

São Tomé and Príncipe is a small island country in the Gulf of Guinea, largely unknown to most of the world's population. Growth has long been driven by an unsustainable reliance on public expenditures, especially grant- and debt-financed public investment. To generate robust and inclusive growth, the country must now reorient its economy toward the private sector. Accomplishing this rebalancing will require STP to address six key challenges: the twin budget and current-account deficits; weak trade connectivity; credit constraints caused by a high level of nonperforming loans and difficulties enforcing contracts; uncertainty surrounding property rights and land tenure; poor-quality infrastructure; and the overexploitation of marine resources.

COUNTRY ECONOMIC MEMORANDUM

for São Tomé and Príncipe

Summary Report

**Turning Smallness
into Uniqueness:
Six Key Challenges
to Unlock
São Tomé and Príncipe's
Growth Potential**

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LIST OF ACRONYMS

ACI	Air Connectivity Index
AGER	Multisector Regulatory Agency (Autoridade Geral de Regulação de STP)
APCI	Trade and Investment Promotion Agency (Agência de Promoção de Comércio e Investimento)
AQR	Asset Quality Review
BCSTP	Central Bank of São Tomé and Príncipe (Banco Central de São Tomé e Príncipe)
BE	Blue Economy
CAD	Current-Account Deficit
CEM	Country Economic Memorandum
CIAT	Agriculture Research and Technology Center
CIT	Corporate Income Tax
DGRN	General Directorate for Registries and Notaries (Direcção Geral de Registos e Notariados)
DSGC	Directorate of Geographical and Cadastral Services (Direcção de Serviços Geográficos e Cadastrais)
DI	Directorate of Tax (Direcção dos Impostos)
DPO	Development Policy Operation
EEZ	Exclusive Economic Zone
EMAE	Water and Electricity Company (Empresa de Água e Electricidade)
EPA	Economic Partnership Agreement
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GUE	Business Single Window (Guiche Único da Empresa)
HIPC	Heavily Indebted Poor Countries
ICT	Information and Communication Technology
IFMIS	Integrated Financial Management Information System

IMF	International Monetary Fund
INE	National Institute of Statistics (Instituto Nacional de Estatísticas)
INPG	National Institute for the Promotion of Gender Equity
IT	Information Technology
JDZ	Joint Development Zone
LGBTI	Lesbian, Gay, Bisexual, Transgender, Intersex
LPI	Logistical Performance Index
LSCI	Liner Shipping Connectivity Index
LTU	Large Taxpayers Units
MADR	Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural)
MDRI	Multilateral Debt Relief Initiative
MIRAB	Migration-Remittances and Aid-Bureaucracy
MSME	Medium, Small and Microenterprise
NIR	Net International Reserves
NPL	Nonperforming Loan
OECD	Organization for Economic Cooperation and Development
PER	Public Expenditures Review
PFM	Public Financial Management
PIM	Public Investment Management
PIT	Personal Income Tax
PPP	Public Private Partnership
PROFIT	People considerations; Resource management; Finance, insurance, and taxation; Transport
PWT	Penn World Tables
R&D	Research and Development
RAP	Autonomous Region of Príncipe
RCA	Revealed Comparative Advantage
REER	Real Effective Exchange Rate
SFPA	Sustainable Fishing Partnership Agreement
SITE	Small Island Tourist Economy
SOE	State-Owned Enterprise

SOGI	Sexual Orientation and Gender Identity
SSA	Sub-Saharan Africa
STP	São Tomé and Príncipe
T-bills	Treasury Bills
VAT	Value-Added Tax
WB	World Bank
WESTGRO	Cape Town and Western Cape Tourism Trade and Investment
WTO	World Trade Organization



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EXECUTIVE SUMMARY

1 São Tomé and Príncipe (STP) needs to turn its smallness into uniqueness to unlock its growth potential. STP is a small island country in the Gulf of Guinea, south of Nigeria and west of Gabon. Largely unknown to most of the world's population, STP has small digital presence, is absent from most of international databases and surveys, and lacks any significant extractable resources. However, these liabilities can be transformed into assets by turning its smallness into uniqueness. STP should leverage its pristine natural environment, diverse fauna and flora, reputation for producing some of the best cocoa in the world, and its rich history and culture to unlock its growth potential by strengthening its image of rainforest sustainability, superior provenance for agricultural goods and tourism, a strong advocate of the blue economy, a progressive African country, and its cultural identity to form an overall image of a unique place.

