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MADAGASCAR ECONOMIC UPDATE

A New Start?

October 2019

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BOXES

ACRONYMS

ARTEC	Regulatory Authority for Communication Technologies for Madagascar *(Autorité de Régulation des Technologies de Communication)*
CNaPS	Private Social Security Fund *(Caisse Nationale de Prévoyance Sociale)*
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GACM	Association of stakeholders in the cacao sector in Madagascar – *(Groupement des acteurs du cacao de Madagascar)*
GDP	Gross Domestic Product
GEL	Association of Lychee exporters *(Groupement des Exportateurs de Litchi)*
ICCO	International Cocoa Organization
ICT	Information and Communication Technology
ILO	International Labor Organization
IMF	International Monetary Fund
INSTAT	National Institute of Statistics *(Institut National des Statistiques)*
IP	Investment production
IT- BPO	Information technology – Business Processing Outsourcing
ITU	International Telecommunication Union
JIRAMA	State-owned utilities company *(Jiro sy Rano Malagasy)*
LDCs	Least Developed Countries
MCPAT	Markets and Competition Policy Assessment Toolkit
MGA	Malagasy Ariary
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
PPP	Public Private Partnership
R&D	Research and Development
SMS	Short Message Service
SSA	Sub Saharan Africa
SWIORAFI	Southwest Indian Ocean Risk Assessment and Financing Initiative
TFP	Total Factor Productivity
TPP	Taxes on Petroleum Products
USD	Unites States Dollar
VAT	Value Added Taxes
WDI	World Development Indicator
WEFGCR	World Economic Forum Global Competitiveness Report

FOREWORD

The successful conclusion of the Presidential election in January 2019 represents a historic window of opportunity for Madagascar to break cycles of political instability that abruptly interrupted its development in the past and to leapfrog its economic and social revitalization. Following a prolonged period of economic stagnation, growth accelerated over the last five years to reach 5.1 percent in 2018, its fastest pace in over a decade. The return to constitutional order in 2014 was instrumental to this economic revival, as it contributed to restore investor confidence, re-open access to key export markets, reinstate flows of concessional financing, and encourage structural reforms. Growth continued apace in 2019, although moderating slightly to an estimated 4.7 percent, amid weakening external demand and a slow execution of public spending following the presidential and parliamentary elections. A post-election rebound in public and private investments is expected to result in growth averaging 5.4 percent in 2020-21.

This Economic Update suggests however that the country remains vulnerable to shocks. International risks include the possible intensification of the trade war between main trading partners, or the rise in international oil prices in a context of geopolitical tensions. The risk of natural disasters or of a sharp drop in the price of vanilla also need due consideration. The government must take advantage of the successful political transition to accelerate growth-enhancing reforms and develop the necessary fiscal buffers to support priority investments and be ready to face unexpected circumstances.

In this context, measures to increase domestic revenue mobilization and improve public sector efficiency are particularly important. In this report, for instance, we highlight the opportunity to review different tax abatements and preferential tax regimes, which reduce government revenues by nearly a quarter. For lack of clear impact assessments, the net benefit of these tax expenditures is often unclear and revenue losses are compounded by opportunities for fraud or abuse. A more systematic and transparent cost-benefit analysis could help identify measures that are ineffective and absorb resources that could be better used in priority investments and social spending.

In parallel, creating a more transparent and predictable business environment would help foster new investments and boost productivity. In this regard, the special focus section of this report analyses regulatory and non-regulatory barriers to competition in key sectors of the economy and ways to overcome them, with the ultimate objective of spurring higher growth and job creation. This includes reinforcing competition laws and strengthening their enforcement by independent regulators as well as encouraging best governance practices for incumbent firms and private sector associations.

Finally, boosting productivity in agriculture and investing more in human capital will be essential to tackle extreme poverty and ensure shared prosperity. With an estimated 75 percent of the population still living with less than $1.90 a day this year and 80 percent living in rural areas, the World Bank is actively working with the government to accelerate human capital development, strengthening resilience and access to basic infrastructure services and foster private sector investments. This includes the growth pole approach, which stimulates private sector-led growth in sectors such agribusiness and tourism, and whose lessons Madagascar is sharing with the rest of the continent.

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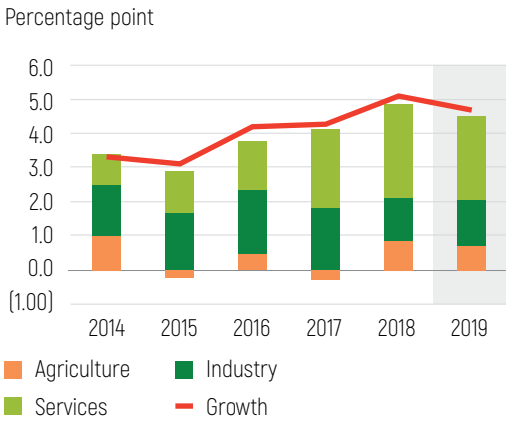
PART ONE

RECENT ECONOMIC DEVELOPMENTS

A ECONOMIC ACTIVITY AND POVERTY

1. Economic growth in Madagascar has been robust in 2018 but lost some momentum in 2019. Growth reached 5.1 percent in 2018, its fastest pace since the return to Constitutional order in 2014,[1] driven by robust activity in export-oriented sectors and in services such as transport, telecommunications, and finance. Improved weather conditions also drove a recovery in agricultural production following a weak harvest in 2017 (Figure 1). In the first half of 2019, however, economic activity moderated due to a combination of weakening external demand from key trading partners and the slow execution of public spending, as the new government took office following the presidential election end-2018. In particular, the nomination of new cabinet members, the reconfiguration of some ministries, the designation of new budget authorizing officers, and the revision of the 2019 budget were associated with slower disbursements compared to previous years (Figure 2).[2]

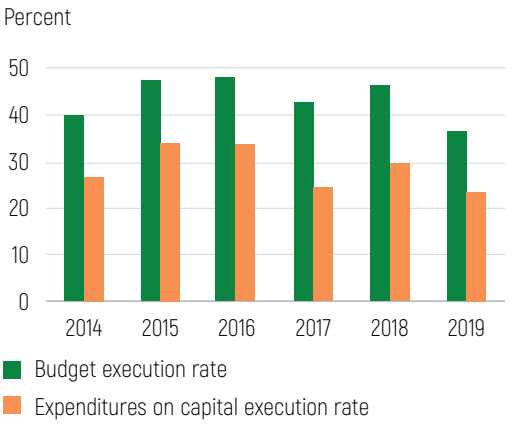
Figure 1: GDP growth and sectoral contributions



Source: World Bank, INSTAT

Note: Contribution of sectors to GDP growth at factor costs. Based on national accounts at 1984 prices.

Figure 2: Government's budget execution rate



Source: Ministry of Economy and Finance

Note: The execution rate is the share of expenditures committed as of end-July over the revised annual budget. The underlying data is from the Treasury's Global Operations table.

2. The peaceful political transition and government's plan to ramp up public investments have been accompanied by rising business confidence in the course of 2019. Following a wait-and-see position of the private sector at the start of the year, business confidence and demand expectations recovered in the second and third quarters, particularly in the manufacturing sector, which bodes well for private investment (Figure 3). Private consumption growth was supported by robust job creation, rising wages and moderate inflation in the first half of the year. By contrast, the contribution of net exports to growth has turned negative, reflecting a deteriorating global economic environment, which dampened exports (Figure 4). On balance, growth is projected to moderate slightly in 2019 to 4.7 percent, about ½ percentage point below the last projections, released in April.[3] In per capita terms, growth is expected to reach 2 percent this year, still significantly outpacing the Sub-Saharan average of 0.3 percent (Figure 5).[4]

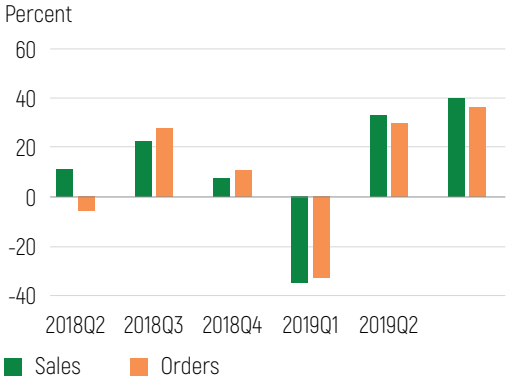
1 Real GDP measured at 1984 prices, consistent with data used by the government for its amended 2019 budget. The government will shift to new national accounts data using 2007 prices from the publication of its 2020 draft budget.

2 As of August, only 44 percent of public expenditures has been committed, a significantly lower rate than prior years.

3 World bank (April 2019). Madagascar Economic Update. Managing Fuel Pricing.

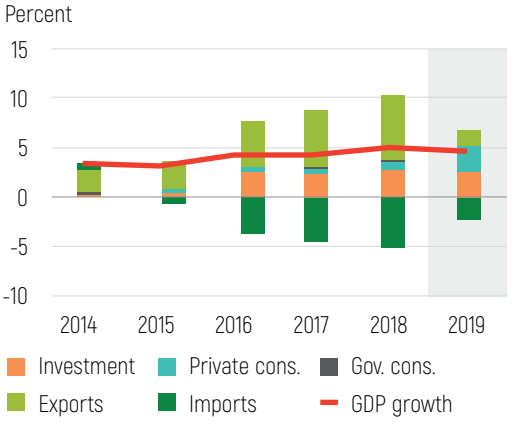
4 These projections take into account new data from the 2018 census, which shows population growth over the period 1993- 2018 to have been 3.01 percent, higher than the previously assumed rate of 2.68.

Figure 3: Business expectations



Source: Central Bank of Madagascar.
Note: Business expectations are measured as the balance of opinions on business trend, in percent of overall responses. A positive value means that the number of respondents indicating an expansion in their activities exceeds that of those indicating a contraction.

Figure 4: Contribution to GDP growth



Source: World Bank, INSTAT
Note: Based on national accounts at 1984 prices. Numbers for 2018 are estimates and those for 2019 are forecasts. Imports are subtracted from final demand, therefore contributing negatively to real GDP growth. Private cons. stands for private consumption and Gov. cons. for government consumption.

Figure 5: GDP growth

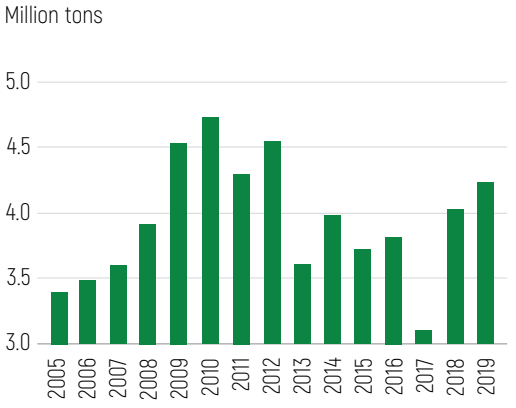
Source: World Bank
Note: Based on national accounts at 1984 prices.
Numbers for 2018 are estimates and those for 2019 are forecasts.

3. Rice paddy production maintained a positive momentum in 2019 but activity in the primary sector as a whole contracted at the start of the year. Domestic paddy production – occupying 56 percent of agricultural land and employing 83 percent of households in the sector[5] - is estimated to reach 4.2 million tons in 2019, about 209,000

[5] World Bank (2017). Madagascar Household and Spatial Analysis. Data computed from the 2012 surveys on the Monitoring of the Millennium Development Goals.

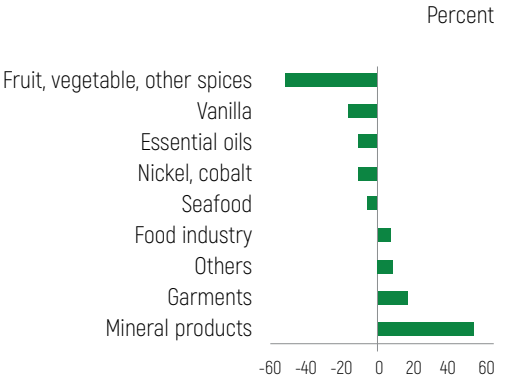
tons above the 2018 harvest, due to favorable weather conditions (Figure 6).[6] The price of paddy at the husker level has also remained above its 2018 level until the main harvesting season in 2019.[7] On the other hand, the volume of exports of the main cash crops and fishery products, including vanilla, cloves, shrimps, and grains has slowed during the first semester (Figure 7). On average, growth in primary sector activity is estimated to have slowed to 2.5 percent in 2019, down from 3.1 percent in 2018, and slightly below population growth. Therefore, agriculture output per capita remains stagnant and still significantly below the level observed a decade ago (Figure 8).

