering/combating the financing of terrorism
AMRTP	National ICT Authority (Autorité Malienne de Régulation des Télécommunications et des Postes)
BCEAO	Central Bank of West African States (Banque Centrale des Etats de l'Afrique de l'Ouest)
CFAF	Financial Community of Africa Franc (currency)
COVID-19	coronavirus disease 2019 (SARS-CoV2)
CPSD	Country Private Sector Diagnostic
CREDD	Framework for Economic Recovery and Sustainable Development (Cadre Stratégique pour la Relance Economique et le Développement Durable)
CREE	Regulatory Commission for Electricity and Water (Commission de Régulation de l'Electricité et de l'Eau)
CREPMF	Regional Financial Markets Regulator (Conseil Régional de l'Epargne Publique et des Marchés Financiers)
CSA	climate-smart agriculture
DDR	disarmament, demobilization, and reintegration
DFS	digital financial services
DGCC	General Directorate for Trade, Competition and Consumer Protection (Direction Générale du Commerce, de la Consommation et de la Concurrence)
DGI	General Tax Directorate (Direction Générale des Impôts du Mali)
DPO	Development Policy Operation (World Bank Group)
DRA	Regional Agricultural Directorates
DSF	Defense And Security Forces
DSSI	Debt Service Suspension Initiative
EBA	European Banking Authority

ECF	Extended Credit Facility
ECOWAS	Economic Community of West African States
EDM-SA	National Power Utility (Energie du Mali – Société Anonyme)
EMIs	e-money institutions
ESOs	entrepreneurship support organizations
EU	European Union
FCFA	foreign currency fluctuation account
FCS	fragile and conflict-affected situations
FDI	foreign direct investment
GDP	gross domestic product
GIM-UEMOA	Interbank Monetary Union of the WAEMU (Groupement Interbancaire Monétique)
GSMA	Global System for Mobile Communications
ICT	information and communication technology
IFC	International Finance Corporation (World Bank Group)
IMF	International Monetary Fund
INSTAT	National Institute for Statistics (Institute National de la Statistique du Mali)
IPPs	independent power producers
KYC	know-your-customer
MFIs	microfinance institutions
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali
MNO	mobile network operator
MSME	micro, small, and medium enterprise
MW	megawatts
NBFIs	nonbank financial institutions
NIF	fiscal identification number
NINA	National Individual Identification Number
NINACAD	National Identification Cadastral Number
PACAM	Support Project for Agro-Industrial Competitiveness in Mali

PC	performance contract
PER	public expenditure review
PPA	power purchase agreement
PPP	public-private partnership
PSGF	private-sector guarantee fund
R&D	research and development
RCA	revealed comparative advantage
SEZ	special economic zone
SiKoBo	cross-border agribusiness special economic zone
SME	small and medium enterprise
suptech	supervisory technology
UNCTAD	United Nations Conference on Trade and Development
US\$	United States dollar
USSD	unstructured supplementary service data
WAAPP	West African Agricultural Productivity Program
WAEMU	West African Economic and Monetary Union
WBG	World Bank Group
WEF	World Economic Forum

EXECUTIVE SUMMARY

Between 2014 and 2019, Mali experienced positive economic growth, which was reversed in 2020 by the COVID-19 pandemic and political instability, resulting in more constrained fiscal space.

Until the onset of the COVID-19 pandemic and despite the deteriorating security situation, Mali's economic growth averaged five percent since 2014, on par with its long-term potential.¹ This growth has been largely driven by commodities (gold exports) and agriculture, and was buoyed by high levels of remittances, foreign aid, and external borrowing. Resilient gross domestic product (GDP) growth and sound macroeconomic performance have, however, been reversed by the COVID-19 pandemic and the multiple sanctions imposed by the Economic Community of West African States (ECOWAS) since the first coup on August 18, 2020. Despite efforts by the government of Mali to contain the economic fallout of the COVID-19 pandemic and political turbulence, these factors are taking a heavy toll on Mali's private sector and economic outlook, with GDP contracting by 1.2 percent in 2020 from 4.8 percent real GDP growth in 2019—as a result of subdued global demand and the impact of restrictive measures adopted to contain the spread of the virus.²

Mali's fragile state status has also taken a toll on economic activity and social welfare by reducing access to markets, threatening food security, and degrading human capital indicators. The low-income country is one of the least developed in the world, ranking 184th of 189 countries, according to the 2020 Human Development Index, and faces severe challenges related to a nondiversified economy, high poverty rates, regionalized internal conflicts, political instability, and violence, hallmarks of the fragility that undermines economic resilience. Fragility has deep-seated roots in Mali, starting from weak political and economic governance and a lack of social accountability, among other underlying causes. Recent years have proved especially difficult, with a succession of military coups in 2012, August 2020, and May 2021, amid waves of protests and widespread insecurity in the north and central regions of Mali that have been slowly spreading to the southern regions.

With an increasing debt burden resulting in limited fiscal space to address persistent security risks and to combat the COVID-19 pandemic, the government of Mali is compelled to refocus the role of the state and unleash the potential of the private sector to boost productivity growth, to diversify the economy away from a narrow base, and to ensure inclusive economic and social welfare for all Malians. With a shift of priorities toward ensuring a peaceful political transition, strengthening basic services in the aftermath of the COVID-19 pandemic, and fighting endemic corruption, Mali is committed to redefine the country's economic growth model. The growth model will be readdressed around energizing investment, creating resilient markets, and building back better for a more resilient recovery via (a) improving the business environment; (b) crowding-in private participation in the delivery of infrastructure and certain public services; (c) ensuring that remaining state-owned enterprises and private firms compete on equal terms—that is, upholding competitive neutrality principles; (d) expanding public-private partnerships in key sectors, through transparent and competitive procurement; and (e) leveraging digital solutions by further enhancing digital infrastructure that would, in turn, increase the uptake of digital financial services and digital platforms for key sectors of the economy, such as agriculture, and digitize government services (e-government). These principles are embedded in the Framework for Economic Recovery and Sustainable Development (CREDD) launched by the government of Mali in 2018. CREDD still serves as a relevant policy platform for the transitional authorities, building on the premise that achieving sustainable, broad-based, and pro-poor economic growth requires private sector-led structural transformation of the economy.

The challenge lies in leveraging the role of the private sector to seize market opportunities in a more complex operating environment.

Notwithstanding a challenging context, Mali is endowed with a vibrant and resilient private sector that constitutes a veritable engine to lead a strong economic recovery post-COVID-19. This is evidenced by estimated statistics for 2021, pointing to a 3.1 GDP growth rate, with the first quarter of 2021 showing signs of recovery in agriculture and services, and an increase in goods exports. The formal private sector represents one-third of the country's GDP and three-fourths of exports. Economic resilience in the face of a fragile environment is due in part to the fact that more than 80 percent of Mali's economic activity occurs in the southern regions of the country, which have been less affected by the crisis despite an uptick in armed conflict in the northern and central regions over the recent years. Remittances representing close to six percent of GDP, well above the regional average for Sub-Saharan Africa, have also contributed to Mali's resilience.

A private sector–driven development trajectory is crucial for generating job opportunities for a labor force that is estimated to grow by estimated 235,000 workers every year, with more than one-half of the country’s population younger than age 24. There is a paucity of good job opportunities in formal businesses and self-employment for Mali’s large and growing pool of young workers. Unemployment in 2020 was estimated at 7.3 percent³ nationally but is much higher among the youth (approximately 40 percent). Further, about one-half of all Malian enterprises are informal small and medium enterprises (SMEs) and 90 percent of all jobs are in the informal sector. Beyond these firms, about one in every six households operates a household enterprise. The enterprises provide full-time jobs for 280,000 Malians and part-time jobs for 545,000 Malians.

Absorbing the growing youth bulge will require strengthening the nascent entrepreneurial ecosystem while leveraging technological innovation and upgrading skills. Indeed, skills enhancement is a key theme in the Private Sector Orientation Law adopted in December 2011. Mali fares relatively poorly in entrepreneurship. The country ranked 123th of 137 countries in the 2019 Global Entrepreneurship Index published by the Global Entrepreneurship and Development Institute, and it scores particularly low in the areas of start-up skills and risk acceptance (entrepreneurial attitudes), opportunity start-up and human capital (entrepreneurial abilities), as well as internationalization and risk capital (entrepreneurial aspirations). Focusing on reducing the gender inequality gap will be especially important, given that Mali scores 60.6 out of 100 in the Women, Business, and the Law index, meaning that the economy gives women approximately one-half the rights of men.⁴

Reinforcing Mali’s growth potential through policies for structural economic transformation and a sustainable post-COVID-19 recovery requires focusing on its comparative advantages and on a gradual diversification of productive sectors in the economy into areas, such as agribusiness.

Structural transformation and economic diversification are key to boosting growth and reducing volatility in Mali. Mali is one of the least diversified exporters in the world and the fifth least-diversified economy in Sub-Saharan Africa. Diversification requires improving overall productivity, either by reallocating resources to high-productivity sectors (such as some manufacturing activities) or by creating productivity gains within a sector through process and product improvements. Given its high share of output, employment, and external trade in Mali, light agro-industry holds the most promising scope for productivity improvements and enhanced performance—with the potential to raise farmers’ income, generate employment, and reduce food prices.

- Agriculture (including livestock):** Representing 40 percent of GDP and 58 percent of direct and indirect employment of Mali’s working-age population, the sector provides livelihood to 11 million Malians. With 6.4 million hectares of land, Mali has more arable land than Senegal and Côte d’Ivoire combined. Mali has the opportunity to use its comparative advantage to move toward more sophisticated production systems, using digital technologies. Nonrice subsistence farming is expected to contribute just over US\$2.43 billion per year (29 percent) to agricultural GDP on average for the period 2019–23. Meanwhile, livestock production is expected to represent 37.5 percent of agricultural GDP or an average of US\$3.14 billion per year. Whereas most agricultural production is focused on meeting domestic demand, cotton represents Mali’s top agricultural export. There is untapped investment potential in several agricultural subsectors, with the possibility to raise value addition and intensity of processing, increase food security, create jobs, and expand exports. Value chains such as fonio, sesame, cotton, livestock, and mango— for instance, remain largely underexploited and provide unique opportunities for investors. Harnessing the potential of these value chains to increase private sector investment and create more and better jobs requires addressing several specific constraints in the next three to five years. Specifically, constraints linked to (a) an unharmonized legal and regulatory environment governing the agricultural sector; (b) governance, institutional fragmentation and weak capacity; (c) inadequate financial infrastructure, lack of access to finance, and lack of transparency and traceability of financial flows; and (d) suboptimal uptake of agricultural technologies to move toward climate-smart agriculture, with a lack of qualified skills in light agro-industry.
- Agribusiness special economic zones (SEZs)—as reinforced by digital network platforms—can provide the private sector with the economic foundation to expand agricultural transformation in Mali.** Establishing SEZs can help Malian farmers gradually (a) expand the complexity of products along the entire agribusiness value chain through mechanization and innovation, (b) improve human capital through an expanded knowledge base, (c) upgrade skills, and (d) streamline and rationalize transport and information and communication technology (ICT) connectivity. The strategic development of essential infrastructure and services through implementing innovative SEZ public-private partnerships (PPPs) can further take advantage of the positive value-chain attributes of SEZs. Such a strategy can then be replicated in Mali’s Trans-Sahel region neighbors, many of whom are also conflict-affected and fragile nations. To date, there is no SEZ law in Mali. The existing legal framework consists of one article in Mali’s investment code. Given the complexity of SEZs, that article is not adequate to make a compelling business case to entice seasoned foreign investors to make SEZ investments in the West African nation.

Boosting private investment requires alleviating five key cross-cutting constraints.

Analysis of bottlenecks to the development of agribusiness and agricultural value chains in Mali identified key cross-cutting constraints to private sector development in the country. Those bottlenecks are (a) energy supply, (b) transport and logistics, (c) digital infrastructure, (d) access to finance, and (e) business environment. Over the coming five years, Mali will need to address these bottlenecks as a priority if the country is to fully harness its private sector and steer it toward achieving better development outcomes.

- Energy:** Despite significant progress over the past two decades, access to reliable electricity supply in Mali remains low, particularly in rural areas. The national electrification rate in Mali reached 51 percent in 2018, surpassing for the first time Sub-Saharan Africa's average rate of electricity access of 48 percent. This increase was driven predominantly by a relatively high electricity access rate in urban areas of 86 percent, compared with 78 percent in Sub-Saharan Africa. Whereas the rural access rate also improved, reaching 25 percent at the end of 2018, it remains extremely low (albeit close to Sub-Saharan Africa's average of 32 percent). The energy sector in Mali requires a profound transformation to make it an efficient and more sustainable sector, with a lower subsidy requirement, supporting long-term energy infrastructure development and spurring Mali's transition to a light agro-industrial economy. Key areas for improvement revolve around enhancing the current performance and sustainability of the sector, prioritizing four objectives: (a) improving financial and operational performance of EDM-SA (the national power utility), (b) developing a comprehensive electricity sector master plan including a clear methodology to select new generation capacity based on a least-cost approach, (c) fostering the development of domestic on-grid renewables solutions and benefiting from regional electricity imports, and (d) setting the conditions for an effective deployment of mini-grid programs to increase access in rural areas.
- Transport:** Mali's overall transport infrastructure quality and density is well below regional standards. The country ranked 96th of 160 countries on the 2018 Logistics Performance Index. The proportion of the rural population with access to all-season roads is about 22 percent, below the average of 34 percent in Sub-Saharan Africa—hampering the growth potential of key agricultural value chains. The transport sector in Mali presents several opportunities that could materialize over different time frames. In the short to medium term, the following priorities should be emphasized: (a) restoring and maintaining access roads to existing and potential agriculture production areas through long-term output and performance-based contracts, and (b) upgrading and maintaining the northern Dakar–Bamako road corridor through long-term PPP contracts. Although longer-term solutions are not the immediate focus of the Country Private Sector Diagnostic (CPSD), laying the foundations for achieving these objectives must start in the short term to enable light agro-industry to take off. Those foundations include: (c) constructing and operating new inland terminals and logistics platforms, (d) renewing the heavy cargo long-haul trucking fleet, (e) privatizing the management and operations of the Bamako airport, (f) improving traffic flow and mass transit in Bamako, and (g) restoring and maintaining high-demand truck roads through long-term PPP contracts.

- Digital Infrastructure:** In 2019, the cost of 500 megabytes (MB) mobile internet represented 20.5 percent of monthly income, compared to an average 9.6 percent in Sub-Saharan Africa. In Mali, where more than 50 percent of the population lives in rural areas subsisting on agricultural activities, the availability of connectivity increases productivity and value generation, improving women’s livelihoods in particular. A World Bank study on the welfare effects of broadband⁵ indicates that increasing mobile penetration from 70 percent to 79 percent is expected to increase GDP levels by 0.3 percent. Increasing mobile broadband penetration from 20 percent to 39 percent is expected to increase GDP levels by 1.6 percent. Increasing 3G/4G coverage is expected to create about 20,000 new jobs; and increased broadband penetration is expected to reduce poverty levels, potentially lifting 100,000 people out of poverty as an immediate effect. A strong recovery that allows the Malian economy to reap the benefits of a robust digital economy requires urgent and significant action by the government of Mali, the regulator, and the private sector to avoid widening the digital gap at the national and regional level. The first level of actions proposed relate to the removal of inefficient regulatory barriers that are preventing increased investments, particularly at the wholesale and infrastructure-sharing levels. The second phase of intervention should focus on accelerating the harmonization in availability of digital infrastructure across the territory. The disparities between rural and urban areas are still too significant to guarantee the full economic potential of digital transformation across the population. Finally, the development of digitally enabled platforms such as e-health, e-education, e-government, and m-money must be pursued at a sustained pace to increase economic inclusion and efficient administration in light of recent socioeconomic instability. These reforms can unlock private sector investment in the digital sector and contribute to economic growth, jobs, and poverty reduction.
- Access to Finance:** Access to finance remains heavily constrained for most Malian businesses and entrepreneurs—in particular outside of urban areas and for underserved segments such as the informal sector, agricultural communities, women, and young entrepreneurs. Key constraints affecting financial inclusion include supply- and demand-side obstacles, such as the low financial literacy rates and capabilities in the general population; the information asymmetries and risk aversion of banks, which constrain credit to small businesses and farmers; and the limited competition and lack of level playing field between banks, microfinance institutions, and other emerging, nonfinancial players such as mobile money providers—all of which result in high prices and low innovation in product development. Whereas much of the regulatory work in this area is taking place at the regional level (that is, West African Economic and Monetary Union and the Central Bank of West African States [WAEMU and BCEAO]), several directions can be suggested to increase the financial inclusion of farmers, businesses, and entrepreneurs in Mali by removing constraints from both the supply and the demand sides. These include: (a) leveraging mobile money and digital financial services as an entry point to financial inclusion—and a powerful tool for integrating disadvantaged people into the formal financial sector; (b) revitalizing the microfinance sector through strengthened governance and capabilities for better outreach to rural farming communities; (c) reactivating the existing Private Sector Guarantee Fund to make it an effective platform for liquidity-starved micro, small, and medium enterprises (MSMEs) and a trusted partner for businesses hit hard by the COVID-19 crisis; and (d) rolling out financial literacy programs to educate the general population, particularly the youth, on opportunities and risks inherent to financing their business.

- **Business Environment:** The investment climate remains unfavorable for development of SMEs and hampers the development of value chains. A robust business environment is a prerequisite to any private sector growth. The government of Mali would need to take significant action to improve its currently weak business environment and make it more conducive to private sector investment. The first level of actions proposed relates to improving the tax framework by streamlining cumbersome procedures, by moving toward dematerialization of processes, and by introducing more fiscal transparency. These measures would provide incentives for firms to become formal while improving the transparency of the overall fiscal system. The second level of proposed actions pertains to improving land administration. Steps toward achieving this include establishing a national cadaster system combined with assigning unique identifier numbers for each land parcel and establishing an online one-stop shop.

Governance emerges as a key reform pillar in notably every section of the CPSD. In a society dominated by consensus politics and growing insecurity, standard technocratic reforms (such as the liberalization of the agricultural or transport sector) that ignore Mali's current geopolitical and political economy realities are probably destined to fail. The CPSD therefore prioritizes governance as a cross-cutting policy measure that will help Mali emerge from its current status as a failed state. This outcome is of paramount importance to enable the West African Sahelian nation to generate private sector investment, both domestic and foreign, that can sustain economic growth and development and poverty alleviation in the new COVID-19 and fragile world.

While the CPSD analyzes the cross-cutting and vertical sectors separately, it prioritizes reforms that will enable the value-added sectors to the economy—that is, those that are expected to deliver the most impact, keeping in mind the limited capacity of the transitional government and the drivers of fragility. To that end, the CPSD draws on success factors and lessons learned from previous policy design and implementation experiences in both Mali and peers (comparator and aspirational), across the agribusiness sector and other cross-cutting areas such as the business environment. Further, using IFC's Contextual Risk Framework, a screening and deep dive analysis of the country's fragility identified key risks and opportunities for building resilience. The CPSD carefully takes into consideration these indicators in the various chapters of the document, notably on infrastructure, agriculture, and business environment, with a cross-cutting gender and governance lens. A careful assessment of these risks would allow Mali to preemptively implement mitigation measures to attenuate the potential negative effects on private sector investment.

Table ES.2 proposes a strategic reform agenda for the next five years. This agenda is aimed at supporting the development of the private sector to help sustain inclusive growth and to foster job creation. However, given the limited tenure of the transition government, it is critical that several key actions be undertaken immediately to lay the groundwork for more comprehensive reforms in the short to medium term. These immediate-term reforms are in table ES.1. The core of this report provides more detailed analysis and justifications for the proposals.

TABLE ES.1. IMMEDIATE-TERM ACTIONS AND REFORMS TO BE UNDERTAKEN BY THE TRANSITION GOVERNMENT

SECTOR	PROPOSED IMMEDIATE TERM ACTIONS
Agriculture	Conduct a feasibility study of the digitization of the phytosanitary and other certification services to reduce time and costs and improve international competitiveness for high-value crops.
	Lay the groundwork for the establishment and operationalization of a WRS to increase access to credit and dispose of professional storage infrastructure by (a) creating a WRS public-private sector steering committee to support development and adoption of necessary laws and decrees, including a future regulatory agency, and (b) conducting a feasibility study to examine the potential for the expansion of agricultural insurance to increase access to agricultural credit and other services.
Special economic zones	Adopt the draft SEZ law (pending approval by the transitional Malian Council of Ministers).
Energy	Improve the financial and operational performance of EDM-SA by (a) Increasing efficiencies in fuel procurement and management via a reduction of diesel consumption, new renewable generation capacities, and competitive procurement of fuel and (b) strengthening the PC between EDM and the government of Mali by defining KPIs, setting out a clear action plan, and appointing an independent auditor of this PC.
	Improve the government of Mali's planning and execution capabilities by finalizing the master plan and prioritizing least-cost competitive new generation investments and by upgrading the transmission and distribution networks in a coordinated fashion.
Digital infrastructure	Revise the regulatory framework to facilitate all types of infrastructure-sharing arrangements, which can involve the sharing of various components of mobile networks, including both passive and active sharing.
	Investigate sharing-agreement opportunities, including the introduction of TowerCos on the market at both passive and active layers of the last mile to increase network coverage of the population. (Within the past five years, specialized infrastructure companies known as "TowerCos" have emerged around the world to buy tower infrastructure from operators and then lease back their services.)
Access to finance	Adopt a pro-DFS Ministerial Decree instituting an implementation schedule for the digitization of government payments (to be cosigned by Minister of Finance and Minister for the Digital Economy) over one to three years.
	Finalize membership of Mali's Treasury to WAEMU's GIM-UEMOA program.
Business environment	Redesign the single combined tax by modifying its text through the 2022 finance law that has been prepared in September 2021.
	For access to land, adoption of a decree defining the legal and regulatory framework for the single window.

Note: DFS = digital finance services; EDM-SA = Mali's national power utility; GIM-UEMOA = Regional Interbank Electronic Banking Group; KPI = key performance indicator; PC = performance contract; SEZ = special economic zone; WAEMU = West African Economic and Monetary Union; WRS = warehouse receipts system.

Table ES.2 summarizes the constraints and recommended priority interventions to increase the role of the private sector in the Malian economy. Short-term denotes within the next 2-3 years and medium-term denotes within the next 3-5 years.

TABLE ES.2. RECOMMENDATIONS FOR INTERVENTIONS

CATEGORY	IMPACT ON FRAGILITY DRIVERS	PRIORITY POLICY RECOMMENDATIONS	TIMEFRAME
AGRICULTURE, INCLUDING LIVESTOCK			
Harmonize laws and codes governing the agricultural sector, reduce institutional fragmentation, and strengthen capacity	Creates enabling environment to increase private sector participation in the agricultural sector	<ul style="list-style-type: none"> • Conduct a feasibility study of the digitization of the phytosanitary and other certification services to reduce time and costs and improve international competitiveness for high-value crops. • Create a decree or <i>arrêté</i> by the Ministry of Economy and Finance to complement the investment code and the customs and taxes code to facilitate and simplify importing greenhouse technology. • Review existing laws, codes, and regulations governing the agricultural sector to determine the need for updates and existing gaps as well as recommendations for harmonization. • Enact institutional reforms that would consolidate the development of irrigation as well as merge the DRA with the rural engineering DRGR. 	<p>Within the next 12 months</p> <p>Short term</p> <p>Short term</p> <p>Short term</p>
Leverage agricultural technology and move toward climate-smart agriculture and improve skills	Reduces vulnerability to climate change and improves resilience	<ul style="list-style-type: none"> • Provide incentives to the private sector for the investment, importation, and development of technologies and capital goods that minimize postharvest losses and waste. • Support private investors to boost downstream investments in bulk storage, refrigeration, processing, packaging, and quality control. • Increase the proportion of the public agricultural budget that goes to R&D, focusing on recruitment and training of PhD researchers, especially female researchers. • Bank and digitize agricultural flows by investing in realtime information systems on commodity prices. 	<p>Short term</p> <p>Medium term</p> <p>Medium term</p> <p>Medium term</p>

CATEGORY	IMPACT ON FRAGILITY DRIVERS	PRIORITY POLICY RECOMMENDATIONS	TIMEFRAME Short term: 1-2 years, Medium term: 3-5 years
Improve financial infrastructure	Improves financial infrastructure and promotes product development	<ul style="list-style-type: none"> • Create a WRS public-private sector steering committee to support development and adoption of necessary laws and decrees, including a future regulatory agency. • Establish and operationalize a modern legislative and regulatory framework for a WRS to increase access to credit, professional storage infrastructure, and markets for agricultural commodities. • Conduct a feasibility study to examine the potential for the expansion of agricultural insurance to increase access to agricultural credit and other services. • Leverage DFS to deliver specific assets on credit to rural households and farmers, through dedicated PAYG mechanisms. 	<p>Next 12 months</p> <p>Short term</p> <p>Medium term</p> <p>Medium term</p>
SPECIAL ECONOMIC ZONES			
Implement agribusiness and SAFE National Security SEZs	Reduces security risks, improves access to land, improves governance, and reduces gender disparities	<ul style="list-style-type: none"> • Adopt draft SEZ law (pending approval by the transitional Malian Council of Ministers). 	Within the next 6 months
ENERGY			
Improve financial and operational performance of EDM-SA	Improves access to basic infrastructure; improves transparency and governance	<ul style="list-style-type: none"> • Increase efficiencies in fuel procurement and management via a reduction of diesel consumption, new renewable generation capacities, and competitive procurement of fuel. • Strengthen the PC between EDM and the Mali government by defining KPIs, setting out a clear action plan, and appointing an independent auditor of this PC. • Design a transparent mechanism for regular review of costs and sufficient funding of maximum allowed revenues against eligible expenses via a mix of compensation and tariff adjustments as deemed appropriate by the Mali government. • Refinance EDM-SA short-term commercial debt by on-lending by the Mali government of concessional funding and by recovering past due receivables from government for public consumption and arrears in subsidy payments. 	<p>Within the next 12 months</p> <p>Within the next 12 months</p> <p>Short term</p> <p>Short term</p>

CATEGORY	IMPACT ON FRAGILITY DRIVERS	PRIORITY POLICY RECOMMENDATIONS	TIMEFRAME Short term: 1-2 years, Medium term: 3-5 years
Develop a comprehensive electricity sector master plan that includes a least-cost generation plan	Improves access to basic infrastructure and improves transparency and governance	<ul style="list-style-type: none"> • Improve the government of Mali's planning and execution capabilities by finalizing the master plan and prioritizing least-cost competitive new generation investments and by upgrading the transmission and distribution networks in a coordinated fashion. • Institutional capacity strengthening at Ministry of Energy, Ministry of Economy and Finance, CREE, and EDM-SA. 	<p>Within the next 12 months</p> <p>Short term</p>
Foster the development of domestic on-grid renewables solutions and increase the opportunity to benefit from regional electricity imports	Improves access to basic infrastructure, reduces climate change vulnerabilities, and improves resilience	<ul style="list-style-type: none"> • Implement a clear risk allocation between public and private parties in the framework of IPPs and in the drafting of bankable project documents such as Purchase Power Agreements. • Provide guarantee instruments to secure payment obligations of the government and the EDM-SA. • Procure additional capacity to ensure the best possible tariff for EDM by systematically holding auctions. • Implement the required reforms to ensure secured and reliable electricity exchange through the WAPP market and by ensuring securitization of payment of imports. 	Short to medium term
Set the conditions for an effective deployment of minigrad programs to increase access in rural areas	Improves access to basic infrastructure, reduces gender disparities, and fosters climate resilience	<ul style="list-style-type: none"> • Set cost-reflective tariffs, thus providing adequate compensation in case of grid encroachment, clarifying and reinforcing the institutional and regulatory framework, structuring bankable concession agreements, and prioritizing least-cost planning. 	Medium term
TRANSPORT AND LOGISTICS			
Restore and maintain access roads to existing and potential agricultural production areas through long-term output and performance contracts	Improves access to basic infrastructure	<ul style="list-style-type: none"> • Increase road asset management effectiveness and road fund resources starting with the full and timely release of the resources legally owed to the road fund—that is, increase the fuel levy and take steps to improve the prevailing institutional and procurement arrangements applicable to road asset management. 	Medium term

CATEGORY	IMPACT ON FRAGILITY DRIVERS	PRIORITY POLICY RECOMMENDATIONS	TIMEFRAME Short term: 1-2 years, Medium term: 3-5 years
Upgrade and maintain the northern Dakar-Bamako road corridor through long-term PPP contracts	Improves access to basic infrastructure	<ul style="list-style-type: none"> Strengthen and restructure the road fund in both countries, increase the fuel levy allocated to the road fund, and provide for the necessary ring-fencing and backing of road funds for PPP contracts for the restoration and long-term maintenance of high-demand roads. 	Medium term
DIGITAL INFRASTRUCTURE			
Facilitate infrastructure sharing	Improves access to basic infrastructure	<ul style="list-style-type: none"> Revise the regulatory framework to facilitate all types of infrastructure sharing arrangements, which can involve the sharing of various components of mobile networks, including both passive and active sharing. Investigate sharing-agreement opportunities, including the introduction of towercos on the market at both passive and active layers of the last mile to increase network coverage of population. 	Within the next 12 months
Reform the fiber wholesale market in Mali to increase fiber deployment and availability	Improves access to basic infrastructure	<ul style="list-style-type: none"> Backbone and wholesale: <ul style="list-style-type: none"> Explore implementation of LRIC wholesale principles and develop a regulatory framework for transparent access and interconnection to the national fiber backbone capacity. Initiate coordination between key backbone capacity players to unearth the synergies required to accelerate MBB deployment, enhance availability of middle-mile broadband capacity, and improve QoS. Review commercialization of state-owned fiber capacity and investigate concession opportunities. Remove regulatory barriers to access cross-border capacity. 	Short term
Improve market contestability and transparency	Improves transparency and governance	<ul style="list-style-type: none"> Reform Ordinance n°2011-023/P-RM of 28 September 2011 on ICT to meet international best practices (such as a general authorization plan, flexibility for innovative operators wishing to deploy in rural areas, reinforcement of rights of way, encouragement of infrastructure sharing, and increased transparency of sectoral agencies). Improve governance of the funds collected by AGEFAU for the USF, including (a) improving transparency and efficiency of the USF, (b) developing an efficient model of collaboration for rural connectivity between AGEFAU and mobile operators, and (c) publishing updated mobile coverage maps by AMRTP. 	Short term

CATEGORY	IMPACT ON FRAGILITY DRIVERS	PRIORITY POLICY RECOMMENDATIONS	TIMEFRAME Short term: 1-2 years, Medium term: 3-5 years
Facilitate development of e-commerce platforms	Fosters gender and spatial inclusion and improves market diversification	<ul style="list-style-type: none"> Design and implement a coherent roadmap for the deployment of e-commerce platforms. The government of Mali must define a coherent regulatory and investment strategy to encourage the emergence of a robust e-commerce sector by involving all relevant parties including the DGCC, MIC, and MEN. 	Medium term
ACCESS TO FINANCE			
Leverage mobile money and digital financial services as an entry point to financial inclusion	Improves financial inclusion through expansion of digital financial services	<ul style="list-style-type: none"> Adopt a pro-DFS Ministerial Decree instituting an implementation schedule for the digitization of government payments (to be co-signed by Minister of Finance and Minister for the Digital Economy) over one to three years. Finalize adhesion of Mali's Treasury to WAEMU's GIM-UEMOA program. Adopt regional (BCEAO-level) or national regulation to favor access to digital credit by authorizing regional or national credit bureau to collect alternative credit information such as consumer prepaid and postpaid utility bills and other available data. 	<p>Within the next 12 months</p> <p>Within the next 12 months</p> <p>Medium term</p>
Strengthen governance and operational capabilities in the microfinance sector	Improves financial inclusion through restructuring of the microfinance sector including outreach to remote areas and rural and farming communities	<ul style="list-style-type: none"> Clarify roles and responsibilities in the governance, regulation, and supervision of the MFI sector. Assign to Ministry of Finance the sole supervisory function (in collaboration with BCEAO) and the promotion work to Ministry of Industry. Facilitate access to the USSD by MFIs, by continuing to lower its cost and easing its access by value-added financial service providers. Develop a refinancing facility for MFIs by setting up a guarantee fund for MFIs with the BCEAO, leveraging existing government guarantee plans. 	<p>Medium term</p> <p>Medium term</p> <p>Medium term</p>
Operationalize the Private Sector Guarantee Fund (FGSP) and address liquidity challenges resulting from the COVID-19 crisis	Addresses the finance gap for MSMEs and other businesses hit hard by the COVID-19 crisis	<ul style="list-style-type: none"> Conduct a needs assessment of the Malian Private Sector Guarantee Fund (Fonds de Garantie pour le Secteur Privé) to determine capacity building and product development priorities. Enhance transparency and build good working relations with partner commercial banks by appointing three independent board members on a competitive basis (from the private sector), by establishing a standing audit and risk committee, and by ensuring regular prudential reporting. 	<p>Medium term</p> <p>Medium term</p>

CATEGORY	IMPACT ON FRAGILITY DRIVERS	PRIORITY POLICY RECOMMENDATIONS	TIMEFRAME
			Short term: 1-2 years, Medium term: 3-5 years
Increase financial literacy and raise awareness of financial sector opportunities and risks	Improves financial inclusion	<ul style="list-style-type: none"> Establish a National Observatory for Financial Services in charge of protecting consumers and raising awareness on financial products and services. 	Medium term
Strengthen the entrepreneurship ecosystem by boosting financing instruments for start-ups	Spurs innovation and addresses the finance gap for MSMEs	<ul style="list-style-type: none"> Establish a set of dedicated funding instruments and credit lines adapted to the needs of start-ups and young entrepreneurs. Conduct a feasibility study to establishing quasi-equity or private-equity funds that span the countrywide and the subregional levels. 	Short term
Business environment			
Improve the tax system	Improves transparency and governance	<ul style="list-style-type: none"> Redesign the single combined tax by modifying its text through the 2022 finance law that was to be prepared in September 2021. Improve the management of the NIF by (a) improving toponymy and street coding and creating a tax cadaster, (b) modernizing the registration for filing taxes, and (c) cleaning up the taxpayer file to remove chronic defaulters. Further digitalize tax procedures including (a) introducing electronic tax declaration and online payment taxes, (b) setting up an automated risk management system, and (c) effectively implementing electronic procedures with the DGI, along with efficient and rapid exchange of information between the various departments involved in tax control and collection. 	<p>Within the next 12 months</p> <p>Short term</p> <p>Short term</p>
Improve access to land	Improves transparency, reduces spatial disparities	<ul style="list-style-type: none"> Adopt a decree defining the legal and regulatory framework for the single window. Establish a national cadastral system combined with assigning a unique identifier number for each land parcel (NINACAD) managed through a dedicated online window for land. 	<p>Within the next 12 months</p> <p>Medium term</p>

Note: AGEFAU = Universal Access Fund Management Agency; AMRTP = National ICT Authority; BCEAO = Central Bank of West African States; CREE = Regulatory Commission for Electricity and Water; DFS = digital finance services; DGCC = General Directorate for Trade, Competition and Consumer Protection; DGI = General Tax Directorate; DRA = regional agricultural directorates; DRGR = rural engineering directorates; EDM-SA = Mali's national power utility; FGSP = Fonds de Garantie pour le Secteur Privé; GIM-UEMOA = Regional Interbank Electronic Banking Group; ICT = information and communication technology; IPP = independent power producers; KPI = key performance indicator; LRIC = long-run incremental cost; MBB = mobile broadband; MEN = Ministry of Digital Economy; MFI = microfinance institutions; MIC = Ministry of Industry and Commerce; WAPP = West African Power Pool.

1. COUNTRY CONTEXT

Mali is a landlocked, low-income, and fragile Sahelian country, struggling with natural resource dependence as well as with insurgency, terrorism, and social tensions. The country is one of the least developed in the world, ranking 184th of 189 countries, according to the 2019 Human Development Index, and faces severe challenges related to a nondiversified economy, high poverty rates, regionalized internal conflicts, political instability, and violence. Recent years have proved especially difficult, with three military coups in 2012, 2020, and 2021, amid waves of protests and widespread insecurity in the north since 2012 and Central Mali since 2015 that has also been slowly spreading to the southern regions in recent years. Despite the worsening security situation, Mali's economic performance has been relatively strong, with gross domestic product (GDP) growth averaging 5.7 percent since 2014. This growth is mostly driven by cotton and extractives (gold), which account for about 80 percent of total exports, begging the need for Mali to diversify its economic base away from commodities that are vulnerable to shocks.

Over the past two years, Mali's economy has suffered a double blow from the COVID-19 pandemic and Economic Community of West African States (ECOWAS) sanctions imposed—most recently on January 9, 2022—after the August 2020 and May 2021 coups. The global COVID-19 outbreak and ongoing political turbulence are taking a heavy toll on Mali's economic outlook, with GDP contracting by 1.2 percent in 2020 as a result of subdued global demand and the impact of restrictive measures adopted to contain the spread of COVID-19. Projected GDP growth for 2021 is 3.1 percent, demonstrating signs of recovery.

1.1. POLITICAL ECONOMY⁶

A phenomenon referred to as consensus politics has influenced and shaped Mali's geopolitical and internal political economy landscape since 2002.⁷ Consensus politics was the approach taken from 2002 to 2012 to govern the country through a large multiparty coalition. This approach provided a seemingly democratic stability to the country and contributed to the development of local civil society organizations and a relatively free press. However, beneath the surface, consensus politics led to elite capture and government corruption,⁸ resulting in a concentration of powers in the hands of the president without leaving room for any real opposition.⁹ Consensus building, then, can be traced as one of the root causes of Mali's political instability today. This political instability—exacerbated by a deteriorating security situation throughout the nation and most recently by the COVID-19 pandemic—has prevented Mali from realizing its true economic and social potential.

In a society dominated by consensus politics and growing insecurity, standard technocratic reforms such as the liberalization of the agricultural or transport sector that ignore Mali's current geopolitical and political economy realities will have little traction. The design and implementation of innovative and targeted strategies that address the underlying causes of the enduring geopolitical, political economy, and even health care crises would help Mali emerge from its current predicament. This outcome is of paramount importance to enable the West African Sahelian nation to become a productive and competitive domestic economy and a viable destination for private sector investment that can sustain economic growth and development and poverty alleviation in the new COVID-19 and fragile world.¹⁰

Mali's Geopolitical Situation Since 2012

In early 2012, large areas of the north were captured and occupied by local military insurgents supported by militaries returning from Libya and with the backing of jihadist groups (for example, Al-Qaeda). Gao, Tombouctou, and Kidal all fell to rebel forces. The insurgents then drove the Malian army out of other major northern cities. Fueled by popular dissatisfaction over crisis management by the civilian government, as well as by its own repeated defeats in the north by the rebels, a group of lower ranking army soldiers staged a coup d'état in March 2012.

By early 2013, militants in northern Mali were chased out from the main cities by the Malian Armed Forces with the help of French and African military troops, as reinforced by the United Nations (UN) Multidimensional Integrated Stabilization Mission in Mali (MINUSMA). In June 2013, a new president, Ibrahim Boubacar Keita, was elected and supported by a coalition of 12 political parties, prominent religious, business leaders, and a large segment of the international community.