2 To accomplish this transformation, this image must be matched by a more balanced growth in which the private sector plays a larger role and with a more effective government. STP's growth potential can only be realized if the economy transitions to a more balanced growth pattern, in which the private sector becomes an important growth driver, and with sufficient tourism and agricultural export revenue to finance the current-account deficit. Small, locally owned tourism and agribusiness firms – with increasing women participation – must be empowered to benefit from STP's image and integrate into high-value, employment-intensive export sectors. To support a vibrant private sector, the government must retrench and refocus on enhancing public administrative efficiency, boosting own-source revenue generation, and building the regulatory capacity necessary to foster responsible private investment in economic assets and infrastructure.

3 Tourism, agriculture, and fisheries could drive the country's transition to a more balanced growth pattern. These sectors can generate jobs, improve food security, reduce the trade deficit, and bring in foreign exchange to finance the current-account deficit. Given STP's current development status, small changes—such as adding a new weekly flight from a major air transport hub or establishing a new chocolate factory—could have major impacts. As policymakers design a strategy to sustainably accelerate growth by exploiting international niche markets, they can draw on the experience of Costa Rica's Green Lifestyle, Grenada's Spice Island, and other countries that have successfully capitalized on a similar mix of environmental, economic, and geographic assets.

4 The following Country Economic Memorandum (CEM) highlights six key challenges that STP must overcome as it transitions to a more balanced growth pattern. Economic growth in STP has long been driven by an unsustainable reliance on public expenditures, especially grant- and loan-financed public investment. To generate robust and inclusive long-term growth, the country must now reorient its economy toward the private sector. Accomplishing this rebalancing will require STP to address six key challenges at the macroeconomic, structural, and sectorial level.

These include:

- The twin budget and current-account deficits;
- Weak trade connectivity by both air and sea;
- Credit constraints caused by a high level of nonperforming loans and difficulties enforcing commercial contracts;
- Uncertainty surrounding property rights and land tenure;
- Poor-quality infrastructure, especially in the energy and transportation sector; and
- The overexploitation of marine resources.

5 and it offers policy recommendations for addressing each challenge. The CEM also provides recommendations that are not directly linked to the six challenges but will have positive effects on growth. The CEM format is not designed to be exhaustive, and STP may face additional challenges to growth in areas such as human capital development, which are outside of the scope of the report. The full CEM consists of the following main report plus 15 background notes, which are listed at the end of the executive summary. Beyond its core focus, the CEM addresses three cross-cutting issues: (i) the role of gender, (ii) sexual orientation and gender identity in STP's social and economic development, and (iii) the potential of the "blue economy" to generate sustainable and inclusive growth.

6 After contracting during the decades since independence, STP's economy entered a period of robust growth in 2000. The economic expansion was accompanied by capital deepening and increased productivity. GDP per capita had fallen by 36.6 percent between 1980 and 2000, but after 2000 STP's annual GDP growth rate averaged 5 percent, while GDP per capita grew by 1.9 percent per year. Capital deepening and increased productivity contributed 46.5 and 36.7 percent, respectively, to overall growth.

7 Although growth rates remain high by historical standards, STP's expansion has slowed since 2014. The annual GDP growth rate fell to an estimated 2.7 percent in 2018 (Figure 1). An influx of foreign direct investment (FDI) in oil exploration provided a short-lived boost to growth around 2010 but has not produced oil so far. Public investment peaked at 31.5 percent of GDP in 2011 before dropping to 9 percent in 2018 (Figure 2).