Figure 6: Paddy production



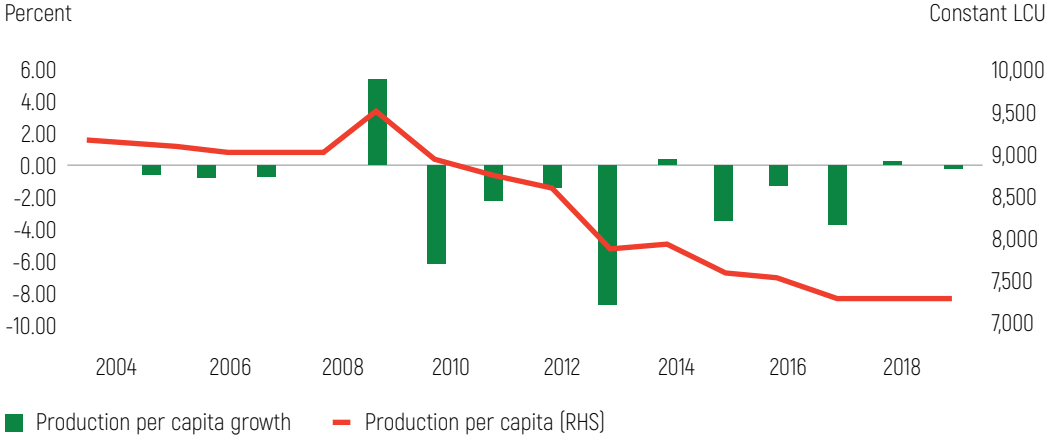
Source: Ministry of Agriculture
Note: Data is estimated based on the 2004/2005 agricultural census, pluviometry data, regional reports on the agricultural campaign, and surveys on harvest assessment when available.

Figure 7: Export growth in 2019



Source: Malagasy authorities, WB staff calculation
Note: Percent change between the first semester of 2018 and that of 2019.

Figure 8: Agricultural production per capita

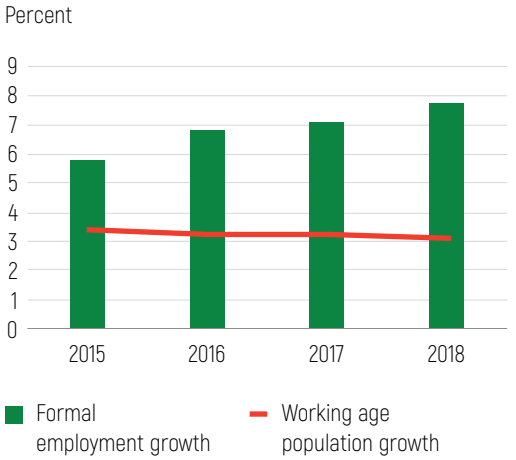


Note: Based on national accounts at 1984 prices.
Numbers for 2018 are estimates and 2019 are forecasts.

6 Estimates from the Rice Observatory and the Ministry of Agriculture, Livestock and Fishing.
7 For example, the main harvest season starts in April in Marovoay and June in Amparafaravola.

4. Progress in poverty reduction is supported by improving labor market conditions but is hindered by low and falling labor productivity in agriculture. Strong economic performance over the last five years has supported job creation, with private employment recorded at the main private social security fund expanding on average by 6.8 percent per year over the period 2016-18, more than twice the growth rate of the working age population (Figure 9).[8] Sectors contributing most to the increase in contractual employment over that period include retail and wholesale trade, textiles, agriculture, services to companies, and public administration. However, progress in alleviating extreme poverty is slowed down by low and declining labor productivity in agriculture.[9] This decline has been associated with the inability of other sectors to absorb a rapidly growing population, as well as low rural connectivity, limited access to inputs, and a lack of organized value chains in the main staple and cash crops. From 2012, the last year for which poverty data are available, to 2019, the percentage of the population living below the international poverty line of USD 1.90 (2011 PPP) per day has only slightly decreased, from 77.6 to 74.1 percent, and remains significantly higher than the regional average of 41.5 percent (Figure 10).[10]

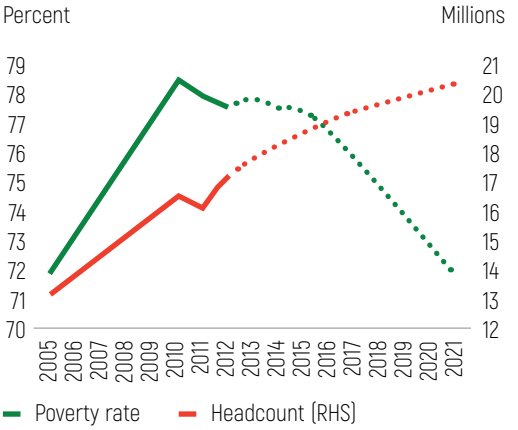
Figure 9: Employment and working age population growth



Source : Caisse Nationale de Prévoyance Sociale, United Nations, World Bank

Note: Formal employment is measured by the number of employees registered at the CNAPS, the main social security fund for private employees in Madagascar. The working age population is made of males and females aged 15 to 64.

Figure 10: Poverty rate and headcount



Source: World Bank

Note: Poverty measured at USD 1.90 per day PPP. Last available poverty headcounts are from 2012. Data for 2013-18 are estimates and 2019-21 are forecasts.

[8] Source: CNaPs 2019

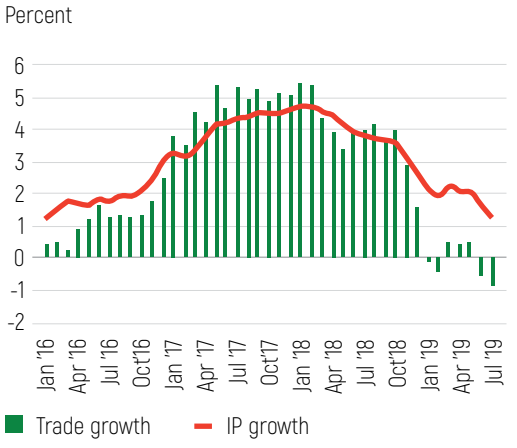
[9] As measured by value added per worker (source: WDI).

[10] Latest data available for the SSA region covers 2015. Data from World bank PovcalNet

B TRADE AND BALANCE OF PAYMENT

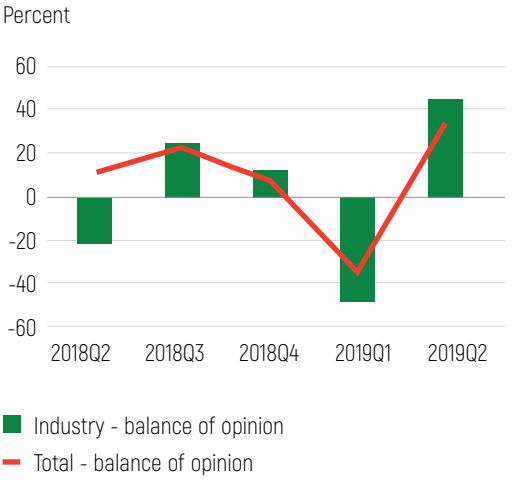
5. The Malagasy economy has been negatively impacted by slowing global demand. Export revenues and industrial activity were adversely affected by a significant economic deceleration in major export markets in the first half of the year, which coincided with the flare-up of trade tensions between the United States and China. These two countries absorb 25 percent of Malagasy exports and are a major source of global spillovers, including on trade-dependent economies in Europe and Asia. In this context, many major advanced and emerging economies experienced at least one quarter of stagnant or negative growth in 2019 and during the first half of this year global trade in goods registered its weakest performance since the global financial crisis (Figure 11). This has put downward pressure on both the demand and price of Madagascar's key export goods and was associated with a dip in industrial sales and order books at the start of the year (Figure 12). Demand conditions in industry started improving in the second quarter, but only partially recovering from the dismal performance of the first quarter.

Figure 11: Growth in global goods trade and industrial production



Source: World Bank, CPB.
Note: Growth in global goods trade and industrial production are measured in volume.

Figure 12: Sales and order book changes

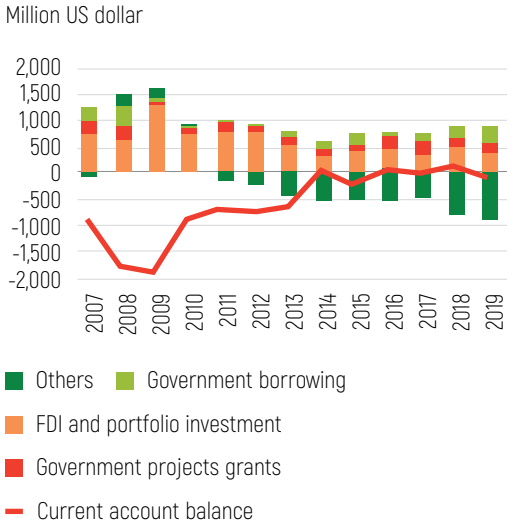


Source: Central Bank of Madagascar.
A positive value means that the number of respondents indicating an expansion in their activities exceeds that of those indicating a contraction.

6. Weakening export revenues and sustained imports were reflected in a deteriorating current account balance. In the first semester, the current account recorded a deficit of US$220.4 million, compared to a surplus of US$213.9 million in the first semester of 2018. The shift mainly stems from a deceleration of export revenues, including from cash crops and nickel. In recent years, vanilla has been the main source of export receipts, supported by exceptionally high prices and robust demand. Both export quantities and unit prices, however, shrank in the first half of 2019. Despite vanilla being a key source of foreign exchange and income for Madagascar, gains are accruing to intermediaries and exporters, rather than to smallholders (see Chapter 3). Nickel is the second largest source of export revenues, and while export volumes continued to grow in the first semester, lower international prices on expectations of slowing demand from China and other major industrial economies have reduced export revenues there as well. Imports of intermediate goods remain sustained whereas fuel imports are supported by ongoing demand from electricity generation and transport. The balance of incomes, while remaining positive, dropped by a third compared to the first semester of 2018, reflecting important dividend payments and lower inflow of public and private transfers. For the whole year, the current

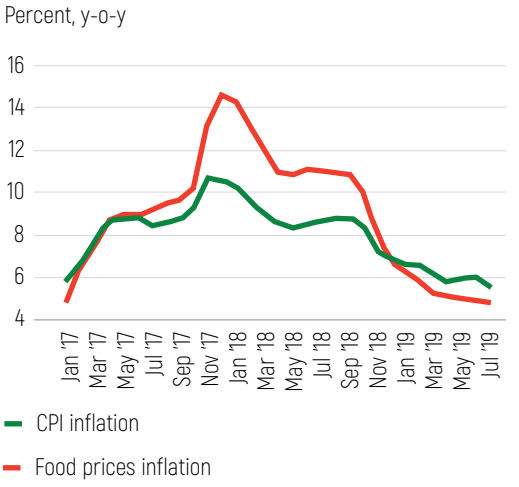
account balance is expected to shift from a surplus of 0.8 percent of GDP in 2018 to a deficit of 0.8 percent of GDP in 2019. With net official transfers projected to increase to 3.9 percent of GDP in 2019 and foreign direct investments forecasted at 3.2 percent of GDP in 2019, external financing flows remain robust (Figure 13).

Figure 13: Current account balance and financing



Source: Central Bank of Madagascar, International Monetary Fund
Note: The current account measures net flows of goods, services and income between the residents of a country and non-residents. A negative figure means that payments to non-residents exceed receipts. The current data was adapted from balance of payment data available. FDI stands for Foreign Direct Investment. The "Others" category includes banks, monetary authority, private sector loans and unrepatriated export revenues.