Despite the 2015 Algiers Peace Accords theoretically ending the conflict in the north and despite the strong presence and support of partner armed forces, efforts to restore security, political, and social order in the northern and central regions have faced massive challenges. Violence, once confined to the north, spread to central Mali and is slowly moving southward to more productive areas. This spread may have a huge impact on private sector activities in the south. In addition, ethnic tensions (largely linked to land management disputes and access to resources) have a long history in Mali. They have intensified and spread to central Mali in recent years. The vicious cycle of antigovernment sentiment, corruption, and waning political climate reached a fever pitch in 2019 following a rise in interethnic tension in the central regions. A massacre in the Ogossagou village in March 2019 (more than 160 Fulani were killed), prompted the prime minister at the time to resign and to dissolve the cabinet. In the aftermath, a new prime minister, Boubou Cissé, was appointed. This change in government—the fourth in four years—occurred amid escalating protests and strikes in Bamako.

Mali's political situation remains volatile with two coups d'état in nine months and renewed sanctions imposed by ECOWAS on January 9, 2022.¹¹ The first one happened August 18, 2020, and led to the resignation of President Ibrahim Boubacar Keïta and the dissolution of the National Assembly and the government. The Comité National pour le Salut du Peuple led by Colonel Assimi Goïta was put in charge of the transition to civilian rule. A transitional government, headed by President Bah N'Daw and Prime Minister Moctar Ouane, was formed October 5, 2020. A position of vice president of the transitional government was created and filled by Goïta in agreement with ECOWAS. On May 25, 2021, President N'Daw, Prime Minister Ouane, and then-appointed defense minister Soukeymane Doucoure were arrested and detained at the Kati military base. The vice president of the transition, Goïta, claimed responsibility for the arrests, pointing to violations of the Charter of the Transition on the part of the interim president, and deposed the prime minister for treason. On June 7, Goïta was officially sworn in as the new president of Mali. Shortly thereafter, he appointed Choguel Kokalla Maïga as prime minister. On June 11, a new government of 25 ministers and 3 deputy ministers was announced. Goïta reconfirmed commitments to protect the transition and to hold presidential and general elections in February 2022.

On June 10, 2021, French President Emmanuel Macron announced the end of Operation Barkhane—the deployment of French troops across the Sahel that has been in place since 2013. As part of the realignment of the format and objectives of the French presence in the region, the number of troops will be reduced from 5,100 to about 3,500 by mid-2022 and then to 2,500 in 2023. Three bases (Kidal, Timbuktu, and Tessalit) are being closed in northern Mali, and the Gao base is being kept as the main one in the country.

Going Forward

To address and resolve these crises, Mali, with the support of the international development community and in close collaboration with the Malian civil society and private sector, needs to prioritize good governance and target multisectoral spatial strategies in its economic development strategy. Such approaches linked to technological innovation have the potential to begin restoring confidence between the state and its citizens. The move toward light agro-industry, by first focusing on the country's key comparative value chains such as livestock, mango, shea nuts, and cotton, will be key. Further, special economic zones (SEZs) could be an effective policy tool for Mali to implement bold and innovative strategies required to rebuild the economic and social fabric of Mali. Such interventions can increase the likelihood of attracting the required private sector-led investment to jump-start both post-conflict and post-COVID-19 economic recovery in Mali.

1.2. FRAGILITY: CONTEXTUAL RISK, FRAGILITY, AND RESILIENCE CONSIDERATIONS FOR THE PRIVATE SECTOR

Fragile and conflict-affected situations (FCS) are context specific, complex, and nuanced, requiring approaches tailored to the distinct geography, history, and conflicts of each setting. Using IFC's Contextual Risk Framework, a screening and deep dive analysis of the country's fragility, eight main drivers of fragility were identified. The Country Private Sector Diagnostic (CPSD) carefully considers these indicators in the chapters of this document, notably infrastructure, agriculture, and business environment, with a cross-cutting gender lens. A careful assessment of these risks would allow Mali to preemptively implement mitigation measures to attenuate the potential negative effects on private sector investment.

Contextual Risk Framework—Highest Risk Indicators

Security forces

Security forces have proliferated in Mali. Such forces are found in the Malian army, French forces, and more than 15,000 UN peacekeeping personnel (MINUSMA) to support the transitional authorities of Mali in ensuring security, stabilization, and protection of civilians, among others. The lack of preparedness and capacity of the Malian Defense and Security Forces to deal with the diversity and intensity of new threats has led to the multiplication of private security companies. Nevertheless, the private security sector remains poorly regulated and trained in Mali and mostly unarmed. In high-security risk environments, private sector operations may draw upon public or private security forces for asset protection.

Internal conflict

Opportunities to build resilience through private sector interventions in northern Mali remain constrained by insecurity. The historical concentration of economic activity in southern and western Mali has exacerbated existing inequalities with northern populations, including Tuareg. The political instability since the 2012 coup d'état strengthened the Tuareg rebellion, which allied with extremist and terrorist groups to besiege the region. The trajectory of violence shifting south to Mopti is exacerbated by communal violence over land and resource access for cattle grazing and agriculture. Clashes between Dogan and Fulani groups have escalated because of attacks and retaliations. Inclusiveness and equity become even more important criteria in this context. To that end, the CPSD is focused on opportunities in regions with lower levels of conflict. However, spillover effects from Mopti into Segou may have implications for current and future investments.

Access to formal justice systems and conflict resolution mechanisms

Companies using formal court systems can face issues of transparency, poor enforcement, and lengthy processes. Weaknesses in the performance of the commercial justice system negatively affect the business environment and constitute obstacles for private sector development. As a result, multinational companies often choose to elect other countries for potential dispute resolution in their commercial contracts. For the Malian population, access barriers and perceptions of mistrust and corruption in the formal justice system often see citizens rely on traditional and local authorities to dispense justice, rather than engaging with the courts. These authorities often promote forgiveness and do not encourage sanctions and can further exacerbate feelings of injustice and impunity. While it is not presented in the CPSD as an activity for the short-to-medium term, Mali should prioritize enforcing contracts as part of its investment climate agenda and supporting policy reform to improve the efficiency of commercial justice institutions.

Access to infrastructure and basic services

As discussed further in the infrastructure section of CPSD, poor infrastructure can impair accessibility to markets and raw materials for companies, with scarcity of electricity increasing operating costs, especially in energy-intensive activities such as manufacturing. The Malian population faces significant disparities in infrastructure and service access, particularly in northern and rural areas. For example, access to electricity in rural areas is 25.4 percent of the population, compared with urban areas at 85.6 percent. This CPSD therefore identifies opportunities to explore initiatives that help address governance gaps and enhance market access, including through partnering with the private sector.

Forced population movement

Mali is experiencing a worsening humanitarian crisis as a result of the increase in violence since 2018, with internally displaced persons fleeing to southern cities and refugees fleeing neighboring insecurity, which is increasing pressure on public services and land access. Mali had more than 200,000 internally displaced persons as a result of conflict or violence and more than 6,000 by natural disaster at the end of 2019. In addition, regional insecurity has increased refugee flows to Mali, with more than 40,000 refugees as of July 2020, the majority of whom are from the subregions Burkina Faso, Niger, and Mauritania. These movements increase the risk of tensions over already scarce resources and access to jobs that are mostly provided by the private sector. This CPSD analyzes regional platforms in the Sahel that can explore potential programming for refugees to build resilience.

Deforestation and other threats to natural resources

Growing adverse climate impacts, particularly extreme drought and desertification, remain a key risk for the two-thirds of Mali that is arid and semi-arid. These changes are leading to reduced rainfed crop yield, greater transhumance movements, increased livestock mortality, variability and quality of water supplies, and food insecurity. Linked with these challenges is widespread deforestation, driven largely by poverty and food insecurity, which has resulted in 2.1 million hectares of forest lost between 1990 and 2016; Sikasso region alone accounted for 70 percent of the loss of tree cover. The CPSD therefore prioritizes interventions that will maximize production efficiency, use climate-smart technologies, and increase food security.

Indigenous land

As discussed further in the business environment section, indigenous land rights are integrated into the Malian rural land code but remain poorly enforced. Private land ownership is secured through land titling and registration, but most of the titled land is in urban areas. Very few smallholder farmers or pastoralists own the land they work, and most rural land is technically under state ownership with customary use rights exercised by farmers and pastoralists.¹² As the population increases and the availability of land resources decreases, fierce and sometimes violent competition for access to land intensifies. This makes rural producers' situation more precarious. The CPSD therefore prioritizes access to land rights in the business environment section, building on ongoing technical assistance to Mali in this field.

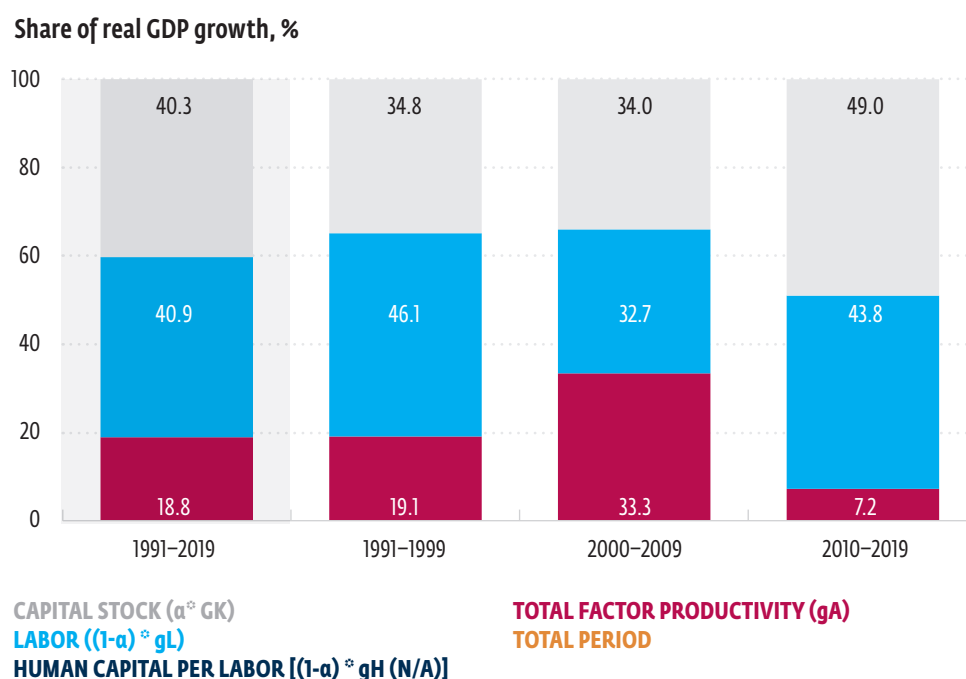
Gender-based violence and protections

Gender-based violence is pervasive in Mali, exacerbated by the effects of conflict on women and girls. According to the Malian Demographic and Health Survey from 2018, 45 percent of women ages 15 through 49 have experienced physical or sexual violence.¹³ Although justice systems exist, women often do not seek access to justice because of social pressure or lack of awareness of formal systems available. Significant gender disparities in education, workforce, and health access also remain a barrier for women in Mali. This includes prevalence of child marriage, female genital mutilation, early pregnancy, maternal mortality, and lower levels of female education and skilled workforce participation, with the female adult literacy rate at 25.7 percent in 2018. The CPSD therefore prioritizes opportunities that focus on inclusivity of women in the workforce and supply chains, as these are important considerations for closing gender gaps and building resilience.

1.3. MACROECONOMIC AND FISCAL TRENDS AND OUTLOOK

Historically, economic growth in Mali has been comparatively weak and highly volatile over the long run. Despite a lower starting level of per capita income, with real per capita growth amounting to only 1.4 percent over the past 25 years, Mali has grown more slowly on average relative to the rest of Sub-Saharan Africa. Mali's growth underperformance is the result of comparatively lower human capital accumulation and total factor productivity growth, compounded by the political and security crisis. Mali's human capital is markedly low, and the country ranks 154th of 157 countries on the Human Capital Index, with the lowest score in the world in Quality of Education.¹⁴ A growth decomposition exercise suggests that one-half of Mali's growth over the past two decades can be attributed to labor accumulation, with capital accumulation accounting for about one-third of its growth; human capital and productivity appear to be the factors in which Mali lags most relative to peer countries (figure 1.1).

FIGURE 1.1. A LONG-TERM VIEW: REAL GDP GROWTH IN MALI, 1991–2019



Source: World Bank staff calculations.

Note: α = income share of capital; gA = total factor productivity; gH = compound annual growth rate of human capital; gL = compound annual growth rate of labor.

Before the COVID-19 shock, Mali’s economy was performing higher than its potential growth rate of 5 percent despite persistent security and political challenges.¹⁵ Growth was maintained on average at 5.7 percent per annum since 2014, the year of full recovery from the 2012 coup, despite increasing insecurity. Economic growth softened somewhat in 2018 and 2019, at 4.7 percent and 4.8 percent, respectively, around its potential rate. This growth has been possible because most of the economic activity occurs in the agricultural south of the country, which has been relatively preserved from violence. Beyond agriculture, economic growth was relatively broad based, with a strong rebound in government capital spending leading to a construction recovery of 5.5 percent in 2019, while the performance of the industrial sector was also robust with gold mining growing at 6.6 percent on top of an acceleration of close to 22 percent in 2018. Services output rose 5.3 percent in 2019 with a good performance in the transport and information and communication technology (ICT) sectors (figure 1.2). On the demand side, public investment and private consumption were the main drivers, with strong domestic demand benefiting from the sharp increase in both public (that is, government infrastructure spending) and private investment (that is, investments in developing mines) (figure 1.7).

FIGURE 1.2. GDP COMPOSITION BY SECTOR

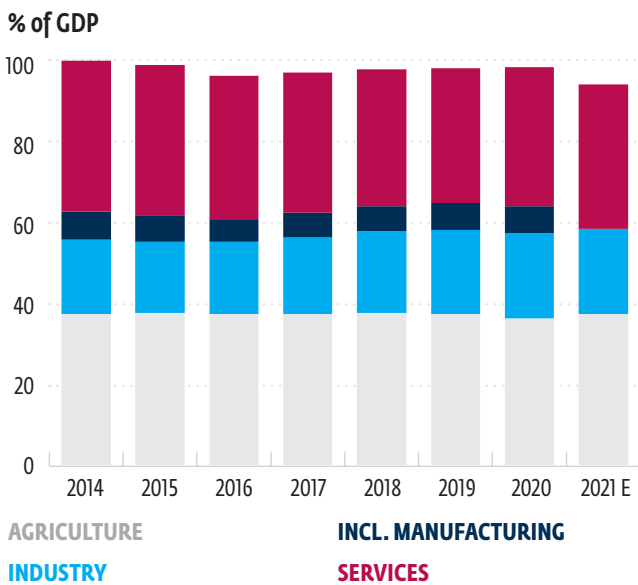
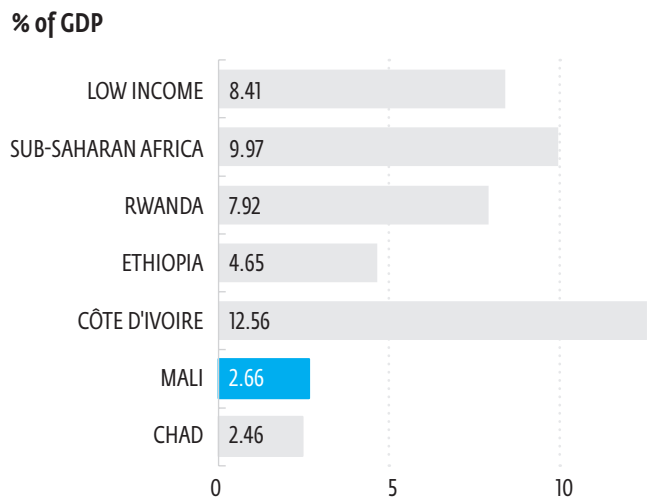


FIGURE 1.3. MANUFACTURING VALUE ADDED, 10-YEAR AVERAGE



Sources: World Bank Macro Poverty Outlook; World Development Indicators, 2021.

Note: E = estimated; GDP = gross domestic product.

Mali's resilient economic performance in recent years can be credited to several factors. Accounting for more than one-third of GDP and four-fifths of employment, resilient agriculture production has been the backbone of the Malian economy, mainly in the form of subsistence agriculture. The emergence of gold mining as well as transport, telecommunications, and banking services, the main changes in Mali's output structure over the past decades, have further bolstered economic resilience—while the contribution of manufacturing in the Malian economy remains comparatively low (figures 1.3 and 1.4). On the monetary and financial side, Mali's adherence to the West African Economic and Monetary Union (WAEMU), with the Financial Community of Africa franc (CFAF) pegged to the euro, and the role played by the regional Central Bank of West African States (BCEAO) have been critical in limiting inflation. Inflation has remained overall subdued, below 2 percent, in recent years—and turned indeed negative in 2019 at –3.0 percent as a result of Mali's good cereal production and WAEMU-wide common inflation factors such as excess regional supply and imported euro-area low inflation, which brought about deflationary pressures. Other resilience factors analyzed below include (a) financial sector soundness, with credit to the private sector growing at 2.2 percent, supporting the robust increase in private consumption; (b) net capital inflows growing steadily, including foreign direct investment (FDI) inflows and migrant workers' remittances representing respectively 2.8 percent and 5.9 percent of GDP in 2019 (compared to 1.8 percent and 2.8 percent in Sub-Saharan Africa), and (c) continued donor support from the international community, including grants which have increased to 1.9 percent of GDP in 2019, both for project financing and general budget support.

The COVID-19 pandemic outbreak and the two military coups in 2020–21 disrupted more than half a decade of strong economic performance in Mali. Specifically, the Malian economy was hit hard by the containment measures introduced by national and regional authorities mid-March 2020 to slow the progress of the COVID-19 pandemic, which severely hampered economic activity while agricultural output suffered from an unsuccessful cotton campaign linked to low farmgate prices, disputes over fertilizers, and difficulties in obtaining critical inputs. On top of that, six weeks of ECOWAS-imposed border blockades and economic sanctions as a result of the August 18, 2020, coup further affected Mali's trade and financial flows. The combination of both crises pushed the Malian economy into a recession, with real GDP growth contracting by 1.2 percent in 2020. On the demand side, private consumption declined because of lower remittance inflows, households' response to the health hazard, and containment measures. Nonpriority public investment was curtailed to accommodate emergency health-related expenditures and donor disengagement after the military coup. Simultaneously, private investment was dampened by lower FDI inflows and the uncertainty induced by the military coup. Exports declined in volume, because of the lower supply of export crops, while import volumes were affected by reduced private demand. Inflation, which was in negative territory in 2019, turned positive since July 2020 as a result of supply-chain disruptions and higher food prices.

Despite the strong growth performance up until 2020, Mali has seen very limited economic diversification outside of gold and cotton – reflecting a stalled structural transformation. Mali’s two key export commodities, which represented close to 90 percent of exports in 2020, are characterized by stagnant product complexity. Gold, which has historically dominated Mali’s export basket, witnessed a recent surge in exports, with industrial gold production reaching approximately 65 tons in 2019 and in 2020. Cotton is Mali’s second largest export, accounting for 6.7 percent of exports in 2020. Mali consistently ranks among the top cotton producers in Africa – and over four million Malians (over a fifth of the population) depend on the cotton sector for the livelihoods. Manufacturing in Mali remains limited, with domestically manufactured goods including textiles, agricultural tools, cosmetics, batteries, paint, plastics, processed foods, cement, cigarettes, and beverages. Mali has an open economy in which trade accounts for around 65 percent of GDP, and customs duties are relatively low – with the average applied tariff rate at 10 percent. Yet Mali, ranked as the 95th most complex economy according to the Economic Complexity Index, is one of the least diversified exporters in the world and the fifth least-diversified economy in Sub-Saharan Africa. Mali’s trade balance, largely dependent on commodity prices, is structurally in deficit. According to the WTO, the country’s exports of merchandise increased to USD 3.92 billion (from USD 3.68 billion in 2019) in 2020, while imports of merchandise decreased to USD 4.88 billion (from USD 5.13 billion) – resulting in the highest merchandise trade deficit of the WAEMU region.¹⁶ Mali is also a net service importer: the value of commercial services imports stood at USD 1.61 billion, against USD 542 million in exports. Diversification of export partners has also remained stable although Mali appears more diversified than its peers: top export destinations are South Africa (36.5 percent of total exports), followed by Switzerland (35.6 percent), Bangladesh (7.1 percent), Cote d’Ivoire (4.2 percent) and Burkina Faso (2.8 percent). Senegal (which accounts for 22.5 percent of Mali’s total imports) is the biggest supplier, followed by China (15.8 percent), Cote d’Ivoire (10.6 percent) and France (7.9 percent).¹⁷

Since 2020, the twin shocks of the pandemic and the political upheavals have rolled back progress on poverty reduction by half a decade. The international poverty rate (US\$1.90 per day in 2011, purchasing power parity) decreased from 47.6 percent in 2015 to 42.1 percent in 2019, driven by higher agricultural production and the expansion of the tertiary sector, which encouraged rural households’ consumption. This positive trend was reversed in 2020 owing to growth contraction that increased poverty to 44.9 percent (representing almost a million additional people living below the extreme poverty line). More alarmingly, the growth elasticity of poverty was only –0.4 compared with the average –1.9 elasticity for Sub-Saharan Africa.¹⁸ There has also been mixed progress in many nonmonetary poverty indicators: the share of households with access to water and electricity increased to 85.7 percent and 67.7 percent in 2019, respectively, while the use of electricity for lighting and access to flushing toilets have declined by an average of 3 percentage points since 2014. Inequalities have also increased over the past decade, with consumption inequality as measured by the Gini coefficient increasing from 0.37 in 2015 to 0.38 in 2018/19.

Macroeconomic fundamentals have so far remained manageable despite a rapidly widening fiscal balance and mounting debt pressures. Headline inflation turned positive in mid-2020, and continued to increase in 2021, reaching 4 per-cent y/y in June 2021, driven by surging food prices. The real effective exchange rate depreciated by 5 percent in 2019 as a result of the euro nominal depreciation against the US dollar combined with persistently lower inflation of the WAEMU compared with trading partners (figure 1.5). With imports declining faster than exports, Mali's current account deficit narrowed from 7.5 percent to 0.2 percent of GDP between 2019 and 2020—as Mali has seen its terms of trade improving with the drop in oil prices (20 percent of imports) and hike in the international price of gold (more than 90 percent of export earnings). External financial inflows dropped in 2020, due to the pandemic and delays in donor support. On the fiscal front, the general decline of economic activity and onset of COVID-19-related spending led to a dramatic increase in the overall fiscal deficit (from 1.7 per-cent to 5.4 percent of GDP between 2019 and 2020), thwarting the government's efforts to streamline expenditures and mobilize tax revenue—supported by International Monetary Fund (IMF) technical assistance to strengthen tax and customs administration.¹⁹ The resulting public debt-to-GDP ratio reached a record-high 47.4 percent in 2020, from 40.6 per-cent in 2019 with external debt at 26.4 percentage of GDP (figure 1.6). Tax revenue is weak (14.3 percent of GDP), below the WAEMU standard of 20 percent. While Mali's debt policy is prudent, the maturity of domestic debt, with 59 percent of it falling due over 2019–21, remains a concern. Mali's risk of overall debt distress is moderate, but still vulnerable to changes in financing conditions and external shocks. Support from the IMF has resumed under the three-year extended credit facility (ECF), which was approved in August 2019—but political volatility has delayed disbursements in 2020–21. Mali is a participant to the G20 Debt Service Suspension Initiative declared in April 2020.

FIGURE 1.4. NOMINAL EXCHANGE RATE AND INFLATION, MALI

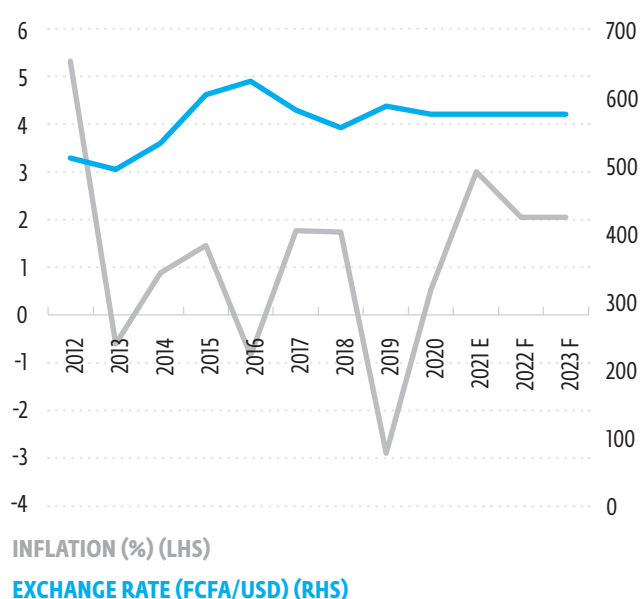
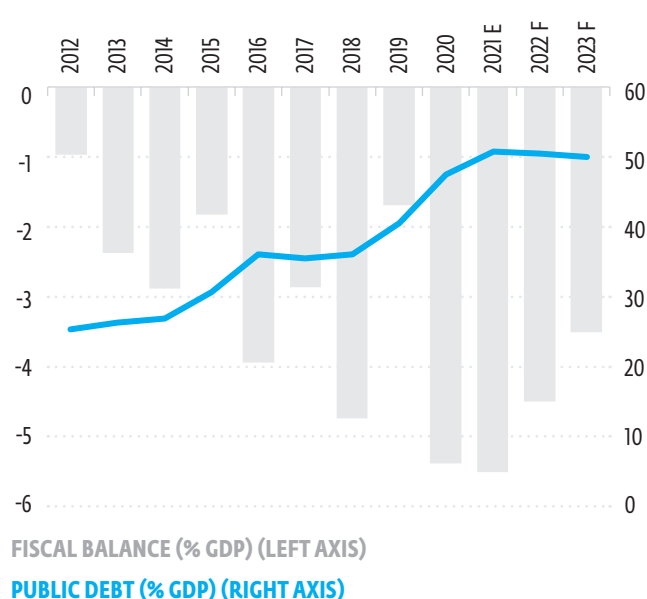


FIGURE 1.5. FISCAL BALANCE AND PUBLIC DEBT, MALI



Source: World Bank, Macro Poverty Outlook, 2020, <https://www.worldbank.org/en/publication/macro-poverty-outlook>.

Note: E = estimated; F = forecast; GDP = gross domestic product.

In the medium term, real GDP growth will gradually rebound as the pandemic wanes and private consumption recovers, supported by a continued rise in cotton production and by investments in the gold sector. With real GDP growth estimated at 3.1 percent in 2021 and projected at 3.3 percent in 2022, the Malian economy should recover but remain below pre-pandemic growth levels. The current account is bound to stay volatile, and Mali's growth trajectory will continue to hinge on commodity prices and weather conditions. The medium-term outlook for Mali remains subject to high uncertainty in light of the ongoing political transition. Downside risks include (a) the further contagion of political instability, insecurity, and violence (terrorist threats and domestic conflict), with new elections promised within 18 months of the political transition (since September 2020); (b) the scale of the COVID-19 crisis and uneven speed of vaccine rollout to propel economic recovery; (c) the insolvent national electricity company (EDM-SA) and its effect on public finances; as well as (d) deteriorating terms of trade and weather-related shocks on the country's agricultural output.

Mali's macroeconomic policy framework is anchored in the authorities' medium-term development strategy (Framework for Economic Recovery and Sustainable Development; CREDD 2019–23). Support from the IMF has resumed under the three-year ECF, which was approved in August 2019—but political volatility may delay disbursements. In the short term, the primary focus of the IMF-supported program is to (a) significantly improve fiscal governance on the revenue side through tax administration and customs reforms; (b) increase revenue collections and reverse the 2018 revenue shortfall; (c) create fiscal space for priority security, social, and development spending; (d) address the unsustainable financial situation of EDM, and (e) strengthen the business environment. As of January 2020, the IMF deemed implementation of the program to be “broadly satisfactory” and Mali's fiscal framework to strike an appropriate balance between spending needs and available resources.

The spatial dimension to Mali's development story partly sheds light on the country's economic resilience. More than 80 percent of Mali's economic activity occurs in the south, which has been spared by the crisis and, as a result, has been able to side-step major adverse economic consequences. Tourism previously was concentrated in the central and northern regions of Mopti, Timbuktu, and Gao, where most of Mali's cultural heritage is located. These regions have been the most severely affected during the crisis. It is estimated that Mali has lost approximately US\$3.2 billion in forgone FDI because of the conflict during the period 2012–17, and it is estimated that the crisis has negatively affected Mali's total investment activity (that is, FDI plus domestic investment) by US\$5.3 billion during this period.²⁰ Other economic activities—including export-crop agriculture (for example, cotton) and mining—have been concentrated predominately in the south, which has seen an increase in armed conflict in recent years. In fact, recent statistics of investment projects approved under the existing investment code show that the agricultural, agro-industry, and mining sectors in the south, particularly in Koulikoro and Sikasso, have been expanding.

Net inflows of FDI are on par with regional peers, subject to the country's security challenges (figure 1.8). After a record high at 4.2 percent of GDP in 2011, FDI net inflows amounted to 2.8 percent of GDP in 2019—most of which are oriented toward (gold) mining, oil extraction, textile industry, financial services, telecommunications, and infrastructure. Mali's leading international investors are Australia, Canada, Côte d'Ivoire, South Africa, and the United Kingdom.

FIGURE 1.6. FIXED INVESTMENT, 2010–19

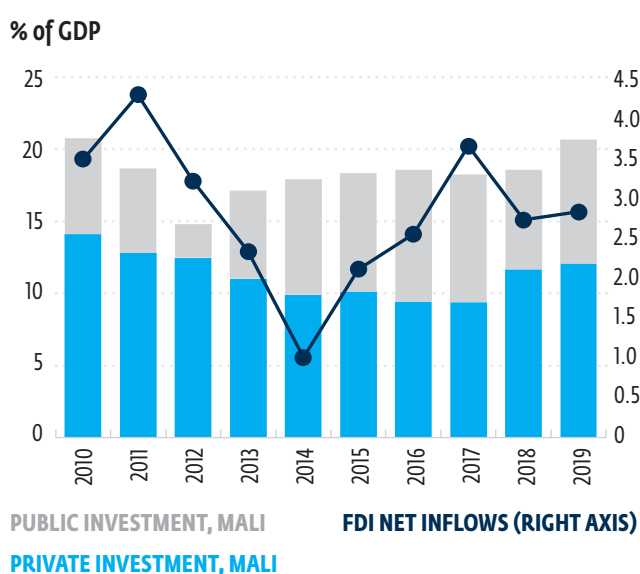
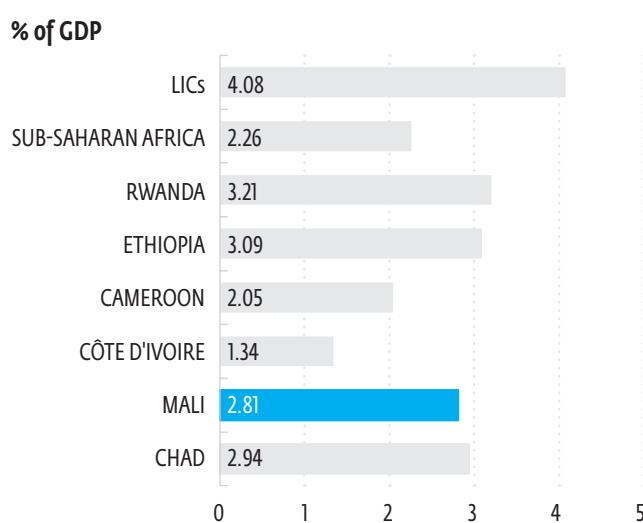


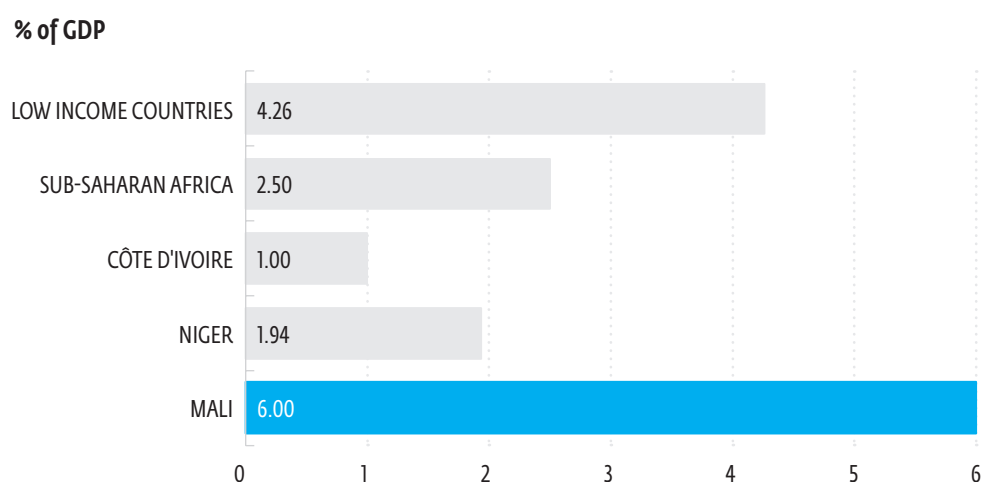
FIGURE 1.7. FDI NET INFLOWS, 10-YEAR AVERAGE



Sources: World Bank national accounts data and International Monetary Fund, International Financial Statistics and Balance of Payments databases (2021).

Note: FDI = foreign direct investment; GDP = gross domestic product; LIC = low-income country.

Another factor of resilience for the Malian economy rests on the high levels of remittances from migrant workers. Personal remittances received reached US\$1.034 billion in 2019—representing on average 6 percent of GDP over 2010–19, well above the regional average for Sub-Saharan Africa (2.5 percent) and for low-income countries (4.3 percent) (figure 1.9). However, as a result of the COVID-19 pandemic and ensuing economic crisis, the amount of money migrant workers send home globally is projected to decline by 14 percent in 2021 compared with 2019.²¹ Factors driving the decline in remittances include weak economic growth and employment levels in migrant-hosting countries, weak oil prices; and depreciation of the currencies of remittance-source countries against the US dollar.

FIGURE 1.8. PERSONAL REMITTANCES RECEIVED, 2010-19 AVERAGE

Source: World Bank World Development Indicators.

1.4. COVID-19 IMPACTS AND POLICY RESPONSES

The COVID-19 shock has recently added to Mali's significant security and social challenges. The first COVID-19 case was reported in Mali on March 25, 2020. As of February 12, 2022, the country had registered 30,265 confirmed cases and 716 deaths.²² Although the COVID-19 infection rate remains low, the pandemic has significantly affected Malian livelihoods and local businesses. The COVID-19 shock erased the progress made in poverty reduction since 2015, with an increase of poverty to 44.9 percent owing mainly to supply chain disruptions and price shocks as well as reduction in remittances.

The COVID-19 shock is affecting the Malian economy through both external and domestic channels of transmission.

- **External Channels:** These include a contraction in global demand and a subsequent drop in commodity prices as well as tightened global financial conditions (for example, FDI and large-scale mining sector investments, aid inflows, and remittances). The collapse in external demand will dampen exports, especially of cotton (mainly exported to Asia). The external supply shocks are also slowing imports of manufacturing inputs and production, for an ailing business sector.

- **Domestic Channels:** These relate to the effects of social distance and travel restriction policies imposed to contain the spread of the virus—particularly on the services sector. As a result, private consumption will fall, business activity and investment will further retrench with the decline in demand and cash flow pressures, and unemployment will rise. Poor access to basic health services, high levels of informality and poverty, a fragile health system, and shortages of medical supplies and facilities all could exacerbate the economic and social fallout of the pandemic, especially for the most vulnerable segments of the population.

Because of the COVID-19 outbreak, the economic landscape in 2020 for Mali was significantly impacted:

- **Growth:** Real GDP contracted by 1.2 percent (–4.5 percent per capita) owing to the COVID-19 effect on global demand, the domestic containment measures, and the effects of the coup and related economic sanctions.
- **Inflation:** Headline inflation turned positive in mid-2020, and continued to increase in 2021, reaching 4 percent year-on-year in June 2021, driven by surging food prices (5.3 percent year-on-year). Potential upside pressures from supply disruptions and policy support will likely be offset by the large output gap and the fall in oil prices, which are expected to be gradually passed through to domestic prices.
- **External Position:** The current account deficit (CAD) narrowed to 0.2 percent of GDP in 2020, driven notably by a large improvement in terms-of-trade (lower oil and higher gold prices) and lower domestic demand. The contraction of imports owing to a lower energy bill, trade disruptions, and lower domestic demand is expected to be larger than the loss in earnings from exports (especially of cotton exports to Asia) and lower remittances from Europe, the United States, and the region. At the same time, a decline in FDI and other private inflows will weigh on the financial account, whose deterioration will more than offset the improvement in the current account, and weigh on Mali's gross official reserves.

The general decline of economic activity and COVID-19 related spending increased the budget deficit from 1.7 percent in 2019 to 5.4 and 5.5 percent in 2020 and 2021. The resulting public debt-to-GDP ratio reached an estimated 52.7 percent in 2021, up from 47.3 percent in 2020 and 40.7 percent in 2019. Mali's risk of overall debt distress is moderate but still vulnerable to changes in financing conditions and external shocks. Thus, Mali was one of the first candidate countries for the G20 Debt Service Suspension Initiative called for by the World Bank and the IMF in April 2020 to grant debt-service suspension to the poorest countries to help them manage the severe impact of the COVID-19 pandemic.

The authorities responded quickly with measures to contain the spread of the virus and to mitigate its social and economic impact (box 1.1). In addition to BCEAO taking swift measures to preserve financial stability and provide additional liquidity in the banking system,²³ Malian authorities responded quickly to the COVID-19 shock by stepping up health care response as well as emergency measures to support households and businesses affected by the outbreak.

BOX 1.1. MEASURES ANNOUNCED BY THE MALIAN GOVERNMENT TO COMBAT COVID-19

Mali responded to the pandemic with preventive containment measures in early March 2020. Then on April 10 of that year, it followed up with a package of supportive measures (worth CFAF 34.12 billion) to vulnerable households and ailing firms.

- **Preventive Containment:** For these measures imposed between March and May 9, 2020 (and then again on December 1, 2020, up to January 25, 2021), the government suspended commercial flights (except cargo flights); closed land borders; enacted a night curfew; suspended all public gatherings; prohibited social, sports, cultural, and political gatherings of more than 50 people; and closed schools, night clubs, and bars. Working hours were reorganized to end earlier to protect civil servants. Retail markets remained open (at a reduced schedule) to prevent disruptions in the supply of basic goods, while 20 million masks were expected to be distributed. The government also set up a crisis response unit and stepped up public awareness campaigns.
- **Emergency Medical Response:** This plan was designed to prevent the spread of COVID-19. The government of Mali, in collaboration with the World Health Organization and the World Bank, has been strengthening testing capacities, expanding quarantine and hospitalization facilities (including medical equipment such as ventilators, quarantine facilities), and improving medical care capacities through planned support to the health sector (including bonuses to health workers)—now costed at about 0.6 percent of GDP.
- **Social Measures in Support of the Poorest Households:** These measures included a special fund (CFAF 100 billion) to provide targeted income support to the poorest households, a mass distribution of grains and food for livestock to the poorest households, the free supply of electricity and water to the poorest consumers for April and May 2020 (which will increase subsidies to state-owned suppliers), a three-month exemption from the value added tax on electricity and water tariffs, and a three-month exemption from customs duties on the import of basic food (rice and milk).
- **Support to Firms:** Businesses hit by the economic slowdown, including small and medium enterprises, were provided with a support guarantee fund of 0.2 percent of GDP (CFAF 20 billion); support was provided to the public electricity and water utilities; help was provided to clear budget arrears accumulated during this year; and tax deferral and relief was granted to ease liquidity constraints on the hardest-hit companies, especially in the hospitality sector (hotels, restaurants, transport). In addition, the government urged commercial banks to restructure ailing firms' debt, building on the framework set up by the Central Bank of West African States to support firms with repayment difficulties.