Figure 14: Consumer price inflation



Source: INSTAT
Note: Consumer price inflation is measured by the annual variation of the Consumer Price Index (base average 2016 = 100) at end of period. The Food price index includes food and soft drinks.

7. International reserves remain at an adequate level. International reserves remain at a healthy level, amounting to a record 4.6 months of imports in September. he central bank continued to implement targeted interventions to smooth seasonal changes in the demand and supply of foreign exchange linked to the production cycles of key cash crops. Reflecting the balance of international transactions, the nominal effective exchange rate depreciated at a moderate pace during most of 2019, while the real effective exchange rate remained broadly stable.

C INFLATION, CREDIT, AND MONETARY POLICY

8. Consumer price inflation moderated in 2019 and monetary policy remains on a steady course. Consumer price inflation eased during 2018 amid diminishing food price inflation. The downward trend continued up to the third quarter of 2019, despite upward price adjustments of some staple goods such as edible oils since mid-2019. The price hike in edible oil followed the announcement of additional import duties to safeguard domestic industries. In contrast, rice price inflation continued to moderate in 2019, thanks to robust domestic production and favorable weather conditions. The downward revision of gas prices at the pump negotiated by the government in June 2019, together with declining international oil prices earlier in the year, were reflected in energy inflation decelerating up to the third quarter of 2019. A flaring up of geopolitical tensions in the Middle East during the fourth quarter have made international oil prices more volatile but have not led to a sustained uptick. Overall, inflation is expected to moderate to 6.3 percent on average in 2019, down from 8.6 percent in 2018, and remain consistent with the central bank's price stability objective. The Monetary Policy Committee has maintained the policy rate unchanged from its end-2017 level and continued to manage intra-year fluctuation in banks' excess reserves through targeted liquidity interventions.

9. Madagascar's banking sector exhibits strong fundamentals. All banks fulfill the minimum capital adequacy requirement, with an average capital to risk-weighted assets ratio of 13 percent in 2018, well above the required minimum of 8 percent. Non-performing loans remain low, at 8.5 percent of total credit to the economy, and below the regional average of 10.1 percent. Subject to seasonal fluctuations, bank liquidity is ample in aggregate, with overall deposits exceeding loans. Banks are on average highly profitable, mostly due to very high spreads between loan and deposit rates. Credit growth to companies remained robust in the first half of the year, while bank lending rates declined somewhat. Private credit-to-GDP ratio increased from 12.9 percent in 2016 to 13.4 percent in July 2019. These levels are well below the regional average of 24.4 percent and signal limited financial intermediation by banks. The share of population with access to savings account in commercial banks and mobile money accounts remains low by regional standards but increased in recent years to reach 11 and 7 percent in 2018, respectively.

D PUBLIC FINANCES

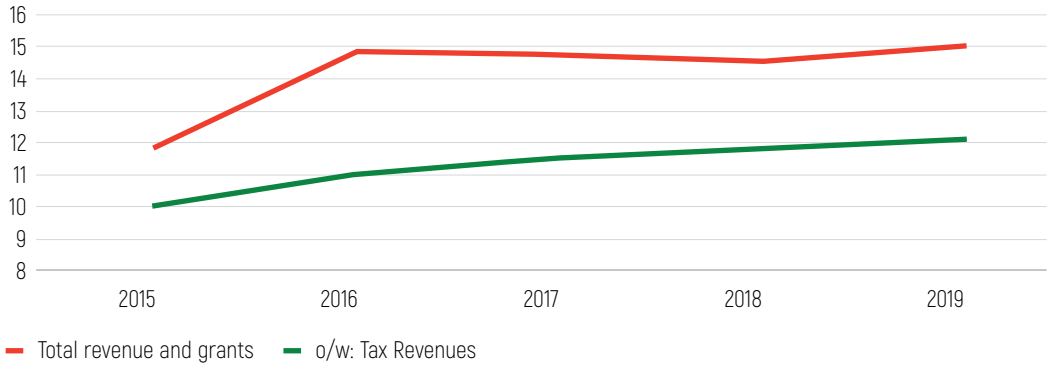
10. The tax-to-GDP ratio is on an upward trend, but revenue mobilization remains among the lowest in Sub-Saharan Africa. Total government revenues excluding grants increased to 12 percent of GDP in 2018, up from 10.1 percent in 2014.[11] Tax collection in the first half of 2019 has slightly exceeded the target set in the budget, and overall revenues are expected to increase to 12.2 percent of GDP in 2019 (Figure 15). Despite some improvement, the tax-to-GDP ratio is well below the average of 16 percent in Sub-Saharan Africa.[12] Madagascar has a simple domestic tax structure, with a flat 20 percent income tax rate and a 20 percent VAT rate, which arguably makes tax collection and compliance easier. However, limited effectiveness and coordination of tax administrations, numerous exemptions and loopholes, as well as pervasive tax evasion and corruption are constraining revenue collection. Over the past 3 years, tax expenditures amounted to 1.9 percent of GDP on average, with an administrative review of their effectiveness still pending (see Box B1).

11 Based on national accounts data at 1984 prices.

12 Data for 2016 for SSA. Source: WDI.

Figure 15: Government revenues

Percent of GDP

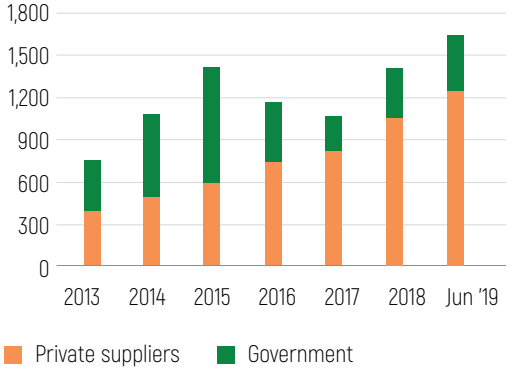


Source: Malagasy authorities, IMF and WB staff calculations, September 2019

11. The composition of government spending is improving gradually. Public expenditures (excluding interest payments) declined to 16.3 percent of GDP in 2018, mainly due to the under-execution of public investments. The new government approved the revised 2019 budget in May to reflect changes in the government structure and its new priorities but it remained committed to key objectives such as the reduction of accumulated liabilities to petroleum companies and reduced transfers to the state-owned utilities company, JIRAMA. The financial situation of JIRAMA, however, remains precarious with operating losses and arrears towards suppliers increasing in 2019 (Figure 16). Social spending is projected to stabilize at 1 percent of GDP in 2019, similar to the execution rate in 2018.[13] Overall expenditures (excluding interest payments) are expected to rebound to 16.6 percent in 2019, reflecting a scaling up of public investments in the second half of the year (Figure 17).

Figure 16: JIRAMA's arrears

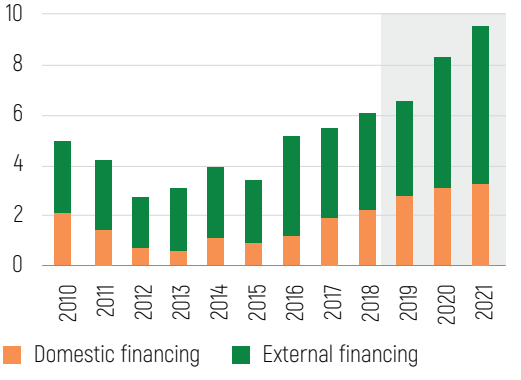
Billion MGA



Source: Ministry of Economy and Finance, World Bank, JIRAMA
Note: Data as of June 30 for 2019. Data compiled from the financial accounts of JIRAMA.

Figure 17: Public capital expenditures by source

Percent of GDP



Source: Ministry of Economy and Finance, International Monetary Fund
Note: Ratio of commitments to GDP at the end of the year on an accrual basis. Projections start in 2019.

[13] Spending of social ministries, excluding salaries and externally financed investments.

12. Budget deficits remain low and are largely externally-financed. The budget deficit widened marginally in 2018, to 2.5 percent of GDP, while public debt slightly declined to 45.7 percent of GDP. The deficit is expected to remain broadly stable in 2019, while the debt-to-GDP ratio is expected to slightly increase to 46 percent of GDP.[14] The deficit is mainly externally-financed, with external borrowing projected at 2.1 percent of GDP in 2019, compared to 1.7 percent in 2018. External financing has been largely on concessional terms, accounting for 95 percent of external public debt. On the domestic side, appetite for treasury bills continued be determined by seasonal variations in bank liquidity, but was positively affected by the smooth political transition after the presidential election end-2018.

[14] Social spending defined using an administrative and programmatic classification.

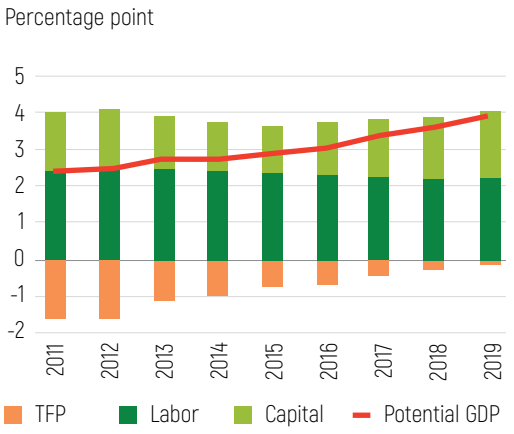
PART TWO

OUTLOOK AND RISKS

A ECONOMIC OUTLOOK

1. A positive short-term outlook is supported by ambitious public investment plans. Growth is projected to increase to 5.3 percent in 2020, on expectations of a scaling up of public investment, including in road, health and education infrastructures, and a post-election rebound of private investment as confidence returns. Rising public and private capital spending should more than offset a slowdown in export growth, as economic activity in China, Europe, and the United States remains soft. In 2021, growth is expected to increase slightly further to 5.4 percent, as the upturn in public and private capital spending continues. Over the medium term, the growth potential of Madagascar continues to be held back by inadequate infrastructures, low human capital, a lack of competition in key sectors, and poor governance. While this is expected to continue constraining activity through subdued productivity trends in the base case scenario, accelerated reforms by the new government could result in better outcomes, and hence represent a upside risks to the outlook (Figure 18).

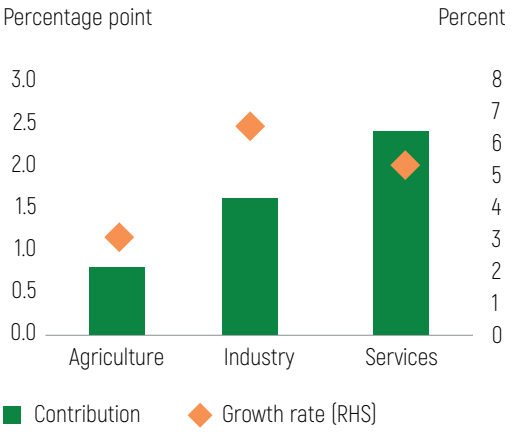
Figure 18: Potential growth estimates



Source: World Bank

Note: TFP stands for Total Factor Productivity.

Figure 19: Sectoral contribution to growth, average 2020-21



Source: World Bank

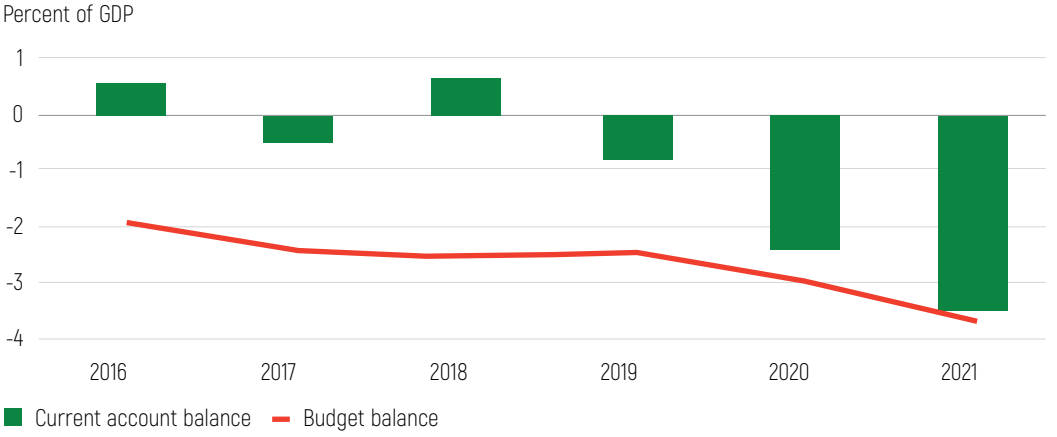
Note: The data presents the simple average of growth rate and percentage point contribution over 2020-2021.

2. The service sector is projected to remain the main engine of growth, despite the rapid expansion of the manufacturing sector. Growth in the manufacturing sector is projected to average 6.9 percent in 2020-21, underpinned by robust investments and projected improvements in electricity generation. Activity in the tertiary sector is expected to grow at a somewhat slower pace, but its contribution to overall GDP growth should be greater, given its larger size (Figure 19). Services sector activity will also benefit from the government's infrastructure investment plan, including enabling services such as transport and finance. The agriculture sector is expected to expand at a modest pace, slightly outpacing that of the overall population growth, assuming the absence of severe natural disasters. However, labor productivity trends in agriculture are expected to remain weak and production mainly geared towards self-subsistence, reducing its contribution to aggregate income generation and food security. Tellingly, only 20 percent of rice production nationwide is being marketed. Technological absorption is low, as farmers have limited access to inputs, finance, and markets and as they face price uncertainty, which reduces the incentive to invest in higher-yielding production systems. Addressing this constraints remain a key challenge to increase the growth potential of the Malagasy economy.

3. Consumer price inflation is predicted to continue hovering around 6 percent in 2020-21. Stable inflation is predicated on favorable weather patterns keeping food prices in check, as well as broad stability in oil prices, and a continued modest pace of nominal effective exchange rate depreciation and credit growth. Under baseline assumptions, policy interest rates are expected to remain around current levels, with the credible commitment of the central bank to price stability and an improved operational framework contributing positively to anchor inflation and exchange rate expectations. Central bank liquidity management and the recent enhancement of foreign exchange market operations are expected to continue smoothing seasonal fluctuations in banks' excess reserves and the exchange rate.[15]

4. The current account deficit is expected to gradually expand, reflecting the prospects of decelerating export revenues and scaled up investments. Softening external demand and moderating vanilla prices should result in weaker export revenues in 2020 and 2021. At the same time, rising public and private investments will support strong import demand which, together with lower net current transfers, will contribute to a rising current account deficit. The latter is projected to reach 2.4 percent of GDP in 2020 and 3.5 percent of GDP in 2021 (Figure 20). Growing external deficits, combined with an increasing share of non-concessional financing at higher interest rates should result in a gradual increase in public external debt, albeit from low levels.

Figure 20: Government budget and current account balance



Source: Malagasy authorities, World Bank

Note: The current account measures net flows of goods, services and income between the residents of a country and non-residents. Budget balance presents the difference between government revenues and government expenditures, including interest payments. A negative budget balance indicates that the government spends more than it earns.

5. Government deficits are on an upward trajectory. The central government budget deficit is expected to widen to 3.7 percent of GDP by 2021, up from 2.5 percent in 2018. This rise is mainly driven by accelerated public investments, from an estimated 6.1 percent for GDP in 2018 to 9.5 percent in 2021. This projected increase assumes an improved absorptive capacity and reduced implementation constraints. Increased public investments will more than offset the government's planned reductions in transfers and subsidies to State-Owned Enterprises (from 2.6 percent of GDP in 2018 to 2.1 percent in 2021). In particular, the fall in transfers to JIRAMA assumes that the utility's operational performance improves and that its plans to clean up arrears are effectively implemented. The government's ability to finance priority spending is hampered by low domestic revenue mobilization, with a tax-to-GDP ratio among the lowest in Sub-Saharan Africa. Efforts to increase this ratio are expected to continue, by targeting delinquent taxpayers, accelerating the digitalization of tax declaration and improving the efficiency of the tax administration, but are expected to fall somewhat short of the planned rise of 1 percentage point of GDP per year absent a stronger revenue

[15] Madagascar officially maintains a flexible exchange rate regime. The exchange rate is determined by the market and the central bank only intervenes to smooth episodes of high volatility, based on an automatic algorithm applied on a limited scale.

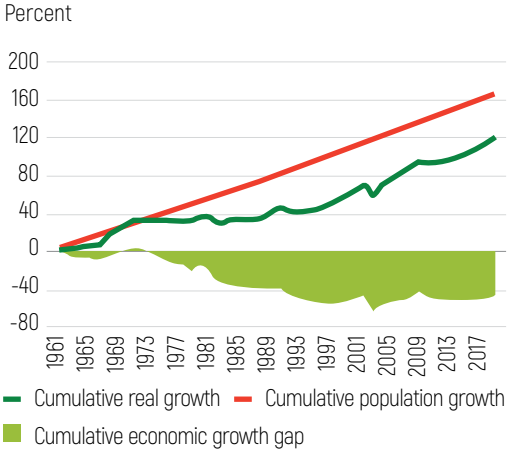
mobilization strategy. Over the medium term, increases in non-tax revenues and rationalization of proliferating tax exemptions and loopholes are among the key options to increase revenues without hampering activity and create fiscal space to finance priority investments. Box B1 discusses the use of tax expenditures in Madagascar, assesses their efficiency and calls for some rationalization based on transparent cost-benefit analysis.

6. Poverty rates are projected to gradually decline. With per capita income growth averaging around 2½ percent in 2020-21, poverty rates are projected to continue declining in coming years, to reach 71.4 percent in 2021. Meanwhile, the number of poor people should further increase, with an estimated 20.4 million people living on less than USD 1.90 per day by 2021, up from 19.9 million in 2019 due to rapid population growth.

B RISKS AND POLICY CHALLENGES

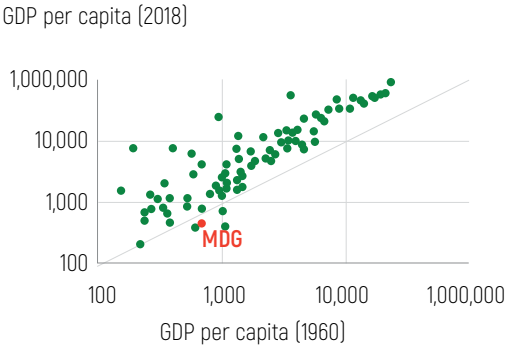
7. Accelerated reforms could lead to stronger-than-expected growth, but downside risks loom as well. The Malagasy economy has proven highly vulnerable to both domestic and external shocks, as a history of stop-and-go growth episodes illustrates (Figure 21). A successful transition of power after the 2018 presidential election substantially reduced the prospects of political instability, while repeated political crises used to be a major factor behind the underperformance of the Malagasy economy (Figure 22). Moreover, baseline projections assume gradual improvements in governance and reform implementation, whereas faster delivery of well-targeted and confidence-building policies combined with a strong institutional commitment to macroeconomic stability could yield better than expected outcomes. However, important downside risks also loom on the horizon. These include a sharp economic slowdown of major trading partners, a sudden drop in vanilla prices from their current highs, or a hike in oil prices amid escalating geopolitical tensions. For instance, a sudden re-alignment of vanilla prices with their pre-boom (2012-15) average could curtail overall export revenues by more than 20 percent at constant vanilla export volumes, increasing the current account deficit above 8 percent of GDP in the absence of mitigating effects on the import side (Figure 23).

Figure 21: Cumulative population and real GDP growth



Source: World Bank

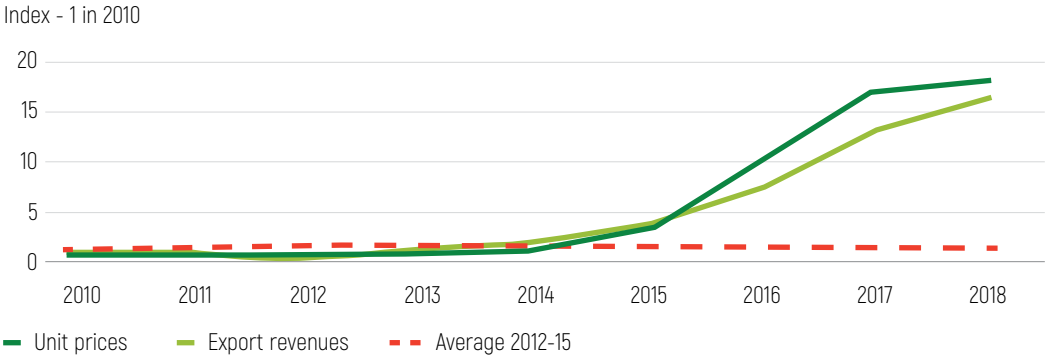
Figure 22: GDP per capita in 1960 and today



Source: World Bank

Note: Sample of all countries with WDI data, GDP per capita in constant 2010 USD, scales logged to the base 10 (GDP p.c. increase 10x with each equal-spaced interval.).

Figure 23: Vanilla prices and export earnings

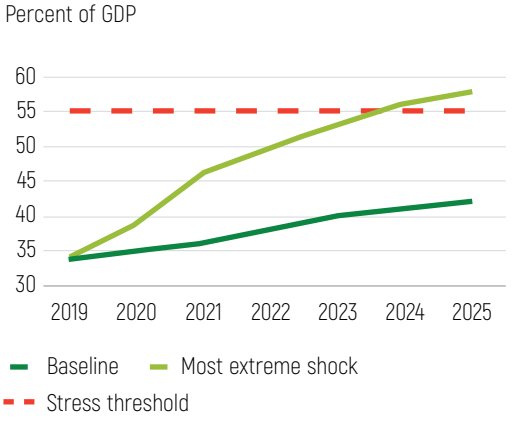


Source: Malagasy authorities, World Bank

Note: Data derived from balance of payments export statistics. Unit prices are computed from value of exports and export quantity information as declared at Malagasy Customs.

8. Contingent liabilities need monitoring. Fiscal risks include those associated with prospects of rising government deficits amid low domestic revenue mobilization, contingent liabilities towards state-owned companies, and a proliferation of unsolicited PPP projects. Continued operating losses at JIRAMA and delays in the implementation of a viable financial recovery plan could increase public transfers in the short term and heighten risks of financial distress over the medium term. Commercial debt obligations associated with the financial restructuring of Air Madagascar are also potential sources of risks. This said, the risk of public debt distress is assessed to be moderate over the medium term. Unchecked liabilities towards petroleum companies and commercial debt breaching stress thresholds only in scenarios implying substantial liability growth or terms-of-trade shocks (Figure 24). The risk of external debt distress is currently low, reflecting a low starting point, an improved debt carrying capacity in recent years, and ample foreign exchange reserves compared with regional peers (Figure 25).

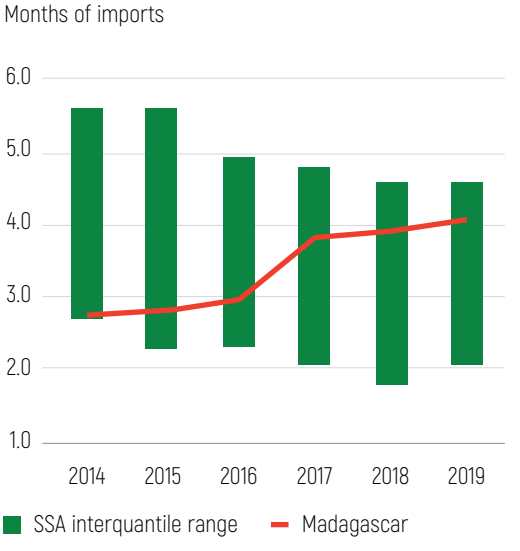
Figure 24: Present value of public debt, baseline and stress scenario



Source: International Monetary Fund and World Bank. Debt Sustainability Analysis (July 2019).