Nonetheless, implementation of the various measures has been delayed largely as a result of the political events of 2020–21—particularly private-sector support measures that are yet to be operationalized (for example, tax deferrals, private sector guarantee fund). To date, the health care response program is partially executed (spending completion rate at 73 percent) and only the targeted distribution of basic food items to vulnerable communities (for example, cereals) has been completed, together with financial transfers to the water and electricity utilities (EDM and SOMAGEP—CFAF 17 and 15 billion, respectively).

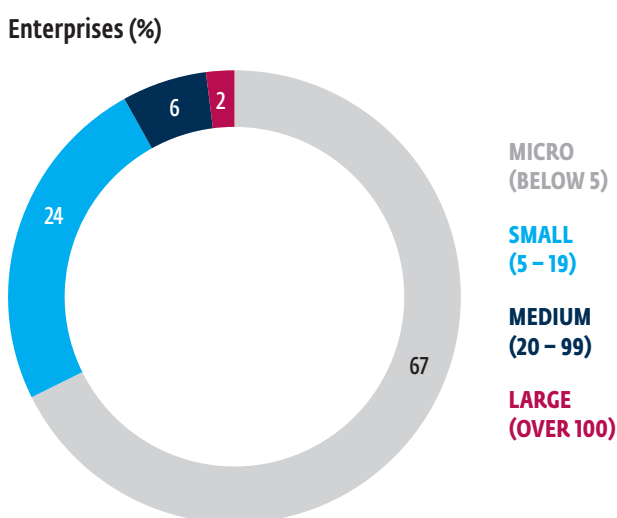
Source: IMF Staff Report, Rapid Credit Facility, April 2020; reporting by Malian authorities, November 2020; Mali President Ibrahim Boubacar Keita's Speech to the nation on April 10, 2020, https://www.macmap.org/OfflineDocument/Covid19/COVID_MLI_1.pdf.

2. STATE OF THE PRIVATE SECTOR

The formal private sector in Mali is limited in size and is highly concentrated, with a small number of large firms. Only about 10,000 legal entities were formally registered in Mali as of 2017, but these are estimated to contribute to 43 percent of value addition and 78 percent of total exports.²⁴ Among formal businesses, only 800 have more than 20 employees. The 39 largest firms, largely located in the capital, Bamako, are responsible for 80 percent of salaried employment in the private sector and contribute to a disproportionate share of value added.²⁵ Specifically, these large firms are often part of diversified business groups that operate across a variety of subsectors, ranging from cotton ginning, sugar manufacturing, and agro-processing (for example, pasta products, brewing, baking, vegetable oil, sugar, dairy, textiles, and tobacco) to power, financial services, telecommunications, and security, as well as (gold) mining—for the most part, sectors that are more capital than labor intensive.

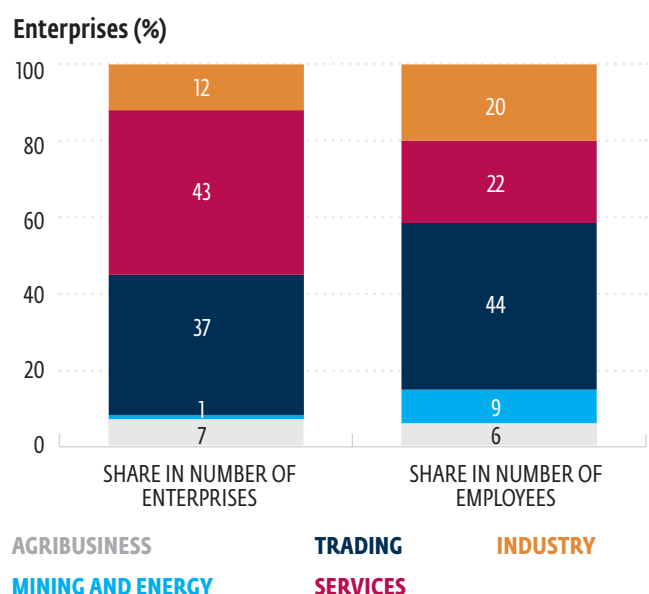
Yet most businesses in Mali consist of micro, small, and medium enterprises (MSMEs) and informal household enterprises. On average, formal businesses in Mali employ just above 11 workers. By contrast, two-thirds of these entities are micro enterprises with fewer than five workers, with another 24 percent consisting of small enterprises (figure 2.1). The relatively small scale of businesses can be partially explained by the type of activities in which most of these businesses are engaged: the commerce and services sector (80 percent), which does not require a large workforce (figure 2.2).

FIGURE 2.1. MALIAN REGISTERED ENTERPRISES BY SIZE, 2017



Sources: Estimates from INSTAT and INPS data.

FIGURE 2.2. MALIAN ENTERPRISES BY SECTOR AND EMPLOYMENT, 2017

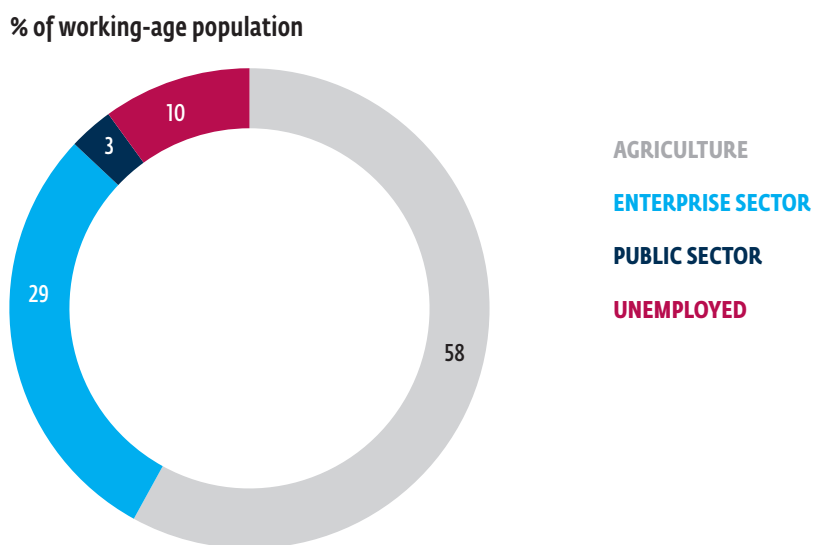


Sources: Estimates from INSTAT and INPS data.

In addition to the formal sector, about half of all Malian enterprises are informal small and medium enterprises (SMEs) and 90 percent of all jobs are in the informal sector.²⁶ Beyond these firms, about one in every six households operates a household enterprise. These household enterprises are important employers, providing full-time jobs for 280,000 Malians and part-time jobs for 545,000. Thus, more workers are employed in household enterprises than by formal firms.²⁷

There is a paucity of good jobs in formal businesses and self-employment for Mali's large and growing pool of young workers. More than half of Mali's workforce—58 percent—is engaged in agriculture, whereas the enterprise sector (industry, commerce, and services) employs about 30 percent of the workforce (figure 2.3). The services sector accounts for about 33 percent of Mali's GDP, followed by the industrial sector (21 percent of GDP). Mali's working-age population consists of about 6 million people, 90 percent of whom are actively employed.²⁸ However, most workers in Mali are limited to low-productivity jobs in the agricultural sector or in small commerce. Informal employment is commonplace (90 percent of all jobs), and wage employment remains the exception (14 percent, combining formal and informal wage jobs).²⁹

FIGURE 2.3. EMPLOYMENT BREAKDOWN PER SECTOR, 2016



Source: Mali National Statistical Institute, <https://instat-mali.org/fr>.

Mali faces the challenge of generating job opportunities for a labor force that is estimated to grow by approximately 235,000 workers every year, with over half of the country's population under age 24. Unemployment is estimated at 9 percent nationally but is much higher among the youth (approximately 40 percent) and in regions such as Gao or Koulikoro (over 30 percent).³⁰ Yet the concept of unemployment in Mali must be nuanced, as those who register as unemployed in statistics are most often unpaid helpers in family agriculture, small commerce, and services, or other low-productivity jobs.

In labor force participation, the gender gap is particularly sizeable. There exists a 20 percentage point difference between male and female employment rates, and of the total female employment, only 5 percent are wage and salaried workers compared with men, whose rate is 14 percent. (ILO, 2018)³¹ Informal employment is the main avenue for those entering the labor market, with a female representation of 94 percent and male of 87 percent.³² According to *Women, Business and the Law 2021*, women are at a further disadvantage than men when it comes to employment.³³ Although women can participate in industrial jobs, they face some challenges, for instance in factories and construction sites where there are limitations to their participation according to Decree 96-178 of the Labor Law, article 189-2 and 189-6.³⁴ This limits their ability to participate fully in the economy and places them at a disadvantage to their male counterparts. The average gender wage gap (weighted) for Sub-Saharan Africa is 22 percent, meaning that female employees earn approximately 20 percent less than male employees.³⁵ The burden of unpaid work (for example, household chores and caregiving) also falls disproportionately on women in Mali, where 92 percent of unpaid work care is done by women. Men spend approximately 21 minutes a day on unpaid care work.³⁶

Outside agriculture and the public sector, which account for 58 percent and 3 percent of total employment, respectively, sole proprietors operating informal businesses employ the largest share of the workforce in Mali. The sole proprietors operate small- and micro-scale businesses, sometimes with the help of family members and a few salaried workers, most often without formal registration. Sole proprietorship (*entreprise individuelle*) is also the preferred legal form even in cases in which the owner would like to formalize activities, resulting in lower costs, absence of minimum capital requirements, and a more favorable taxation regime.

Finally, Mali fares relatively poorly in entrepreneurship. The country ranked 123rd of 137 countries in the 2019 Global Entrepreneurship Index, published by the Global Entrepreneurship and Development Institute, and scores particularly low in the areas of start-up skills and risk acceptance (entrepreneurial attitudes), opportunity start-up and human capital (entrepreneurial abilities), and internationalization and risk capital (entrepreneurial aspirations).

Mali's competition policy framework is weak. Although Mali has in place antitrust laws to prevent monopolies and ensure fair competition, the competition authorities in charge of these share competencies with sector regulators, hence leading to weak enforcement and de facto firm collusion. Furthermore, the country widespread corruption impedes the effective implementation of these policies.³⁷ There is evidence of price-fixing for several sectors, such as rice production and grain trading. Most of the competition occurs between the formal and informal private sectors.

2.1. COVID IMPACTS ON THE PRIVATE SECTOR

The COVID-19 shock and containment measures have also had a large adverse impact on the local private sector. Hence the government's swift response package, including support mechanisms dedicated to help the private sector, particularly more vulnerable, smaller businesses, weather the crisis and keep lights on (box 2.1). Key findings from two recent World Bank Group (WBG) Business Pulse surveys conducted in November 2020 and June 2021 on COVID-19 impacts found that all business sectors experienced a drop in sales and income and that the health crisis adversely affected the operational status of 9 percent of companies surveyed.³⁸ Insufficient demand (40 percent) followed by a shortage of liquidity (29 percent) are cited as key factors for temporary closures of businesses. A significant proportion (43 percent) of firms surveyed confirmed they had to cancel customer orders as a result of supply chain disruptions and constrained access to inputs. The sectors hardest hit include wholesale and retail trade (with a sales decrease by 76 percent compared with 2019, from 61 percent in 2020), agro-industry (24 percent of firm closures) as well as services—including the hospitality industries (hotels, restaurants). Large and medium companies are the most affected, with a decrease in activity by 22 percent between February 2020 and June 2020 and by 35 percent in June 2021. Firms outside Bamako also proved less resilient in the face of the crisis than those in the capital.

Some notable insights from the survey include the following:

- **Workforce Downsizing:** The COVID-19 outbreak has resulted in a reduction in the number of employees. Between December 2019 and June 2020, the number of employees in companies fell by 29 percent—and further by 35 percent in June 2021. A more notable drop in seasonal jobs (by 32 percent), in start-ups and very small businesses (by 53 percent) and very large companies (by 35 percent).
- **Sales and Supply Chain Disruptions:** Malian businesses were also negatively affected by a drop in sales and other supply chain disruptions—85 percent of companies agree that the health crisis has led to a reduction in sales. Variation in sales, disruption in the supply of materials, and uncertainty are the three most-felt impacts. With two-thirds of the companies that have experienced supply difficulties, almost all companies (95 percent) have changed their supply management and their sales management. In addition, 64 percent of companies operate with changes and limitations (provisions for hand washing, gels, masks, and so forth).

- **Cash-Flow Pressures:** More than half of businesses will not be able to cover their operating expenses with their current cash flows after a period of three months—41 percent of companies will not be able to cover current expenses with their cash flows after a month. Large and very large companies appear to have greater resilience with half of them having cash flows covering operating expenses for more than three months. Agro-industry is most vulnerable with 65 percent of companies having cash flow reserves of less than a month.
- **Access to Finance:** Access to finance appears as particularly constrained, with interest rate and collateral requirements by banks deemed excessive by surveyed firms. Lack of access to finance is also cited as the major bottleneck to increased digitization by 37 percent of firms.
- **Access to Support Measures:** Only 17 percent of the surveyed companies benefited from the various support measures taken by Malian authorities, with 48 percent of beneficiaries getting access to subsidies and 20 percent to tax exemptions.
- **Business Confidence:** On a positive note, a majority of surveyed companies (50 percent) are optimistic that their sales will be up in the next six months and 16 percent think they will be down. The construction and real estate sectors (82 percent), financial services (82 percent) and retail trade (80 percent) are the three most confident sectors.
- **Fewer Women in Companies:** The weight of women in the workforce fell by 3 points, from 38 percent to 35 percent. This variation is more marked for permanent jobs. This is compounded by the absence of childcare systems, with 92 percent of businesses not planning to offer childcare.

BOX 2.1. CLEARING GOVERNMENT ARREARS TO THE PRIVATE SECTOR

Mali announced measures to support private firms hit by the COVID-19 shock and the ensuing economic slowdown. Those key measures included the creation of a small and medium enterprise (SME)-support Guarantee Fund (representing 0.2 percent of GDP) as well as the clearance of budget arrears to the private sector accumulated in 2020. Already before COVID-19, the Malian authorities were committed under the International Monetary Fund (IMF) extended credit facility (ECF) for 2019–21 to develop a strategy for the clearing of domestic payment arrears, defined as “overdue payments on financial obligations from primary (government) spending, for which the payment date generally exceeds 90 days, unless terms and conditions for settlement specify a longer grace period.” Government domestic arrears are a persistent problem across Sub-Saharan Africa with average arrears amounting to 3.3 percent of GDP in 2019 and 8.5 percent for oil-exporting countries.^a

Mali, recognizing the effect of domestic arrears on the financial sector and economic activity, committed to clear in 2019 all the arrears accumulated in 2018. Non-accumulation of new domestic payment arrears by the government is a continuous performance criterion under the IMF ECF. Preliminary data by the IMF suggest that all central government arrears had been cleared by end-2019 as part of the government’s efforts to revitalize private-sector growth and abide by its international commitments.^b Going forward, the Malian government also committed to no longer exceeding the ceiling for pending bills and not resorting to an accumulation of new domestic payment arrears.^c Yet some domestic arrears accumulated again in early 2020 owing to continued cash management challenges and should be cleared as part of the government’s new package of measures to support the economy.

TABLE B2.1.1 EDM-SA'S DEBT AT THE END OF JUNE 2019 (CFAF, BILLIONS)

	June 2019 Est.
TOTAL DEBT	319
Financial debt	209
Short-term debt ¹	128
Local commercial banks	99
of which: overdraft	27
Other financial institutions	29
Medium- and Long-term debt	82
Local commercial banks	4
Other financial	78
Supplier debt (arrears)	76
Electricity	37
Petroleum product	11
other	28
Fiscal debt	34
Tax arrears	26
Other	8

Source: Malian authorities; IMF staff estimates.

¹ Loan Maturity is 12 months or less.

Of particular concern is the financial situation of Mali's national electricity company, EDM-SA, with substantial arrears to suppliers (table B2.1.1).

EDM-SA has been facing insolvency as a result of high production costs, inadequate tariffs as well as operational inefficiencies. As a result, EDM-SA borrowed heavily from commercial banks and fuel suppliers: its total debt (including payment arrears) was estimated in 2019 at Financial Community of Africa franc (CFAF) 319 billion (3.1 percent of GDP), with short-term debt to local commercial banks (about CFAF 100 billion) representing more than half of annual revenue. With World Bank support, Mali authorities developed a plan to reduce the stock of arrears by EDM-SA and avoid the accumulation of new arrears—via government-guaranteed bank loans, additional transfers and debt reprofiling. The objective is to renegotiate and clear 40 percent of arrears by the end of 2019 (CFAF 46 billion) and clear all arrears to suppliers by 2023 (CFAF 69.5 billion). EDM-SA intends to use its 2019 government subsidy (CFAF 30 billion), coupled with the anticipated payment of government entities' electricity bills to EDM-SA, to repay the new commercial loans and avoid rolling over the principal.

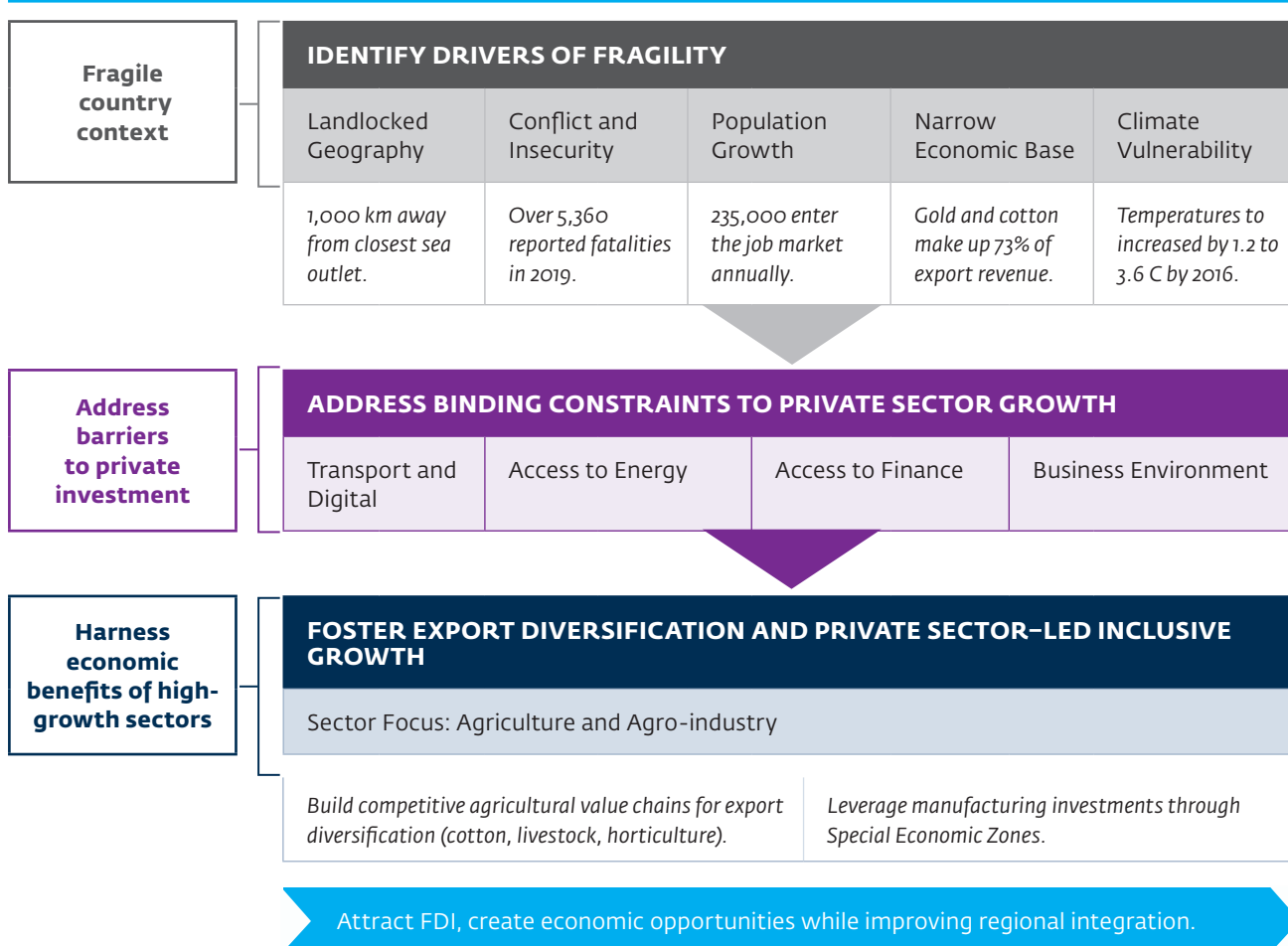
- IMF, "One Planet, Two Worlds, Three Stories" (Regional Economic Outlook, Washington, DC, October 2019), <https://www.elibrary.imf.org/view/books/086/28351-9781513514055-en/cho3.xml>.
- IMF, "IMF Executive Board Approves the Extension of Increased Access Limits Under the Rapid Credit Facility and Rapid Financing Instrument" (Press release No. 20/3305, Washington, DC, October 5, 2020), <https://www.imf.org/en/News/Articles/2020/10/05/pr20305-imf-executive-board-approves-extension-increased-access-limits-under-rcf-and-rfi>.
- IMF, "Mali: Debt Sustainability Analysis" (IMF Country Report No. 20/153, Washington, DC, April 24, 2020), <https://www.imf.org/en/Publications/DSA?country=MLI&fm=&fy=&tm=9&ty=2019#search-section>.

3. OPPORTUNITIES FOR PRIVATE SECTOR INVESTMENT

3.1. METHODOLOGICAL CONSIDERATIONS

The main purpose of a CPSD is to identify key opportunities for the private sector and the critical constraints that will have to be addressed, and to develop recommendations that could alleviate these constraints. The proposed approach for this CPSD is based on the following steps: (a) identify sectors where Mali displays evident comparative advantages and that hold the potential for structural transformation—that is, domestic value creation; (b) assess private sector appetite and alignment with government priorities; and (c) apply an overall fragility lens, thus ensuring that increased private sector investment in a given sector does not exacerbate some of the predetermined drivers of fragility and indeed contributes to partly alleviating them by providing opportunities for job creation, inclusive growth, and sustainable development (figure 3.1). Furthermore, the assessment of binding constraints to private sector activity in the growth sectors relies on a benchmark analysis against “comparator” countries, both structural and aspirational peers (box 3.1).

FIGURE 3.1. AN ANALYTICAL AND IMPLEMENTATION FRAMEWORK



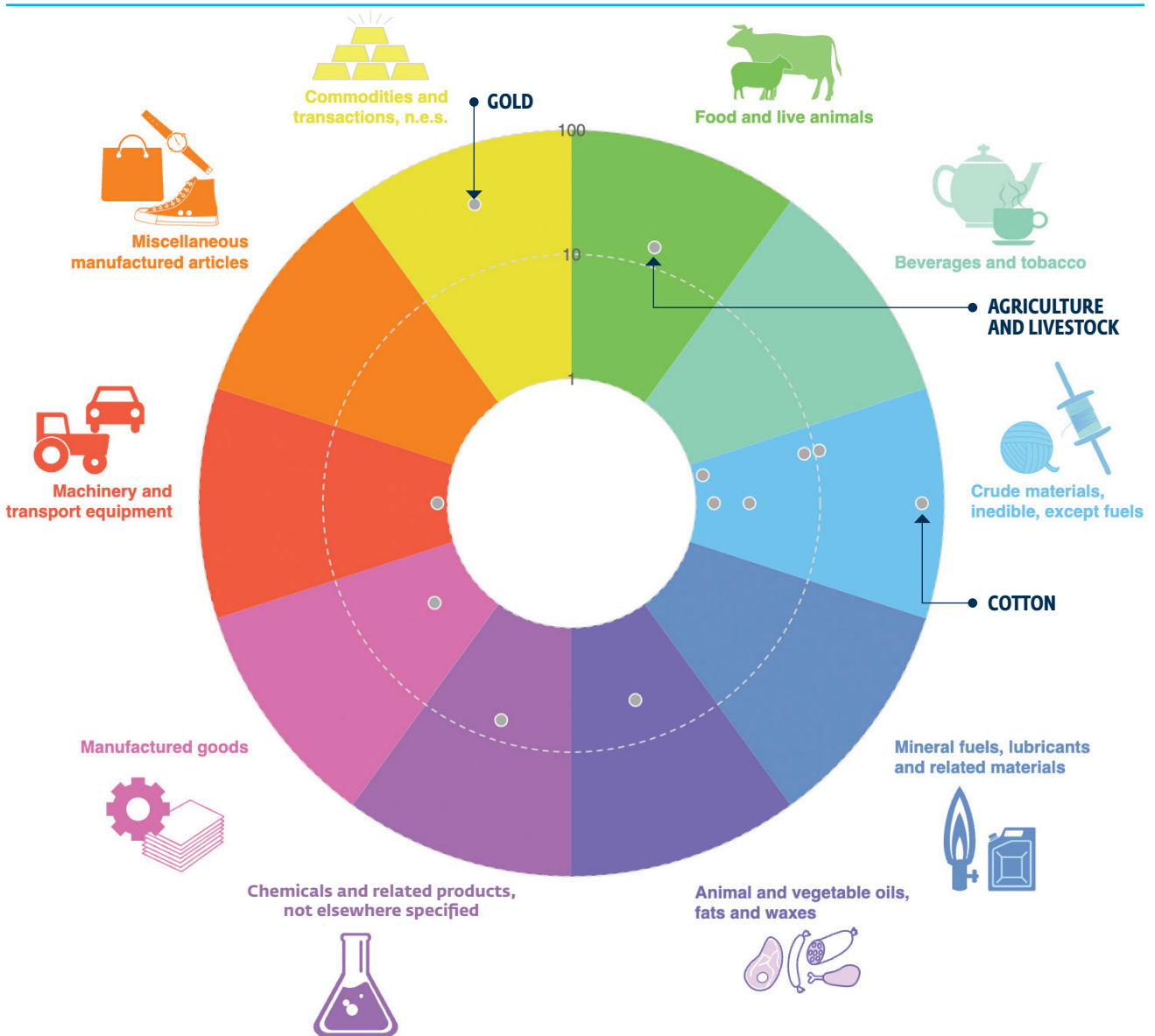
Source: World Bank/IFC staff.

Note: FDI = foreign direct investment; km = kilometers.

Structural transformation and economic diversification are key to boosting growth and reducing volatility in Mali. This process requires improving overall productivity, either by reallocating resources to high productivity sectors (such as some manufacturing activities) or by creating productivity gains within a sector through process and product improvements. Given its high share of output, employment, and external trade in Mali, light agro-industry holds the most promising scope for productivity improvements and increased performance. The agro-industry thereby further diversifies the economy from an already narrow economic base, raises farmers’ income, generates employment, and reduces food prices.

This improvement is confirmed by Revealed Comparative Advantage (RCA) analysis and Product Complexity analysis conducted for Mali (figure 3.2).³⁹ RCA analysis suggests that in 2020, Mali was naturally competitive in several product categories, such as live animals and commodities such as cotton and gold.⁴⁰ Specifically, livestock, cotton, cereals, oilseeds, and derivatives (for example, leather, animal skins, and fertilizers) come out as top subcategories where Mali has a strong comparative advantage. On the commodities side, gold has the highest comparative advantage. This analysis represents a strong positive correlation with Mali’s export basket, as gold, cotton, and livestock represent the main sources of Mali’s export earnings (respectively, 62 percent, 11 percent, and 8 percent).

FIGURE 3.2. MALI’S REVEALED COMPARATIVE ADVANTAGE (RADAR PLOT)



Source: UNCTADStat Mali, 2020, <https://unctadstat.unctad.org/en/RcaRadar.html>.

Apart from gold, cotton, and livestock, other subsectors for which Mali's growing export share can be used as a proxy for competitiveness are horticultural products. These products in particular include tropical fruits such as mangoes, for which an upward trajectory appears in Mali's export share. In line with government efforts to diversify agricultural production toward high-value, nontraditional agricultural products, Malian producers are increasingly shifting away from cotton toward rice, cereals (maize, millet, and sorghum), and horticultural products—that is, crops with the highest production value per area. The export volume of Malian mangoes has tripled over the past decade, reaching 22,214 tons in 2018. As a result of favorable agro-climatic conditions in the south, technological innovation such as cold storage and intermodal transportation (from air to sea freight), and secured access to the fast-growing European fresh fruit market, mango has developed into one of Mali's leading export products, generating increasing revenues for its smallholder producers and exporters.

BOX 3.1. CHOICE OF PEER COUNTRY COMPARATORS

The structural comparator countries selected for Mali are Niger and Burkina Faso. They are two neighboring landlocked and low-income Sahelian countries that share with Mali a high degree of dependency on commodity exports (for example, cotton and gold), as well as a status of fragility that predates the 2012 Malian crisis. Like that of Mali, the economies of Niger and Burkina Faso are predominantly rural, dependent on agricultural exports, and increasingly vulnerable to insecurity and climate change.

Côte d'Ivoire and Rwanda appear to be suitable aspirational comparator countries for Mali. Côte d'Ivoire has emerged from its 2011 post-electoral

conflict as one of the fastest-growing economies in the world, with 8 percent average GDP growth since 2012, driven by a booming agricultural sector and nascent diversification (away from cocoa), rising productivity levels, and high export performance. Rwanda, Africa's development success story, has succeeded in fostering broad-based economic development despite its small economy and landlocked geography. Rwanda has done so by attracting significant foreign direct investment, developing a skilled workforce, and engaging in more productive sectors—with a focus on services, trade, and tourism, including strategic activities undertaken in its recently created special economic zones.

Source: World Bank/IFC staff.

3.2. SECTOR FOCUS: AGRICULTURE AND AGRIBUSINESS (INCLUDING LIVESTOCK)

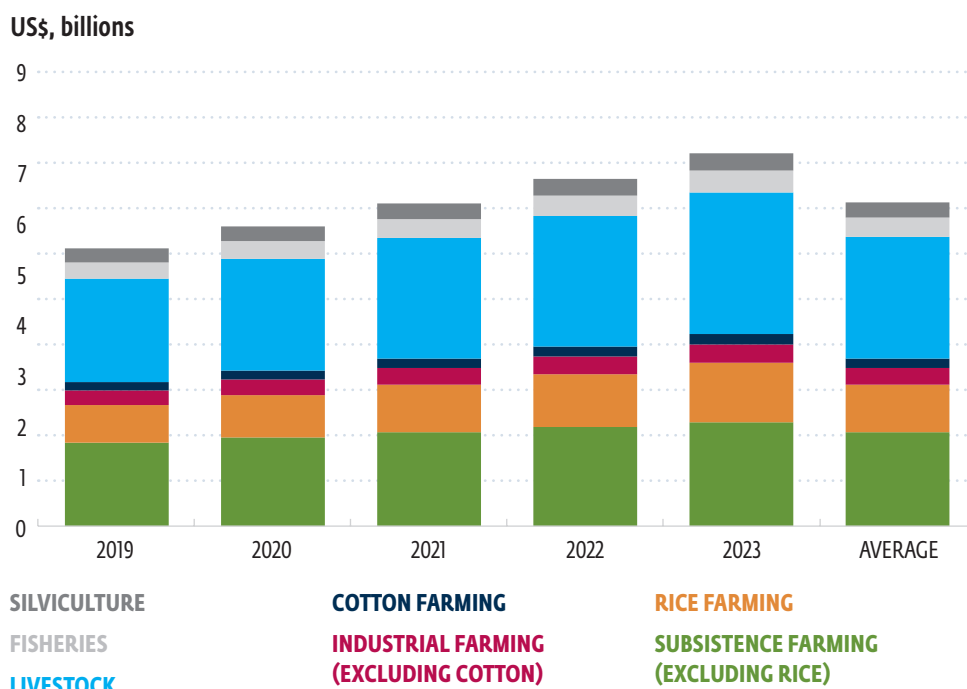
Given Mali's strategic location and rich endowment of natural resources, agribusiness, including livestock, can be transformative for the country if it efficiently leverages its key comparative advantages. Representing 40 percent of GDP and 58 percent of direct and indirect employment of Mali's working-age population, the sector provides livelihood to 11 million Malians. With 6.4 million hectares of land, Mali has more arable land than Senegal and Côte d'Ivoire combined.⁴¹ With 2 million hectares of internal water surface areas, Mali surpasses all of its neighbors and regional partners.⁴² The country is also endowed with high groundwater levels, especially in the Inner Niger Delta (southern Timbuktu, central Ségou, and central Mopti regions). This natural resource opens up opportunities to cultivate crops and raise animals year-round in areas with low surface water and rainfall to complement its existing main production regions (for example, Sikasso and Ségou).⁴³

Transforming Mali's agricultural and agribusiness sector into a vibrant and sustainable contributor to its economic growth is particularly relevant in light of the COVID-19 pandemic. According to household surveys conducted by Mali's National Institute for Statistics (INSTAT) in May, June, and July 2020 and in January to March 2021, COVID-19's impact on employment has significantly diminished.⁴⁴ In March 2021, 0.3 percent of respondents attributed their loss of employment to the pandemic compared to 37.6 percent in July 2020. Respondents in urban areas other than Bamako were the hardest hit, with 55.9 percent of the respondents in May attributing their loss of employment to COVID-19. Nationally, the impact of the coronavirus pandemic on household income and activity is not hard compared with previous months; only 1 in 10 households (11.1 percent) was affected by a drop in income related to COVID 19 against 44.1 percent in February 2021.

In addition to its negative effects on employment, COVID-19 has had a significant impact on food security. According to INSTAT, 61.3 percent of households in July 2020 experienced a food shortage due to the pandemic, with 74.6 percent reporting that their households went without food in June 2020.⁴⁵ The biggest negative shocks for households since the pandemic began have been the increase in food prices, followed by increased prices for inputs. According to INSTAT data, 71 percent of households reported that COVID-19 was the cause of their households having scarce food to feed themselves, with 69 percent of those surveyed indicating that there were periods during the past 30 days when there was nothing to eat at home. However, the domestic harvest for the 2020/2021 campaign, buttressed by increased rainfall, should improve access to food for a majority of households not directly affected by the ongoing insecurity challenges increasingly concentrated in the Liptako-Gourma zone (tri-border area comprising Mali, Niger, and Burkina Faso).

Climate change in Mali is evident and widespread and has already changed weather patterns and increased weather variability, with adverse impacts on food security, livelihoods, conflict, and migration. Mali has already experienced overall warming temperatures, and climate change has both decreased rainfall and changed rainfall patterns. The north has experienced warming of about 0.5°C per decade, and the frequency of hot nights has increased significantly in all seasons except for winter. The changes in rainfall and decreased food production disproportionately affect the rural poor, mainly subsistence farmers. In this context, Mali has validated in 2018 its Climate-Smart Agriculture (CSA) Investment Plan. Mali’s CSA Investment Plan prioritized a set of 12 investments and actions needed to boost crop resilience and enhance yields for more than 1.8 million beneficiaries and their households to help them adapt to climate change.

FIGURE 3.3. GDP BY AGRICULTURE SUBSECTOR



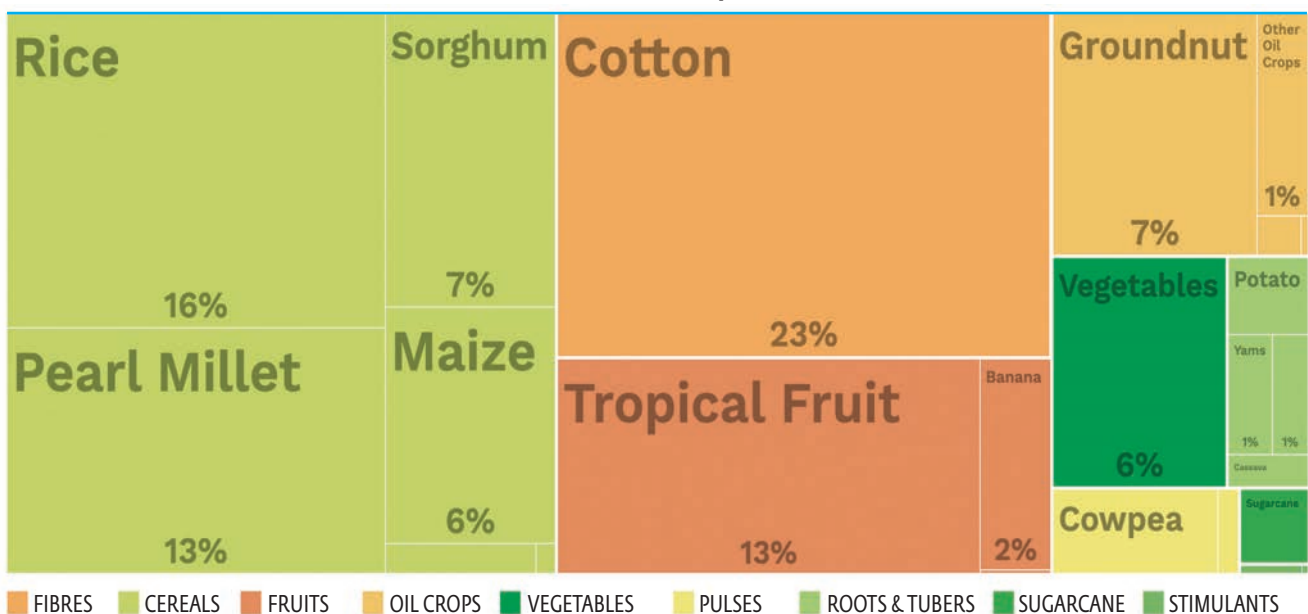
Source: PNIA 2019-23.

Mali’s agricultural production is dominated by six key value chains⁴⁶ that account for 85 percent of the country’s agriculture production. The agricultural production in Mali is largely dominated by cotton and cereals (including rice, millet, and sorghum). Aside from the cotton and rice value chains that are relatively structured, production systems are (a) low intensity, (b) based on traditional cultivation techniques with low input and low output, and (c) dedicated mostly for household consumption and the domestic market. This results in various value chains performing significantly under their potential.

Nonrice subsistence farming is expected to contribute just over US\$2.43 billion⁴⁷ per year (29 percent) to agricultural GDP on average for the period 2019–23.⁴⁸ Rice production alone is expected to contribute US\$24 billion per year (14.8 percent).⁴⁹ Meanwhile, livestock production is expected to represent 37.5 percent of agricultural GDP or on average of US\$3.14 billion per year. Whereas most agricultural production is focused on meeting domestic demand, cotton represents Mali’s top agricultural export.

This leaves room for untapped investment potential that lies within several agricultural subsectors. This investment estimate is based on value addition and intensity of processing, increased food security, job creation potential, and export potential (figure 3.4). These value chains including cotton, fonio, livestock, mango, and sesame remain largely underexploited and provide a unique opportunity for investors. See appendix B for a detailed discussion of these value chains.

FIGURE 3.4. AGRICULTURAL CROPS BY PRODUCTION VALUE IN MALI, 2017



Sources: HarvestChoice, International Food Policy Research Institute (IFPRI); University of Minnesota, "CELL5M: A Multidisciplinary Geospatial Database for Africa South of the Sahara," 2017, <https://doi.org/10.7910/DVN/G4TBLF>; Harvard Dataverse, V5 Image provided by Data Africa. <https://dataafrica.io/profile/mali/CropsByProduction>.

Harnessing the potential of these value chains to increase private sector investment and create more and better jobs requires addressing several constraints in the next three to five years. Specifically, constraints are linked to (a) an unharmonized legal and regulatory environment governing the agricultural sector; (b) governance linked to institutional fragmentation and weak capacity; (c) inadequate financial infrastructure, lack of access to finance, and lack of transparency and traceability of financial flows; and (d) suboptimal uptake of agricultural technologies to move toward CSA, with a lack of qualified skills to move toward light agro-industry.

Agribusiness Enabling Environment and Governance

According to the 2019 “World Bank Enabling the Business of Agriculture” (EBA) report, Mali received an overall score of 33.7 of a maximum score of 100 and is ranked 86th of 101 countries. EBA measures and compares the performance of the enabling environment—that is, the laws, regulations, and policies affecting agribusiness across 101 countries.⁵⁰ The 2019 report noted that significant gaps existed in mechanization and irrigation, which had the lowest scores, 0 and 10, respectively.⁵¹

Correcting these deficiencies requires investment from both public and private actors. According to the World Bank’s 2020 “Public Expenditure Review” (PER) of the agricultural sector, the Malian government’s expenditures can be characterized by the heavy emphasis on supporting crop production, particularly input subsidies for cotton and rice.⁵²

Despite its relatively high share of total expenditure, spending on agriculture is highly inefficient in both its allocative and its technical efficiency. Resources are concentrated in the crop subsector at the expense of the livestock subsector. In economic classification, spending has been heavily skewed toward current expenditure and especially input subsidies at the expense of investment. Few resources are transferred to the regions and to the decentralized services to enable providing adequate services.

BOX 3.2. LESSONS LEARNED: LEVERAGING THE PRIVATE SECTOR FOR VALUE CHAINS

While moving to implementing the recommendations from this CPSD, several past success stories of leveraging the private sector in Mali should be replicated. This holistic value chain approach of working both on the demand side, by strengthening the capacity and the infrastructure of mango producers, and on the supply side by investing in a mango transforming firm that buys the product has been deemed successful and could be replicated by the World Bank Group (WBG) in its future interventions.

In the World Bank and IFC Joint Implementation Plan (JIP 2016–2019), the WBG supports selected value chains. Those include mango, quality beef, and shea butter, which present the most potential in competitiveness and export.

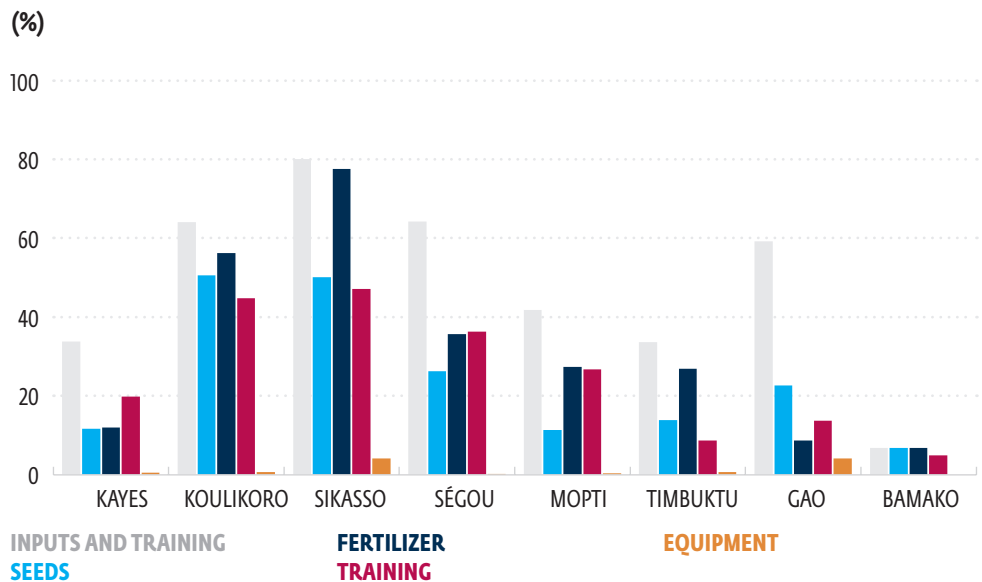
The approach taken was to use existing World Bank operations. That approach used the Support Project for Agro-Industrial Competitiveness in Mali (PACAM) and the Mali Dry Land project to de-risk IFC investments in these selected value chains.

For example, PACAM rehabilitated 300 kilometers of rural roads in the region of Yanfolila and Sikasso. This project helped provide access to markets for the mango producers as well as to CEDIAM (a firm that transform mango into pulp for juices). Also, in the scope of the project, PACAM conducted two phytosanitary campaigns against the mango fruit fly to ensure the mango quality was meeting the European export standards. On the other side, IFC worked with CEDIAM to ensure the firm had the required certifications for export and recently concluded a €2 million investment in the firm.

Source: Excerpts from PACAM Mid-Term Review, April 2020.

Despite contributing only 2.9 percent to the sector’s GDP, cotton production receives 58 percent of government input subsidies, highlighting the mismatch between resource allocation and the stated government priority of diversifying and modernizing the agricultural sector. Since its inception, the cotton subsidy program has had an average annual increase of 12 percent, with 511,938 metric tons subsidized during the 2018/2019 agricultural campaign. However, increases in production have not followed suit. Cotton production accounted for 58 percent of the subsidy during the 2009–18 period, but yields have remained flat. Cotton yields increased by 1.6 percent annually during the 2009–16 period, with an average of 930 kilograms per hectare (kg/ha), which is below the 1,200 kg/ha threshold necessary to ensure financial viability.⁵³

FIGURE 3.5. SHARE OF AGRICULTURE HOUSEHOLDS BENEFITING FROM EXTENSION SERVICES, 2017



Source: Cellule de Planification et de Statistiques, “Enquête Agricole de Conjoncture Intégrée aux Conditions de Vie des Ménages (ECA-I),” 2017.

With a share of just 40 percent of expenditures allocated to investments on average during the 2010–18 period, government action is disproportionately geared toward inefficient and opaque provisions of inputs and the payment of operating expenses and salaries of government workers (figure 3.5). Furthermore, resources and decision-making are centralized in Bamako, and just 9 percent of resources on average were allocated to the regions. The 2020 PER recognizes the need to streamline and adequately fund public agencies whose mission is to develop Mali’s agriculture, livestock, and fisheries sectors.

There is a high level of institutional fragmentation, which poses a major constraint for both coherent government action and public sector investment. Ten agencies are tasked with developing irrigation plans with an average annual budget of 350 million CFAF (US\$627,000) per agency. This amount is inadequate given their mandate. As such, the PER recommends that, with the exception of the Office du Niger zone, agencies focused on expanding access to water be consolidated into a single entity that also merges the mission and activities of regional agricultural directorates with the mission and activities with rural engineering directorates. The goal is to rationalize current expenditures and boost resources earmarked for investments. These recommendations fit well with a potential special economic zone (SEZ) strategy (as discussed in the next section of this report) to boost the sector, while also addressing the weaknesses highlighted in the “Enabling the Business of Agriculture” analysis on Mali.⁵⁴ Specifically, the new Mali SEZ Law, if adopted, will create one autonomous SEZ administrative authority that will consolidate many of the cited activities under one agency for purposes of establishing agribusiness SEZs. This feature will enable Mali to improve the enabling environment of the agribusiness sector.

Institutional capacity constraints are another major hurdle faced by the government of Mali, inhibiting it from spending all the foreign aid it is allocated. For example, in 2018, only 32 percent of the budget was executed, owing in part to the complexity of the governing administrative procedures and human-resource constraints in the relevant ministries. As such, it is important to ensure that the programs and investments detailed in Mali’s latest national investment program are carried out fully to incentivize and inspire investment from the private sector.

Physical and human capital, harnessed by technology

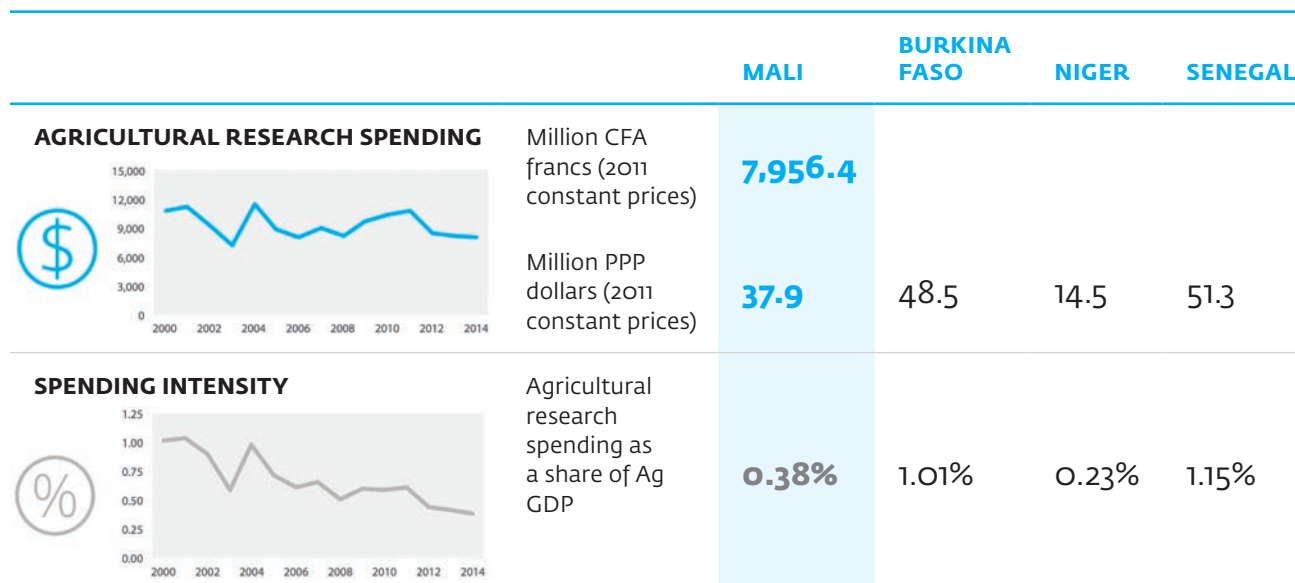
The improved efficiency of Mali’s value chains requires investments in both physical and human capital. The government of Mali can take pride in launching initiatives that leverage agricultural technologies to improve value-chain efficiency and foster private sector participation, such as the e-voucher program.⁵⁵ However, the agricultural sector in Mali is still characterized by low levels of productivity in large part because of archaic technology and inefficient practices, owing to an inadequately skilled workforce that cannot embrace advances in technology or product sophistication to take the sector to a higher level.⁵⁶ For physical infrastructure, boosting downstream investments in bulk storage, refrigeration, processing, packaging, and quality control is critical. For human capital, there is a paucity of experienced managers who can effectively operate companies at industrial scale, and there is a lack of service providers who are able to advise companies how to scale up to attract domestic and international investors.

Within the crop subsector, current expenditure and subsidies account for 60 percent of total spending on average, crowding-out critical investment spending. Input subsidies accounted for 42 percent⁵⁷ of spending during 2010–18, and capital expenditure accounted for the remaining 40 percent. If the costs related to the operation of public services are removed from that figure (over 20 percent of total capital expenditure in the crop subsector), the share of actual investment would only be around 30 percent. This amount is far from sufficient given the enormous investment needs in water control and sustainable soil management (crucial for a Sahelian country), research and advisory support for improving productivity, and infrastructure (rural roads, storage and conservation infrastructure, rural energy, and so forth) to encourage the development of value chains.

The increased uptake of digital technologies can help accelerate Mali’s move toward light agro-industry. Transformative technologies allow higher potential for private investment because of (a) lower capital requirements required for lean agricultural technology start-ups; (b) their potential to optimize entire value chains of otherwise fragmented input providers, producers, and processors, thus offering a wider access to markets; and (c) their potential for high growth, given that the agricultural technology market is still nascent and early investors can reap rewards. As described earlier, Mali has significant potential with livestock, fisheries, and horticulture production. For Mali, as a large, landlocked country, subsidies to facilitate the acquisition of electric trucks, vans, motorcycle taxis—both refrigerated and nonrefrigerated—are essential to ensure that supply meets demand without compromising the well-being of consumers and the environment owing to product degradation and postharvest losses and waste.

Data on agricultural transactions are essential for maximizing efficiencies across value chains.⁵⁸ Leveraging technology to increase information sharing to provide timely information to actors for different value chains improves traceability and transparency. The sector is very informal and based on cash; consequently, it is difficult to have clear and timely visibility on the nature of flows, the volume of flows, and flows between actors. It also makes policy making more difficult. Initiatives like AgriPay, an IFC-supported digital financial services project dedicated to the agriculture value chains, are a step in the right direction.⁵⁹

The amount that the government of Mali has invested in agricultural research and development (R&D) has fallen over time. R&D fell from 1.00 percent of its agriculture GDP in 2000, the minimum recommended by the United Nations and the African Union, to 0.38 percent in 2014.⁶⁰ Increased government funding is needed, not only to cover the cost of salaries, but also to allow adequate funding for the day-to-day running of research programs, as well as necessary investments in infrastructure. Further, agricultural research in Mali is among the most donor dependent in Africa. Strong reliance on short-term projects funded by donors and development banks, combined with modest levels of public funding, have driven significant fluctuations in agricultural research spending over time. Events like the 2012 military coup and unrest in the country’s north—which prompted a temporary freeze on aid—highlight the country’s vulnerability to funding shocks and, hence, its need to diversify its sources of agricultural research funding.

FIGURE 3.6. AGRICULTURAL RESEARCH SPENDING AS A PERCENTAGE OF AGRICULTURE GDP, 2000-14

Source: Léa Vicky Magne Domgho, Ouleymatou Traoré, and Gert-Jan Stads, "Agricultural R&D Indicators Fact Sheet" (International Food Policy Research Institute, Washington, DC, 2018), <https://www.asti.cgiar.org/sites/default/files/pdf/Mali-Factsheet-2017.pdf>.

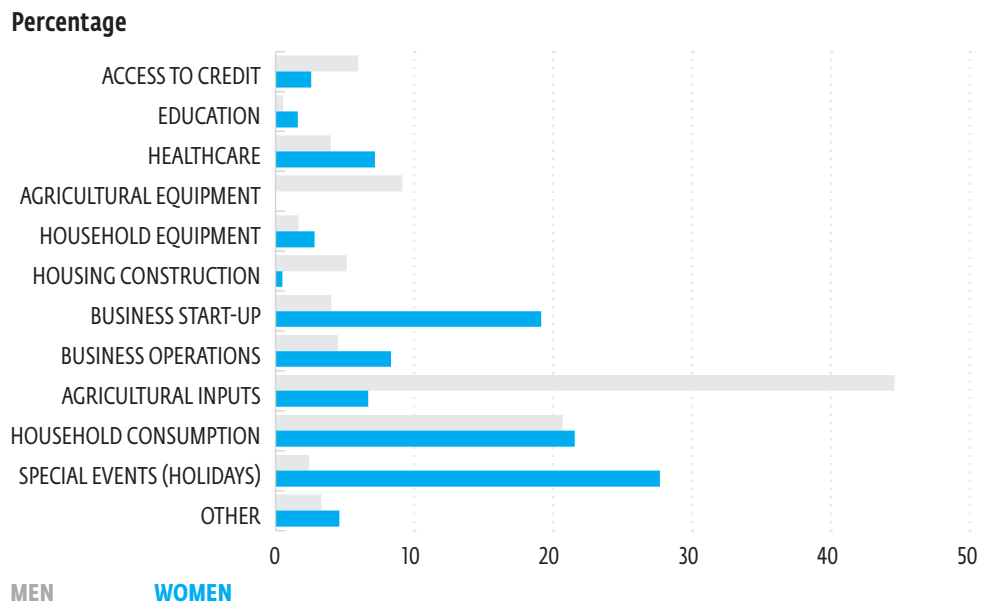
Note: CFA = CFA franc; PPP = purchasing power parity; \$ = US\$.

With 87 percent of its research pool close to retirement, Mali risks losing a large share of qualified human capital to stimulate R&D and, consequentially, private investment. The government of Mali needs to invest more in recruitment and training as mechanisms to motivate and maintain staff over time, as the agricultural sector is largely composed of a workforce with low education levels. Further, whereas females constitute the majority of Mali's farmers, only 15 percent of the country's agricultural researchers are female. Since women offer different insights and perspectives to address the unique and pressing challenges of Mali's farmers, it is important that the country focus on improving the gender balance—both among its agricultural researchers and its research managers—to more effectively address the breadth of priorities and challenges facing its farmers.

Agrifinance

The agricultural sector lags other sectors in financial inclusion and access to credit. According to IMF financial soundness indicators,⁶¹ agriculture and fishing received as little as 3 percent of the total credit in the Malian economy in June 2019, less when compared with the same sector in Burkina Faso (4.7 percent⁶²) or Côte d'Ivoire (9.2 percent⁶³). A recent World Bank report⁶⁴ on Mali noted that less than one-third of agriculture households receive credit in the country, with 14 percent of them obtaining it from informal sources, 12 percent via value chain financing (suppliers and cooperatives), and only 4 percent via financial institutions. Financial inclusion data, both in access to and use of financial services, indicate lower uptake of farmers and households in rural areas (figure 3.7). Aware of this important barrier, Mali, with the support of the donor community, has initiated several projects that extend direct financing to the sector. However, structural reforms still need to be taken for more inclusion and sustainable offers of suitable agricultural finance products in Mali to catch up regional peers in WAEMU (Côte d'Ivoire or Burkina Faso).

FIGURE 3.7. AGRICULTURE HOUSEHOLD ACCESS TO CREDIT, BY TYPE



Source: Enquete Agricole de Conjuncture (2017).

The government of Mali has taken several initiatives to improve access to finance in the agricultural sector.⁶⁵ Despite lasting effects and some sustainable activities, most programs only provide partial and temporary solution to growing financing needs in the agricultural sector, and structural reforms are still needed. The World Bank 2018 report on financial inclusion⁶⁶ recognizes the creditworthiness of most of the smaller subsistence (uneducated) households. Yet such households still need to build a digital footprint showing a stable financial flow, which could be used by households to collateralize their credit applications. Thus, the regulatory framework needs to accommodate flexibility in product origination and credit recording for a better risk profiling which includes digital financial services (DFS). The report also underlined the high potential for well-structured value chains to obtain credit from financial institutions, and channel it indirectly to large numbers of small- and medium-size farms. As the cotton sector that, already better organized, is benefiting from the banking sector, other value chains can be supported for more organization and better access to credit. The report encouraged measures to increase the presence of financial service providers in rural areas and to facilitate customer assessment and monitoring, particularly through microfinance institutions and mobile money actors for expanding their distribution channels and agent networks.

The government of Mali has also put in place the first foundations to operationalize warehouse receipt financing⁶⁷ by adopting a law governing warehouse receipts in 2018. Because of the COVID-19 pandemic and the disruptions along food value chains in Mali and across the world, facilitating access to improved storage infrastructure that allows commodity owners to obtain credit based on their securely stored collaterals offers an opportunity for farmers, processors, and traders to improve their livelihoods and increase the competitiveness of the sector. However, the current regulatory framework does not comply with international standards. For the mechanism to be fully operational, the first step will be to review and complete the legal and regulatory framework. Therefore, a warehouse receipts system (WRS) steering committee consisting of relevant public and private stakeholders (agriculture value chain representatives, financial institutions, warehousing service providers, and key government ministries) should be created in the short term to support the development and adoption of the necessary law and decrees, including the future regulatory agency. In the longer term, the government should pursue activities that will promote warehouse receipt financing through communication campaigns and demonstration activities and will catalyze private investments in warehousing infrastructure and services.

3.3. SPECIAL ECONOMIC ZONES IN THE AGRIBUSINESS SPACE

One catalytic policy that Mali can effectively leverage to promote resilient economic growth in agribusiness is private sector–driven agribusiness SEZs as buttressed by a modern SEZ legal, regulatory, and institutional framework. The most powerful and dynamic policy attribute of SEZs for a country like Mali is their inherent quality to serve as catalytic demonstration areas. In these designated areas, national, state and provincial, or municipal and local governments can experiment with and pilot new economic, social, regulatory, and institutional approaches. Upon realizing positive results through trial-and-error techniques on a relatively smaller, albeit more manageable, scale, a country can later execute the piloted spatial area reforms more broadly at the countrywide level.

SEZs can provide both the transitional and future Malian governments with an effective policy to address these constraints efficiently, targeting each zone. SEZ-specific reforms can gradually be carried out by targeting individual SEZs before being extended and applied to the rest of the economy of Mali. These targeted SEZ reforms, in turn, can enable even a FCS state like Mali to achieve the following practical outcomes in agribusiness:

- Improve the enabling business environment and infrastructure, including transport networks.
- Facilitate the efficient, equitable, and responsible access to, and use of, agricultural lands.
- Provide enhanced access to agricultural inputs (for example, seeds, fertilizers) and suppliers.
- Promote the expanded provision of related technical services, including laboratory testing.
- Facilitate access to local, regional, continental, and even global supply and value chains, especially for smallholder farmers.
- Improve sanitary and phytosanitary standards.
- Consolidate links to research and other institutions (for example, R&D, training).
- Leverage digital network production-and-distribution platforms to increase mechanization.
- Attract national, foreign, and diaspora investment to create jobs.
- Provide viable testing grounds for innovative crop techniques and alternative energy sources.
- Improve Mali’s exporting prospects.
- Solidify the bridge among medical science, agribusiness, and environmental protection.

Agribusiness SEZs can uniquely target anchor ICT and digital network providers to locate in future Malian SEZs to establish digital production-and-distribution platforms. Such platforms would comprise private sellers and buyers of inputs (for example, seeds, fertilizers), output (for example, fresh produce or processed products), and financial products (for example, warehouse receipts, financial leasing). By doing so, agribusiness SEZs can accelerate promoting strategic local, regional, continental, and even global agribusiness supply and value chains in Mali. (For a more comprehensive discussion on the innovative role that SEZs can play in Mali, see appendix D).

BOX 3.3. LESSONS LEARNED: SEZ BEST PRACTICES FOR MALI

- SEZ Failure Factors:** Lessons learned around the globe show that three factors are primarily responsible for failed SEZ regimes, including in Africa. They are (a) the absence of best-practice and detailed SEZ law and regulations that compel both public and private sectors to adhere to international SEZ development and operation standards, (b) the failure to conduct comprehensive SEZ feasibility studies as mandated by the SEZ enabling law and regulations, and (c) the lack of world-class offsite infrastructure that includes streamlined transportation networks.
- Draft Mali SEZ Law:** The draft Mali SEZ law (as prepared by the IFC SEZ legal team) is predicated on international best practice standards that are found not only in chapter 14 of the ECOWAS Investment Policy but also in the SEZ law and regulations of the following countries in which SEZs and other zones have been successful: Bangladesh, Djibouti, Haiti, Jordan, Morocco, Panama, and Philippines.
- SEZ Feasibility Studies:** Specifically, the future Mali SEZ law (when adopted) will greatly increase the probability of successful SEZ development and operation in the Sahel nation by requiring undertaking comprehensive SEZ feasibility studies that will incentivize, inter alia, the establishment of viable public-private partnerships (by using efficient incentives based on performance investment incentives) to construct critically needed off-site infrastructure.
- Expanded Tax Base:** The future Mali SEZ law will also promote increased tax revenues by assessing a simple 20 percent SEZ flat tax in the future Mali SEZs where today no regulated economic activity is taking place. This feature can potentially serve as a positive demonstration effect for Mali's national fiscal regime.

Source: IFC analysis.

Agribusiness SEZs—as reinforced by digital network platforms—can provide the private sector with the economic foundation to accelerate agricultural transformation in Mali. This enlarging can be done by gradually helping private Malian farmers to expand the complexity of products along the entire agribusiness value chain through mechanization and innovation by improving human capital through an expanded knowledge base and skills-upgrading and by streamlining and rationalizing transport and ICT connectivity, among other achievements. Strategically developing essential infrastructure and services on a targeted basis by implementing innovative SEZ public-private partnerships (PPP) mechanisms can further take advantage of the positive value-chain attributes of SEZs. Such a strategy can then be replicated in Mali's neighbors in the Trans-Sahel region, many of which are also FCS nations.

One constraint that impedes Mali from establishing a best-practice SEZ regime is the absence of a modern SEZ legal, regulatory, and institutional framework. To date, there is no law or regulations governing SEZs in Mali. The existing legal framework consists of one article in the investment code. Given the complexity of SEZs, that article is not adequate to make a compelling business case to entice seasoned foreign investors to make any SEZ investments in the West African nation. Not surprisingly, this government-regulatory setback, juxtaposed with Mali's precarious security situation and recurring political instability, explains why no SEZ exists in Mali today.

The immediate solution is to push for Mali to adopt the draft Mali SEZ law. The best-practice SEZ law will enable Mali to eliminate—by targeting individual SEZs—many of the market and government-regulatory constraints discussed in this report. Thereby, business opportunities for the private sector can be expanded, especially in agribusiness and health care (COVID-19).

Recommendations

Harmonize laws and codes governing the agricultural sector, reduce institutional fragmentation, and strengthen capacity by doing the following:

- Review existing laws, codes, and regulations governing the agricultural sector to determine the need for updates, to identify existing gaps, and to make recommendations for harmonization.
- Make institutional reforms to consolidate irrigation development and to merge the regional agricultural directorates with the regional rural engineering directorates.
- Conduct a feasibility study on digitizing the phytosanitary and other certification services to reduce time and costs and to improve Mali's ability to compete internationally for high-value crops.
- A decree or r ete by the Ministry of Economy and Finance to complement the investment code and the customs and taxes codes to help and simplify importing greenhouse technology.

Harness technology for physical and human capital by doing the following:

- Support private investors to boost downstream investments in bulk storage, refrigeration, processing, packaging, and quality control.
- Increase the proportion of the agricultural GDP budget devoted to R&D, focusing on recruitment and training for PhD researchers, especially female researchers.
- Provide incentives to the private sector for investing, importing, and developing technologies and capital goods that minimize postharvest losses and waste.
- Bank and digitize agricultural flows by investing in real-time information systems on commodity prices. Obtaining comprehensive and real-time data on what is sold, at what price, and to whom will allow for more traceability and transparency in the sector.

Improve access to finance by using the following measures:

- Establish and operationalize a modern legislative and regulatory framework for a warehouse receipt system. A WRS is necessary to unlock capital and boost entrepreneurship, especially in the cereals and export-oriented value chains.⁶⁸ WRS is a method of inventory financing in which loans are made against goods held as collateral in a licensed warehouse. Currently, commercial bank and insurance product loans are not adapted to the agricultural sector, given that the sector's risks and time are very different from those of nonagricultural endeavors. For example, five-year loans are unrealistic for agribusinesses if the objective is to establish plantations or orchards. Investments in such enterprises are front-loaded and require years of patience and careful monitoring before fruits can be harvested. It is vital to account for these factors when designing financial products for agribusinesses. The concept of patient capital is also very important for Mali and for stakeholders to integrate into their thinking as they execute public expenditure programs designed to boost value chains.⁶⁹ The first step will be to review and complete the legal and regulatory framework. Therefore, a WRS steering committee consisting of relevant public and private stakeholders (agriculture value chain representatives, financial institutions, warehousing service providers, key government ministries) should be created in the short term to support developing and adopting the necessary law and decrees, including the future regulatory agency.
- Mobile network operators (MNOs) and DFS providers could support digitizing farmer payments not only to reduce the cost and risks of delivery, but also to help individual farmers establish a digital footprint that would open the door for credit in the future.
- Grants, subsidies, and other government programs should be channeled through DFS to foster financial inclusion, and also to provide households with a stable financial flow that could be used as collateral for their credit applications;
- Leverage DFS to deliver specific assets on credit to rural households and farmers, through dedicated pay-as-you-go mechanisms.

Aggressively pursue an agribusiness SEZ policy and adopt draft SEZ law by doing the following:

- The immediate short-term solution is for Mali to adopt its draft SEZ law, in strict accordance with the Mali SEZ Implementation Strategy outlined in appendix D. Implementing such an aggressive agribusiness SEZ policy can trigger not only the creation of the SiKoBo (cross-border agribusiness) SEZ by private sector SEZ developers and operators, but also the establishment of other private sector-managed SEZ agropoles throughout Mali. These positive economic outcomes will then provide the private sector with additional reasons to invest in Mali even under the current challenging circumstances.

4. KEY CONSTRAINTS TO PRIVATE SECTOR DEVELOPMENT

4.1. ENERGY

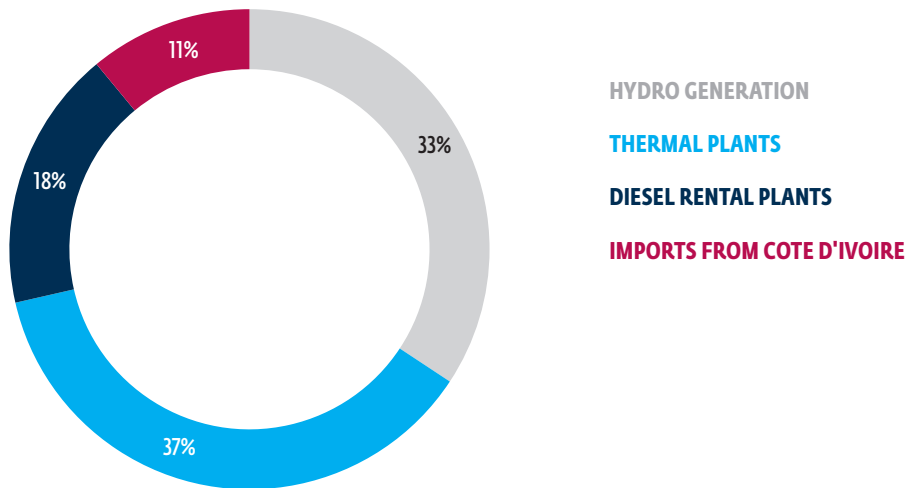
Despite significant progress over the past two decades, access to reliable electricity supply in Mali remains low, particularly in rural areas. The national electrification rate in Mali reached 51 percent in 2018, against only 28 percent in 2010 with the number of people with access to electricity increasing from 4.2 million to 9.7 million.⁷⁰ The recent progress means that Mali in 2018 surpassed for the first time Sub-Saharan Africa's average rate of electricity access of 48 percent. This progress is driven predominantly by a relatively high electricity access rate in urban areas of 86 percent, compared to 78 percent in Sub-Saharan Africa. Whereas the rural access rate has also improved, reaching 25 percent at the end of 2018, it remains extremely low (albeit close to the regional average of 32 percent). The number of people without access to electricity decreased only slightly from 10.7 million in 2010 to 9.4 million in 2018, largely attributable to relatively high population growth. Demographic growth and urbanization are two structural trends in Mali that will continue to affect the expansion of electricity demand, which will need to be matched by an adequate expansion of electricity supply if the sector is going to meet its development objectives. This expansion is particularly important because Mali is ranked 106th in the Global Competitiveness Index⁷¹ for quality of electricity supply, and access to electricity is cited by Malian firms as one of top three constraints on business operations.⁷²

Within the perimeter of its concession, the vertically integrated Malian electricity utility, EDM-SA, has monopoly over power transmission and distribution, whereas generation is open to the private sector. EDM-SA is therefore the single buyer for power supplied by independent power producers (IPPs). The energy supplied is generated by the thermal generation plants owned and rented by EDM-SA, from electricity imports from Côte d'Ivoire, and from the regional hydropower facilities (Manatali and Felou) owned by the Senegal River Basin Authority (OMVS) and managed by the OMVS's energy management company. The Malian Agency for the Development of Domestic Energy and Rural Electrification (Agence Malienne pour le Développement de l'Energie Domestique et l'Électrification Rurale, AMADER), created in 2003, is in charge of electricity service delivery to rural areas through a PPP approach, whereby rural electrification concessions are granted to private operators. The Regulatory Commission for Electricity and Water (CREE), reporting to the prime minister's office, was established in 2000 to regulate the water and electricity sectors. CREE's mandate is to protect customers, promote competition when possible, arbitrate disputes between the government of Mali and operators, and

approve adjustments to ensure fully cost-reflective tariffs. However, its actual role in the sector has been limited owing to heavy government intervention, for example, through direct negotiations with private operators and proposed tariff adjustment reversals. Furthermore, CREE’s mandate is limited to EDM-SA’s concession perimeter. AMADER undertakes regulation by contract for rural electrification concessions.

Overall, Mali has an endowment of clean power. To meet growing domestic energy demand, Mali has, over time, relied less on hydrogeneration and more on thermal and expensive rental units, resulting in a significant increase of EDM-SA’s operating costs and further deteriorating the sector’s viability. In 2019, the total installed capacity in the interconnected system was 455 megawatts (MW), of which 156 MW was from hydropower plants (that is, 33 percent versus 94 percent in 2003) and 259 MW (56 percent) was from thermal (103 MW from EDM-SA-owned thermal power plants, 66 MW from Albatros IPP thermal plant, and 80 MW, or 18 percent, from expensive diesel rentals), and 50 MW was from electricity imports from Cote d’Ivoire (11 percent) (see figure 4.1). A key challenge of the electricity sector is to reduce electricity generation costs so that the the sector is financially sustainable, can increase access, and can attract private sector participation.

FIGURE 4.1. ENERGY MIX IN THE MALI ELECTRICITY SECTOR, 2019



Source: EDM-SA, Annual Report, 2020.

Key Constraints

Mali faces key structural constraints challenging the sustainable development of its power sector as follows:

- **Lack of strategic planning (including an appropriate tool to manage the sector), overlapping responsibilities, and lack of governance.** Weak planning and implementation capacity, limited public resources, and lack of experience in dealing with private sector investors have resulted in many structural issues. PPP projects have generally followed discretionary practices (awarding sole sources), resulting in a higher cost of generation that is ultimately passed on to the end user, and have been signed with private operators in a nonstructured fashion without a full view of the sector and not following least-cost tariffs. Moreover, the additional generation capacity has been planned without considering the need to reinforce aging transmission and distribution infrastructure. It has led to Mali's paying capacity payments to IPPs that are unable to (a) evacuate power or (b) deploy renewables generation that is curbed by the limited grid capacity to absorb it. Furthermore, this lack of strategic planning has resulted in Mali's having limited options: Mali must either increase reliance on expensive emergency diesel rentals to meet fast-growing demand or increase imports. There is a critical need for sector planning based on a program and for the public stakeholders' capacities to design and manage it to be strengthened. Mali has made several commitments in this regard, including signing a moratorium to award future generation expansion projects through transparent and competitive procurement to benefit from least-cost prices. A least-cost generation plan is being developed under the supervision of the Ministry of Energy to define priorities, based on a least-cost and competitive approach, for new generation, transmission, and distribution infrastructure investments. Yet, its timely completion, acceptable legal registration, and enforcement remains to be ensured and protected from vetted political and private interests.
- **Lack of funding led to obsolete transmission and distribution infrastructure with high losses:** The quality of the electricity provided by the EDM-SA has been deteriorating because of the degradation of the transmission and distribution networks. This deterioration is largely because the power sector doesn't generate enough cash to support the transmission and distribution networks. The EDM-SA's customer base has increased rapidly, from 120,000 households to close to 400,000 in the past 12 years. The rapid growth of the demand has overloaded the transmission and distribution network and the transformers in key substations are congested because of limited transit capacity and flexibility. EDM-SA's system losses were estimated at 22 percent in 2018 and the revenue collection ratio remained relatively low at around 85 percent. It is estimated that the transmission segment will need US\$1.4 billion by 2034 and an average of US\$27 million of additional investments in the distribution network annually, to deliver reliable and affordable electricity services to the growing number of customers. The scale and rapid pace of this investment plan illustrates the urgent need to address bottlenecks at the level of transmission and distribution networks to support the sector's development objectives.

- Financial viability and operational performance of the national utility are poor and deteriorating:** EDM-SA has to operate at a loss with tariff levels way below cost recovery and subsidies not sufficient to ensure a sustainable sector. Electricity tariffs have failed to reflect the increase of EDM-SA's operating costs resulting in mounting operating deficits. EDM-SA's costs per unit of electricity billed increased considerably in the recent past reaching 150 FCFA/ kilowatt hour (kWh) in 2018 and increasing further to 165 FCFA/kWh in 2019, while average tariffs remained largely unchanged. As such, the tariff deficit is now equivalent to 40 percent of the total cost of electricity per kWh (see table 4.1). Yet, given the extremely fragile social context, the government of Mali has not been able to adjust tariffs to reach equilibrium. Moreover, the operational subsidy EDM-SA receives from the government of Mali to fill the tariff shortfall is neither regularly paid nor sufficient. As a result, EDM-SA is left with operational losses (that is, up €29.4 million in 2018) and such deficit does not even reflect cash needed to pay debt service and fund capital expenditure investments in transmission and distribution or new generation capacity. Finally, the financial viability of EDM-SA is undermined by low collection rates especially from the public and parastatal entities, thereby reducing the amount of revenue billed and collected and further deteriorating the cash flow of EDM-SA.

TABLE 4.1. TARIFF AND COSTS

CFAF/KWH	2016	2017	2018	2019
Average tariff	97	96	100	100
• LV (low voltage)	104	104	107	106
• MV (medium voltage)	85	84	88	90
Costs per unit of electricity billed	135	129	150	165
Tariff revenue shortfall	38	32	50	64

Note: kWh = kilowatt hour; LV = low voltage; MV = medium voltage.

- Short-term commercial loans used to continue providing electricity services:** EDM-SA has relied on such loans to fill the ever-increasing cumulative cash shortfall, and the financial charges are further deteriorating its financial situation. Faced with increasing liquidity challenges, EDM-SA has been relying heavily on short-term borrowings to meet its obligations and has delayed payment to fuel and power suppliers. At the end of June 2019, EDM-SA's debt including arrears was estimated to be about 3.1 percent of GDP.⁷³ The situation has reached a point where EDM-SA can no longer pay for debt service unless it contracts additional debt, and therefore EDM is insolvent.

Recommendations

The energy sector in Mali requires a profound transformation to make it an efficient and more sustainable sector; one which would ultimately create budgetary space and reduce the subsidy requirement over time to effectively support long-term energy infrastructure development and address ancillary needs such as human capital development needs. Overall key areas for improvement needed for the current working of and sustainability of the sector are (a) improving EDM-SA's financial and operational performance, (b) developing a comprehensive electricity sector master planning including a clear way to select new-generation capacity on the basis of on a least-cost approach, (c) fostering the development of domestic on-grid renewables and benefiting from regional electricity imports, and (d) setting conditions to effectively deploy mini-grid programs to increase access in rural areas.

Among the recommendations here, two can be realized in the tenure of the transitional government. For others, authorities need to take intermediate steps for a seamless transition of the reform agenda with the next elected government.

Improve the financial and operational performance of EDM-SA.