Note: The most extreme shock consists in a shock on GDP growth where the rate in 2020 and 2021 is one standard deviation lower than historical average or the forecast. The threshold is that of a medium debt carrying capacity. Baseline presents the most likely scenario based on current available information.

Figure 25: Gross official reserves

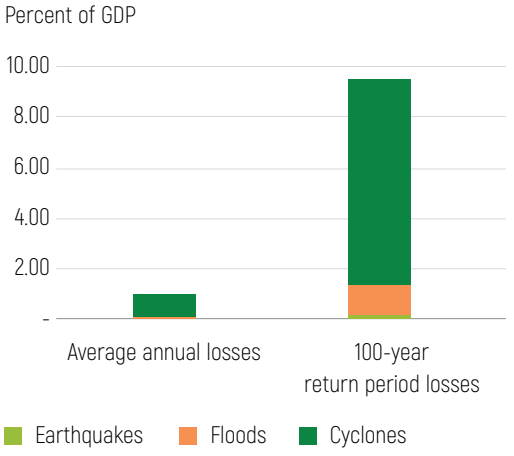


Source: International Monetary Fund, World Bank

Note: SSA refers to Sub Saharan Africa. The interquartile range uses data from and 29 other SSA countries.

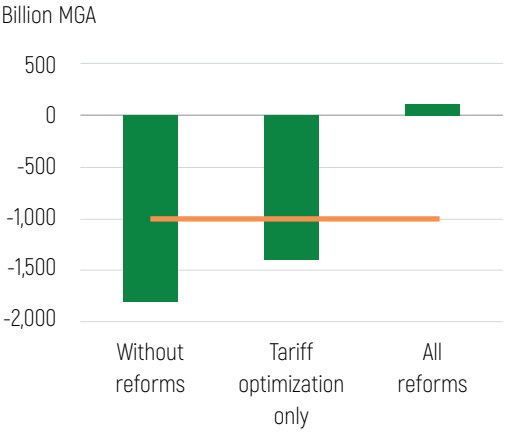
9. Natural disasters are an ongoing threat that require contingency planning. The lack of fiscal space could significantly constrain the government's ability to respond to unexpected shocks, including severe natural disasters. While the cost of such disasters is estimated at about 1 percent of GDP on average, it can spike in the face of particularly severe events. For instance, losses from events occurring every century are estimated to cost more than 9 percent of GDP, with the largest impact stemming from exceptionally strong cyclones (Figure 26).[16] Planning for future costs could involve the implementation a contingency fund, as well as contingent credit and sovereign insurance. Unmitigated impacts of climate change affect the security of rural livelihoods due to a high dependence on rain-fed agriculture, chronic food insecurity, physical isolation and a lack of access to social safety nets.

Figure 26: Estimates of the direct losses from natural disasters



Source: GFDRR and World Bank (2016). Madagascar Disaster Risk Profile, SWIO-RAFI.
Note: The figures are modelled estimates of the total impact of hazards. It is assumed that a larger return period is associated with less likely occurrence but a greater intensity of disasters.

Figure 27: Projected operating losses of JIRAMA in 2023



Source: World Bank.
Note : The horizontal orange line indicates estimated results in 2019. All reforms include fight against technical losses, energy efficiency, refinancing of arrears, optimization of fuel purchases, fight against non-technical, losses, optimization of production in isolated centers, increase in collection rates, contract renegotiation, tariff optimization and investment in hydro in line with Least Cost Development Plan.

10. Fiscal space is needed to strengthen resilience and support priority investments. Measures to increase revenue mobilization and public sector efficiency will create the necessary fiscal space to support priority actions as well as room for maneuver if economic shocks materialize. Efforts to increase the tax-to-GDP ratio can be accelerated through the digitalization of tax declaration and payments, improvement in tax and customs administration, as well as identification and removal of ineffective tax expenditures (see Box B.1). A transparent and objective selection of public investments and an ambitious recovery plan for JIRAMA will also support fiscal sustainability while untapping the growth potential of other sectors. Priority actions for this recovery plan include the renegotiation of contracts with suppliers, reduction of technical and non-technical losses, responsible tariff increases for industrial users, and carefully selected investments in hydropower and solar energy (Figure 27).

11. Improving the business environment, agricultural productivity, and human capital are key to sustainable and inclusive growth. Opening key markets to competition, creating a more transparent and predictable business environment, and avoiding distortionary measures would foster sustainable private sector development. Given the prevalence of regulatory and non-regulatory barriers to competition in Madagascar, Chapter 3 suggests ways of strengthening competition to stimulate investment and job creation. Boosting productivity in agriculture through improved access to markets, better organized value chains as well as enhanced human capital through improved education and health services delivery remain particularly important to tackle extreme poverty and ensure shared prosperity. Strengthening early interventions and social safety nets in cases of natural disasters is also essential to mitigate risks associated with climate change.

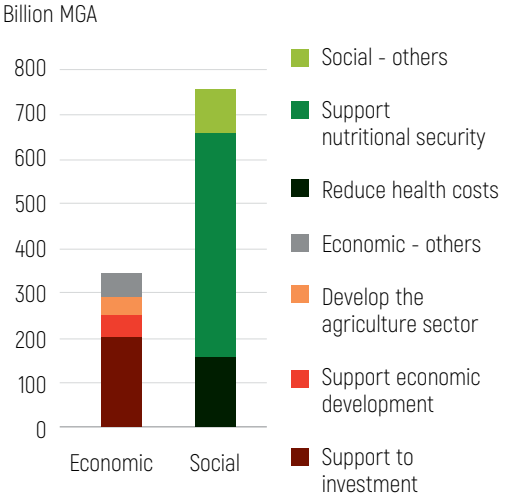
[16] Madagascar Disaster Risk Profile, SWIO-RAFI, GFDRR and World Bank (2016).

Box B1: Tax expenditures: the benefits of greater transparency and cost-benefit analyses

Tax expenditures are defined as the transfer of public funds through a targeted reduction of business or individual tax liabilities.[17] Similar to direct public expenditures, they affect the government's budget balance and are used to achieve certain economic or social objectives. However, unlike direct expenditures, tax expenditures do not have a pre-established cap and their execution is not monitored throughout the year, which makes them significantly less transparent.

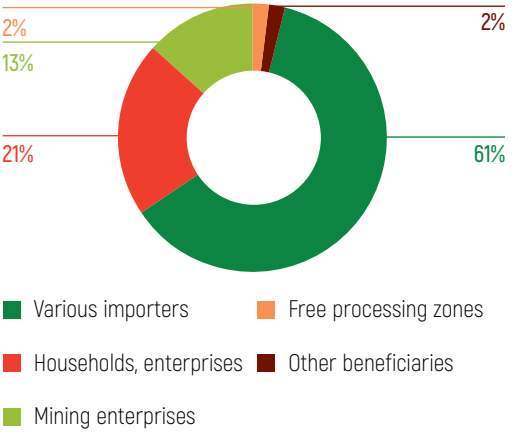
Tax expenditures are often used to keep essential goods affordable or promote investment. In the case of Madagascar tax expenditures are, for the most part, intended to improve nutritional security, decrease health costs, and support investments (Figure B1.1).[18] Tax expenditures include exemption from the payment of taxes and duties, abatement of the tax rate applicable to some taxpayers, preferential tax regimes for specific sectors, or deferred payments. In 2018, tax expenditures mostly consisted of exemptions on Value Added Tax (VAT) and customs duties payable by various importers (Figure B1.2). Exemptions on local sales and importations of rice made up 45.3 percent of tax expenditures in 2018, followed by drug sales and imports (13.2 percent), and exemptions granted to mining activities (12.8 percent).

Figure B1.1: Distribution of tax expenditures in 2018, by objective



Source: Ministry of Economy and Finance, World Bank

Figure B1.2: Distribution of tax expenditures in 2018, by agents



Source: Ministry of Economy and Finance, World Bank

[17] Definition by OECD.

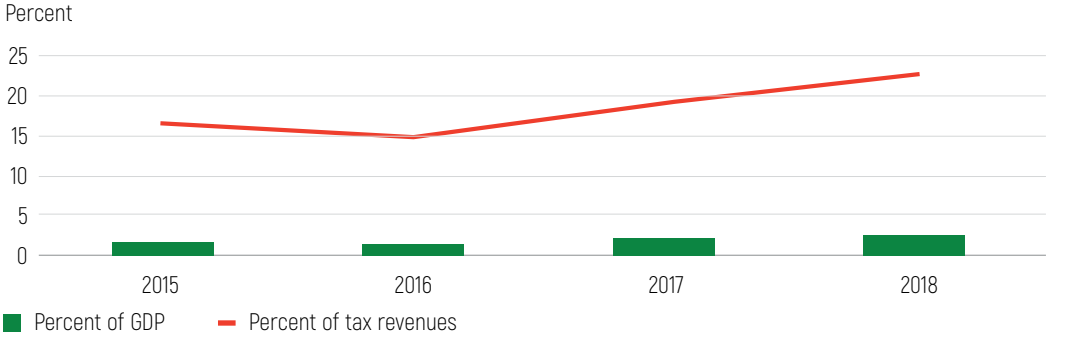
[18] This structure was noted across year 2016 through 2018.

Tax expenditures in Madagascar are highly persistent and rarely overturned. One of the most noteworthy tax expenditures derives from the free zone scheme introduced in the late 1990s to attract investments in the manufacturing sector. This notably supported the establishment of a thriving textile sector in Madagascar. The scheme's fiscal incentives include VAT exemption on imports and exports, as well as corporate income tax exemptions for the first years of operation. In addition, tax breaks were included in the 2002 Act on large mining investments to attract investments in the mining sector. Since 2008, following a sharp rise in the price of foodstuffs on international markets, rice transactions have also been exempted from VAT and customs duties to reduce retail prices and complement local production with imports. More recently, new measures were introduced to promote access to renewable energy. The list of tax expenditures also includes many ad hoc exemptions to privileged beneficiaries. Tax expenditures have rarely been undone, irrespective of changes in economic circumstances and policy priorities.

Efficiency could be improved by objective assessments and robust monitoring. Tax expenditure decisions would require a prior analysis of their relevance or potential impacts, as well as comparative analysis of whether direct public expenditures or regulatory measures would be more appropriate. Additionally, the monitoring of tax expenditures is undermined by the unavailability of data and limited technical expertise. When the inefficiencies of certain tax expenditures are uncovered, attempts to modify or remove exemptions are often met with resistance, from beneficiary groups or for political reasons.

Currently, direct losses in tax revenues are significant. In 2018, 448 tax expenditures were inventoried in Madagascar and entailed a reduction in tax revenues amounting to MGA 1,099.3 billion, i.e. 2.7 percent of GDP or 23.4 percent of the tax revenues collected that year (Figure B1.3).[19] For a country such as Madagascar, whose tax revenue collection capacity ranks among the lowest in the world, this is a very large concession. More exemptions were introduced in 2018 for the importation of hemodialysis instruments and devices, ready-to-use therapeutic foods, and wheat seeds.[20]

Figure B1.3: Size of tax expenditures



Source : Ministry of Economy and Finance, World Bank

Weak control mechanisms open the door to fraud and abuse of tax expenditures. For instance, some enterprises are created as free export processing enterprises and yet omit to submit any activity report as required by the Act on free export processing enterprises. Some in fact benefit from tax exemptions without creating jobs or making investments, and their VAT-free imports unfairly compete with domestic industries. The exemption on rice imports is also abused by some importers who make fraudulent declarations to benefit from the exemption. VAT losses resulting from fraudulent rice import declarations are estimated at about 0.1 percent of GDP.

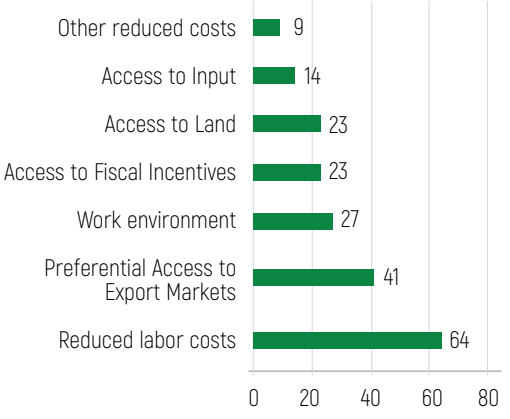
[19] The tax expenditure assessment is conducted by the Ministry of Economy and Finance and the relating report is publicly accessible on the Ministry's website and is annexed to the Finance Act. In 2018, the assessment did not address excise duties.