- The financial viability of EDM-SA can be achieved through a combination of measures. First, increasing efficiencies in fuel procurement and management is important to complement on-going cost-reduction measures. Fuel costs constitute 50 percent of annual expenditures of EDM-SA. According to the approved Sector Recovery Plan, the government of Mali is committed to reducing the cost of fuel in the sector by 10 percent each year. Areas of improvements include a reduction of diesel consumption, new renewable generation capacities, and competitive procurement of fuel.
- Second, to achieve confidence in the ongoing financial sustainability of EDM-SA, there must be a regular review of costs and sufficient funding of maximum-allowed revenues against eligible expenses. Such funding could be done through a mix of compensation and tariff adjustments as deemed appropriate by the government of Mali. This mechanism will provide greater funding certainty to the sector. Immediately, the current transition government should appoint an adviser to help define the best approach to take.
- Third, improving the operational performance of EDM-SA through strengthening the performance contract (PC) and appointing an independent auditor of the PC is urgently necessary. In 2019, as part of the IMF program, the Ministry of Energy signed a three-year PC with EDM-SA to improve its operational performance and to reduce costs. For effective implementation of the PC, a clear set of activities and performance indicators to measure results needs to be identified by EDM-SA. As per the signed PC, EDM was required to prepare a pluriannual action plan and performance improvement plan to support implementation. This performance improvement plan needs to be implemented with clear measurable key performance indicators to improve EDM-SA operational and commercial performance and quality of service. An independent technical auditor should regularly evaluate the PC to improve transparency and oversight.

- Finally, the refinancing of EDM-SA short-term commercial debt and improvement is necessary to alleviate the utility from an ever-increasing financial burden and restore its ability to operate efficiently. Most of EDM-SA's commercial debt has a repayment period of less than a year and high interest rates—compared with debts on concessional terms. EDM-SA short-term debt can be refinanced through (a) on-lending by the government of Mali of concessional funding, and (b) the recovery of past-due receivables from government for public consumption and arrears in subsidy payments. In fact, this refinancing is to be pursued parallel to improving collection of commercial performance and revenues from public entities and private customers. Mali is committed to implement those two reforms as part of the comprehensive Sector Recovery Plan adopted in 2019 and updated in 2020. Their effective implementation, without further delays, will be critical to improve EDM-SA's financial sustainability and creditworthiness.

Develop a comprehensive electricity sector master plan.

- Improving planning and execution capability by the government is key to ensure a structured programmatic approach for the sector, to prioritize least-cost competitive new generation investments, and to upgrade the transmission and distribution networks in a coordinated fashion. The first step under the purview of the transition government is to finalize the master plan that is being developed by the Ministry of Energy through the World Bank-led Mali Electricity Sector improvement Project. This master plan is a critical piece to turn around the sector to ensure that (a) procurement of generation is aligned with the prioritization and timing laid down in the document, (b) procurement of domestic and regional generation projects is done competitively, and (c) transmission and distribution infrastructure investments are efficiently orchestrated to absorb the new renewable-generation capacity. By encouraging shifting away from negotiated deals and toward competitively procured IPPs, this master plan will also pave the way for further private sector investments. Hence, this master plan will set strict guidelines for new investments and their sequencing and will ensure the long-term sustainability of the sector. Its adoption by the government of Mali must be effectively secured to make sure that the government turns down any political and private vested interests.
- Considerable efforts also need to strengthen institutional capacity in the electricity sector to improve its overall governance and performance. To reach the sector's development objectives, capacity strengthening is crucial at the Ministry of Energy (and institutions such as AMADER), at the Ministry of Economy and Finance, at CREE, and at EDM-SA. This would contribute to better equip these institutions in identification, planning, procurement, and execution of projects including (PPP projects). Adequate capacity at this institutional level would contribute to improving the sector's legal and regulatory framework, making it more attractive to private sector participation and bridging the information asymmetry often associated with power purchase agreement (PPA) negotiations and implementation.

Foster the development of domestic renewables solutions through auctions and by leveraging regional electricity imports.

- Tapping into Mali’s huge renewable energy potential will clearly help lower electricity production costs and remedy the electricity sector’s acute shortcomings. To achieve the best possible tariff, especially for solar photovoltaic projects, auctions should be conducted on the basis of a clear risk allocation and bankable project documents. This would include the following:
 - Ensure that PPAs are bankable and based on the best industry standards. Bankability of the key terms such as duration, termination rights, tariff protection, performance monitoring, and so forth would attract private investors and ensure project funding by lenders.
 - Ensure that clear risk allocation is adhered to. The risks borne by the private sector should be restricted, to the extent possible, to the construction and operation risks that are best managed and mitigated by IPPs. For the other risks, the public sector should manage or reduce them. These risks include acquiring land, easing permitting and licensing, and ensuring a conducive fiscal environment (for example, value added tax exemption for equipment importation). Adhering to these guidelines would contribute to reinforcing the bankability of any IPP project.
 - Ensure the availability of the guarantee instrument to secure the payment obligations of EDM-SA and the Mali government. This action would reduce the perception of risk as long as the sector is not financially sustainable. Such a guarantee, in a form of a political risk guarantee, would cover PPA payments and, possibly, termination rights.
- With a clear investment framework, visibility on the sector strategy, and an appropriate risk allocation, Mali should be able to attract private investors and foster competition among independent power producers. As a result, auctions would lead to highly competitive tariffs, especially for solar photovoltaic projects, in line with what has been seen in other West African countries such as Benin or Senegal. In this respect, Mali will need to (a) design the most appropriate risk allocation to achieve the most competitive tariff possible and (b) build the capacity of the PPP unit and other institutions involved in PPP projects.
- Pre-negotiated electricity imports from regional neighbors are the lower-cost option for Mali that will allow for regional energy market integration and will also help Mali gradually phase out expensive thermal power generation. A new transmission line with Côte d’Ivoire is under construction and will allow the imports (today capped at 50 MW) to increase up to 200 MW by 2023. The Guinea-Mali interconnection project is approved and will provide 100 MW of imports by 2025 from the Souapiti Dam. The Manantali-Bamako Transmission line is being upgraded as part of the OMVS (Senegal River Basin Development Authority) program and will allow Mali to receive power from the Gouina hydropower plant (35 MW [of 140 MW]) under development.

Deploy effective mini-grids programs to increase access in rural areas.

- With only 25 percent of the Mali rural population having access to electricity, conditions for equitable access to electricity services in rural and remote areas must be created. As part of the Sahel Alliance initiative, Mali aims to double the electricity access rate by 2023. This rate would need an increase of the current investment for electricity access of US\$544 million to US\$3.4 billion. Beyond initiatives to expand the grid to major secondary towns, and given the transmission system is heavily concentrated in the southwest of the country, Mali must foster mini-grids and solar home systems.
- Mali has attempted to develop mini-grids. An estimated 3.9 million people (21 percent of the unelectrified population) will be best served by mini-grid projects.⁷⁴ Under the Spontaneous Application Projects for Rural Electrification program,⁷⁵ 68 private developers developed about 250 mini-grids between 2004 and 2015, connecting approximately 78,000 rural households. Despite initial success, these projects experienced several setbacks that have hindered their implementation: poor process for the selection of developers; issues surrounding the implementation of the program, such as lack of subsidy disbursement and grid encroachment; noncost recovery tariffs used as a political tool; and expropriation of private mini-grids. It is estimated that only between about 30 and 73 mini-grids are still operating today out of 250 that were operating in 2015.
- Mali should build on the lessons learned from previous mini-grids projects to make necessary policy reforms and restore market fundamentals to attract large private investments. Those reforms shall include, but are not limited to, setting cost-reflective tariffs, providing adequate compensation in case of grid encroachment, clarifying and reinforcing the institutional and regulatory framework, structuring bankable concession agreements, and prioritizing least-cost planning. By setting an enabling environment, Mali could be a candidate for large programmatic mini-grid tenders currently developed by different development finance institutions.

4.2. TRANSPORT AND LOGISTICS

Mali's landlocked geography, large land area, and uneven distribution of economic activities between north and south mean that transport connectivity is critical to link consumer markets with production zones. Road transport is by far the prevailing mode of transportation, accounting for almost all freight transport since rail transport ceased to function in 2018. Other transportation modes include inland waterways, with Koulikoro serving as a river port on the Niger (yet only navigable between July and January), and airports, including Bamako's international airport for which a potential concession is being discussed. In Mali's capital city, urban transport is inadequate, unreliable, and inefficient, despite Bamako witnessing record-high urbanization and population growth.

For its cross-border trade relations, Mali is highly dependent on regional transport corridors, which provide the country with outlets to the sea. The international maritime trade flows through two rail and road corridors crossing Côte d'Ivoire and Senegal and connecting to the ports of Abidjan and Dakar. A smaller trade volume transits through other ports like Conakry or Tema, and high-value and time-sensitive freight is shipped by air.⁷⁶ Historically, the Abidjan-Bamako corridor was the main sea access until the deteriorating security situation in Côte d'Ivoire made traders seek alternative routes through Senegal. The Dakar-Bamako intermodal corridor comprises two separate highways crossing the border in the north and in the south and reuniting in Senegal between Tambacounda and Dakar, and an uninterrupted railway line which is not the case for Abidjan-Bamako. In 2017, the volume share of the Malian maritime trade hauled along the Dakar-Bamako corridor was about 70 percent compared with 20 percent along the Bamako-Abidjan corridor. After adding the bilateral trade, the share moving along the Dakar-Bamako corridor becomes even higher⁷⁷ and reached 4.6 million tons in 2017.

The government of Mali, through the CREDD, is seeking to reduce this trade imbalance.⁷⁸ The program aims at diversifying and increasing agricultural production, developing manufacturing and transformative industries, improving transport and logistics, and attracting more private investments. The transport and logistics sector is expected to play a prominent role by providing country production areas and consumer centers reliable, cost-effective, easy, and swift access to national and international markets. While enabling the development of other productive sectors, it also generates opportunities for local and foreign private sector participation and financing.

The following analysis discusses the opportunities that could materialize over different time frames. Those opportunities are as follows:

- **Short Term:** In fewer than five years, reviving the Dakar-Bamako cargo railway concession
- **Medium Term:** In five to eight years, restoring and maintaining access roads to existing and potential agriculture production areas through long-term output- and performance-based contracts, and upgrading and maintaining the northern Dakar-Bamako road corridor through long-term PPP contracts
- **Long Term:** Over more than eight years, constructing and operating new inland terminals and logistics platforms, renewing the heavy-cargo long-haul trucking fleet, privatizing the management and operations of the Bamako airport, improving traffic flow and mass transit in Bamako, and restoring and maintaining high-demand trunk roads through long-term PPP contracts⁷⁹

Key Constraints

The quality and density of Mali's overall transport infrastructure are well below regional standards. The country ranked 96th of 160 countries on the 2018 Logistics Performance Index,⁸⁰ which measures the capacity of developing countries to efficiently move goods and connect manufacturers and consumers with international markets. The road on either the north or south corridor is uneven and, overall, in fair to poor condition as is the century-old railway track. In rural areas, poor road access hinders the development of agriculture (see the section on transportation constraints). Only 22 percent of the rural population has access to all-season roads, below the average of 34 percent in Sub-Saharan Africa, thereby hampering rural development and constraining human capital gains with limited access to health and education services. Improving all-season road accessibility to markets is critical to facilitate agricultural activities. The World Bank Group's 2015 Systematic Country Diagnostic for Mali identified poor access to markets and lack of competition in the transport sector as binding constraints to improving the livelihoods of smallholder farmers and pastoralists.⁸¹

A binational railway concession awarded to the railway company Transrail was launched in 2003 but terminated prematurely in 2015. Then the railway operator was the public entity Dakar Bamako Ferroviaire (DBF), which became defunct in 2019. Transrail shipping activity peaked at 416 million tonne-kilometer in 2007, but its share of the total volume of goods transported remained much lower than the road's, and this imbalance increased after 2010.⁸² DBF managed to move less than 10 percent of the maritime freight for a couple of years until the complete stoppage of the railway traffic in 2018. Since then, the entire international freight has been shipped by road along the north and south corridors. Shipping efficiency is low with an average time of 23.7 days for goods to reach Bamako from Dakar in 2015 (including 13 days on average in the port of Dakar), and transport price is estimated at 30 percent of merchandise value in 2016.⁸³ Despite termination of the Transrail concession at the end of 2015, the Transrail company is still being liquidated to allow for a clean, liability-free new concession to operate the Dakar-Bamako line, if revived by the two countries. The immediate future of the regional Dakar-Bamako rail is uncertain given the national plans of Senegal to revive its own railway track by building a standard gauge.

In addition to inadequate infrastructure and poor service, Mali's transport-logistics system suffers from market distortions.⁸⁴ Governance arrangements in the West African road transport sector are dated, highly inefficient, and distortionary; consider, for example, à tour de rôle system, quotas for national carriers, nonmarket-based freight allocation, overweight loads, oligopolistic unions and structures, inefficient institutions, a multitude of rent-seeking opportunities, and so forth. This has led large traders and industries to enter the transport business, primarily to support their own transport needs, thereby putting the most profitable segment of the transport market out of reach of commercial trucking operators. Consequently, transport services have become less lucrative, prompting commercial truckers to maximize short-term profits by overloading and operating obsolete vehicles, which not only inhibits containerization but also deteriorates road infrastructure prematurely and endangers road safety.

The poor performance of the transport sector has two root causes: the chronic underinvestment for both construction and maintenance of transport infrastructure and the lack of an adequate legal and regulatory framework applicable to transport logistics. The former is illustrated by the insufficient resources allocated to the road fund, but the situation is just as bad for urban transit, railway, inland waterways, and airports infrastructure. The latter perpetuates informality, entrenched lobbies, and inefficiency in road transport and has given rise to a dominance of the market by operators on own-account transport and a subsequent reduction of using the commercial road haulers' fleet, which in turn has led to lower truck rotations and higher transport prices.⁸⁵ Besides, the indirect subsidies granted to the Malian trucking industry undermine the prospects for developing a sustainable Dakar-Bamako railway (with the exception of a few toll sections, trucks don't pay an access fee as the railway does). Ongoing WBG assistance is encouraging formalizing the trucking industry and promoting a competitive environment for road transport.

Of 89,000 kilometers (km) that make up the national road network, the maintenance of 21,000 km is officially assigned to the road fund whose resources can only cover about 40 percent of the needs. Furthermore, only a portion of these resources is made available to the road fund and spent on road works, a situation which results in the actual maintenance of about 7,000 km of roads plus about 4,000 km funded by the European Union under a temporary labor-intensive maintenance program. The national network is subdivided into national roads (14,000 km of which 5,700 are paved and 1,500 are engineered earth roads), regional roads (7,000 km), local roads (29,000 km), and communal roads (39,000 km). About 100 percent of the paved and engineered earth roads, 15 percent of the national and regional earth roads, and less than 3 percent of the rural roads are maintained annually. The condition of the 68,000 km of rural roads depends on elusive local or communal contributions and on rural connectivity programs funded by international financial institution (for example, the ongoing World Bank-funded Rural Mobility and Connectivity Project that finances the rehabilitation of about 1,700 km of rural roads while causing the road fund to finance the annual maintenance of 1,200 km of rural roads). This explains why about 70 percent of the national paved and engineered earth roads are in good to fair condition while about 95 percent of the rest of the network is in poor condition.⁸⁶

Recommendations

Develop sustainable access to productive areas (medium-term opportunity):

- Because of the challenges previously described, some productive or potentially productive areas (agriculture, livestock, and extracting activities) in the southern part of the country cannot be accessed. Addressing this neglect requires increasing the effectiveness of road asset management and of road fund resources starting with the full and timely release of the resources legally owed to the road fund. The road fund draws its main resources from a fuel levy fixed by the Ministry of Economy and Finance and carved into the fuel excise tax collected by the Treasury. This fuel levy is equivalent to US\$.063 per liter, which is much lower than the international recommendation of at least US\$0.150 per liter and lower than the average fuel levy allocated in Sub-Saharan Africa. Relative to another benchmark, road maintenance expenditures in Mali top 0.5 percent of GDP compared to a minimum 1.0 percent rule of thumb or more if the network suffers from a significant maintenance backlog as is the case in Mali.

- Those conditions perpetuate the already low rural access index of Mali. Moreover, the government policy of limiting the allocation of national resources for maintenance while borrowing long-maturity international financial institutions (IFIs) money to prematurely rehabilitate is economically unsound.
- If the government were to increase the fuel levy and improve road asset management, new resources could be dedicated permanently to restore and maintain access roads to the productive areas instead of relying on occasional IFI rural connectivity programs.⁸⁷ Predictable and reliable long-term funding is a prerequisite to finance multiyear output- and performance-based contracts that provide small and medium contractors with an opportunity to hire and train local labor and acquire small-scale equipment by using local commercial loans and mutualized guarantees. Reliable roads in turn create opportunities for setting up businesses to transport private passengers and freight.

Upgrade and maintain the Dakar-Bamako Road Corridor:

- The proposed binational intermodal corridor project does not include any investment in road infrastructure except for logistics platforms and rest areas. Yet, the road condition on either north or south corridor is uneven and overall fair to poor. Both Senegal and Mali can reasonably allocate scarce national resources to rehabilitate and upkeep one road corridor; the preferred option is the northern alignment.⁸⁸
- Although Senegal and Mali give priority to the upkeep of their paved roads, the resources they can mobilize still fall short of their needs, especially along the corridors that cater to overloaded trucks where premature roadway failures are frequent. Maintenance funds are often diverted to fund emergency and rehabilitation works resulting in build-neglect-rebuild vicious cycles, uneven levels of service, and high government and vehicle operating costs. The lack of resources is also compounded by institutional and procurement barriers whose removal is at the center of an ongoing sector dialogue with Sub-Saharan Africa governments.⁸⁹ Their resolution would pave the way to implement road restoration and long-term maintenance contracts that are already within the reach of some countries. The high-demand roads would be rehabilitated, modernized, and fully maintained under long-term output- and performance-based contracts structured as a PPP.
- Such an approach is worth exploring for the northern corridor as a pilot project. The contracts would be arranged as government pays rather than users pay, thereby shifting the traffic risk to the government. Availability payments would be paid by the road fund, which would collect an adequate fuel levy and a load-distance charge levied on trucks. The load-distance charge would be consistent with the fee charged for track access; both would reflect the fuel tax policy for road and rail use, and track maintenance costs are borne by the railway operator. This approach requires, among other things, a strengthening and restructuring of the road fund in both countries, an increase of the fuel levy allocated to the road fund, and the necessary ring-fencing and backing of the road fund resources allocated to the PPP contracts to restore and maintain the high-demand roads for the long term.

- This opportunity may not materialize in the medium term because of the time required to complete the necessary regulatory reforms like increasing the fuel levy,⁹⁰ restructuring the road fund including ring-fencing and backing its resources earmarked for PPP contracts payments, and levying a load-distance charge on trucks. Nevertheless, this approach should be initiated and pursued actively as it is the best option to complement, strengthen, and sustain the set of actions planned under the proposed Dakar-Bamako Intermodal Corridor Project.

The following opportunities could be realized in the long term. They would lay the groundwork in the short to medium term that is necessary to bring the goals to fruition.

Construct and operate inland terminals and logistics platforms (long-term opportunity):

- Private participation and investment opportunities will be evaluated to construct new inland terminals, logistics platforms, and customs clearance facilities in Senegal and Mali.
- The new inland terminal in Nossombougou, to be funded by Dubai Ports World (DPW) under an agreement with the government, still requires a rail connection (about 30 km) to the railway corridor, when the corridor becomes usable.

Renew the heavy-cargo trucking fleet (long-term opportunity):

- Modal movements must be efficiently regulated along the corridor. Such regulations must formalize and modernize the transport and logistics industry; professionalize the trucking industry; and rationalize and optimize freight movements, transshipments, and customs clearance operations.
- At the same time regulations must minimize the heavy-cargo trucking fleets' current adverse impacts on Dakar and Bamako urban areas. As part of the modernization of the logistics industry, WBG is working to provide advisory and financial assistance to scrap and selectively renew the obsolete and aging heavy-cargo truck fleet like a similar program being implemented in Côte d'Ivoire.⁹¹

Privatize Bamako Airport operations (long-term opportunity):

- Since 2012, the government has been considering privatizing the operations of Aéroports du Mali (ADM).⁹² However, because of a strong resistance from highly unionized personnel, this idea was held back. But in 2017, faced with an alleged persistent mismanagement of ADM operations, the government dismissed its CEO and a year later officially announced its desire to privatize ADM. This announcement was met by another push back from ADM's personnel that forced the government to withdraw the plan.
- From 2012 to 2017, the Bamako Senou Airport underwent rehabilitation and modernization and was renamed International Airport Modibo Keita. However, in 2019, local media reported a considerable drop in the quality of ground and security services while traffic had expanded to nearly 1 million passengers.

This project is sensitive. Before the resignation of the latest president in August 2020, the government had reached the final negotiations of a quasi sole-source deal with a private operator. Assuming the new government wants to restart the privatization transparently and competitively, a thorough evaluation, access to reliable data, and a strong and credible commitment of the government to enforce the personnel retrenchment plan are required. These elements are necessary before assessing the financial viability and testing the appetite of private operators given the substantial passenger traffic. Nonetheless, the privatization is not expected to generate much capital expenditure because the passenger terminal was renovated recently. Rather, financing would come about by monetizing existing public assets through a sale and ticket entry fee.

Improve mass transit and traffic flow in Bamako (long-term opportunity):

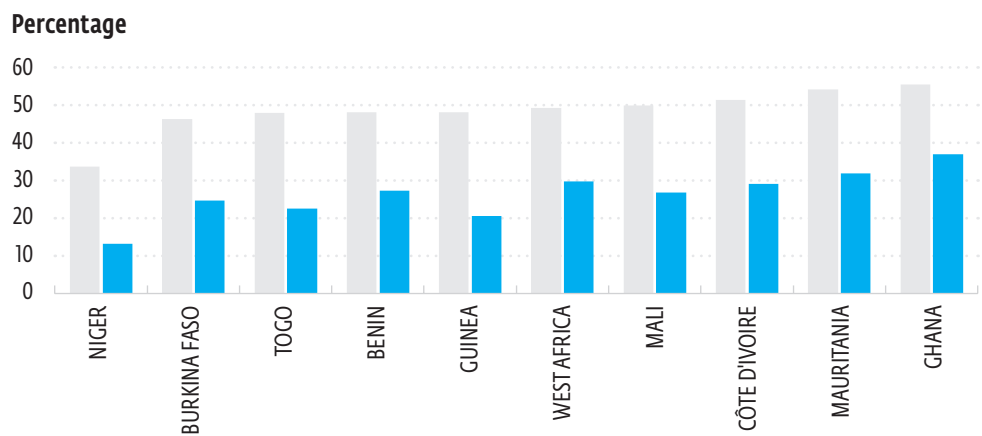
- These activities would concentrate on (a) professionalizing and formalizing urban transport operators and (b) strengthening metropolitan governance following models used and experiences gained in other West African capitals. The private sector, with support from IFIs, could explore suitable business models and work with the local financial sector to finance renewal of the mass transit fleet in Bamako.

Restore and maintain high-demand paved roads (long-term opportunity):

- If the governments of Mali and Senegal were to increase the road fund resources and improve the effectiveness of the road asset management as previously described, Mali could structure PPPs to restore and maintain the northern corridor long term. And also, Mali could prepare the way for comparable PPP contracts for other high-demand paved roads.
- In the same way as for the Dakar-Bamako road corridor, the road fund would collect a load-distance fee on trucks traveling on the restored roads. To reach this capacity, the road fund should upgrade to a so-called third-generation status described in *Scaling Up Private Sector Participation in Road Asset Management in Sub-Saharan Africa Project*.⁹³
- The number of restoration contracts would obviously depend on the road fund size and would provide opportunities to tap private financing and know-how. However, upgrading the road fund and the road maintenance requires a substantial fiscal effort and considerable capacity building that will take time.

4.3. DIGITAL INFRASTRUCTURE

Access to digital connectivity in Mali largely relies on mobile networks and is on par with that of peers (figure 4.3). More than 98 percent of subscribers rely on mobile connectivity, according to AMRTP, Mali's National ICT Authority.⁹⁴ The number of unique subscribers to mobile telephony stood at 50 percent of the population in 2019, compared with an average of 48 percent in Sub-Saharan Africa and 42 percent in low-income countries.⁹⁵ Likewise, the number of unique mobile internet subscribers stood at 26 percent of the population in 2019, compared to 25 percent in Sub-Saharan Africa and 19 percent in low-income countries. The sector generated a turnover of around US\$925 million in 2019,⁹⁶ contributed 5.7 percent to the country's GDP⁹⁷ and employed more than 1,200 workers. The COVID-19 crisis is expected to result in a 2 percent drop in the revenue of mobile connectivity without limiting the level of access.⁹⁸

FIGURE 4.2. PENETRATION OF MOBILE SERVICES AS A PERCENTAGE OF TOTAL POPULATION

MOBILE PENETRATION/TOTAL POPULATION
MOBILE INTERNET PENETRATION/TOTAL POPULATION

Source: GMSA Intelligence, 2020, <https://data.gsmainelligence.com/data>.

Mali has a fairly high access to international connectivity. The two private operators, Orange Mali and Sotelma/Malitel, have set up their own national fiber-optic infrastructures to access the international capacity of submarine cables through neighboring countries. Maroc Telecom (owning 51 percent of Sotelma/Malitel) has deployed the TransAfricain fiber-optic cable, linking Morocco to Burkina Faso through Mauritania and Mali. The 5,700 km cable improves the broadband connectivity of Maroc Telecom's subsidiaries in these countries by connecting them to the region's submarine cable systems. In November 2019, Orange Group announced plans to deploy a new international backbone network to be built around a terrestrial fiber network combined with submarine cables. The regional West African network will connect all the main capital cities in the region, including Dakar, Bamako, Abidjan, Accra, and Lagos. The commercial launch of the West African backbone happened on November 10, 2020.⁹⁹

Significant disparities remain in access to digital connectivity across users: 80 percent of the population in urban areas report having access to mobile telephony compared with 66 percent in rural areas, while 78 percent of men at the national level report having a mobile telephony service, compared with 61 percent of women. Despite making a large share of daily transactions to buy goods, women are still less likely than men to own a mobile phone and even more less likely to use the internet on a mobile. Literacy, affordability, and cultural bias play critical roles in the gender gap. As a result, a majority of women in rural areas are still excluded from accessing mobile money services; third-generation deployments have so far been restricted to urban areas and some areas of specific economic interest such as mining, despite proven upsides in value and job creation.¹⁰⁰

The country is also lagging in internet quality. Mobile download speed in Mali was 43 percent below the regional average and 38 percent below the income-group average in 2019. On average, 32 percent of the population is covered by a fourth-generation network. Mali has begun a number of initiatives that seek to support digital connectivity that are supported by the international donor community. These include the following:

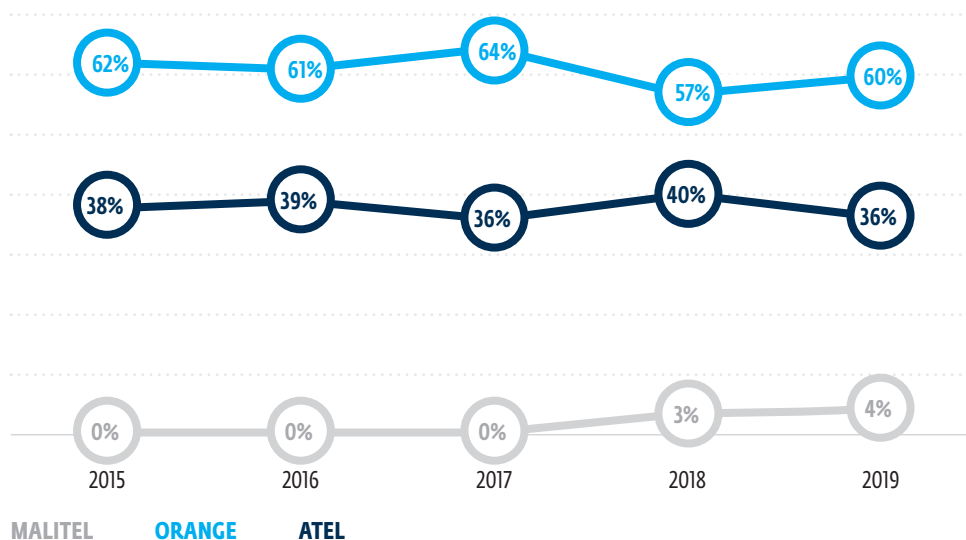
- **Digital Strategy 2020 (Mali Numérique 2020):** The government’s strategy set an ambitious vision to develop the digital sector around three main principles: (a) create a dynamic, structured governance and allocate adequate resources; (b) focus resources and carry out high-impact actions; and (c) make the action sustainable. The plan targeted 50 percent penetration of mobile internet by 2020. The plan is being updated.
- **Optical and Information Network:** Mali needs to modernize by building a fiber-optic network in Bamako, as well as by deploying national backbones. However, the commercialization aspects of this infrastructure are still unclear.

Key Constraints

Disparities in access to digital connectivity result from limited affordability. In 2019, the cost of 500 MB mobile internet represented 20.5 percent of monthly income, compared with an average 9.6 percent in Sub-Saharan Africa.¹⁰¹ The cost of basic mobile telephony for calls and text messages represented 17 percent of income, compared with 7.8 percent in Sub-Saharan Africa. Such levels of service affordability are further constrained by the price of devices as 65 percent of users do not own a smartphone.¹⁰²

Limited service affordability stems from low intensity of competition in the retail market for mobile connectivity. Over the past 17 years, the market has been led by a duopoly between Orange and Sotelma. A third mobile operator entered the Malian market in 2017, with limited effects on competition and services adoption (figure 4.4). The country awarded a fourth mobile license in December 2019; however, full terms are yet to be negotiated for setting up a new subsidiary for Algérie Telecom (Mobilis). The call for tender for this fourth license was supported by a previous action in an earlier digital phosphor oscilloscope (DPO) series.

FIGURE 4.3. EVOLUTION OF MOBILE MARKET SHARES IN MALI



Source: GSMA Intelligence, 2020, <https://data.gsmainelligence.com/data>

The gap in internet quality is primarily caused by not investing in network densification owing to limited competition, as described earlier; low intensity of infrastructure sharing; and limited availability of spectrum for mobile operators.

To date, the country does not have an independent tower company, thereby limiting infrastructure sharing, which is critical to cost effectively support network expansion in challenging areas. Radio spectrum that supports fourth-generation (4G) deployment has been awarded to the two largest mobile operators. From a regulatory standpoint, spectrum availability is still too scarce to enable full-scale deployment of mobile broadband services. The country lags its regional counterparts in 1–3 gigahertz (Ghz) spectrum allocation. Furthermore, no overarching telecommunications legislation exists in Mali; instead, a number of laws and decrees compose the sector’s regulatory framework.

These barriers are further augmented by an underdeveloped digital ecosystem, limited availability of digital skills, and poor development of public digital platforms. Venture capital funds for digital entrepreneurship in Mali are still not highly available despite the country’s 14 technology hubs, more than other Sahelian countries but less than other countries in the subregion (15 in Senegal, 22 in Côte d’Ivoire, and 25 in Ghana).¹⁰³ This situation is described further in section 4.4, Access to Finance. The country ranked 178th of 193 countries, according to the United Nations e-government 2018 rankings.¹⁰⁴ Moreover, 29.3 percent of the population over age 15 do not hold any form of official identity document, with a strong gender disparity, since more than 35 percent of women do not hold one compared to nearly 20 percent of men who do.

E-commerce platforms remain anchored in the informal sector by relying on social network platforms for access by customers. To increase consumer confidence, (a) specific provisions aimed at protecting online transactions up to settlement of disputes, (b) repression of fraud and cyber-attacks, and (c) issuance of electronic certificates for signature recognition are necessary and should be supported by establishing and operationalizing enforcement agencies.

Recommendations

The following reforms can unlock private sector investment in the digital sector and contribute to economic growth, jobs, and poverty reduction. In Mali, where above 50 percent of the population lives in rural areas subsisting on agriculture activities, the availability of connectivity can increase productivity and generate value that positively affects livelihoods, women’s in particular. Based on the findings of a recent study developed by the World Bank and the Global System for Mobile Communications (GSMA) that focuses on Nigeria and whose results are applicable to Mali, increasing mobile penetration from 70 percent to 79 percent in Mali would increase GDP levels by 0.3 percent. Increasing mobile broadband penetration from 20 percent to 39 percent would increase GDP levels by 1.6 percent. Increasing 3G and 4G coverage would create about 20,000 new jobs, and increased broadband penetration is expected to reduce poverty levels by lifting 100,000 people out of poverty immediately.¹⁰⁵

Creating a coherent roadmap to develop e-commerce platforms must be supported. Mali must define a coherent regulatory and investment strategy for the emergence of a robust e-commerce sector by involving all relevant parties, including the General Directorate for Commerce, Competition and Consumer Protection, Ministry of Industry and Commerce, and the Ministry of Digital Economy.

Market performance and private sector effects will be enhanced by reviewing the following:

- Reform the Ordinance n°2011-023/P-RM of 28 September 2011 on ICT to meet international best practices (for example, a general authorization plan, flexibility for innovative operators wishing to deploy in rural areas, reinforcement of rights of way, encouragement of infrastructure sharing, and increased transparency of sectoral agencies).
- Improve governance of the funds collected by the Universal Access Fund Management Agency (AGEFAU) for the Universal Service Fund, including (a) improving transparency and efficiency of the USF, (b) developing an efficient model of collaboration for rural connectivity between AGEFAU and mobile operators, and (c) publishing updated mobile coverage maps by the National ICT Authority (AMRTP).

The fiber wholesale market in Mali, characterized by little transparency and no public data available on wholesale conditions and tariffs, needs to be reformed to increase fiber deployment and availability. In addition, the government of Mali should conduct the following:

- Backbone and wholesale:
 - Explore implementing long-run incremental cost wholesale principles and develop a regulatory framework for transparent access and interconnection to the national fiber backbones capacity.
 - Initiate consultations between key backbone capacity players to accelerate mobile broadband deployment, enhance availability of middle-mile broadband capacity, and improve quality of service.
 - Review commercialization of state-owned fiber capacity, and investigate concession opportunities.
 - Remove regulatory barriers to access cross-border capacity.
- Infrastructure sharing:
 - Strengthen competition and reduce costs for operators with infrastructure sharing. The regulatory framework of Mali should facilitate all types of infrastructure sharing arrangements, which can involve sharing components of mobile networks, including passive and active sharing.
 - Investigate sharing agreement opportunities including introducing towercos on the market at passive and active layers of the last mile to increase network coverage for the population.

4.4. ACCESS TO FINANCE

Fourteen licensed commercial banks collectively account for more than 90 percent of total financial sector assets. The microfinance sector is much smaller, accounting for about 3 percent of financial system assets. The remainder of Mali's financial system comprises six nonbank financial institutions (NBFIs)—three mobile money operators, two guarantee funds, and one leasing company—and 11 insurance companies, which collectively account for less than 2 percent of financial sector assets.¹⁰⁶

Over the past decade, Mali's financial sector has made substantial strides despite the challenging operating context. The ratio of domestic credit to the private sector as a percentage of GDP was about 25 percent in 2019 compared with an average of around 30 percent of GDP in the WAEMU. The banking sector has witnessed increased competition, and an increasing proportion of formal SMEs and larger businesses hold accounts at a financial institution. While financial inclusion is lagging, the high penetration rate of mobile telephone services and the recent introduction of mobile money have sparked a positive transformation. They have enabled an increasing proportion of Malians to open affordable accounts and use mobile money to conduct financial transactions and exchange funds in a safe, reliable manner.

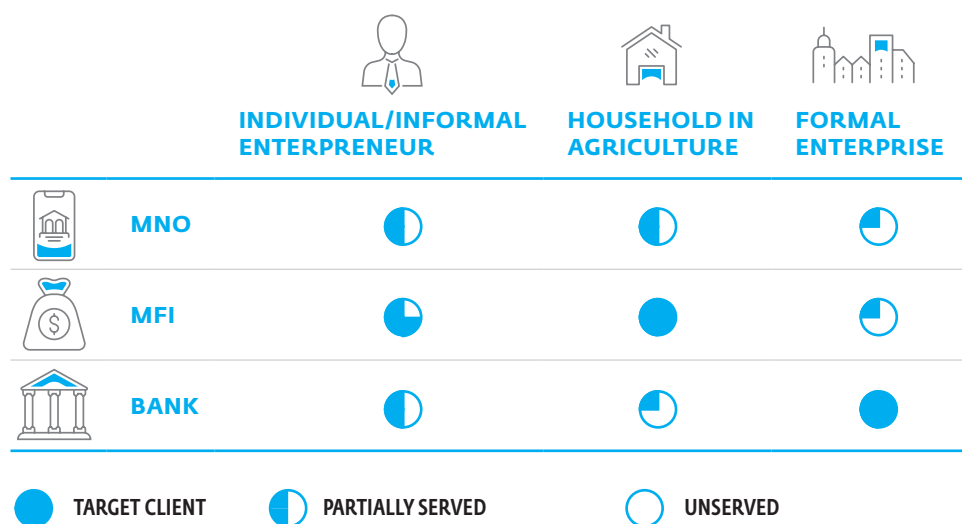
Nevertheless, challenges in access to finance remain acute. Among the many challenges facing entrepreneurs is the lack of affordable finance (28 percent of firms in API Mali's [investment promotion agency] portfolio). According to World Bank 2016 Enterprise Survey data, 20 percent of Malian firms consider access to finance to be the second most important constraint.¹⁰⁷ Commercial banks are risk averse and offer limited and unaffordable collateralized financing.

On the supply side, despite increasing levels of competition, Mali's financial sector is segmented across target groups (figure 4.5), with (a) traditional banks focusing on the needs of larger, formal businesses; (b) microfinance institutions (MFIs) mostly targeting a rural clientele of small farmers and microenterprises; and (c) mobile money providers competing for retail customers by providing money transfer products. On the demand side, lack of financial literacy in the general population, low levels of capitalization coupled with lack of formal credit history, and difficulty in evaluating repayment capacity result in high collateral requirements by banks and high cost of credit.

Gender gaps and rural and urban divides are persistent in financial inclusion. Mali has the highest gender gap in access to a financial institution account along with Benin (20 percentage points). Female ownership of financial institution accounts is at 10 percent of the population compared to male ownership at 27 percent (2017). The law does not prohibit discrimination in access to credit based on gender¹⁰⁸ and female MSME ownership is only 9 percent. Further, more than half (68 percent) of women-owned enterprises are credit-constrained.¹⁰⁹ The use of DFS through the internet is also concentrated in the most affluent, educated, and urban population segments: 45 percent urban versus 18 percent rural (2016).

Difficulties in obtaining long-term credit and finance for MSMEs and other underserved groups are compounded by the global COVID-19 outbreak. Overall, private credit for MSME financing is limited, and credit constraints are particularly acute for microfirms, women entrepreneurs, and farmers. As a result, MSMEs tend to rely heavily on their own resources, including those provided by friends and families, which accounts for 75 percent of financing for purchasing fixed assets, followed by bank loans (19 percent of financing). In this landscape, equity finance plays a minimal role, representing only 2 percent, while alternative financial instruments such as seed funds for start-ups and crowdfunding platforms remain at an embryonic stage. With the COVID-19 health crisis taking a toll on the Malian economy in 2020, particularly on smaller firms that typically have minimal cash reserves, the financial sector is poised to be hard hit as a result of liquidity shortages, deterioration of asset quality, and potential solvency problems. Uncertainties and heightened risk profiles are likely to lead lenders to pull back from riskier segments such as MSMEs.

FIGURE 4.4. TYPICAL COVERAGE OF CUSTOMER SEGMENTS BY FINANCE PROVIDERS IN MALI



Source: World Bank, "From Mobile to Credit: Financial Access for Poverty Reduction and Economic Growth in Mali" (World Bank, Washington, DC, 2020).

Note: MNO = Mobile Network Operator; MFI = Microfinance Institution.

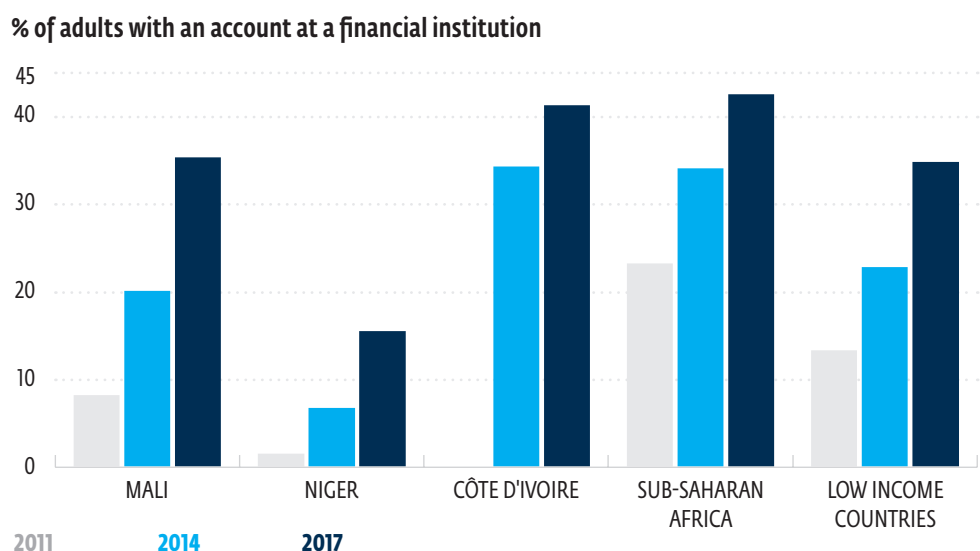
In April 2020, as part of its COVID-19 response, Mali announced an additional allocation of CFAF 20 billion to the existing Private-Sector Guarantee Fund (PSGF) to provide financial relief to MSMEs affected by the pandemic. This additional allocation is intended to support key economic sectors (such as tourism, hospitality, and seasonal exports), which have been most affected by COVID-19. The additional financing will enable the PSGF to issue partial credit guarantees to banks to incentivize them to issue new (or extend existing) loans for firms that experienced a decline in revenues and sales because of the crisis. The guarantees will have a higher coverage ratio (up to 80 percent) to compensate for the higher risks of loans to distressed companies.¹¹⁰ However, following the recent political changes in Mali, this measure has not yet been enacted.

Constraints for further developing the local financial sector include (a) weak financial inclusion, (b) high collateral requirements requested by financial institutions, (c) limited DFSs, and (d) lack of adequate financial instruments to provide long-term capital to entrepreneurs. Recommendations for tackling these constraints are structured around (a) SME banking, (b) microfinance, (c) digital financial services, and (d) entrepreneurship. Access to agriculture finance is detailed in the chapter 3 of this report, dedicated to agriculture.

SME Banking

Most financial transactions continue to be conducted in cash, with limited connections with formal financial systems. According to the 2017 Global Findex database,¹¹¹ only 35.4 percent of Malian adults (ages 15+) have an account with a formal financial institution, which fares under the Sub-Saharan African average of 43.0 percent (figure 4.6). The share of adults with an account at a formal bank has improved from 13.3 percent to 18.2 percent. To access credit, Malians predominantly rely on loans from family and friends or on informal financial providers. Only a very small proportion of the population, largely consisting of those employed in the formal sector, have access to financial services, and those living in rural areas remain financially excluded—levels of financial inclusion in Mali’s rural areas are among the lowest in Sub-Saharan Africa.

FIGURE 4.5. BANKING SECTOR PENETRATION, 2011-17



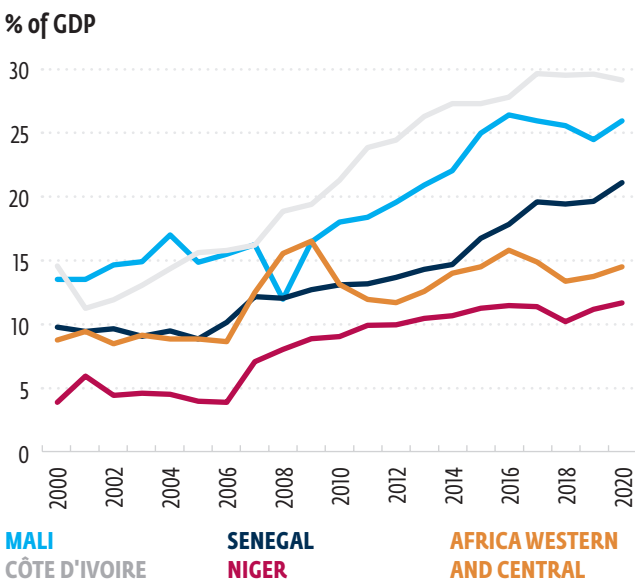
Source: World Bank Group, The Global Findex Database 2017, <https://globalfindex.worldbank.org/>.

Over the past decade, Mali’s banking sector has experienced sustained growth.

Despite the challenging political and security environment in Mali, this growth makes the banking sector the fourth largest in the WAEMU region. Domestic credit to the private sector rose from 13.5 percent in 2000 to 20 percent by 2020, above regional peers such as Cote d’Ivoire (Figure 4.6). Of the 14 commercial banks operating in Mali, 9 belong to African banking groups and account for more than 90 percent of total financial assets. Yet they are comparatively small in size, depth, and outreach.

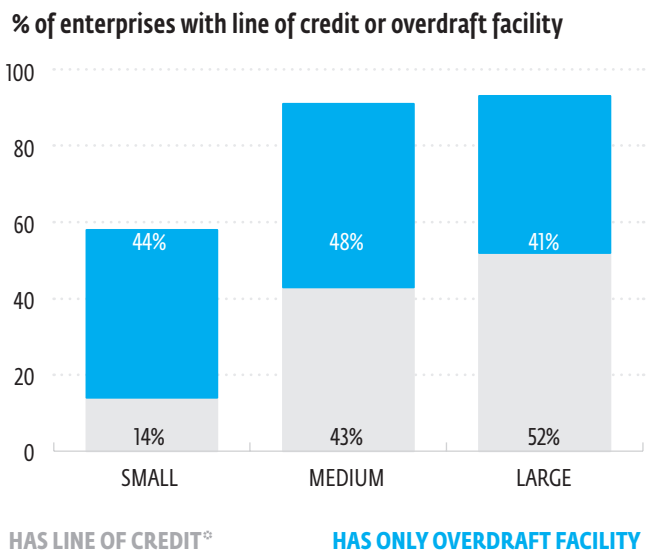
Access to financial services by the formal enterprise sector has considerably increased. However, huge disparities remain in financial inclusion, and credit is highly concentrated on a few large borrowers. Between 2007 and 2016, the share of Malian firms reporting to have a loan or line of credit increased steadily from 10 percent to 26 percent (figure 4.8). Yet banking sector credit is concentrated on formal enterprises, which account for less than 5 percent of wage employment. Whereas most of the 10,000 formal businesses operating in Mali have access to an account, a small proportion of them have access to credit. Large variations in access to credit exist by firm size: while about half of large firms report having a loan and line of credit, the ratio drops to 42 percent for medium firms and to only 14 percent for small firms. The formal MSME financial gap was estimated at 30 percent or US\$371.5 million, and 55 percent of MSMEs were financially constrained in 2017.

FIGURE 4.6. TOTAL FINANCIAL SECTOR ASSETS, 2000 - 2020



* WAEMU is the simple average of the asset/GDP ratios of member countries**
 *** Excluding South Africa and Nigeria
 Source: World Bank, Open Data (World Bank, Washington DC, 2021)

FIGURE 4.7. SOURCES OF FORMAL CREDIT BY ENTERPRISE SIZE, 2016



* It includes "Have both LOC and OF" and "Have only LOC".
 Source: World Bank, "Enterprise Survey, 2016" (World Bank, Washington, DC, 2016), <https://www.enterprisesurveys.org/en/enterprisesurveys>.

Note: LOC = line of credit; OF = overdraft facility; SSA = Sub-Saharan Africa; WAEMU = West African Economic and Monetary Unit.

Key Constraints

Improving access to finance for formal businesses, particularly smaller ones, is critical as MSMEs contribute to more than one-third of GDP and three-fourths of Mali's exports. The share of Malian firms considering access to credit as a major constraint has been rising. Smaller enterprises have access merely to overdraft facilities that can be used only to finance working capital, not investments. For larger enterprises, including those operating in sectors such as agro-processing that are critically important to create agricultural added value, the short-term nature of loans is also an issue.

Major bottlenecks on the supply side include heightened levels of risk aversion resulting from a general reluctance of commercial banks' to lend to segments they perceive as riskier. Despite competitive pressure and rapid credit growth over recent years, credit remains highly concentrated among a limited number of wholesale solvent borrowers with whom banks have established relationships: Mali's top 50 borrowers receive almost one-third of the total credit. This fact may reflect not only the risk aversion on the part of the banking sector with a reluctance to diversify to help smaller client but also the interest rate cap of 15 percent imposed by the BCEAO, which discourages lending to segments of the market perceived as high risk. Over time, banks have also increased their exposure to government securities, and public domestic debt held by banks has increased from 1.9 percent to 6.8 percent of GDP between 2011 and 2017.¹¹² The generally short nature of credit that banks provide is reflected in the composition of economic sectors, with close to 50 percent going to trade.

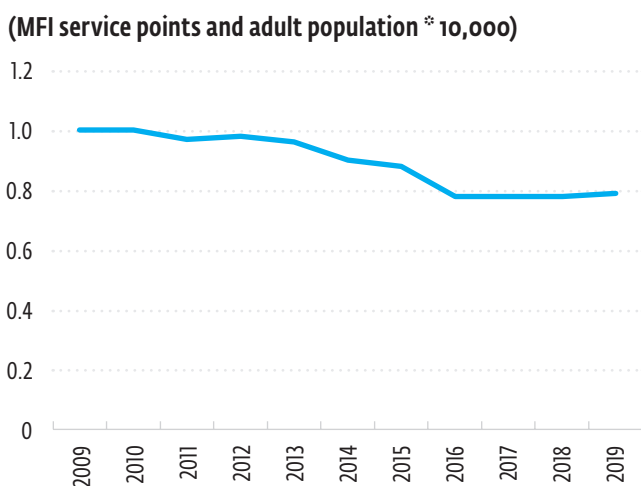
On the demand side, factors constraining access to financial services include low levels of financial literacy in the general population coupled with difficulties in accessing reliable collateral such as property titles or presenting steady cash flows (for example, as a result of irregular harvests in agriculture). Banks are facing significant information asymmetries such as lack of reliable credit information on SME clients, which banks perceive have high risk. As a result, banks set high collateral requirements for loans (some of the highest in the world as a percentage of principal), including the cost of property registration. Banks also struggle with developing or adapting products, offering inadequate loan sizes or maturities to clients. With these constraints and without a clear strategy for the unbanked, banks remain biased toward more profitable, sovereign lending.

Furthermore, an old and incomplete financial sector regulatory framework has been an issue over the past decade. Mali's financial sector is regulated by BCEAO and is supervised by both regional and national institutions—in particular, the banking commission is responsible for supervising the banking sector as well as systemic MFIs.¹¹³ The emergence of MNOs has added a layer of complexity, since MNOs have been encouraged to create independent companies as nonbank e-money issuers supervised by regional financial sector regulators, while MNOs themselves are subject to domestic ICT regulatory authorities' control. Across the WAEMU area, it has been almost a decade since the last revision of the banking laws, during which time several innovative changes have occurred in the financial landscape, including the emergence of agent banking, e-banking, alternative finance, risk-based anti-money laundering and combating the financing of terrorism (AML/CFT), and expansion of digital financial services. For long-term finance, regional regulation and infrastructure are also wanting. Capital market development is hampered by the lack of conducive environment, and critical pieces of regulation are missing, especially for SMEs (including venture capital and private equity, covered bonds, minibonds, basket bonds), while the institutional investors base is insufficiently mobilized and the infrastructure is fragmented. (For example, the yield curve cannot be built owing to the coexistence of two sovereign bond issuance systems and an inactive money market, failing to anchor the yield curve.)

Microfinance

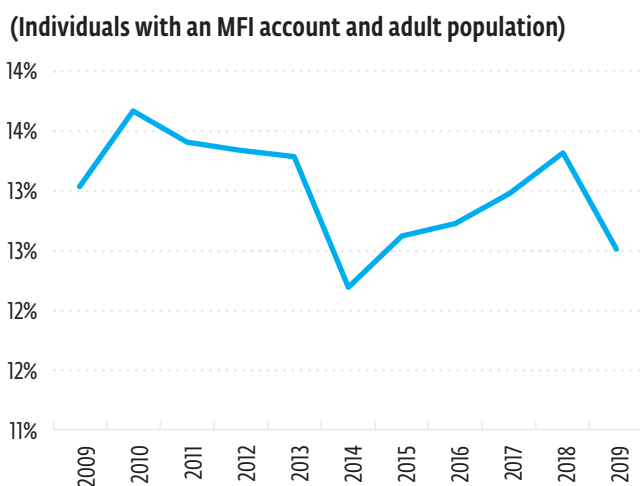
The microfinance sector in Mali, which accounts for about 3 percent of total financial sector assets but serves a similar number of customers to traditional banking, has been in a state of emergency over the past decade. This situation is largely due to MFIs lacking the resources and capacities to scale up their expansion into remote, rural areas, added to weaknesses in sector governance and supervision. While the MFI sector has not fully recovered from the 2009/2010 crisis, as shown by the pending liquidation of a number of smaller institutions whose licenses have been revoked, recent actions by national and regional authorities—including a new microfinance law with tighter prudential rules and closer supervision by the BCEAO—have helped to address the high level of nonperforming loans (NPLs). Furthermore, new entrants in the MFI sector have boosted the sector’s professionalism and quality of governance – rapidly gaining a significant market share and facilitating overall sector recovery (figures 4.9 and 4.10).

FIGURE 4.8. GEOGRAPHIC PENETRATION OF MICROFINANCE SERVICES



Source: BCEAO, Etat d’Inclusion Financière 2009 – 2019.
 Note: MFI = microfinance institution.

FIGURE 4.9. USE OF MICROFINANCE SERVICES

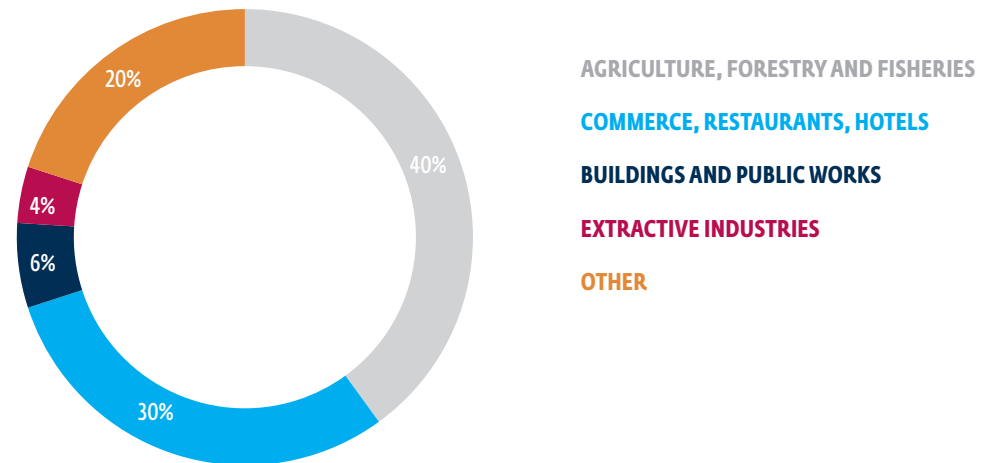


Source: BCEAO, Etat d’Inclusion Financière 2009 – 2019.
 Note: MFI = microfinance institution.

The MFI sector has traditionally played a critical role in Mali’s rural areas, bringing a significant proportion of the population into the financial sector. MFIs are the lenders of choice to the rural sector, with a footprint serving roughly 1 million, mostly low-income, farming clients. At present, approximately 65 percent of MFIs’ loan portfolio consists of loans to farmers and producers in the agricultural sector, thereby expanding from its original focus on cotton and rice producing zones (figure 4.11). Yet more work is needed to incentivize MFIs to develop products and services tailored to the needs of MSMEs (especially for micro, small and medium sized in both urban and rural areas) and incorporating MFIs in key agricultural value chains, such as cotton. There are approximately 100 MFIs registered and licensed by the Ministry of Economy and Finances, yet 7 large MFIs dominate the market with over 82 percent of the sector’s total assets and 72 percent of clients.

FIGURE 4.10. MFI CREDIT ALLOCATION, BY SECTOR

(% of outstanding credit)



Sources: CCS/SFD, BCEAO, 2019.

Note: MFI = microfinance.

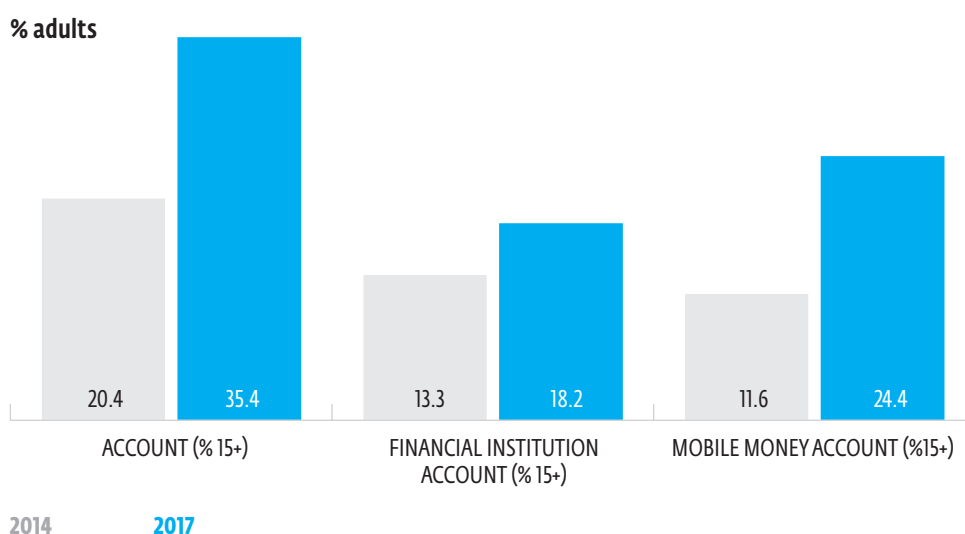
MFIs face numerous challenges that still need to be addressed, starting with the quality of corporate governance and professional management. Whereas efforts have been made to clean up the sector and build up the capacity of elected officials, more attention is required to (a) increase the educational levels of board members of large financial cooperatives and (b) strengthen strategic management capacity and risk management and internal control systems. Further, relaxed supervisory controls and the institutional capacity at the Ministry of Finance hinders the sector reaching its full potential. MFIs are also facing challenges to move digital (which will enable increasing the outreach and increasing the efficiency), because several of them are still working without management information systems or with weak ones, which is a key prerequisite, and they are struggling to finance such investments.

Digital financial services

Since 2010, the entry of MNOs in Mali has increased financial sector competition and spurred positive market disruptions, allowing underserved segments to gain access to new financial products. Indeed, financial inclusion is increasingly driven by digital payments, government policies, and a new generation of financial services accessed through mobile phones and the internet.¹¹⁴ In Mali, this development was aided by the political crisis, which spurred an increase in the use of mobile financial services, especially for money transfers, since mobile money provided a safe and affordable means to transfer funds to and from areas affected by the security situation. Total mobile connection penetration rate in Mali stands at 111 percent, the third highest rate in Sub-Saharan Africa.¹¹⁵

Mobile money has the potential to transform access to finance by addressing constraints related to proximity and cost. The rate of penetration of mobile money agents is dramatically higher than for traditional banking, with significantly lower costs: now 24.4 percent of Mali adults have a mobile account compared with only 11.6 percent in 2014, which shows how much mobile account ownership is growing (figure 4.12). With this proportion the country positions itself strongly against the Sub-Saharan Africa average of 21 percent. In 2016, there were 287 active mobile money agents for every 100,000 adults in Mali, a much higher rate than in Côte d’Ivoire (146), Niger (100), and Senegal (176). By contrast, in Mali, there were only 3.8 bank branches for every 100,000 people and 3.3 MFI points of service.

FIGURE 4.11. FINANCIAL ACCESS TRENDS IN MALI



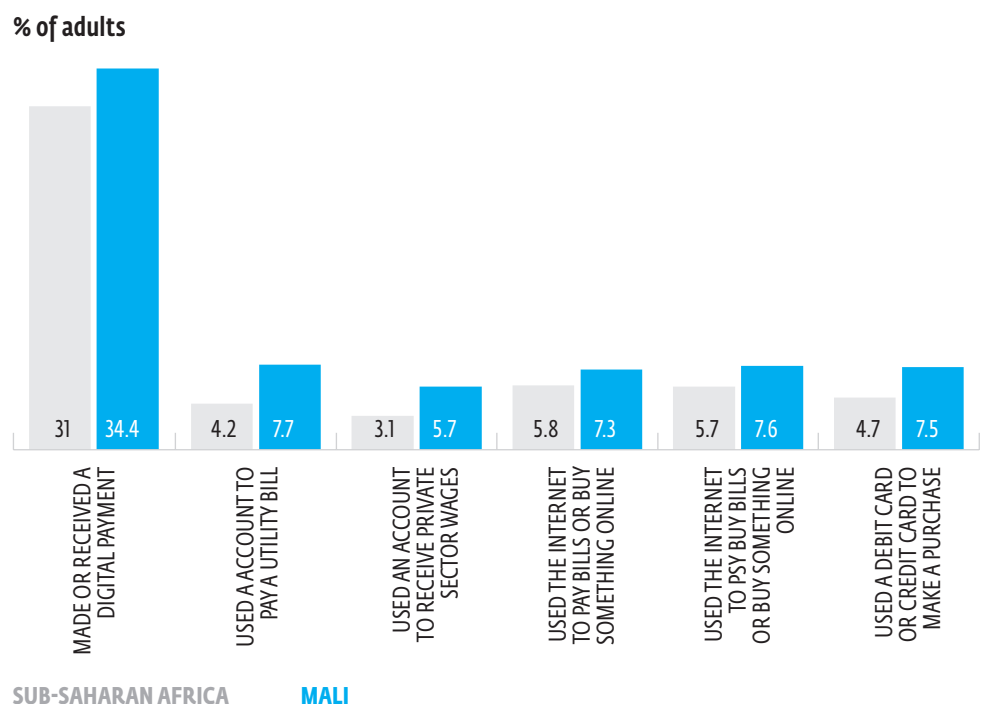
Source: World Bank Group, The Global Findex Database 2017, <https://globalfindex.worldbank.org/>.

Mobile money can also provide an entry point for access to a broader set of sophisticated financial products. Yet the newly integrated population segments mostly use mobile money only for transactional services. So far, Mali’s mobile money market has been dominated by first-generation products (mostly person-to-person transfers) and has been used mostly for domestic remittances and sales of airtime for mobile devices. Diversifying mobile money products to include savings and credit products would require MNOs to enter into partnerships with other institutions, including MFIs.

As of today, Mali accounts for 2 of the 33 mobile money deployments in the WAEMU region.¹¹⁶ With 7 million mobile money accounts, Mali represents 10 percent of WAEMU's overall number of accounts (77 million), which makes it the fifth-largest mobile money market in the region. For regional market share, Mali is above peers like Niger (4.46 percent), Guinea-Bissau (1.22 percent) and Togo (6.13 percent). As in other Sub-Saharan African markets, the DFS activity rate is around 43 percent, similar to the regional average, but below Burkina Faso and Senegal. In use, airtime top-ups and cash-outs are the most prominent transactions, accounting for roughly 15 and 22 percent of the country's transaction volume, respectively. Mali has 148,000 mobile money access points in the region, representing 22 percent of the region's total with an activity rate of 30 percent. Mali (like Benin) represents 12 percent of the region's volume of mobile money transactions and even 13 percent in value.

First-generation DFS products still dominate the market in Mali (figure 4.13). Whereas newly integrated population segments use mobile money mostly for transactional services such as cash-in cash-out and person-to-person transfers, bill and utility payments, airtime top-ups, and bulk payments, second-generation products are emerging, including digital credit, savings and insurance, merchant payments, international remittances, and the bank-to-wallet services. Yet diversifying mobile money products to include savings and sophisticated credit products would require MNOs to partner with other institutions, including MFIs.

FIGURE 4.12. USE OF DIGITAL FINANCIAL SERVICES IN MALI AND SUB-SAHARAN AFRICA



Source: World Bank Group, The Global Findex Database 2017, <https://globalfindex.worldbank.org/>.

The current law on the credit bureau was revised in May 2019 to remove article 53 related to the consent of the consumer before sharing personal financial data. However, unlike Burkina Faso, Côte d'Ivoire, Niger, Senegal, and Togo, Mali has yet to require utility billers to provide creditors' consumer postpaid data to the credit bureau. Such a reform has the benefit of allowing for a broader database and prepares for an enhancement of alternate lending opportunities. Indeed, without consumer data, it is impossible to build credit algorithms and scoring tools for the financial sector to further support digital lending.

On the regulatory front, BCEAO's guidelines that were issued in 2015¹¹⁷ opened the DFS market for MNOs to compete independently from banks by authorizing two types of e-money institutions. The two types of e-money issuers were either based on a banking model or a nonbank model. It allows for a range of e-money issuers, including banks and nonbank financial Institutions (MFIs and e-money institutions; EMIs), which are permitted to issue e-money with a few preconditions. Separate microfinance regulations, however, severely limit MFIs' involvement in noncore activities such as issuing e-money. NBFIs and other nonbank institutions like MNOs, must create a separate legal entity and apply for an EMI license. To become licensed, EMIs must meet separate standards on corporate governance and be solely dedicated to issuing e-money. Some MNOs are setting up (or have already set up) e-money subsidiaries to use this EMI license.¹¹⁸ To offer digital savings and loans products, nonbanks must continue to partner with financial institutions.¹¹⁹

Key Constraints

Limited access to quality and affordable digital connectivity hampers Mali's digital economy through DFSs and entrepreneurship. With the Malian population largely unbanked, DFSs have essentially been provided by MNOs, and banks are just starting to develop their own digital products. Such expected expansion of digital infrastructure, discussed in the digital infrastructure chapter of this report, should enable e-commerce and provide entrepreneurship opportunities for 9 million young Malians (47 percent of the population).

Interoperability is partially effective in Mali through payment cards, but the BCEAO shows commitment to improve it. Although interoperability is not mandated by regulation, the 2015 e-money instruction requires e-money issuers to take the necessary technical and operational steps to facilitate interoperability with other payment systems.¹²⁰ BCEAO has developed a "road map for interoperability" to encourage interoperability among competitors while taking measures to secure full interoperability through a regional payments switch by 2021.¹²¹ Although difficult to achieve in the face of one dominant provider, effective market collaboration can emerge when market players understand the potential shared benefits of network effects.¹²²

Regulations governing agent networks and agency banking exist but are enabling mainly for EMIs. The legal framework for contracting agents is slated per category of provider. EMIs have clear guidelines for managing agent networks, and this has enabled EMIs to grow the number of agents and develop a capillary agent network. The instructions are less friendly for MFIs, which are required to establish actual branches to offer agency banking. Mali's 2010 Banking Law permits banks to conduct agent banking, but the conditions are deemed too stringent by the market (US\$10,000 deposit requirement for intermediaries in bank operations).¹²³

Know-your-customer (KYC) regulations enable DFS, but still restrict access to traditional financial accounts. Tiered KYC is permissible for e-money account holders and allows for limited mobile money use without formal identification documents. The 2015 e-money guidelines set the transaction and monthly thresholds for mobile wallet customers to CFAF 200,000 (US\$380) before a valid ID is required. In theory, customers can transact without a valid ID up to this amount; however, in practice MNOs require an ID when purchasing a SIM card. Currently, no tiered KYC permission for financial institutions exists; institutions still require that new customers provide a photo ID and proof of address, thereby restricting uptake.¹²⁴ The current AML/CFT regime prevents commercial banks (as opposed to e-money issuers) from adopting simplified or tiered KYC plans for lower-risk products or customers, such as predefined ceilings and digital onboarding of customers through permanent simplified customer due diligence procedures (while maintaining adequate provisions to mitigate AML/CFT risks). Biometric identification is permissible but subject to government authorization.

Finally, the development of a financial technology ecosystem in Mali requires a comprehensive legal and policy framework. With the growth in e-money users and technological innovation at full speed, there is potential to encourage innovative financial technology solutions to support improved access to safe transaction accounts and encourage their frequent use (for example, artificial intelligence, machine learning, cloud computing, and blockchain). The use of supervisory technology (suptech) is also increasingly relevant for strengthening oversight and lowering the risks involved in DFS. In this regard, the telecommunications regulator must be involved in the supervision of the ecosystem through suptech tools.

BOX 4.1. DIGITAL FINANCIAL INCLUSION: A REGIONAL REFORM AGENDA

Mali should engage in closer and more regular dialog with the West African Economic and Monetary Union (WAEMU) and the Central Bank of West African States (BCEAO), (including the Regional Financial Markets Regulator [CREPMF]). Such engagement would speed up the legal and regulatory updates required to ensure a level playing field between finance providers (commercial banks, nonbank financial institutions, microfinance institutions [MFIs], and mobile network operations), thereby fostering competition and innovation, and provide cost-efficient financial services. Specifically, this agenda will comprise the following:

- **Credit reporting system:** Reviewing legislation on credit information to improve the quality of data available in the credit register and authorize credit bureaus to use alternative data (including prepaid and postpaid utility data—for example, bills), in order to enrich their scoring mechanisms.
- **Expansion in banks' outreach and a reduction in the use of cash in the economy, particularly in rural areas and among customer segments that are less likely to have official documentation.**
- **Simplified and risk-tiered know-your-customer (KYC):** Amending the existing anti-money laundering/combating the financing of terrorism (AML/CFT) legislation to enable banks and financial institutions to introduce a range of products with simplified KYC requirements and onboarding of customers, as is authorized for e-money issuers. This action could facilitate an
- **Agent banking framework:** Amending the agent-banking regulatory framework to allow banks to fully leverage the agent-banking model and ensure a level playing field across finance providers (including mobile money providers and MFIs). Developing a capillary agent network (according to terms defined by the agent contract) would enable banks to enter into contracts with super agents, who can then develop the agent network cost-effectively.

Such reforms can only be acted on at the regional, BCEAO, and WAEMU levels. Other desirable measures, such as making interest rate caps more flexible for digital credit, can be acted on through the WAEMU Council of Ministers and other entities where Malian authorities sit. The goal is to build a regulatory environment that fosters competition and innovation in the provision of financial services (including through the regulation of financial technology companies) and is conducive to delivering saving, insurance, and credit products through digital platforms.

Source: IFC staff.

Recommendations

Pathways for accelerating financial inclusion in Mali go in two directions: (a) facilitating access to low-cost financial services by removing both supply- and demand-side constraints such as widespread information asymmetries and the risk aversion of financial institutions and (b) fostering financial intermediation and improving access to credit by expanding the banking sector customer base and leveraging mobile money and digital financial services as a key entry point.

Whereas much of the regulatory work required to accelerate financial inclusion in Mali takes place at the regional level (WAEMU and BCEAO), several directions could improve access to finance for underserved segments such as agriculturalists, businesses and entrepreneurs if the Mali government removed both supply- and demand-side constraints. Those directions include (a) leveraging mobile money and digital financial services as an entry point to financial inclusion and thereby putting to use a powerful tool for integrating disadvantaged people into the formal financial sector; (b) revitalizing the microfinance sector through strengthened governance and capabilities for better outreach to rural farming communities; (c) reactivating the existing Private Sector Guarantee Fund to make it an efficient platform for liquidity-starved MSMEs and other businesses hit hard by the COVID-19 crisis; and (d) rolling out financial literacy programs to educate the general population, particularly youth, on opportunities and risks inherent to financing their business.

Leverage mobile money and digital financial services as an entry point to financial inclusion.

- Mali plays a key role in fostering uptake of DFS and promoting market-based competition. Some options include supporting the systematic adoption of electronic payments by government institutions and creating a conducive regulatory environment for DFS-based saving, insurance, and credit products (for example, flexible interest rate caps for digital credit and integration of DFS providers into the credit information system).
 - Adopt a pro-DFS ministerial decree and a schedule to implement the digitization of government payments (to be cosigned by the Minister of Finance and Minister for the Digital Economy) over one to three years. The decree would establish a high-level government committee on digital transformation, cochaired by the president or prime minister, that would be in charge of digitizing select government-to-person and person-to-government payments. The committee would help identify priority payments for digitization, such as civil service salaries and other social transfers, in collaboration with interested line ministries and public agencies (for example, the ministries of finance, health, education, and telecommunications). The goal would be to incentivize government agencies and private sector employers to pay salaries and make other transfers in e-money instead of cash.
 - Finalize adhesion of Mali's Treasury to the WAEMU GIM-UEMOA program, the regional interbank card switching and clearing service designed to facilitate digital payments across the WAEMU region and lower cross-border transaction costs for financial service providers.¹²⁵ With the GIM-UEMOA becoming fully interoperable by 2021 and widening its membership to include the broadest possible range of operators, including mobile telephone payment operators, finance providers will be able to provide more DFS at a cheaper cost, including e-wallet transactions across MNOs and between MNOs and commercial banks. Adhering to the GIM-UEMOA will enable the Treasury to digitize cash transfer programs, open e-wallets, and distribute prepaid debit cards. As of now, a technical agreement has been reached on the digitalization of cash transfer programs.
 - Adopt regional (BCEAO level) or national regulation to favor access to digital credit by authorizing regional or national credit bureau to collect alternative credit information sources such as consumer prepaid and postpaid utility data (bills) and other available data sources.

Strengthen governance and operational capabilities in the microfinance sector.

- Mali can strengthen these capabilities by helping to establish shared management information and information technology systems, providing the systems with access to the unstructured supplementary service data (USSD) channel and enhancing access to affordable financing through the establishing a refinancing facility. It can also do as follows:
 - Clarify roles and responsibilities in the governance, regulation, and supervision of the MFI sector. Assign to the Ministry of Finance the sole supervisory function (in collaboration with BCEAO) and the Ministry of Industry with the promotion function.
 - Facilitate access to the USSD by MFIs, by continuing to lower its cost and easing its access by value-added financial service providers (VAFSPs). AMRTP currently asks companies to pay US\$250 to declare a value-added service offering USSD, leaving many small businesses and start-ups de facto excluded from this market. Establishing a team in the Malian regulatory agency to assist VAFSPs in obtaining USSD short codes and joining the USSD platform (for example, Togo multiplying the number of active codes).
 - Develop a refinancing facility for MFIs by setting up a guarantee fund for MFIs with the BCEAO, leveraging on existing government guarantee plans. The guarantee components of this fund could be the following: (a) a portfolio guarantee mechanism to share the credit risk of microfinance loans provided by Tier 1 MFIs and (b) a guarantee on refinancing loans for Tier 2 and Tier 3 MFIs, to enable them to have access to more attractive financing conditions.

Operationalize and strengthen the Private Sector Guarantee Fund:

- This action will enable the fund to take on more risks and catalyze MSME on-lending through sophisticated financial products and risk mitigation. The PSGF was reinvigorated in 2020 as part of the Mali government's COVID-19 response package, and additional funding to bolster the PSGF's existing resources is still to be deployed. Going forward, good working relations between the PSGF and financial institutions must be ensured, and capacities must be built in the PSGF to enable it to extend new products such as portfolio guarantees. The following need to be considered:
 - Conduct a needs assessment of Mali's PSGF to determine priorities for capacity building and product development. The PSGF was designed to provide guarantees and other risk mitigation products to partner banks, thereby filling the MSME finance gap in a competitive, market-oriented way. In the COVID-19 crisis, the PSGF was recently reactivated to proactively handle the expected increase of NPLs in banks' portfolios.
 - Enhance transparency and build good working relations with partner commercial banks by competitively appointing three independent board members from the private sector, by establishing a standing audit and risk committee, and by ensuring regular prudential reporting.

Roll out financial literacy programs in partnership with MNOs and interested banks and MFIs:

- Financial literacy programs would focus on increasing awareness and facilitating the use of digital accounts by people with limited levels of general and financial literacy. Illiteracy is one of the most commonly cited reasons for financial exclusion, alongside lack of proper identification documentation. In Mali, where a majority of people use a basic phone and the illiteracy rate is high (particularly among women), partnerships between MNOs and interested financial institutions to promote behavioral messages in local languages through mobile telephones would be a powerful tool to reach financially excluded customers. Wide-scale, broadly targeted financial literacy programs could also enable inactive or low-use customers to develop internal financial skills and capabilities, such as farmers and small business owners in developing their own business and investment plans and applications for financiers to consider. Successful financial education programs are defined by the following characteristics: (a) simple and actionable; (b) personalized for individuals' needs and situations; (c) timed to coincide with decision making; (d) accessible and entertaining; and (f) targeted to reach those who are primed to learn, such as young adults.¹²⁶

Establish a National Observatory for Financial Services in charge of protecting consumers and raising awareness on financial products and services.

- Key missions would include (a) ensuring regulatory compliance and fair competition in the banking sector, (b) monitoring and sanctioning reprehensible practices by commercial banks, (c) receiving consumer complaints, and (d) settling disputes. The observatory would also partner with MNOs and interested banks and MFIs to roll-out financial literacy programs targeting youth and focusing on helping people with limited levels of literacy use digital financial accounts.

Entrepreneurship

Prior to the pandemic the entrepreneurship ecosystem in Mali, although still nascent, has been steadily growing in the past few years. This growth is demonstrated by the number of entrepreneurship support organizations (ESOs), such as incubators, accelerators, fab labs, and coworking spaces that have emerged. A recent World Bank study¹²⁷ estimates that in 2015 only four ESOs were operating in Mali. In 2019, this number had grown to 24 structures. Despite the growing number of ESOs, their capacity and quality of services still varies. Only a few offer structured programs, including mentorship, that effectively help start-ups in their growth from ideation to prototyping to markets. The majority of ESOs provides services that are not always tailored to the needs nor maturity of the start-ups. The same study underscores the fragility of their business models, highlighting how ESOs themselves operate in a start-up mode and would benefit from strengthening their capacities, developing more robust and structured curricula and funding strategies adapted to the local reality.