[20] Tax expenditure data cannot be compared across years because of differences in scopes of analysis.

The net benefit of tax expenditures needs to be established. For lack of cost-benefit assessments, it cannot be established that tax expenditures achieve their intended socio-economic objectives. Moreover, international experience shows that tax incentives are not a major factor behind attracting investments and are effective only under broader reforms of the business climate, as observed in successful cases like Korea and Singapore. The failure of similar initiatives in other developing countries is attributable to the weakness of the business environment in general, such as persistent political instability and lack of infrastructure, which cannot be compensated by tax incentives alone. Furthermore, as different countries compete to attract investments, those with a weak business climate will need to make substantial concessions to domestic resource mobilization to achieve competitiveness. Businesses operating in exports sectors in Madagascar[21] mention the availability and affordability of inputs, as well as preferential access to export markets as the determining factors for doing business in Madagascar, well ahead of tax incentives (Figure B1.4 & B1.5).[22]

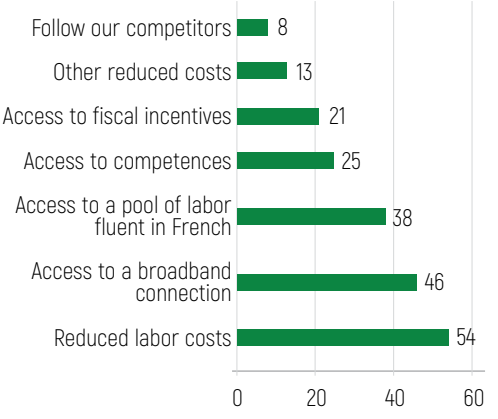
Tax-exempt imports can have detrimental effects on local producers. In some cases, duty free imports make it harder for local production to compete with more capital- or skill-intensive processes abroad, as is the case with the rice sector. Rice production in Madagascar is mainly intended for the self-consumption of small producers. Only 20 percent of this production is sold on markets and it is complemented with imported, tax-exempt rice. Because consumers prefer locally produced rice, imported rice is generally sold at a lower price, except during the lean period. Cheap imported rice compels local producers to adjust prices and margins downwards, adding to the pressure from market intermediaries who take advantage of the remoteness of producers. Promoting a higher market price, on the other hand, could incentivize local producers to increase their commercial supplies and invest in production methods that are more effective, provided market access and value chains are improved concurrently.

Figure B1.4: Sources of attractiveness for investment in the textiles sector



Source: World Bank. Interview conducted in 2019.
Note: Figures present the percentage of firms citing each factor as comparative strength

Figure B1.5: Sources of attractiveness for investment in the IT-BPO sector



Source: World Bank. Interview conducted in 2019.
Note: Figures present the percentage of firms citing each factor as comparative strength

21 Including agribusiness, textile, and subcontracting activities in business outsourcing services.
22 World Bank (forthcoming). Country Economic Memorandum.

Over the past years, the administration made progress in reinforcing the management of tax expenditures. Reforms mainly aimed to reinforce the transparency of tax expenditures and included: (i) publishing and updating the list of enterprises benefiting from the free export processing zones and enterprises scheme on a monthly basis, on the website of the Economic Development Board of Madagascar, (ii) publishing the amounts and names of beneficiaries of exemptions of customs tax and VAT on imports, on the website of the Directorate General of Customs, (iii) publishing the assessment of the amount of tax expenditure in Finance Acts, and (iv) publishing the tax expenditure report on the website of the Directorate General of Taxes.

For tax expenditures to be effective and to prevent the diversion of important fiscal revenues away from priority investments, key principles must be abided to. These principles offer the advantage of facilitating tax administration, reducing the opportunities for fraud and abuse, and promoting an equitable treatment of private operators.

Simplicity. The tax policy should remain simple, with all tax regulations integrated into the general tax code.

Cost-benefit analysis. Any new decision to grant an exemption should be supported by a positive cost-benefit analysis. Additionally, periodic reviews to assess the achievement of the original objectives should be conducted.

Transparency. Any tax expenditure should be legally grounded in the tax legislation, costs and benefits should be assessed, and communicated ex ante and ex post. The eligibility criteria and granting process should be clearly defined.

Time limit. Temporary tax expenditures should be preferred to permanent ones.

PART THREE

STRENGTHENING COMPETITION TO STIMULATE GROWTH AND JOB CREATION

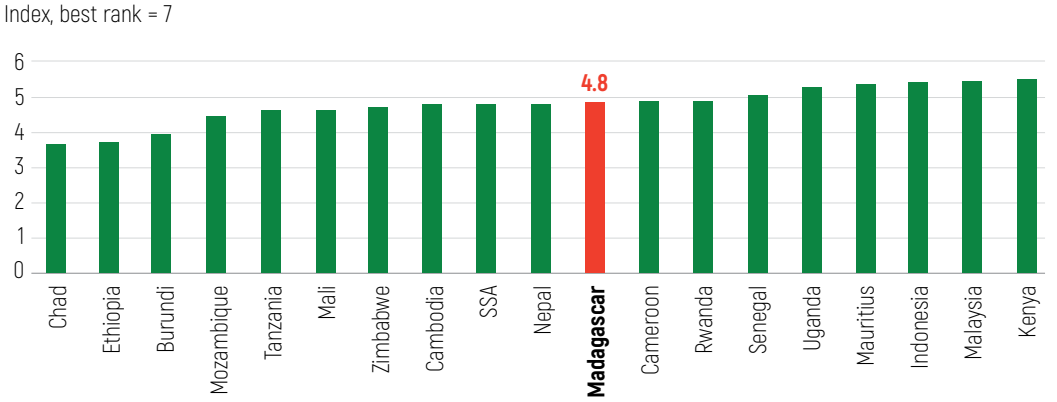
A INTRODUCTION

1. This special focus section assesses the competitive landscape in key sectors of the economy and suggests a series of priority actions to reinforce it. Market competition is a key driver of productivity, export competitiveness and innovation, while it benefits consumers through lower prices and better paying jobs. However, Madagascar's key sectors are characterized by a high level of concentration and low levels of competition (Figure 1). This reflects weaknesses in the legal framework for competition policies, limited enforcement of existing laws, and political capture. This special focus analyses business practices in key sectors of the economy and offers solutions to improve policy frameworks and promote a level playing field in order to stimulate higher and more inclusive growth in the coming years.

B MARKET CONCENTRATION AND ANTI-COMPETITIVE PRACTICES

2. Key sectors of the Malagasy economy are highly concentrated. A wave of privatizations in the 1980s and 1990s saw state-led monopolies and oligopolies be replaced with privately-owned companies.[23] However, private actors that took control of these entities were largely drawn from the political elite, and economic power remained concentrated in the hands of a few. Over time, some entrepreneurs have been able to successfully do business in Madagascar, navigating the weak institutional environment and, in some cases, taking advantage of it. Once established, incumbent firms were able to maintain a first or second mover advantage and preserve their market dominance, including through political capture. Therefore, key sectors of the economy are highly concentrated, and firms often vertically integrate or develop conglomerate structures to further entrench market power. This is the case in sectors such as telecommunications, petroleum, banking, mining, real estate, and high-end agribusinesses.

Figure 1: Intensity of competition



Source: WEF GCR 2017/18. Note: Values from 1 (competition not intense at all) to 7 (competition extremely intense)

[23] Jütersonke and Kartas 2010.

3. This section presents a review of the barriers to market entry and competition in three major sectors.[24] The first one is telecommunications and it supplies a key input to the rest of economy.[25] More competition in this sector could generate welfare gains by optimizing the use of existing infrastructures, stimulating new investments, and reducing costs for other sectors. The current government is considering reducing regulatory and non-regulatory barriers to entry, including measures to open up investments in fiber optic infrastructures.[26] The other two sectors, vanilla and lychee, are export-oriented agribusinesses that generate significant export revenues and have a large potential for greater productivity and income gains along the value chain if barriers to competition can be addressed. Analysis of the competitive landscape of key cash crops is particularly important now as pipeline roads could contribute to unlock market access for key rural areas, generating new opportunities for domestic and international development.[27]

(i) Telecommunications

4. Madagascar has one of the fastest internet services in Sub-Saharan Africa. Investments in the submarine fiber optic cables in 2009 and 2010 ended the country's dependence on satellites for international connectivity, improving access and reducing the cost of international bandwidth. More recently, Telma (Telecom Malagasy), has been laying a national fiber backbone connecting major cities and contributing to the availability of high-speed internet across urban areas. Madagascar has now one of the fastest download speeds in sub-Saharan Africa. This has fostered the emergence of new highly performing sectors, including the IT-BPO, retail and banking sectors, as well as other services to enterprises.[28]

5. Despite improvements, internet connection fees remain high and penetration is low. The cost of fixed broadband internet services is higher than in peer countries (Figure 2)[29] Penetration rates are also well below those of comparators (Figure 3), with a significant proportion of the population still unconnected to mobile network (65.9 percent). High prices are an important contributor to low penetration and access rates in Madagascar, which constitutes a significant opportunity cost for the economy. One estimate suggests that if fixed broadband subscriptions were to rise to levels of peers in Rwanda and Cameroon (i.e. from 10 percent currently, to 18 percent), growth could be raised by more than 1 percentage point.[30] Over time, it could also stimulate new investments and accelerate the digitalization of the economy. Access to backbone infrastructures will need to be significantly expanded to achieve such objectives.

[24] The assessment is based on the Markets and Competition Policy Assessment Toolkit (MCPAT). The MCPAT methodology allows for the identification of market characteristics that shape dynamics and government interventions that restrict competition by: i) restricting entry; ii) facilitating collusion; or iii) creating an unlevel playing field, and consideration of solutions that can achieve policy objectives and address market failures while minimizing market distortions.

[25] The Special Focus of the Spring 2019 Economic Update addressed the lack of competition in the petroleum sector, which is another key input sector.

[26] As announced by the Minister of Telecommunication in May 2019.

[27] Road rehabilitation pipeline includes for example the NR5 to Soanierana Ivongo, RN6 to Antsiranana, RN13 to Fort-Dauphin, RN43 to Faratsiho, and RN44 to Ambatondrazaka.

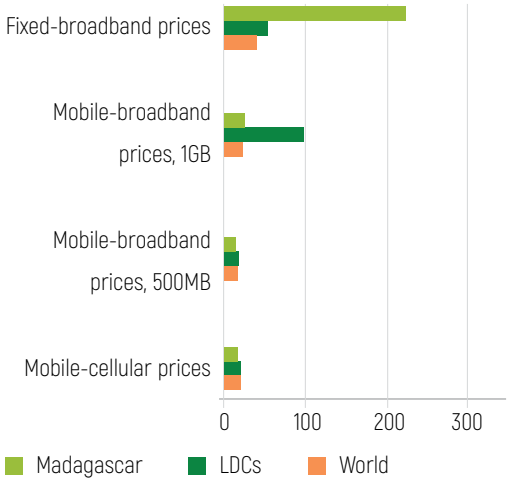
[28] Telecom Malagasy (Telma) is a former state-owned enterprise. During the privatization phase, Telma was acquired by the Axian Group, with the government maintaining a 19 percent share.

[29] The ITU defines a mobile-cellular basket as consisting of 51 minutes of mobile voice call and 100 SMS.

[30] This calculation is based on the assumption that in low income countries, an increase of broadband subscriptions by 10 percentage points can lead to up to 1.4 percentage point increase in growth rates, which is the finding of the report: World Development Report (2016), Exploring the relations between the broadband and economic growth.