While the number of female entrepreneurs is growing, female entrepreneurs still face more hurdles than their male counterparts. With only a 0.678 score on the 2017 Gender Inequality Index, Mali is trailing at the end of the list, being ranked 157th of 160 countries surveyed. Only 7.3 percent of adult women have reached at least a secondary level of education (against 28.8 percent in Sub-Saharan Africa), and only 12 percent of women are literate (against 27 percent of men). The lack of professional training and tailored support compounds the ability of uneducated women to acquire the necessary skills to move to higher-value-generating activities. From rural farmers to the urban elite, women entrepreneurs face discrimination. Patriarchal traditions have also been replicated in regulatory frameworks, barring women from accessing land, equity, and inheritance equally. According to the *Women, Business and the Law 2020* report¹²⁸ improvements have been made in the workplace and in pay indicators as Mali is listed in the report as one of the economies that has seen policy reforms. However, because of societal norms, female entrepreneurs still do not have equal access to credit from banks and other financial providers.¹²⁹

The recent COVID-19 pandemic has further highlighted the importance of a strong entrepreneurial ecosystem. With formal businesses being affected by the economic crisis and being forced to let go a large number of their employees (on average 29 percent), many of the job seekers have turned to smaller enterprises for employment. In the past few months, the country has seen an increase in entrepreneurial endeavors, several of which are addressing the service delivery in health and education. Some of these endeavors include an enterprise providing health care services for patients in their homes and another delivering online courses for graduate students.

The growing importance of entrepreneurship for the country's economic growth is reflected in the increased attention to this by the government. Mali's initiatives, such as Tech Fridays, have contributed recently to spotlight the topic of entrepreneurship and the need for strengthening the entrepreneurial ecosystem. From these initiatives surfaced promising entrepreneurs (mainly operating in the digital sector), many of whom have received seed funding in the form of prizes or grants to test or refine their business ideas or products. Whereas these initiatives have had the merit of drawing attention to entrepreneurship, their impact has remained limited and has not addressed the systemic issues that affect entrepreneurs, such as the lack of (a) a proper legislative framework for start-ups, (b) dedicated funding instruments, (c) adequate capacity building support, and (d) access to networks and regional markets.

Under the support of the Ministry of Digital Economy, a participatory dialogue was launched in 2018 to identify key bottlenecks faced by entrepreneurs and to put forward recommendations to further strengthen the entrepreneurial ecosystem. This resulted in the Mali Start-Up Act, which was adopted by the council of ministers in September 2019. Similar to other national Start-Up Acts, such as in Senegal and Tunisia, the Mali Start-Up Act includes a series of measures and fiscal incentives for new start-ups in the digital sector to register their businesses. Hence, these start-ups will exit from the informal sector, where most operate. The Mali act also foresees establishing dedicated funding (such as an investment fund for start-ups) aimed at providing the long-term capital start-ups require. An accompanying decree, which further details how to operationalize these measures, has been drafted but not yet been adopted because of the recent government changes.

Early-stage enterprises require access to appropriate, growth-oriented financing.

Entrepreneurs do not normally have access to traditional commercial loans owing to a lack of credit history, negative cash flow, or insufficient collateral. Local banks and partial guarantee institutions, such as the PSGF, are reluctant to lend to MSMEs and cite the high risks and costs as primary reason, followed by the lack of long-term funding and adequate collateral. Poor titling and contract enforcement increase the uncertainty and costs to enforce collateral claims, causing banks to require more collateral to compensate for future losses. The rising costs and risks of doing business in Mali further reduces banks' appetite to lend to MSMEs and, in cases where they do finance them, limit their exposures to mostly short-term credit. Most banks limit their lending to a few established MSMEs with a long track record and solid guarantees, while smaller and less established enterprises remain either excluded or underserved. Hence, access to alternative financing resources such as friends and families, angel investment capital, or venture capital is critical to increase the chances of success of any new venture.

Risk finance mechanisms adapted to the seed stage (around US\$50,000 to US\$200,000) are at an embryonic stage. Mali's first Angel Business Network (Mali Angels), established in April 2019, has been perceived as positive sign toward providing seed funding for early-stage entrepreneurs. However, to date no investments have been made. The investment fund foreseen under the Mali Start-Up Act should also help address the financing needs of digital entrepreneurs. Additionally, the Ministry of SMEs has been looking into alternative financing mechanisms such as crowdfunding platforms, which are currently not present in Mali.

Private equity (PE) funds are an important institutional alternative to bank financing. High-quality fund managers go beyond just providing much-needed growth capital, but they also take an active, hands-on approach with their investees. This includes working with companies to refine strategies, guiding companies to strengthen management capacity, leveraging networks to introduce suppliers and customers, advising on expansion plays, and so forth. PE funds improve productivity and financial performance. Evidence shows that PE fund investee companies (a) deliver operating performance 4.5 to 8.5 percent greater than non-PE fund investee companies during the first three years after investment, (b) demonstrate better management (particularly to family-owned firms), and (c) are up to 50 percent less likely to fail than non-PE fund investee companies with similar characteristics. PE funds also promote international best practices across areas such as corporate governance, including establishing an independent board and introducing acceptable accounting, financial report, auditing, and environmental, social, and corporate governance along with insurance distribution directive practices.

Several lessons are applicable to Mali. They have been learned from IFC's SME Ventures, an investment program designed to identify and empower fund managers in frontier markets to make equity investments in SMEs. These lessons would guide the types of funds that could be considered:

- Limit single-country funds to large, more stable markets, and focus on regional funds. Any PE funds investing in SMEs in Mali should be regional funds investing across several francophone West and Central Africa geographies.
- Invest in fund proposals and fund managers that emerge in the market (and do not force the creation of funds and/or joint ventures). Focus attention on having teams based in-country, on developing relevant networks and capability to create value, and on creating a good track record.
- Ensure commercial and legal terms are standard terms, including management fees and standard fund structures. Less standard structures are more difficult for a broader set of investors to participate in.
- At the time of investment, set a minimum target amount for fund raising to ensure viability.
- Explore concessional funding and first-loss cover to accommodate potentially higher macro risk. Use concessional funding to encourage high quality fund managers to invest in frontier and fragile markets.

Recommendations

The following recommendations could help Mali unleash its entrepreneurial potential. They would do so by laying the foundations for a dynamic start-up ecosystem and by leveraging its youth bulge with proper skill sets and instruments.

Establish a set of dedicated funding instruments and credit lines adapted to the needs of start-ups and young entrepreneurs.

- One of the provisions of the Start-Up Act passed by the Council of Ministers in 2020 is to create funding for digital start-ups. To effectively support the entrepreneurial ecosystem, Mali should adopt the accompanying decree and consider widening the provisions of this act to all start-ups, not just those that are digital. This decree would be an effective measure to fund start-ups and young entrepreneurs who need to grow a business.

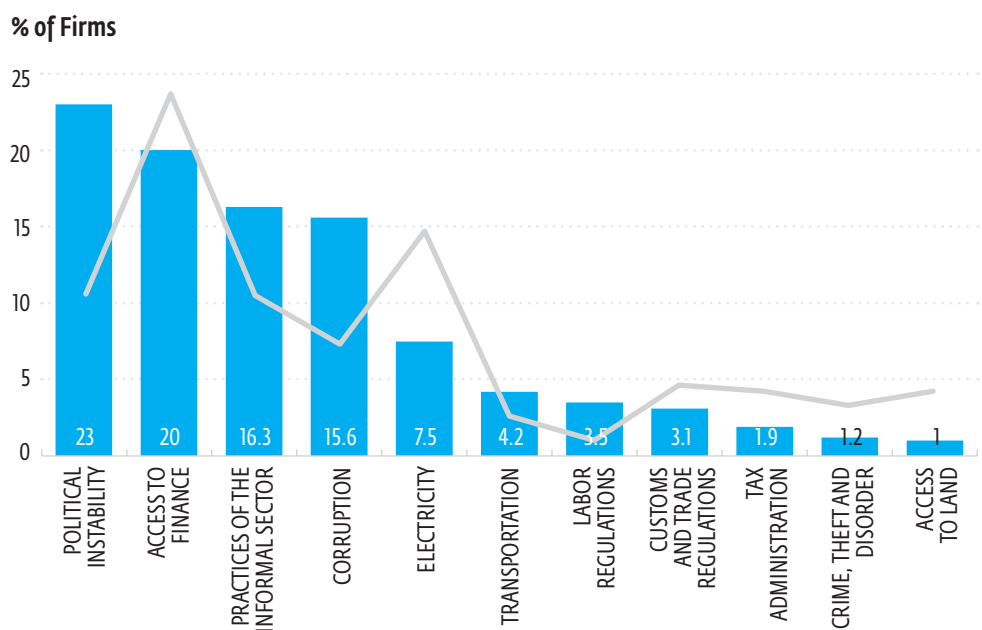
Conduct a feasibility study to the establishment of quasi-equity and private-equity funds that span the country and the subregional levels.

- Access to dedicated financing mechanisms is cited by entrepreneurs as the main challenge to entrepreneurship. In recent years, there have been efforts by private investors to introduce private equity funds (for example Zira Capital); however, most of these funds have remained limited and available to entrepreneurs only in Bamako. A feasibility study carried out on the national scale would help best identify the needed funding mechanism.

4.5. BUSINESS ENVIRONMENT

Mali's business environment has been declining because of prolonged political instability and the COVID-19 pandemic. To that effect, World Bank's 2016 Enterprise Survey¹³⁰ lists political instability as the top constraint for Malian businesses (figure 4.13). The World Economic Forum (WEF) Global Competitiveness Index¹³¹ consistently ranks Mali among the lowest performing countries (129th of 141 countries in 2019, 125th of 140 countries in 2018, and 123rd of 137 countries in 2017). The prolonged conflict and instability have contributed to the worsening of an already fragile economy, affecting all businesses. But the situation has especially affected those operating in conflict-affected areas, which have seen a surge in their operating costs and operational risks. WEF Regional Risks report¹³² lists the top five risks for Mali as energy price shock, fiscal crises, illicit trade, unemployment or underemployment, and terrorist attacks. The volatile political situation has also affected financial resources available to businesses, registering a decrease in the overall appetite of investors and banks to invest or finance businesses. As detailed in the previous section, COVID-19 has resulted in limited liquidity for companies, forcing many to downsize or halt operations. In fact, the formal private sector in Mali operates in a particularly difficult and unstable business environment.

FIGURE 4.13. TOP CONSTRAINTS CITED BY MALIAN FIRMS



SUB-SAHARAN AFRICA MALI 2016

Source: World Bank, "Enterprise Survey, 2016," <https://www.enterprisesurveys.org/en/enterprisesurveys>.

Key Constraints

Mali's economy remains largely informal, and formalizing businesses constitutes a lengthy and cumbersome process. According to INSTAT statistics,¹³³ 55 percent of GDP comes from the informal sector. Whereas the one-stop shop for business creation has reduced the time and cost of creating a business, the procedures for obtaining business licenses remain complicated and do not encourage businesses to formalize.

The synthetic tax (*l'impôt synthétique*), introduced to widen the tax basis to include small enterprises, might have had the opposite effect. It may have created perverse incentives for firms to stay small and informal. The synthetic tax was introduced in 2014 and replaced several local taxes, such as those on livestock and mills. Its intent was to bring small, informal firms into the tax system through a single tax.¹³⁴ However, the synthetic tax may have created incentives for companies to remain small, as the tax payments become significantly higher once companies have been formalized. To avoid being subjected to the synthetic tax, firms underreport their revenue to remain below the tax threshold. Simplifying the tax bases applicable to small businesses by defining single rates and thresholds would encourage them to register as formal.

Further complicating the formalization process is the lack of a proper correspondence between the fiscal identification number (NIF) and the national individual identification number (NINA). The NIF should be associated with each individual, however, because there is no direct connection with the official NINA, which was introduced in 2006. Mali has seen a proliferation in NIFs used to register multiple companies.

Mali's business environment is affected by several other challenges, including access to electricity, access to finance, and access to land, as well as challenges with corruption and property registration. According to the Global Competitiveness Index 2019,¹³⁵ Mali's rank in the access to electricity category fell from 129th in 2017 to 125th in 2019 because of the procedures, time, and costs involved in obtaining a permanent electricity connection, which might take up to 30 days. This length of time is coupled with a weak and unreliable electricity supply. Although Mali experiences a relatively low number of power outages (4.2 versus 13 in Sub-Saharan Africa), losses incurred owing to power outages are substantially higher in Mali (6.5 percent of sales) than in other Sub-Saharan African countries.

Another area where Mali is performing poorly is in land administration. In the absence of a formal land registry, registering property is complex. Landowners often struggle to demonstrate the sole ownership of a land parcel, as land titles are often sold to multiple people, leading to lengthy disputes. On the other hand, there is an overall lack of available land to purchase or lease at favorable prices. This becomes problematic for firms in agribusiness and manufacturing, which need access to land for their businesses.

Corruption is also widespread. Thirty-four percent of Malian firms report to have experienced at least one bribe payment request, a percentage that is much higher than the average of 24 percent in other countries in Sub-Saharan Africa. Bribery incidence is particularly high in accessing construction permits (74 percent of firms claim to be exposed to bribe requests versus 31 percent in Sub-Saharan Africa), government contracts (63 percent of firms versus 26 percent), and requesting meetings with tax officials (32 percent versus 19 percent).

According to the Mali 2020 Investment Climate Statement prepared by US Department of State, many companies claim that corruption is the greatest obstacle for foreign investment and economic development in Mali.¹³⁶ Whereas corruption is a crime punishable under the penal code, bribery is frequently reported in many large contracts and investment projects. Some investors report that government officials often solicit bribes to complete otherwise routine procedures. In 2019, Transparency International's global corruption ranking for Mali deteriorated to 130th of 180 ranked countries (from 120th of 180 in 2018). Mali's perceived public corruption score from Transparency International was 29 of 100 in 2019 (with 0 being "highly corrupt" and 100 being "very clean"). Relative to other developing countries, Mali was rated at the 67th percentile for control of corruption on the FY2020 Millennium Challenge Corporation Scorecard (based on World Bank and Brookings Worldwide Governance Indicators reports).

Access to formal justice systems is lengthy, corrupt, and inefficient. Whereas contracts are normally protected by the presence of courts, enforcement of judiciary decisions is often a lengthy process in Mali. The judiciary system is also characterized by high corruption and inefficiency. The country ranks 106th of 128 countries in the World Justice Rule of Law Index.¹³⁷ Therefore, parties often favor informal agreements to dispute resolution to save time and resources whereas multinationals often choose to elect other countries' jurisdiction for potential dispute resolution in their commercial contracts.

Recommendations

Based on the constraints identified above, the following recommendations are being put forward:

Improve the tax system.

- Redesign the synthetic tax. The fight against the informal sector is complex and does not depend solely on tax rules. Taxation, and especially the rules on documentary and accounting obligations, still plays a significant role, because compliance costs can deter formal business creation even more than taxes themselves. To this end, the synthetic tax needs to be revised to redevelop the tax brackets. Individuals whose annual turnover includes all taxes and between CFAF 20 million and CFAF 50 million should be subject to the synthetic tax regime. Individuals with annual turnover of between CFAF 0 and CFAF 20 million should be subject to a flat tax, as applied in similar countries such as Côte d'Ivoire. The transfer of part of the synthetic tax revenues to local authorities, by associating them in the collection arrangements with the tax office or the Treasury, is also desirable.
- Improve the management of the fiscal identification number. To ensure proper fiscal transparency, there should be a direct link between the NIF and the NINA. By encouraging the establishment of NIF based on NINA as it relates to the company ownership, Mali would avoid situations where a single person can use multiple NIFs to defraud the system. Complementary measures to achieve this include (a) improving toponymy and street coding and creating a tax cadastre, (b) modernizing the registration for filing taxes, and (c) cleaning up the taxpayer file to remove chronic defaulters from the file. By formalizing companies, Mali will widen the taxpayers base, ensure that all economic actors operate on an equal footing, and reduce the unfair competition between formal and informal enterprises.

- Further digitalize tax procedures. Digitizing tax services, including introducing an electronic tax declaration form and an online tax payment system, are important steps toward building a modern and efficient tax structure. Digitizing taxes, by introducing an automated detection system of defaulters and online procedures, would help improve the overall transparency and combat tax evasion. Mali should introduce an automated risk management system as well as the effective implementation of electronic procedures within the tax office and other relevant departments responsible for tax control and collection. By digitizing its tax system, Mali will not only ensure greater transparency but will reduce transaction costs and time spent paying taxes. These elements will be highly beneficial to the private sector.

Improve access to land.

- Establish a national cadastral system combined with the assignment of a unique identifier number for each land parcel (National Identification Cadastral Number; NINACAD) managed through a dedicated online window. As a first step, and in the immediate term, the transition government should define the legal and regulatory framework for the single window. The permanent secretariat in charge of the land reform has initiated a cadastral system in Bamako and Kati, but this must be implemented at a national level to be more comprehensive. The system must be operational on all sites and be able to receive data from the 704 municipalities in Mali. The NINACAD identification should be associated with each land parcel and should be available online for everyone to access. This would ensure an exhaustive and transparent identification of the parcels of the national territory in a single standard reference frame. It would also facilitate access to all the cadastral information relating to individual land parcels, including documentation (extract from the cadastral plan), identification of the owner, and identification of the nature of the premises and the activities carried out there. To further ensure proper land administration, a dedicated online window for land should be established; it would streamline procedures, ensure transparent access to information, and improve coordination between the various land management stakeholders. This measure would ensure a proper record of land ownership and would expedite processes. A national cadastre will contribute to reduce (a) time needed to get construction permits, (b) time to obtain land titles, and (c) the number of land disputes. At the same time, a national cadastre will facilitate quicker transactions and reduce construction time and costs for developers, the benefits of which can be transferred to consumers through lower property prices. Furthermore, this measure will help address duplications in land titles and overall inaccuracies. In return, a better land tenure will lead to increased investment (including FDI), especially in the housing, agriculture, and industrial sectors.

Create formal justice systems and conflict resolution mechanisms (medium term).

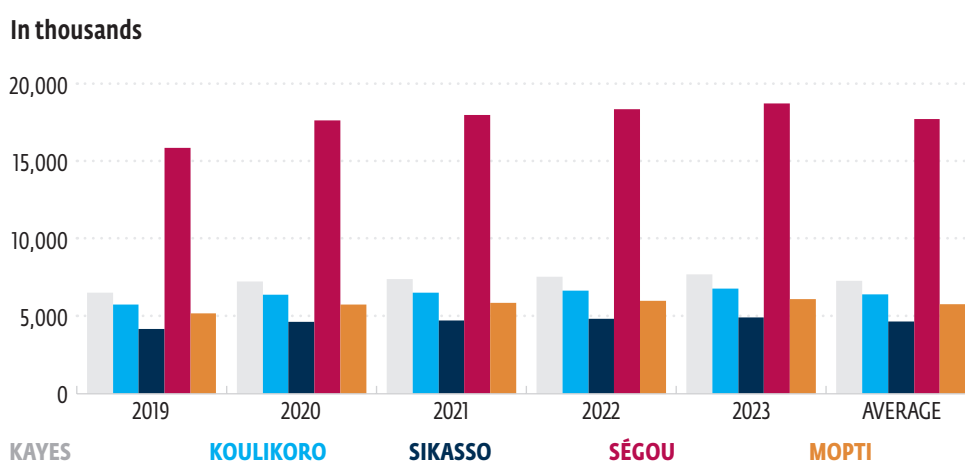
- The government's newly designed investment climate program supported by a World Bank project has identified enforcing contracts as one of its areas of focus. To that end, a sustainable solution would prioritize reforms to strengthen the judiciary mechanisms as a whole and, in particular, support activities geared at improving the efficiency of commercial justice institutions.

APPENDIX

APPENDIX A. AGRICULTURAL VALUE CHAIN ASSESSMENT

Fonio

FIGURE B.1. FONIO PRODUCTION BY REGION



Source: PNISA 2019-2023

Mali is the world's third largest producer of fonio behind Guinea (500,000 metric tons) and Nigeria (90,000 metric tons), with the government targeting an annual average national production of just under 42,000 metric tons for the period 2019–2023. With average yields of 600 kilograms per hectare (kg/ha), fonio is a nutritious and resilient crop that can grow and mature in depleted and shallow soils in as little as 70 days. As such, fonio plays a vital role in the food security of rural households in Ségou, Kayes, Koulikoro, and Mopti. Farming households typically plant fonio once they have harvested their rice, sorghum, or millet harvests. Whereas clear export opportunities exist as more and more consumers around the world consider this ancient grain a gluten-free super food, without significant improvements in postharvest processing efficiency and quality control, those markets will remain out of reach for Malian producers, processors, and exporters. Given the limited supply of quality fonio, the cereal is considered a luxury and reserved for special occasions or for those with dietary needs. With an average local retail price 1,250 (US\$2.13) per kilogram, the per capita consumption in urban markets is estimated at less than 1 kilogram¹³⁸. Whereas the bulk of the value is added at the processing stage (especially precooked fonio), the wholesale market for fonio grain in Mali is estimated to be between US\$3.5 and US\$5.4 million¹³⁹.

Although there is room for improvement in yield as well, without adopting technology and innovative practices to reduce the processing burden (threshing, winnowing, milling, and cleaning), expanding production would be futile. The main challenge facing the fonio value chain comes after harvest. Continued investment in research and development, as well as adopting technologies designed for similar crops, such as teff, a cereal native to Ethiopia, could help improve the fonio transformation in Mali.¹⁴⁰

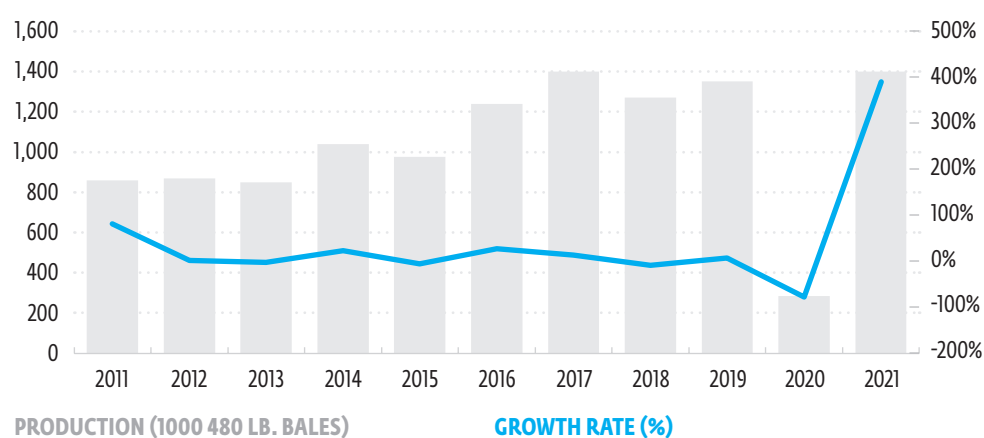
As a labor-intensive crop to process, opportunities to create jobs for women in particular exist in making value-added products, such as precooked fonio and fonio flour. But without a more structured value chain where producers are not merely growing it for survival but as raw material for modern processors, banks and private investors will have difficulty funding the value chain given its constraints.

A company taking advantage of Mali's fonio potential is Farafena. Based in Canada but co-founded by a Malian national, the company supplies retail partners, such as Whole Foods, with high-quality fonio products.¹⁴¹ Farafena closely coordinates with more than 900 smallholder farmers who grow and process the grain for export to Canada. The company is currently building a processing and packaging facility in Mali's Sikasso region that is scheduled to open in 2020. This facility would not only create more economic opportunities locally, but also employ blockchain and distributed ledger technology to enable customers to know exactly where and how the fonio was grown and processed. If successful, companies like Farafena can become role models for other private-sector companies seeking to capitalize on the ancient grain.

Sesame

According to the World Bank, the opportunity cost of not improving sesame production and primary processing falls between US\$9 million to US\$67 million per year.¹⁴² With 2018 exports estimated at just over 20,000 metric tons and valued at US\$4.2 million,¹⁴³ Mali's sesame seeds value chain is still in its infancy, but continues to present opportunities for producers, processors, and markets seeking to supply domestic, regional, and global markets. With production concentrated in the regions of Koulikoro, Ségou, Sikasso, Kayes, and Mopti, the value chain is characterized by the lack of data, inconsistent product quality, low productivity, and limited agro-processing capacity.¹⁴⁴

A resilient crop adapted to dry, hot climates with limited rainfall, the production and transformation of sesame requires continued support for interventions designed to improve yields and quality. Sesame seeds are also highly prized for their oil (53 percent to 60 percent) and protein (18 percent to 22 percent). Compared with farmers in Senegal, Malian producers receive better inputs and technical support from research institutions, nongovernmental organizations, and the private sector; thus it is fair to say that the Malian value chain is in a stronger position.¹⁴⁵ Whereas companies like PROSEMA have purchased, cleaned, and exported thousands of metric tons of cleaned sesame seeds from smallholders to African, European, and Asian markets,¹⁴⁶ sesame seed transformation remains dominated by women-owned enterprises producing artisanal sesame oil, soaps, and animal feed.

FIGURE B.2. MALI COTTON PRODUCTION AND ANNUAL GROWTH RATE

Source: USDA, Cotton: World Markets and Trade (October 2020)

The main impediment facing farmers, according to a survey of sesame growers, is the lack of quality seeds as well as the persistence of pricing and marketing difficulties. Initiatives such as making reliable market information available to all stakeholders in the value chain, as well as organizing group marketing to manage control price fluctuations, will place the value chain on a more robust foundation. Further reforms like facilitating access to finance (for example, warehouse receipt financing); boosting the quantity and quality of certification services; and fostering better coordination of action between farmers, extension workers, processors, and exporters will go a long way to ensuring that sesame seeds play a key role in boosting rural incomes while offering consumers a high quality, nutritious product.

Cotton

Cotton is Mali's top export crop with an 11 percent share of its export basket. Raw and prepared cotton contribute approximately US\$250 million to the country's export earnings. However, the impact of COVID-19 on global cotton markets has had a notable effect on Mali's position in the subsector. Specifically, the pandemic has reduced demand and, according to data from the United States Department of Agriculture (USDA), global land area under cultivation and production are expected to drop by 6 percent and 5 percent, respectively, compared with the 2019/2020 harvest. In Mali, the USDA estimates a 70 percent reduction in areas under cultivation and a 67 percent drop in production for the 2020/2021 harvest.¹⁴⁷ The USDA also expects Mali's exports to fall by 32 percent compared with the previous year. Exports for 2020/21 are projected to be just 174,000 metric tons. In contrast, Mali was Africa's biggest cotton producer in 2017 with more than 700,000 metric tons harvested.

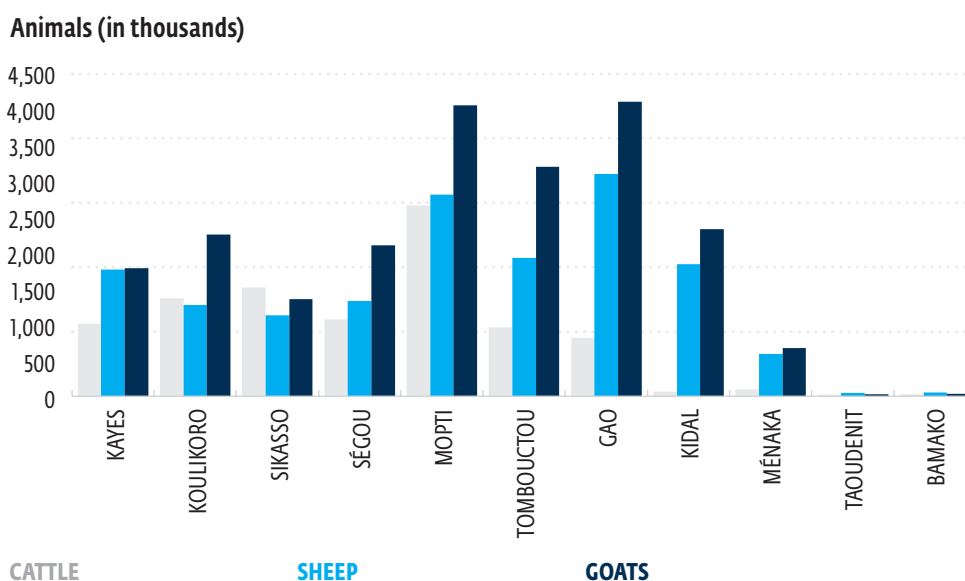
Cotton production and marketing in Mali are managed by the *Compagnie Malienne pour le Développement du Textile (CMDT)*, a state-owned enterprise. The CMDT provides farmers with inputs; manages the provision of credit to the sector; and collects, gins, and markets the final product. Whereas this centralization has its advantages, it also has its weaknesses.¹⁴⁸ This year, the CMDT initially reduced the price offered per ton from 275,000 FCFA (US\$493) to 200,000 FCFA (US\$358) per metric ton. As a result, farmers opted to skip this year’s campaign in favor of planting cereals (for example, maize, millet, sorghum). Despite attempts to correct course by offering a 50,000 FCFA (US\$90) marketing bonus in June, the data confirm that most farmers maintained their refusal to grow cotton, because it would not be in their interest. This sentiment was further compounded by the fact that the input subsidy for fertilizer was eliminated in 2020.¹⁴⁹

Mali’s global share of land under cultivation represents just 0.7 percent of global cotton fields and just 0.25 percent of projected ending stocks.¹⁵⁰ As governments continue to reassess their trade strategies in light of COVID-19, the revival of Mali’s textile manufacturing base through the adoption of culturally appropriate production and manufacturing technology is important. If designed to meet increased domestic and regional demand for garments and fabric, opportunities for farmers, textile manufacturers, designers, and tailors should continue to exist. In addition, efficient processing of cotton byproducts, such as cottonseed for edible oil and animal feed manufacturing, are also important avenues for private sector involvement.

Despite contributing only 2.9 percent to the sector’s GDP, cotton production receives 58 percent of the government’s input subsidies, highlighting the mismatch between resource allocation and the government’s stated priority of diversifying and modernizing the agricultural sector.

Livestock

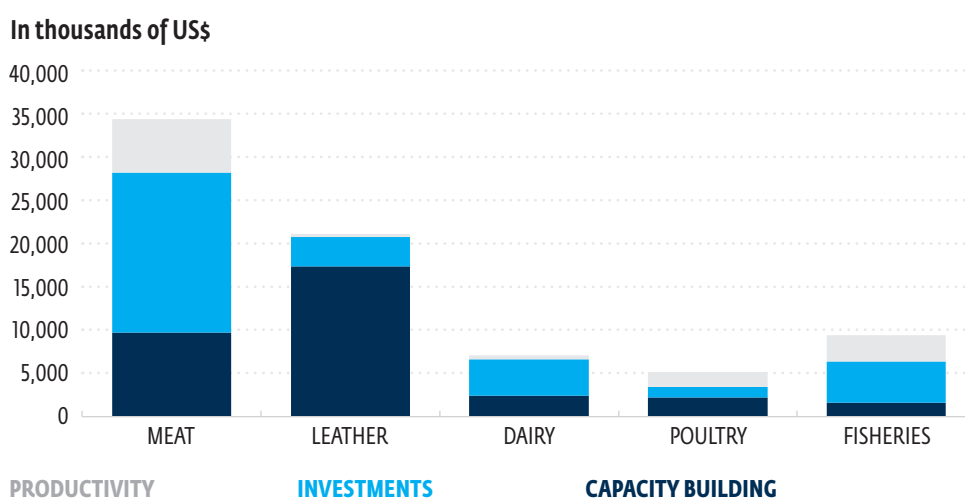
FIGURE B.3. ANNUAL AVERAGE LIVESTOCK AVAILABILITY



Source: PNISA (2019-2023).

Mali has clear comparative advantages in producing livestock. With all of its regions, along with the District of Bamako, capable of producing meat, dairy, and leather products for domestic, as well as regional markets, livestock remains a vital yet undervalued sector. With cattle herd currently estimated at 10.7 million bovine heads, Malian pastoralists are faced with challenges across the value chain. Surmounting these challenges would reduce economic food insecurity and poverty especially among rural households.

FIGURE B.4. LIVESTOCK AND FISHERIES: AVERAGE ANNUAL NATIONAL INVESTMENT PLAN



Source: PNISA (2019-2023).

In the red meat value chain, there are 9 slaughterhouses and 259 open-air abattoirs in operation.¹⁵¹ Peri-urban farms like Afrique Color have taken advantage of opportunities to fatten cattle for 60 to 90 days. However, finding innovative ways to reduce feed costs is necessary to stay competitive, especially when inefficiencies with publicly owned slaughterhouses are taken into account. The supply of quality animal feed continues to lag despite strong demand for affordable options. Better integration with the rice and maize value chains are necessary to ensure by-products from processing are fully used.¹⁵² This feed supply is crucial because privately owned slaughterhouses require animals of a certain size and quality to be profitable.

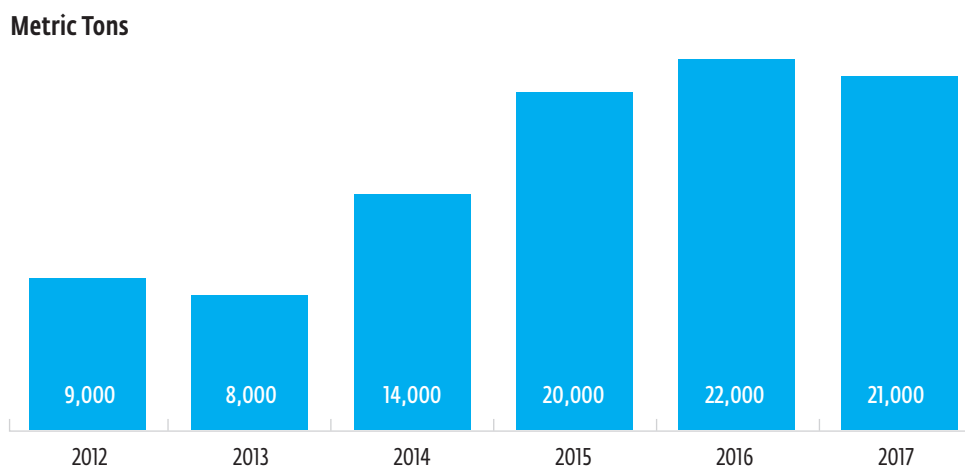
Plagued with weaknesses, such as high levels of informality, fragmentation, and underinvestment, targeted investments in feed production and harvesting, veterinary services, cold-chain technology, and certified slaughterhouses and creameries would help meet growing demand for food and nutrition. Projections for meat consumption in 2025 are estimated at 18 kilograms (kg) per capita for rural residents and 25kg per urban dweller. With similar figures in Senegal and Côte d'Ivoire, demand for meat will continue to grow at annually at approximately 4 percent.¹⁵³ The government and its partners recognize the importance of putting the livestock sector and the meat value chain on solid footing and intend to spend on average, €25 million per year on investments and productivity enhancements. See Plan National d'Investissement dans le Secteur Agricole (PNISA 2015–25) (National Investment Plan for the Agriculture Sector, 2015–25, http://www.passip.org/passip_intranet/pdf-intranet/Politique/9-36%20PNISA_version_finale_sept2014.pdf).

The milk market also can significantly improve once the bottleneck posed by the availability of quality feed is addressed. Whereas production in urban and peri-urban zones are on the rise, Mali imported an estimated 22,000 metric tons of milk products valued at US\$35.7 million.¹⁵⁴ With 30 industrial and semi-industrial milk processing plants in the country, milk collection and marketing is characterized by the lack of adequate infrastructure to minimize spoilage and ensure product safety.¹⁵⁵ As such, private investments in livestock health, pasteurization technology, and cold-chain logistics can help producers and processors be better positioned to meet the growing demand for dairy.

Mango

The mango value chain in Mali has benefited from concerted efforts by the government, donors, and private companies, but weaknesses persist. With production estimated between 500,000 and 750,000 metric tons per annum, most of Mali's mangoes are not of the variety (namely Kent, Kett, and Valencia) prized on the global market. Mali's mango market is characterized by three types of actors: (a) traders and exporters supplying European markets with Kent and Kett varieties, (b) exporters supplying markets in the Maghreb and the Economic Community of West African States common market, and (c) traders supplying local varieties (for example, Amélie). However, an estimated 40 percent of mangoes collected from plantations never reach a final consumer because of the lack of suitable transportation, logistics, and storage services.¹⁵⁶ In a welcome development, the introduction of multimodal logistics enables cooled mango containers to be transported to Europe through Dakar or Abidjan in just 10 days with an estimated 21,000 metric tons exported in 2017.

FIGURE B.5. MANGO EXPORTS, 2012–17



Source: Ministry of Agriculture, Mali, 2018.

Continued investment in mitigating the fruit fly to meet strict international standards, constructing roads to major production zones, and supporting certification and standardization services are necessary to increase private-sector involvement.

Given the number of years for orchards to start yielding fruit, securing financing is a deep challenge for commercial growers. Furthermore, the perishable nature of the product makes commercial banks reluctant to fund exporters. Processing and conditioning infrastructure is also limited so companies specializing in cold storage and transportation services, packaging manufacturing, and juice-making equipment can help Malian mango producers reach new markets while minimizing postharvest losses.¹⁵⁷ **The production of mango seedlings also presents an opportunity to create employment for youth and returns for investors.** Seedlings stay in the nursery for 2.5 to 3.0 years before being transplanted. Once in production, one hectare of mango trees can yield 5 metric tons of fruit. At a wholesale price of 75,000 FCFA per kilo (US\$134) and with an estimated investment cost of 1 million FCFA (US\$1,792) per hectare, a well-funded and structured mango sector can pay dividends for decades to come.¹⁵⁸

APPENDIX B. SWOT ANALYSIS—AGRICULTURE AND LIVESTOCK SECTORS

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Abundant arable land and water resources for cereal, high-value crops, and livestock production • An ancient history of agricultural and livestock competency and a core part of cultural identity • Strategically located with (seven) neighbors. <ul style="list-style-type: none"> – Four neighbors share same currency (WAEMU) – Five neighbors share same accounting standards (SYSCOA/OHADA) • Favorable government policies that have made agricultural development a national priority 	<ul style="list-style-type: none"> • Mali's agribusiness sector characterized by high levels of informality and fragmentation and applies to producers, processor, marketers, and consumers (e.g., food businesses) • Labor dominated by men and women with little or no formal schooling • Infrastructure and enabling services nonexistent or cost prohibitive. • Concerns about quality and timely availability of inputs (namely fertilizer for cotton production) • Appropriate sources of financing are lacking
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Provision of credit and (micro)insurance services based on weather or indexes • Construction and operation of warehouses and silos as part of warehouse receipt systems • Modernization of certification services to reduce costs and improve international competitiveness for high-value crops in particular • Improvement of links through better integration with local suppliers, including through alliances between creditworthy anchor investors and smallholder farmers and cooperatives • Reduction of postharvest losses • Build capacity of intermediary organizations and producer cooperatives, including processing and industrial associations <ul style="list-style-type: none"> – Emphasis on employment-based training (learning by doing) as opposed to capacity-building workshops • Provision of goods, services, and infrastructure designed to minimize postharvest losses: <ul style="list-style-type: none"> – Manufacturing of packaging and related machinery for cereals, fruits, vegetables, meat, and dairy products – More effective and efficient processing machinery for cereals, fruits, vegetables, meat, and dairy products – Climate-controlled transportation services – Energy- and water-saving technologies (e.g., solar-powered water pumps, subsurface drip fertigation, tube wells) • Institutional and government support for (secure or fortified) Special Economic Zones (SEZs), including cross-border SEZs • Development of vertically integrated value chains (e.g., meat and dairy) with clear roles and incentives for producers, processors, marketers, and consumers (households and restaurants) 	<ul style="list-style-type: none"> • Insecurity owing to extremism, transnational organized crime, and a weak central government <ul style="list-style-type: none"> – Cattle rustling and risks from civil conflict over access to farmland • COVID-19 <ul style="list-style-type: none"> – Restrictions on regional and international trade – Restrictions on mobility (access to markets, raw materials) – Impact on purchasing power (lower wages, remittances, access to financing) – Impact on human health and well-being – Impact on plant health and animal well-being owing to reduced mobility of technicians

Note: SWOT = strengths, weaknesses, opportunities, and threats.