Figure 2: Price of fixed broadband

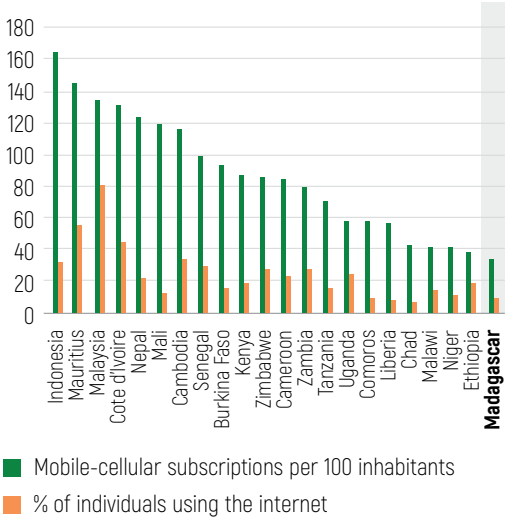
Prices in US$ purchasing power parity



Source: ITU

Figure 3: Penetration of cellular and internet services

Prices in US$ purchasing power parity



Source: ITU

6. Investments in the telecommunications sector has been limited by both regulatory and non-regulatory barriers. There are four major operators in the telecommunications market: Telma, Orange, Airtel and Gulfsat (Blueline). The incumbent firm, Telma, has made significant investments in backbone infrastructure in the past, including during the political transition period when other operators largely shied away from making long-term investments (Figure 4). The government currently maintains 19.9 percent shareholdings in Telma. Discussions are ongoing to allow other operators to invest in areas where Telma already has infrastructures in place, which is currently prohibited. Foreign investment in telecommunication companies is also restricted to two thirds of a company's shares, with the further requirement that at least one of the directors resides in Madagascar, which limits opportunities for further development.

7. The cost of infrastructure investments in rural areas are currently exorbitant. In areas without existing backbone, the cost of a license to lay such infrastructure is prohibitive, hindering investment in last mile services and access of remote areas.[31] A Universal Access Fund has been created to finance such network extensions where investments would otherwise be unviable, but its administration has been opaque. To support a level playing field, the Universal Access Fund should have clear selection criteria on which projects should be financed as well as competitive neutrality principles to ensure the operators have been justifiably selected. In practice, it appears that the incumbent has used the Fund to recoup part of the costs for the deployment of the national backbone network, whereas the process followed by ARTEC and the Ministry of Telecommunications for disbursement is unclear.

[31] Interviews conducted with operators revealed that mobile operators other than the incumbent were not able to put up their own fiber infrastructure under their current license arrangements. Acquiring permission to construct infrastructure requires obtaining a new license, where costs are relatively high.

Figure 4: Operators in various segments of broadband value chain

International connectivity	Core network	Middle mile	Access network
	National backbone	Backhaul	Last mile
EASSy: Telma **LION:** Orange	**Fiber optic:** Telma **Copper lines:** Telma		**Fixed services** · Fixed wireline (DSL and fiber): Telma · Fixed wireless (WiM AX, WiFi): Telma, Gulfast (Blueline), other ISPs **Mobile services:** Market shares as at 2019

	Share of 3G	Share of 4G
Airtel	16.9%	5.7%
Orange	19.6%	5.4%
Telma	63.5%	2.2%
Gulfast (Blueline)	-	76.7%

Source: Authors' own elaboration. Market shares only available for mobile services, GSMA 2019

8. Regulation currently in place does not support access to shared infrastructure or manage interconnection charges in a way that could gradually reduce tariffs.[32] Regulation of the telecommunications sector should strive to balance the incentives for incumbents to continue investing, while also encouraging capital spending by new players. Regulatory lapses include the lack of an enforceable obligation for the Regulatory Authority for Communication Technologies for Madagascar (ARTEC) to determine whether operators have Significant Market Power (SMP).[33] The identification of a SMP would allow the regulator to mandate appropriate corrective measures. The failure to publish a list of operators considered to have significant market influence has persisted despite this requirement being included in its founding statute (Law 2005-023) nearly 15 years ago.

9. Enforcement of competition laws and policies is weak due to governance challenges. Anticompetitive practices by firms (such as abuse of dominance and cartelization) can be prosecuted ex post under the sector-specific regulation and under the competition law.[34] However, ARTEC has not exercised these provisions and the activities of Madagascar's Competition Council have been limited to date. As the activities of the Competition Council grow, it will also be important to manage the concurrency of powers between ARTEC and the Competition Council to maximize the benefits of ex post competition enforcement. This could involve incorporating a collaboration framework between the two bodies to facilitate case referrals, investigations, and sanctions. Finally, the governance structure of ARTEC, including selection of board members and accountability, does not ensure sufficient independence and decision-

[32] There are no provisions to implement an essential facilities doctrine. OECD specifies the 'Essential facilities doctrine' as when the owner(s) of an "essential" or "bottleneck" facility must provide access to that facility, at a reasonable price. http://www.oecd.org/competition/abuse/1920021.pdf.

[33] A dominant position can be defined as a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers. The dominant has an appreciable influence on the conditions of competition (Source: Official Journal of the European Union L282/14 downloaded at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:282:0001:0024:EN:PDF).

[34] The new Madagascan Competition Law No. 2018 – 020 on the recasting of the Competition Law (repeals the Competition Law No. 2005 – 020 of October 17th, 2005) lays out the establishment, functions, and institutional arrangement of the Competition Council. The Competition Council was fully constituted in 2015 but has not been very active in regulation competition, investigating and sanctioning anticompetitive practices. Article 37 of the Act provides for collaboration between the Ministry of Trade, which also has a competition mandate, and other specialized agencies

making ability. While individuals appointed to the board cannot be employees of an entity licensed by ARTEC, their affiliation can sometimes hinder their independence. Some telecom companies are also part of a larger conglomerates active in sectors that utilize ICT services, such as financial services, raising the risk of exclusionary behaviors. This could be dealt with through proper enforcement of abuse of dominance provisions in the competition law.

(ii) Lychee

10. Lychees are an important source of export revenues and income for farmers. Lychees are a source of income for more than 100,000 farmers and seasonal workers in Madagascar with most of the potential of the sector stemming from export markets.[35] Production of lychees is primarily done by smallholder farmers, bought at farmgate by collectors, and sold to exporters who operate sulfur treatment plants (Malagasy lychees are generally treated with sulfur dioxide to prevent the peel from browning during transport) or other processing facilities (see Figure 5). Exporters are also responsible for the packing, storing and transport of lychees to the airplane or boat. Export revenues are estimated to account for more than 80 percent of all revenues from sales of fresh and processed lychees in Madagascar.[36] Around 90 per cent of Malagasy lychees are exported to Europe, with other export destinations including Russia, the Middle East, and East Asia.

Figure 5: Value chain for lychee export

Functions	Input supply	Production	Collection	Processing & Treatment	Export
Actors	- Collectors/processors (financing) - Exporters (financing) - CTHT and tree nurseries (plantlets production)	- ~30,000 smallholder farmers - Industrial plantations - ~45,000 seasonal workers for export	- Producers for first packing - Approx. 280 collectors in the region of Tamatave - Processing industries - ~4,000 seasonal workers	- Exporters equipped with sulfur-treatment and packing station - Processors-exporters (pulp, puree, juice)	- Exporters ~29 firms - ~25,000 seasonal workers, including processing by exporters

Source: Authors' own elaboration. Given the central role of exports, this diagram and analysis in this section focuses on the value chain for exports of fresh and processed lychees.

11. Less than half of the Lychee harvest is commercialized, partly due to export quotas and limited domestic consumption. Madagascar dominates the international market for lychees between December and February in Europe, representing approximately 80 percent of produce during this period.[37] However, only 30,000-40,000 tons of the 70,000-100,000 tons of lychees harvested in Madagascar every year are typically commercialized. About half of the sold produce reaches international consumers and the other half domestic consumers.[38]

[35] Lychees are grown by 30,000 smallholders in the Tamatave, Manajary, Manakara and Fort Dauphin regions along the east coast of Madagascar. In addition, 75,000 seasonal workers are involved in the harvesting, collection, processing and packing of lychees. See ILO (2017) Chaîne d'approvisionnement du litchi de Madagascar : Facteurs incitatifs et contraintes pour l'amélioration de la sécurité et de la santé au travail.

[36] Assuming a domestic retail price of 500 Ariary per kilogram, an export price of 2000 Ariary per kilogram, and equal sales volume in domestic and international markets.

[37] Background report by Henri Michael Tsimisanda. Madagascar's production is estimated at 70,000-100,000 tons p.a. See also Houbin, Chen, Xuming Hang (2012). Overview of litchi production in the world. 4th International Symposium on Lychee, Longan and other Sapindaceae Fruits. White River, South Africa. Acta Horticulturae, International Society for Horticultural Science.

[38] Interviews with lychee exporters in March 2019.

12. Export quotas are determined by the exporters' association, working with two dominant European importers. The exporters' association, Groupement de Exportateurs de Litchi (GEL), exports over 90 percent of Madagascar's lychees (by volume) to two European importers, who are meant to be selected by the government in a tendering procedure every two years. However, in practice, a new call for proposals among European importers has not been initiated since 2013, which prevents competition among importers and therefore the potential to boost export opportunities. The export volume is agreed between GEL and the two importers (currently capped at 17,500 tonnes), which is divided between GEL members. One of the functions of GEL is to ensure tight coordination with European importers, which is facilitated through enforcing the quota on lychee exports. Part of the reason for the organizational practices of GEL and its relationship with the two European importers is related to challenges in maritime transport, which is expensive and requires advance financing by the importers.

13. Market access for new investors is limited by high barriers to entry. Regulatory barriers include the need for exporters to have a sulphur dioxide treatment facilities that meets minimum standards. However, this restriction prevents entry by exporters who do not need to engage in sulfarization or follow alternative postharvest treatments. Moreover, regulations do not specify minimum standards, leaving substantial room for the discretionary granting of licenses. Members who are not part of the GEL, or members that have attempted to exceed their official quotas have reportedly been blocked from shipping at the port.

14. Farmers have limited options to negotiate prices. Lychees are highly perishable, which means that sales from the farm are constrained to local markets. In many lychee growing areas, farmers do not have access to roads, which reduces their negotiating power with collectors who have the transportation means to reach the farmgate. Furthermore, smallholders have limited access to information about prices in other locations, which constrains their decisions on where and when to sell lychees.

15. Going further along the value chain, collectors of lychees face fixed prices, restricting competition in buying markets. In turn, the collectors of lychees generally work exclusively for one exporter, where a set price is agreed in advance. All exporters agree the same price for lychees from the collectors. The collective fixing of buying prices among exporters is likely to restrict competition in buying markets and therefore is to be detrimental to farmer incomes. In addition, for the small portion of lychees that are exported outside of EU markets, the GEL has the autonomy to set reference prices, thereby also limiting price competition.

(iii) Vanilla

16. Vanilla prices have experienced a surge in recent years, and Madagascar is the leading exporter. Low labor costs and a well-suited climate have allowed Madagascar to develop a dominant position in the international vanilla market, accounting for more than half of global exports since 2014.[39] Vanilla exports accounted for 26 percent of Madagascar's export revenue in 2017[40] and contributed around 6.8 percent to national GDP. The sector supports more than 80,000 farmer households and over 6,000 intermediaries. Along with seasonal employment, vanilla generates around 200,000 direct jobs, mainly in the Sava region (North East coast), which produces 85-90 percent of Malagasy vanilla.[41] Increasing vanilla exports, mainly by improving quality, has been among the priorities of the new government.

17. Smallholder farmers selling unprocessed vanilla are squeezed by dominant players collecting, curing, and exporting vanilla. Farmers typically sell their beans to intermediaries before any processing. Unprocessed or green vanilla cannot be stored without deterioration in its quality and therefore must be sold shortly after harvest. While most sales occur on an informal spot market, mostly at farm gate or the street, official local wholesale markets are also used for sales. In the case of green vanilla, collectors (who are often hired and financed by preparators or exporters) buy vanilla from different farmers or from smaller collectors (Figure 6). While reports suggest that some farmers have been able to benefit from recent high prices, most farmers

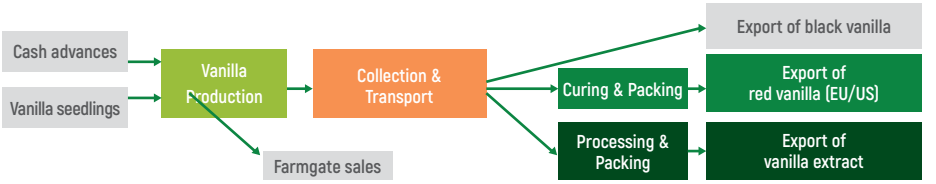
[39] FAOStat, 2018.

[40] Observatory of Economic Complexity, 2017, https://atlas.media.mit.edu/en/profile/country/mdg/

[41] International Labor Organization, 2011.

are not involved in value-adding activities downstream, such as curing (drying process which enhances flavor and increases preservation), which could significantly increase farmers' selling power by allowing them to store the dried, non-perishable product. Barriers to curing by farmers include technical know-how, space and labor constraints, cash needs at the beginning of the season, as well as minimum capacity requirements for curing.

Figure 6: Value chain for vanilla export



Functions	Input supply	Production	Collection	Processing	Export
Activities	- Loan provision - Technical assistance - Vanilla seedlings - Vanilla vines and tutor trees	- Growing (planting, pruning, pollination) - Harvesting - Curing (20% of producers cure vanilla)	- Collection of green beans from farms - Transport to processing plants	- Sorting - Traditional curing (70% or less) - Quick curing (20 - 30%) - Secondary processing	- Packing - Transport to port/airport - Storage - Brokerage
Actors	- Exporters (technical assistance to <10,000 farmers and loans) - Microcredit institutions: loans - Commission agents/ collectors (flower contracts) - NGO (seedlings)	- Independent smallholder farmers (60,000+) - Cooperatives/ producers' associations linked to exporters - Industrial plantations	- Collectors (approx. 3,000, 10% formal) and agents working with collectors (mandataires) - Commission agents - Processors - Exporters	- Farmers and préparateurs (traditional hand curing) - Commission agents - Collectors - Exporters (e.g. QCP)	- Exporters (123 licensed in 2018, 15 main/trusted) - Symrise has 70% market share in vanilla extract - Four export companies acount for about 50% of beans (Somava, Authentic Products M/CAR, Origines/Symrise, Planifolia - Traders and brokers

Source: Authors' own elaboration.

18. The vanilla chain is highly controlled and regulated, reinforcing the power of incumbents and limiting entry for new participants. There are requirements on the minimum and maximum size of operations and other restrictive entry rules. For instance, preparators wishing to buy or sell green vanilla in official markets are required to demonstrate the capacity to cure at least five tons of produce. Collectors are not allowed to employ more than five agents. Exporters are required to renew their license on an annual basis. All buyers and sellers in official markets for green vanilla need to be registered. According to regulation, the Regional Directorate for Trade provides an opinion on the registration of collectors, preparators and exporters, while the Regional Directorate for Rural Development opines on registration of planters. Meanwhile, the registration process is managed by an industry board that is composed, among others, of representatives of incumbents (including collectors, preparators, exporters and farmers) raising a possible conflict of interest that may hinder the entry of new operators.

19. Government interventions have limited options of producers. The government requires sales of green vanilla in official markets (marchés contrôlés) to maintain quality control, protect farmers and limit incentives for theft – but these markets may also hinder alternative commercialization options for farmers (such as contract farming). Government prohibited vacuum packaging in 2016 (agreed by the Ministry of Commerce in collaboration with the National Vanilla Platform which represents the main exporters) to safeguard against reputational risks given issues with buyers assessing the quality of vacuum-packed vanilla on purchase, as well as to limit premature harvests. However, the ban can limit selling options by encouraging players to sell produce immediately to avoid product deterioration and may prevent volumes

from responding to price signals. Overall, the market regulations have reduced the price elasticity of supply, which can exacerbate price volatility.[42]

20. Facilitating the entry of new players could help Madagascar preserve its global market position while benefiting a greater share of the population. With vanilla prices high, more farmers are likely to enter the market in Madagascar as well as competitor destinations, which in the medium-term would pressure prices down. Vanilla is a very labor-intensive commodity, because it requires that vanilla plants are pollinated manually. However, at current price levels, Madagascar' comparative advantage of low labor costs is eroded, with other countries with higher labor costs like Uganda are now able to compete. Similarly, the current price makes investments in better synthetic alternatives attractive. These new players will ultimately drive prices down and will result in Madagascar losing market share.

C POLICY OPTIONS AND REFORMS TO ADDRESS ANTI-COMPETITIVE BEHAVIORS

21. Improving the competitive environment in Madagascar will require both sector-specific and economy-wide initiatives. Anti-competitive behaviors are not sufficiently deterred by legal and institutional guardrails. Broad-ranging efforts are needed to reinforce both regulation and supervision.

(i) Sector-specific reforms

22. In the telecommunications market, reforms could result in lower prices and higher penetration. Key reforms include: (i) the regulatory agency releasing a list of operators with significant market power; (ii) ensuring access to bottleneck facilities by third parties; (iii) allowing competing investments in backbone infrastructure; (iv) reducing the costs of licenses; (v) ensuring the Universal Services Fund is objectively used to deliver investments in rural areas; (vi) improving the functionality and independence of the regulatory agency.

23. 2. In the lychee market, reforms to open the export market could result in higher demand, which could create jobs and boost income along the value chains. Key reforms include: (i) removing the export quota; (ii) streamlining requirements for licenses including removing the requirement to own a sulphur treatment plant and clarifying minimum standards to avoid discretionary interpretation; (iii) Enhancing price setting monitoring by the Competition Council; (iv) encouraging GEL to adopt best practices for private associations with public interest; and (v) building coalitions between international organizations, NGOs, civil society and governments to encourage buyers/ importers to undertake value chain audits in line with Corporate Social Responsibility requirements.

24. In the vanilla market, reducing barriers to entry and government regulation could result in more farmers being able to participate in value addition. Key reforms include: (i) removing an arbitrary ban on vacuum packing in favor of better labelling, traceability and stronger enforcement; (ii) lifting restrictive regulatory barriers such as the cap on the number of agents that can work with a supplier; (iii) Enhancing price setting monitoring by the Competition Council; (iv), encouraging international firms to undertake audits of the value chain; and (v) encouraging contract farming or better organized value chain through effective associations between producers, collectors, and exporters.

25. Private associations of public interest should help improve value chains without encroaching competition. Effective associations can help promote collective quality control, marketing, research, and technical support for small farmers, and hence offer great opportunities to better organize value chains and improve access to tightly regulated international markets. However, they can also create unwarranted barriers to entry, exert excessive controls over prices and production volumes, and concentrate rents. Regulatory improvements could be implemented to make private associations of public interest more effective in organizing their respective value chains while limiting risks of cartelization. The creation of a consortium of stakeholders in the cocoa value chain can serve as a good practice for other agribusinesses (see Box B2).

[42] Potentially due to failure to enforce original regulation of vanillin and moisture content of vacuum-packed vanilla.

Box 2: Good practice in agribusiness: The Consortium of Cocoa Actors

In the past, the cocoa value chain presented several weaknesses, including ageing orchards, low yields, multiplication of inefficient varieties, and a lack of coordination of key value chain players. With the aim of better structuring the sector, the government, private sector and financial and technical partners started coming together in 2015 within the framework of a public-private dialogue. This resulted in the creation of the Consortium of Cocoa Actors (GACM) in April 2015, which comprised producers, chocolate makers and operators/exporters. Madagascar also joined the International Cocoa Organization (ICCO) in 2016. Shortly after, its production was labeled 100 percent fine cocoa.

Since then, with support from the World Bank-financed Integrated Growth Poles and Corridor project, several activities have been undertaken to improve quality, traceability and standards for sustainability in the sector. Around 5,000 producers and 200 cocoa preparators have received training and support, a modern facility has been developed in Ambanja, the capital of cocoa, to produce certified plants, while R&D activities have been coordinated between the private and public sectors to improve quality and productivity. Between 2015 and 2018, export volume increased by almost 60 percent to reach nearly 12,000MT, with more than 90 percent of the production meeting international standards (from 14 percent in 2014). National standards - more stringent than international ones -have been established and an independent analysis and control center for export products was also established in Ambanja. The sector is attracting new investments in cocoa processing units and the country is currently presiding the ICCO. The National Cocoa Plan validated in 2018 is now guiding all activities targeting value chain sustainability.

For several other high-value products such as vanilla, lychee, spices, cloves or essential oils, similar initiatives to structure production value chains and develop tight quality controls could also have positive effects in terms of market openings, export volumes, and opportunities to raise income and profitability for smallholder farmers. However, in contrast to the geographically concentrated production of Cocoa, many of these other export-oriented value chains have plantations spread throughout the country, complicating dialogue between stakeholders and the identification of common priorities. For instance, lychee or spice producers can face different agronomic conditions, logistic challenges, and market opportunities across various regions. An additional complication in the lychee value chain is the fact that harvests last at most two weeks for export markets. Cash-constrained and poorly equipped producers have no other option than selling their products as quickly as possible to avoid rots, reducing their bargaining power and limiting their role in value chains. Common initiatives could be taken to improve production processes, overcome export limitations, and increase the bargaining power of smallholder producers.

(ii) Economy-wide reforms

26. The institutional basis for competition should be strengthened by improving the content of the competition law. Recent amendments to strengthen the law include clarifying considerations in determining dominance, amending the provision on monopolies such that the abuse of monopoly power is prohibited, including penalties for most anticompetitive practices. However, there is further scope to strengthen the law to include the per se prohibition of cartels, which may merit secondary legislation.

27. The Competition Council should become a more effective vehicle to enforce competition laws. There is scope for the Competition Council to improve monitoring and sanctioning of anticompetitive behavior, to estimate quantitative impacts of a lack of competition, and to communicate the results to the public and policy-makers. To enhance the deterrence effect of the law on anticompetitive behavior, the Council needs to build a credible threat of enforcement action with sufficient penalties. Developing a framework for settlements will also help increase efficiency of enforcement. Some countries have successfully developed a leniency program to encourage firms to come forward and provide evidence of cartels.[43] Ensuring the effectiveness of the Competition Council requires implementing safeguards for its independence, particularly in sectors dominated by few well-connected operators. Going forward, the Council should be provided with enough resources, to enable the institution to undertake independent inquiries and investigations. In addition, the Council should collaborate with regulatory agencies on sector specific issues to interpret the application of the Competition Law.

28. For regulatory agencies to enhance their effectiveness, it is important to improve appointment procedures to enhance independence. For example, in the case of the telecommunications regulatory agency, while individuals appointed to the board cannot be employees of an entity licensed by ARTEC, their affiliation can sometimes hinder their independence. Board members could be selected following an open and competitive hiring process, and in some cases, international expertise could also be sought, particularly in the early phase of a regulatory agency undergoing reforms.

D CONCLUSION

29. A lack of market competition in key sectors of the economy is a major constraint to productive, inclusive and sustainable growth in Madagascar. This chapter presents an overview of regulatory and non-regulatory barriers to competition, and ways of overcoming them, with a focus on three specific sectors. Telecommunication, which is tightly interconnected with the rest of the economy, illustrates how improved competition could help stimulate investments by operators, which could help lower cost and improve penetration of both fixed and mobile services. This could have positive effects on the rest of the economy, as telecommunication services are key input for other sectors, including retail, banking, and services to enterprises. The case of lychee and vanilla shows how lower barriers to entry in key export markets could boost opportunities for smallholder farmers and their participation in value addition. The chapter presents both market-specific and economy-wide recommendations to ensure a leveling playing and release the untapped potential for higher and more productive investments. These include reinforcing competition laws and strengthening their enforcement by independent regulators and encouraging best practices for incumbent firms and private sector associations.

43 Leniency can be described as a system of immunity and reduction of fines and sanctions that would otherwise be applicable to a cartel participant in exchange for reporting on illegal anticompetitive activities and supplying information or evidence. More than 50 jurisdictions have adopted a leniency program including: Australia, Brazil, China, Germany, India, Korea, Malaysia, Mexico, Russia, Singapore, South Africa, UK and USA; and the EU.

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