APPENDIX C. LEVERAGING SEZs TO OVERCOME MALI'S GEOPOLITICAL AND POLITICAL ECONOMY CHALLENGES TO SPUR PRIVATE SECTOR-LED GROWTH

c.1. Targeted Policy Tool to Eliminate Mali's Constraints

There is one catalytic policy tool that Mali can effectively leverage to promote resilient economic growth in the agribusiness space (including value-added processing and high-growth supply and value chains). That tool is private sector-driven agribusiness special economic zones (SEZs) as buttressed by a modern SEZ legal, regulatory, and institutional framework. The successful implementation of a national SEZ regime can dovetail efficiently with Mali's reform agenda (a) to spur both private foreign direct investment (FDI) and domestic investment during these turbulent times, (b) to increase diversified export revenue, and (c) to generate local employment.

Private sector-driven SEZs can also provide the West African country with the precise policy tool. That tool, SAFE National Security SEZs, can help Mali begin implementing the 2015 Algiers Agreement on Peace and Reconciliation (Algiers Peace Agreement) to quell the conflict in the northern regions. In this vein, SEZs can give real substance to disarmament, demobilization, and reinsertion initiatives that constitute a core part of the peace agreement. SEZs can further provide both the public and private sectors with a pioneering platform to address the adverse health care, economic, political, and social effects caused in part by the COVID-19 pandemic in Mali, including the breakdown in constitutional law and order. Finally, private sector-driven SEZs can ultimately prove to be an innovative policy instrument to address and resolve the growing demographic, economic, and social challenges confronted by other conflicted-affected and fragile countries comprising the Trans-Sahel region.

c.2. The Case for SEZs in Mali

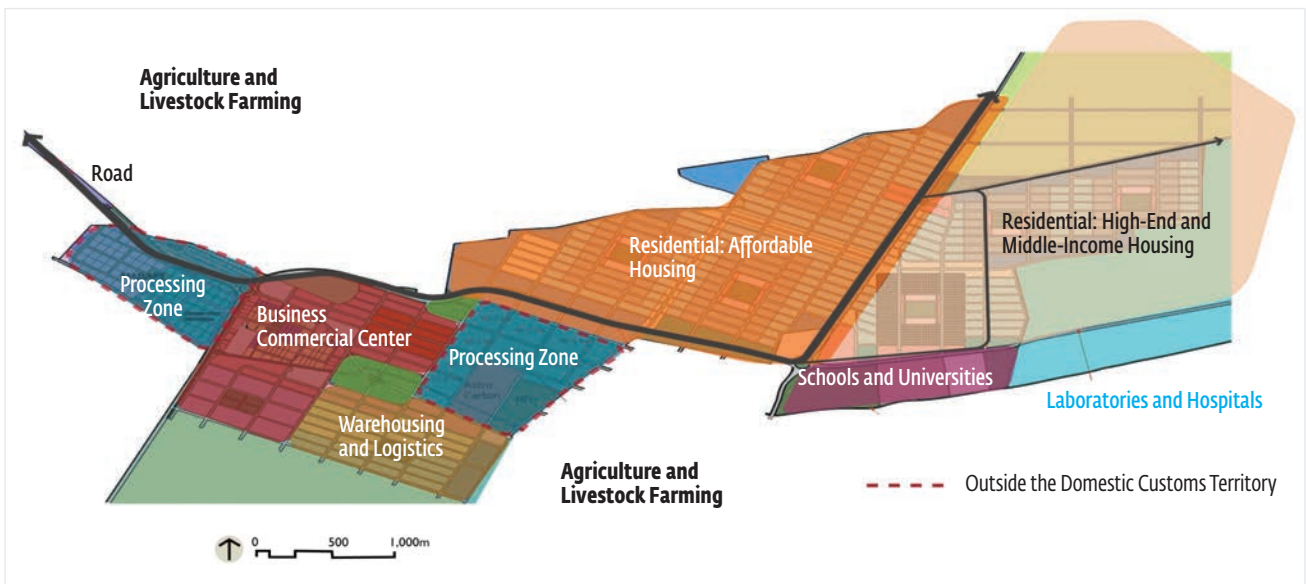
The Concept

Integrated SEZs can trigger dynamic structural transformation. When correctly located, designed, financed, constructed, developed, operated, managed, administered, maintained, marketed, governed, and regulated—SEZs can address many of today's divisive socioeconomic problems, such as education, housing, health care, and food-security inequalities that are fracturing societies around the world. SEZs enable policy makers (a) to leverage economies of scale and digital network platforms, especially for small or landlocked nations like Mali; (b) to create local, regional, continental, and even global supply or value chains; (c) to expand opportunities for education and for accumulating learning and knowledge, including through on-the-job training (that is, learning by doing); (d) to improve national health care systems SEZ by SEZ that can enhance health care-service delivery (as reinforced by the strategic production of essential medical supplies, equipment, and medicines); and (e) to jump-start economic recovery in environments beleaguered by social conflicts, jihadist insurgencies (transnational organized crime), and pandemics.

SEZs are modeled after the early city-state ports, such as Hong Kong and Singapore (figures D.1 and D.2). An integrated industrial municipality, or like a Renaissance city-state, SEZ generally refers to any delimited, physically secured, and sometimes fenced-in geographic area. It comprises integrated and mixed-use development sites with serviced lands and facilities that typically offer on-site administrative regulation, private management, modern infrastructure, related services, and performance-based incentives provided that are decentralized or local. The resulting geographic area can be dedicated to a virtually limitless range of multipurpose economic and social activities, such as manufacturing, commercial, logistics, warehousing, mineral-processing, petrochemical, agribusiness, electricity-generation, high-technology, health care, education, residential (including affordable housing), tourism, financial services, and other similar pursuits. If initially designed as a business incubator or a cluster, an SEZ can also serve the needs of micro, small and medium enterprises (MSMEs) as well. Importantly, these spatial development areas are governed by a unique legal, regulatory, and institutional framework that is different from those in the rest of in the host country.

FIGURE C.1. MASTER PLAN PROXY OF AN INTEGRATED AND MIXED USE AGRIBUSINESS SEZ

Ancillary SEZ Area



Source: IFC illustration.
 Note: SEZ = special economic zone.

FIGURE C.2. SEZs PROVIDE OPPORTUNITIES FOR A WIDE RANGE OF MULTIUSE ECONOMIC AND SOCIAL ACTIVITIES TO TRIGGER INCREASED INVESTMENTS, FORMALIZED JOB CREATION, AND TRADE



Source: IFC illustration.

Note: SEZ = special economic zone.

C.3. The Unwarranted Debate

Positive Attributes of SEZs

The primary drivers underlying SEZ success include four factors. They are (a) targeted investment attraction, penetration, and retention; (b) innovative knowledge creation, dissemination, and sharing; (c) inclusive social infrastructure construction, development, and operation; (d) coherent export promotion, implementation, and realization; and (e) strategic employment generation, retention, and synergy. Correctly located, designed, developed, operated, and governed, spatial growth areas can yield such positive outcomes, because these economic and social areas provide a more liberal and flexible legal, regulatory, and business environment. These areas also provide more efficient administrative institutions and infrastructure than those already existing in the economy. Thus, SEZs in the right policy maker's hands, can serve as effective policy-reform platforms for any nation—including conflict-affected, pandemic-challenged, and fragile or failed states like Mali—to create new markets and to maximize public and private finance for development that contributes positively to inclusive, equitable, and sustainable growth and to combat extreme poverty.

No country confirms the previous conclusions more forcefully than China. It was precisely the SEZs that Vice Premier Deng Xiaoping implemented as the chief private-enterprise, market-driven industrial policy that enabled China’s centrally planned economy to create “bubbles of capitalism” and attain critical-mass development take-off in the vernacular of W.W. Rostow during 1980 through 2000.¹⁵⁹ China’s success with SEZs is one of the chief reasons that the East Asian country has witnessed (outside the COVID-19 period) four decades of uninterrupted economic expansion—without precedent in modern human history—that has catapulted China from an agrarian economy to the world’s second most powerful economy and an industrial and technological juggernaut today.¹⁶⁰

As emphasized by Nobel laureate Paul Romer, China’s meteoric economic growth and development reflect its embrace of two meta ideas through SEZs. The combination of (a) the market concept (as buttressed by the legal institution of private property or quasi-private property rights) and (b) geographical areas capable of attracting growing populations through large-scale SEZs as supported by state-of-the-art infrastructure.¹⁶¹ This unparalleled economic growth based on spatial area development largely explains how nearly 800 million people have been lifted out of extreme poverty.¹⁶² As a result, extreme poverty has fallen from approximately 75 percent of the total Chinese population in 1984 to less than 1 percent today.

The Chinese spatial area phenomenon subsequently triggered a proliferation of well-performing SEZs, around the world. Countless economies—ranging from South and Central America to South and East Asia to the Middle East and to Africa—have experienced relative success because of the SEZ model as a strategic industrial policy to jump-start transformational and structural economic and social reforms and activity.¹⁶³ According to the World Bank, the economic success of China, Japan, Republic of Korea, and Vietnam is attributable to the strategy whereby each nation “chose to invest in infrastructure, *special economic zones*, and, above all, *human capital*, which generated a high-quality labor force connected to the outside world.”¹⁶⁴ Today, approximately 5,400 formal economic zones and other spatial areas in nearly 147 countries that have created roughly 66 million jobs (pre-COVID-19 data) are operating around the globe.¹⁶⁵ With 1,587 SEZs, China boasts the lion’s share by hosting approximately 48 percent of the world’s SEZs.¹⁶⁶

Critics Ignore the Dynamic Effects of SEZs

Despite the tested virtues of SEZs, multiple naysayers abound. Many neoclassical market fundamentalists, focusing strictly on static and fixed allocative efficiency issues (for example, direct employment effects and FDI inflows), often view SEZs as distortionary second- or third-best options for economic development.¹⁶⁷ Their argument often is that the policy tool deviates from the Washington consensus CRG: Consensus needs to be capitalized. It is a term of art. tenets that espouse a countrywide-reform approach that seeks to create a “level playing field” in the economy at large. This criticism ignores the *dynamic effects and catalytic role – as grounded on Nobel Laureate Paul Romer’s endogenous growth theory –* that SEZs can play in promoting broader reforms and growth in the economy at large, even sometimes enabling a country like China to change on a gradual basis its existing competitive advantages (Mali and Sylla, 2013).

Market fundamentalists typically ignore the dynamic effects of spatial areas. Those effects include (a) incubators of improved governance, institutional, legal, regulatory, and social safeguards that can overcome failures of market, government regulators and governance, and coordination; (b) trial-and-error testing of reforms that can spawn countrywide advances; (c) developing local workforce skills through on-the-job training, knowledge accumulation, and programs that upgrade skills programs to improve the capabilities of local human capital; (d) technology transfers; (e) accelerated adoption of information and communication technologies (ICTs), including digital production-and-distribution networks; (f) production and export diversification and upgrades; (g) enhanced production, supply, and trade efficiencies achieved by domestic firms; (h) economic and social integration with the domestic economy; (i) forming industry clusters; (j) integration into local, regional, continental, and global supply and value chains (such as in the agribusiness space); and (k) dynamic structural change, including increased industrialization, market openness, and digitization.¹⁶⁸

The level-playing-field approach may yield higher returns to society when focusing on essential socioeconomic goods and services. These basic necessities are required for human-capital development like health care and nutrition, food security, education, and housing.¹⁶⁹ As emphasized by the World Bank in its seminal 2019 publication, the “most direct way to provide fairness [to any society] is to support early childhood development.”¹⁷⁰ The publication continues: “Guaranteeing that every child has access to adequate nutrition, health, education, and [social and legal] protection, particularly in the earliest years of life, ensures a solid foundation for developing skills in the future. . . . Because the acquisition of skills is cumulative, the returns to early investments are the highest [for society].¹⁷¹ As demonstrated subsequently, SEZs—in symbiotic juxtaposition with digital network platforms that aggregate supply in the relevant market—constitute an innovative conduit to trigger on a targeted basis the efficient and equitable provision of these basic necessities that can eventually be rolled out in the economy at large.

Other SEZ critics stress that the success stories of East Asia and Latin America have not been uniformly replicated throughout the world, especially in Africa.¹⁷² The absence of adequate SEZ infrastructure and utility services; the lack of skilled and other qualified workers, the absence of effective political leadership, the challenges of technical capacity of SEZ government regulators, and the designation of spatial areas based on political rather than on sound market considerations constitute the chief shortcomings that prevent African nations from reaping the full benefits of spatial areas.¹⁷³ The failure to conduct feasibility studies that include market-demand analyses and the unwillingness to adhere to the objective findings of such studies, invariably result in spatial areas in Africa being located at development sites that fail the commercial viability test.

In advancing their positions, critics fail to acknowledge certain reforms. Innovative SEZ legal, regulatory, and institutional framework reforms that have enforcement teeth (as faithfully grounded on the discipline of economic analysis of law¹⁷⁴) can resolve the majority of the highlighted market and government-regulatory failures. As stressed by Farole, an “effective legal and regulatory framework is a necessary *first step* to zone program development.”¹⁷⁵ Farole continues, “Putting in place [such a] framework...establishes the ‘rules of the game’.... It plays a fundamental role in addressing often-difficult land issues, facilitating the provision of the required infrastructure, and ensuring compliance with labor and environmental standards.... “While it is no guarantee of success, the absence of a solid legal and regulatory framework will normally condemn an SEZ program to failure.”¹⁷⁶

Indeed, case studies of other SEZs (for example, Bangladesh SEZs) show successful implementation of the international SEZ blueprint model. These studies demonstrate that spatial areas—when correctly located, designed, financed, constructed, developed, managed, governed, and regulated—constitute extremely effective reform vehicles to correct pervasive market and government-regulatory failures and distortions that hamper the efficient operation of markets. In other words, rather than create market distortions, best-practice SEZs (as reinforced by efficiency-enhancing and equity-preserving SEZ laws) eliminate distortions to enable countries to create new markets, new enterprises, and new employment opportunities. These countries also create new local, regional, continental, and global supply or value chains that otherwise would not exist but for the SEZ regime.

Essential public and social infrastructure (for example, ports, roads, schools, hospitals) can be provided and shared collectively through innovative financing. In addition, infrastructure can be provided through an increase in the supply of quasi-public goods (for example, information, research and development), through protecting and enforcing all private property rights (for example, intellectual property), through expanding the national tax base through special flat-tax regimes, and by establishing a favorable environment to create positive externalities or spillovers like learning and knowledge accumulation through education and training centers. Today’s evolving generation of spatial areas can improve the performance of constrained markets and create altogether new markets in cases in which distortions frustrate free-market enterprise.

Spatial areas and SEZs have progressed over the past five decades. They’ve moved from constituting exclusive commercial enclaves to becoming modern development engines of growth that link countries’ knowledge centers with their industrial and business sectors.¹⁷⁷ They’ve moved from performing single-function business activities to performing multifunction economic, industrial, and social endeavors; from focusing on purely economic goals and outcomes to constituting social and political reform incubators; and from promoting distortionary tax holidays to creating competitive fiscal frameworks. They’ve moved from spearheading reforms at the national level to facilitating cross-border regional cooperation and from leveraging nations’ static comparative advantages to galvanizing dynamic, transformational, and structural changes to their natural factor endowment base.¹⁷⁸

C.4 Mali's Sez Implementation Strategy

Step 1: Enact the Draft Mali SEZ Law

Despite positive results achieved in Bangladesh, Ethiopia, Gabon, and Vietnam, SEZ success has not been uniformly replicated in Africa. This lack of success is attributed to (a) substandard legal, regulatory, and institutional frameworks; (b) no comprehensive and rigorous feasibility studies; and (c) infrastructure challenges. Without a modern SEZ legal, regulatory, and institutional framework, Mali cannot establish best-practice SEZs. To date, no law or regulations govern SEZs in Mali. The existing legal framework consists of one article in the investment code. Given the complexity of SEZs, that article is not adequate to make a compelling business case to attract foreign investments SEZ investments in Mali. Not surprisingly, this government-regulatory failure, juxtaposed with Mali's precarious security situation and recurring political instability, explains why no SEZ exists in Mali today. For this reason, Mali is currently unable to establish agribusiness, medical, and economic recovery SEZs.

The immediate solution is for Mali to adopt the draft Mali SEZ law prepared and submitted by IFC to the former government of Mali. The best-practice SEZ law prepared by IFC will enable Mali to eliminate many of the market and government-regulatory failures discussed in this report and, thereby, expand the business opportunities for the private sector, especially in agribusiness and health care (COVID-19). The new Mali SEZ law will also provide the Trans-Sahel nation with the necessary policy tools to implement the 2015 Algiers Peace Agreement. That agreement will lay the foundation to grapple with the clear-and-present danger posed by the jihadist-insurgency movement in country. Without this latter aspect, the private sector, whether national, regional, or foreign, will not expand business opportunities in Mali.

Without this law, Mali will be hard pressed to stop growing jihadist threats and terrorism in the country. The Economic Community of West African States (ECOWAS), in turn, may be unable to stop the cancerous spread of the terrorist movement throughout the Trans-Sahel region and the rest of the ECOWAS common market, including Benin, Burkina Faso, Côte d'Ivoire, Ghana, Niger, and Togo. Such an outcome could then expose the entire West Africa region to heightened insecurity, to the propensity for greater political instability, to intensified food insecurity, to further breakdown in law and order, and, conceivably, to economic collapse in some countries.

Without this law, the future democratically elected government of Mali will be unable to effectively establish a new social contract with the Malian people. This new social contract, as implemented gradually and incrementally through Mali's future SEZs, can begin to promote (a) equal economic and social opportunities through progressively universally available nutrition, health care, education, and adult training; (b) inclusive and equitable economic growth and development; and (c) accountability of political leaders, among other features. These positive outcomes, in turn, will translate into a fairer and more just society for all Mali's citizens, regardless of their religious affiliation, ethnic origin, gender, social status, and other distinguishing characteristics. These positive economic, political, and social outcomes will then provide the private sector, especially investors like economic and social entrepreneurs, with a legitimate reason to invest in Mali under the current challenging circumstances.

Step 2: Roll Out SEZs in Mali

The World Bank Group already has commissioned an SEZ market-demand analysis for Mali. Preliminarily, the analysis shows several sites in Mali in which SEZ investments have the potential to take root and trigger significant enterprise and job creation in agribusiness.¹⁷⁹ Even though the transitional and the future democratically elected government of Mali should begin slowly with a few SEZs, the landlocked West African nation can gradually create more SEZs as public- and private-sector players acquire practical experience incrementally.

One of the first SEZs that Mali should consider implementing is at SiKoBo. SiKoBo is the cross-border agribusiness SEZ to be located at Sikasso in Mali, Korhogo in Côte d'Ivoire, and Bobo-Dioulasso in Burkina Faso. The SiKoBo SEZ should also be established as a SAFE National Security SEZ given that jihadists have been spreading to southern Mali and northern Côte d'Ivoire and Burkina Faso. Implicating from the outset three ECOWAS countries in the proposed cross-border SEZ design may potentially minimize project risks. If one of the governments fails to shoulder its weight and responsibility—an outcome that would typically guarantee zone failure at the country level—the remaining two governments (as further supported by international development partners and private-sector SEZ developers and operators) can assume greater responsibilities to ensure SEZ success at the cross-border level. A successful SAFE National Security SEZ at SiKoBo may even constitute a bulwark against the growing jihadist threat in Mali and the ECOWAS region.

A comprehensive and rigorous feasibility study must be undertaken. This study should be done by a potential private sector SEZ developer(s)/operator(s) or by technical experts commissioned by the government of Mali and international development partners (for example, World Bank, IFC, African Development Bank) before any funding is allocated to any SEZ development. This exercise will determine whether the proposed cross-border SEZ is technically, economically, financially, socially, and environmentally feasible and commercially viable. This same exercise must be carried out for the multiple SEZ agricultural growth poles that the transitional government or the future democratically elected government of Mali may wish to establish. This recommendation applies with equal force and effect to the many medical SEZs (including medical SEZ villages and medical parks) that Mali needs to confront the COVID-19 pandemic.

As emphasized previously, Mali needs to bring life to the 2015 Algiers Peace Agreement. Mali, in conjunction with international development partners and other foreign players, may wish to establish SAFE National Security SEZs in any of the northern regions (for example, Timbuktu) of the country. Approximately 10,000 to 15,000 United Nations security forces; a potential ECOWAS peace-keeping mission; the existing contingent of French, German, and American troops; and the G5 Sahel Joint Force comprising roughly 10,000 troops provided by the G5 Sahel countries (Burkina Faso, Chad, Mali, Mauritania, and Niger) and supported financially by China, European Union, France, Saudi Arabia, United States, and United Arab Emirates can be deployed more strategically to counter the jihadist insurgency threat in northern Mali.

SAFE National Security SEZs established in the north would lead the implementation of a decentralized governance. That implementation is expressly envisioned by the Algiers peace accord that would enable the government of Mali to implement a de facto federalism form of government. Stated otherwise, the northern regions—organized and administered as decentralized SAFE National Security SEZs—can begin to function as semiautonomous regions in an administrative manner that is somewhat similar to that of the Kurdistan region in northern Iraq under the Iraqi federal constitution. To ensure success, the design, financing, development, and operation of these SEZs must be executed strictly with the findings and conclusions of comprehensive and rigorous feasibility studies. The challenge will be to focus on activities that will make the proposed SEZs commercially viable.

C.5 Overview of the Draft Mali SEZ Law

Mali's draft SEZ law prepared by IFC constitutes an innovative undertaking in a French civil law jurisdiction. This law can empower Mali to create semiautonomous commercial municipalities, smart medical SEZ cities, industrial districts, and agribusiness SEZs in line with Mali's natural endowments. The draft Malian SEZ law incorporates the targeted reforms shown in figure D.3. A ground-breaking feature of this draft law is that the applicable fiscal and investment incentives are centered on a special 20 percent SEZ flat tax that replicates one approach used by the first SEZs in China. Another cutting-edge feature is that private-sector SEZ enterprises may claim the applicable incentives to reduce the tax incidence of the 20 percent flat tax only if two performance-based conditions are satisfied. Those conditions are only if (a) such enterprises perform specific economic or social activities that promote the public or common good or other positive economic and social outcomes on behalf of the Malian people and (b) the marginal benefits of such incentives exceed their marginal costs.

FIGURE C.3. TARGET REFORMS OF MALI'S SEZ LAW



Source: IFC illustration.

Such cost-effective, performance-based outcomes include several factors. They are (a) constructing SEZ infrastructure that reduces market failures like air, water, and noise pollution; (b) creating local jobs for low-, medium-, and high-skilled workers; (c) constructing off-site infrastructure in cases in which Mali does not have the public resources to do so; (d) establishing technical, vocational, and on-the-job research centers to improve local human capital capacity; and (e) jump-starting research and development to achieve inclusive and equitable economic growth. Mali's draft SEZ law also adopts visionary social safeguard standards, doing-business reforms, and modern dispute-resolution techniques, including (a) protections designed to preserve immigration, labor, health care, environment, and gender rights; (b) piloting catalytic demonstration-effect of energy, land-titling, and business-rescue reforms; and (c) a market-based justice system predicated on alternative dispute resolutions (including private-party negotiations, mediation, and international arbitration).

Mali's draft SEZ law needs to achieve the purposes of chapter 14 of the ECOWAS Investment Policy (ECOWIP). In this way, the law will ensure optimal SEZ location and critical infrastructure construction through the following pro-market mechanisms: (a) establish spatial areas at suitable land sites as based on comprehensive and rigorous feasibility studies that assess the relevant technical, engineering, architect, market-demand, and other economic and financial factors underlying successful SEZ development and operation and (b) execute private sector driven–infrastructure development under pioneering PPP agreements. Such agreements should incentivize the private provision of all infrastructure, including off-site infrastructure when the host country is unable to provide such infrastructure. Other innovative features include (a) streamlined municipal government regulation (such as the semiautonomous SEZ authority and other government entities sharing regulatory jurisdiction over SEZ matters through memoranda of understanding); (b) rationalized construction-permit procedures; (c) efficient customs regulations that create SEZ customs-controlled areas in line with the Revised Kyoto Convention and the World Trade Organization's Trade Facilitation Agreement; and (d) comprehensive private property protections.

In short, Mali's pioneering Malian SEZ law will enable it to achieve the following economic and social objectives, reforms, and effects to benefit the Malian people:

Generate Positive Economic and Social Welfare Effects

- **Investment and Trade Volumes:** Expand overall investment and trade opportunities in Mali.
- **Economic Diversification:** Support the diversification of the Malian economy through private sector SEZ development and operation.
- **Reduced Commodity Dependency:** Decrease dependency on commodity gold and cotton production and exports through enhanced industrial, agribusiness, medical, and digital production and distribution.
- **Emerging Sectors:** Increase SEZ foreign direct, diaspora, and national investment in strategic sectors, such as the agribusiness, energy, medical, environmental, digital economy, cyber intelligence, and cyber security.

- **Employment Creation:** Create better job opportunities for low-, semi-, and high-skilled Malian workers.
- **Enhanced Labor Productivity:** Improve the labor productivity of Malian workers through focused training, learning, knowledge-accumulation, and capacity-building programs, such as e-learning and on-the-job training.
- **Gender Equality:** Promote gender equality through the enforcement of equal protection provisions inside the SEZs, including equal pay for equal work.
- **Inclusive and Equitable Development:** Encourage inclusive and equitable economic growth and development to alleviate extreme poverty.

Improve Infrastructure and Energy Delivery

- **Infrastructure and Power:** Upgrade the delivery of high-quality physical infrastructure in the SEZs, including the provision of social infrastructure like transportation networks, health care facilities, educational centers, and affordable housing.
- **Energy:** Provide electricity 24/7 at affordable prices at each SEZ by private sector SEZ developers and operators through on-site power plants and generators (for example, solar-energy plants and farms).

Achieve Positive Health Care Effects

- **Universal Health Care:** Pilot progressive universal health care insurance coverage and protection SEZ by SEZ.
- **COVID-19 and Other Disease Responses:** Improve Mali's national health care delivery zone by zone to address medical pathologies, emergencies, and biological threats including emerging and reemerging infectious diseases, such as COVID-19, HIV, tuberculosis, dengue, chikungunya virus, Ebola, and similar diseases.
- **Biomedical Knowledge Economy:** Promote, support, and drive, as feasible, the biomedical knowledge economy in Mali through the implementation of strategic partnerships established with Malian and foreign universities, research-and-development centers, nongovernmental organizations, medical and other health care clinics, science and technology institutions, and other medical associations to accelerate innovations to medical patents.

Integrate Agribusiness-Health-Environment Ecosystems

- **Contagion Control:** Regulate the critical interplay among medical science, agribusiness production, and the natural environment to achieve optimal health outcomes for people, animals, and plants and to safeguard the environment to reinforce the bridge between human-health care systems and veterinary science to promote effective contagion control and higher standards of living for the Malian people.
- **Environmental Protection:** Protect the physical environment, water supply, natural resources, and biological diversity at each SEZ site, including in any ancillary SEZ area, while ensuring sustainable economic development in conformity with all international environment treaties, conventions, and agreements ratified by Mal.
- **Scientific Research and Development:** Stimulate scientific research, development, and discoveries along with technological advances, innovations, and inventions, especially in medical, health care, biological, chemical, environmental, and agribusiness sectors.
- **Local, Regional, Continental, and Global Supply or Value Chains:** Enhance business conditions for Malian agribusiness producers and suppliers to participate in local, regional, continental, and global supply or value chains.

Accelerate Business Environment and Investment Entry Reforms

- **Business Facilitation:** Streamline and simplify company formation and business registration to reduce the size of the informal economy.
- **Land:** Carry out land acquisition, use, and transfer reforms such as SEZ land titling, certificates, and registries.
- **Anticorruption Reforms:** Promote the operation and management of SEZs by private developers and operators to reduce opportunities for corruption.
- **Finance:** Improve access to credit through the targeted creation of SEZ investment companies, SEZ mobile-banking digitization network platforms, and SEZ alternative financing mechanisms such as SEZ leasing and warehouse receipts.
- **Trial-and-Error Reform:** Zone by zone, pilot other reforms (including other governance, investment, trade, energy, immigration, labor, environment, business registration, access to finance, dispute-resolution, infrastructure-development, customs-administration, and health care improvements at the primary, secondary, and tertiary levels) before applying such targeted reforms countrywide.

NOTES

- 1 The International Monetary Fund (IMF) estimated Mali's potential real growth rate to be at about 5 percent per year (IMF Country Report No. 20/153, 2019).
- 2 As of the publication date of this report, real GDP growth estimates for 2020 are -1.2 percent and 3.1 percent for 2021, for both the World Bank and the IMF. The Malian authorities retain a rate of -1.2 percent for 2020 and more optimistic projections for 2021 (5.1 percent for the first quarter of 2021), Institut National de la Statistique (INSTAT), 2021, <https://instat-mali.org/fr>.
- 3 International Labour Organization Estimates, 2020, https://www.ilo.org/gateway/faces/home/statistics?locale=EN&countryCode=MLI&_adf.ctrl-state=19ouhtef60_4.
- 4 World Bank, *Women, Business and the Law 2020* (Washington, DC: World Bank, 2020).
- 5 Calvin Bahia, Pau Castells, et al., "The Welfare Effects of Mobile Broadband Internet: Evidence from Nigeria" (Policy Research Working Paper 9230, World Bank, Washington, DC, 2020).
- 6 This section is based in large part on previous World Bank publications. See "Country Partnership Framework (CPF) for the Republic of Mali for the Period FY 16–19" (World Bank Group, Washington, DC, November 3, 2015); *Republic of Mali, Systematic Country Diagnostic (SCD)* (World Bank Group, Washington, DC, 2015) and forthcoming SCD Update 2022. See also Amité Roseline Dakouo, Charles Grémont et al., "Dans un Mali en état d'urgence, plus rien n'est audible au sujet de la France," *Le Monde*, December 2, 2019, 1, 28.
- 7 US Agency for International Development (USAID), "Democracy, Human Rights, and Governance, Final Report," (USAID, Washington, DC, June, 2014), https://www.usaid.gov/sites/default/files/documents/1860/Mali_2014DRG%20Assessment_public_FINAL.pdf.
- 8 World Bank Group (WBG), *Mali Systematic Country Diagnostic*.
- 9 WBG, *Mali Systematic Country Diagnostic*.
- 10 WBG, *Mali Systematic Country Diagnostic*.
- 11 ECOWAS (Economic Community of West African States) Commission, "4th Extraordinary Summit of the ECOWAS Authority of Heads of State and Government on the Political Situation in Mali" (Final Communiqué, ECOWAS Commission, Accra, Ghana, January 9, 2022), <https://reliefweb.int/sites/reliefweb.int/files/resources/Final-Communiqué-on-Summit-on-Mali-Eng-080122.pdf>.
- 12 USAID, "Mali," Landlinks Country Profile, <https://www.land-links.org/cpimtru-profile/mali/>.
- 13 Institute for Health Metrics and Evaluation, "Mali Demographic and Health Survey 2018" (Institute for Health Metrics and Evaluation, University of Washington, Seattle, 2018), <http://ghdx.healthdata.org/record/mali-demographic-and-health-survey-2018>.
- 14 WBG, the Human Capital Index. The very low level of human capital reflects constraints to accessing education and health services, as well as the quality of those services and the efficiency with which they are delivered, which constrains the productivity and competitiveness of the next generation of workers.
- 15 World Bank, "Mali: Economic and Poverty Update during COVID-19" (World Bank, Washington, DC, Spring 2020).
- 16 WTO (2020), Mali Trade Profile, https://www.wto.org/english/thewto_e/countries_e/mali_e.htm
- 17 UN Comtrade Database (2020), <https://comtrade.un.org/data/>
- 18 Security sector expenditures in Mali measured in percentage of GDP, at 4.1 percent of GDP in 2018 from 2.2 percent of GDP before the 2011 crisis, are lower than other countries experiencing conflict (12.1 and 7.7 percent in Afghanistan and Iraq, respectively) and similar to countries not experiencing conflict.
- 19 UNCTAD STAT, "Country Profile: Mali."
- 20 ECOPA, "Case Study: Conflict and Its Impact on Investment in Mali" (report for IFC, July 2019).
- 21 World Bank, "Phase II: COVID-19 Crisis through a Migration Lens" (Migration and Development Brief 33, World Bank, Washington, DC, October 2020), <https://www.worldbank.org/en/topic/socialprotectionandjobs/publication/migration-and-development-brief-33>.
- 22 Johns Hopkins University Covid-19 Content Portal. February 2022. url: <https://systems.jhu.edu/research/public-health/ncov/>
- 23 On March 21, 2020, the BCEAO announced (a) increasing the total liquidity made available to banks by weekly and monthly auctions, (b) extending the collateral framework to access central bank refinancing, (c) setting up a framework with the banking system to support firms with COVID-19 repayment difficulties, (d) allocating CFAF 25 billion to the trust fund of the West African Development Bank to increase the amount of concessional loans to eligible countries to finance urgent investment and equipment expenses, (e) communicating on the special program for refinancing bank credits granted to small and medium enterprises, (f) initiating negotiations with firms issuing electronic money to encourage its use, and (g) ensuring adequate provision of banknotes for satisfactory ATM operation. On March 23, the BCEAO raised the liquidity made available to banks at its weekly and monthly auctions allowing average refinancing rates to remain relatively close to the floor of the 2.5 percent to 4.0 percent monetary policy corridor. Finally, on March 27 the BCEAO announced a full allotment strategy at a fixed 2.5 percent interest rate, thereby allowing banks to satisfy their liquidity fully at a lower cost. Discussions on monetary, macroprudential, and financial sector issues are conducted with the authorities at the regional level.

- 24 These estimates are included in the business registry at Mali's investment promotion agency (API) and recognized as active. See <https://apimali.gov.ml/>.
- 25 "Rapport de l'Observatoire National de l'Emploi et de la Formation (ONEF)," 2016.
- 26 Census of MSMEs in Mali, April 2019
- 27 Formal enterprises are estimated to employ around 100,000 people.
- 28 "Actively employed" is defined by INSTAT's modular and permanent survey of households (EMOP) as the population that engaged in, or was actively looking for, any activity aiming to produce goods or provide services in return for remuneration or profit in the seven days preceding the survey. It excludes the majority of students and retirees.
- 29 "Rapport de l'ONEF," 2016.
- 30 INSTAT, "Enquête Modulaire et Permanente auprès des Ménages," 2017, <https://www.instat-mali.org/fr/publications/enquete-modulaire-et-permanente-aupres-des-menages-emop>.
- 31 ILO (International Labour Organization), *Women and Men in the Informal Economy: A Statistical Picture*, 3rd ed. (Geneva: ILO 2018).
- 32 ILO, *Women and Men in the Informal Economy*
- 33 World Bank, *Women, Business and the Law 2021* (Washington, DC: World Bank, 2021).
- 34 World Bank, *Women, Business and the Law 2021*.
- 35 ILO, *Women and Men in the Informal Economy*
- 36 ILO, *Women and Men in the Informal Economy*
- 37 Bertelsmann Stiftung Transformation Index (BTI), 2020 data, <https://bti-project.org/en/?&cb=00000>.
- 38 A sample of 500 formal companies representative of the private sector in Mali was surveyed to assess the impact of COVID-19 on the business sector. The companies surveyed operate in Bamako, Kayes, Sikasso, Ségou, Koulikoro, and Mopti. They are in more than eight business sectors: (a) agriculture and agribusiness; (b) retail trade; (c) construction and real estate; (d) education; (e) service delivery; (f) health; (g) financial services; (h) tourism, hotel, and catering; and (i) other. All company sizes are represented: very small companies and start-ups (0–4 employees), small companies (5–19 employees), medium companies (20–99 employees), large companies (100–250 employees), and very large companies (250 and more employees).
- 39 The revealed comparative advantage (RCA) analysis is based on an underlying theory that posits that patterns of trade among countries are governed by their relative differences in productivity. Whereas productivity differences are difficult to observe, the RCA metric can be used to reveal such differences. When a country has a revealed comparative advantage for a given product (RCA >1), it is inferred to be a competitive producer or exporter of that product relative to a country producing or exporting that good at or below the world average—which suggests that the country's resource endowments make it highly competitive in these sectors.
- 40 Whereas it is a key contributor to Mali's export basket and GDP growth, the mining sector is not explored in the CPSD given the opportunities for private sector investment in the short-to-medium term and the governance challenges the sector faces.
- 41 FAO (Food and Agriculture Organization of the United Nations), Statistical Database 2016 (arable land), <https://www.fao.org/faostat/en/#data/RL>.
- 42 FAO (Food and Agriculture Organization of the United Nations), AQUASTAT Database, 2016, <http://www.fao.org/aquastat/en/>.
- 43 Silvia Díaz-Alcaide, Pedro Martínez-Santos, and Fermin Villarroya, "A Commune-Level Groundwater Potential Map for the Republic of Mali," *Water* 9 (2017): 839.
- 44 INSTAT, *Rapport Mensuel de l'Enquête sur L'Impact de Coronavirus sur les Conditions de Vie des Ménages au Mali* (August 2020 and April 2021).
- 45 INSTAT, *Rapport Mensuel de l'Enquête sur L'Impact de Coronavirus sur les Conditions de Vie des Ménages au Mali*.
- 46 These subsectors are cotton, rice, coarse cereals, horticulture, livestock, and peanuts.
- 47 CFA franc to US dollar exchange rate is CFAF 588 = US\$1.
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- 75 This program is the type that developers submit applications to AMADER to develop mini-grids in the sites of their choosing.
- 76 The Abidjan to Bamako corridor is 1,182 km via Bobo Dioulasso (534 km by road and 648 km by rail) and 1,111 km by road; the Dakar to Bamako corridor is 1,227 km by rail, 1,210 km by road along the southern itinerary, and 1,346 km by road along the northern itinerary.

- 77 The value of the bilateral trade with Senegal was twice as much as with Côte d'Ivoire in 2017.
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- 88 In Senegal, more than half of the traffic shifted to the southern alignment when the condition of the unpaved section between Tambacounda and Kidira (Malian border) became so poor that it took about eight hours to drive its 180 km length, whereas the alternative 440 km Tambacounda-Moussala section (Malian border) had just been paved and could be driven in five hours. In Mali, the rest of the southern alignment is shorter (440 km) but unpaved and hilly, whereas the northern alignment (710 km) is paved with about 40 percent in very poor condition. However, Senegal has programmed the paving of the Tambacounda-Kidira section around 2020–21, and Mali has started the rehabilitation of 135 km of the northern alignment. On one hand, the southern alignment (a) is meant to improve the access to the remote region of Kedougou in Senegal and not to carry an international transit corridor, (b) crosses a hilly area and two national parks in Senegal and Mali, and (c) is still unpaved in Mali (440 km). On the other hand, Mali decided to locate the future inland terminal in Nossombougou along the northern alignment. Thus, now it would make sense to focus on the public financial effort required to maintain and modernize the road corridor only on the northern alignment.
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