Figure 1: STP GDP growth rates: 1981 - 2018

Source: IMF WEO

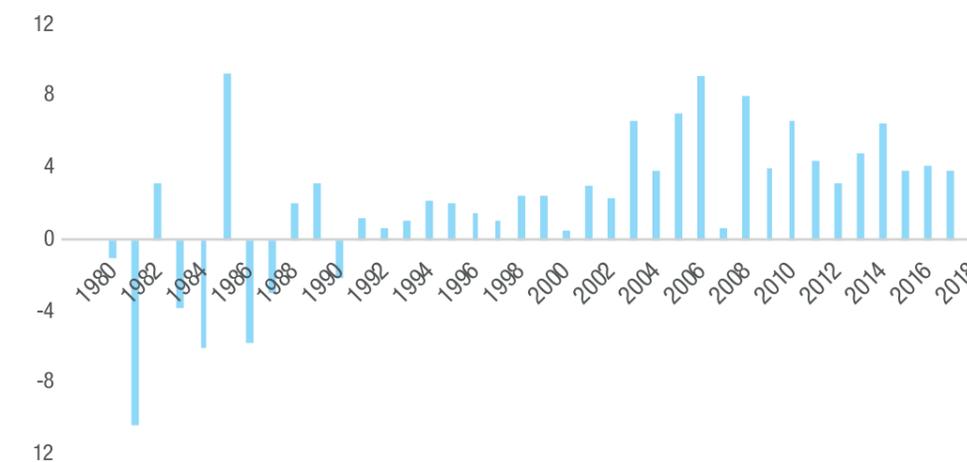


Figure 2: STP public expenditures by category (% of GDP): 2010 - 2019

Source: Ministry of Planning, Finance, and the Blue Economy



* Budget data for 2019

8 Public investment financed by external aid and loans drove STP's growth over the period, but the government's efforts to sustain this growth pattern in a context of declining aid and loans created a large debt overhang and depleted STP's international reserves. Public investment averaged 22.9 percent of GDP from 2010 to 2014 but fell to an average of 15 percent from 2015 to 2018. Meanwhile, grants and external loan disbursements declined from 16 and 8 percent of GDP to 12 and 4.4 percent, respectively. Grants are continuing to dwindle,

and the government has exhausted the space for borrowing, both externally and domestically. STP is now classified as being in debt distress. The debt-to-GDP ratio has nearly doubled since 2008, and the country has recorded primary budget deficits in nine out of the last ten years. Government arrears soared from 6.3 percent of GDP in 2010 to 36.5 percent in 2018, and net international reserves were equal to just 1.9 months of imports in April 2019.

9 STP can no longer rely on public spending to drive growth. The fiscal and current-account deficits, combined with a high level of nonperforming loans, now threaten even the modest growth rates observed in recent years. To sustain a growing economy, STP will need to shift to a more balanced growth pattern in which the private sector drives economic activity. The government will continue to play a vital role in regulating the economy, mobilizing private finance for infrastructure, and providing public goods, and policymakers will need to focus on enhance the efficiency of the public administration. The country's difficult macroeconomic situation, and the urgent need to boost growth to ensure debt sustainability, underscore the importance of transitioning to a private-sector-led growth pattern.

10 The first key challenge is the fiscal deficit that drives the current-account deficit. The impact of the trade deficit is relatively modest, and STP cannot ameliorate its current-account deficit by abandoning the fixed exchange rate and devaluing the currency. The current-account deficit is currently financed by external aid and loans, and along with the fixed exchange rate, it will remain sustainable as long as external aid inflows continue. However, the trajectories of the current-account deficit and aid inflows are incompatible, and because the fiscal deficit is primarily responsible for the current-account deficit, budget imbalances pose a serious macroeconomic challenge. A recent Public Expenditure Review (PER)¹ for STP found that low levels of domestic revenue mobilization were the main cause of the fiscal deficit. As increasing domestic revenue takes time, expenditures will have to be strictly contained to balance the budget in the near term.

11 To address the twin deficits, the government will need to utilize a combination of reforms to tax policy and tax administration, as well as measures to contain expenditures. The government's top tax-policy priority should be to replace the existing limited consumption tax with a dual system composed of a broad-based value-added tax (VAT) and an excise tax. While every aspect of tax administration can be improved, policymakers should first focus on building the

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São Tomé and Príncipe can no longer rely on public expenditure to drive growth.



capacity to administer the VAT, then support the adoption of modern auditing techniques and the establishment of a large-taxpayer unit. The government will need to refrain from increasing expenditures and should consider a freeze on civil-service salaries and hiring. More-accurate revenue forecasts and better cash-flow management would help the government avoid making unmanageable financial commitments that could lead to further payment arrears.

12 External demand for STP's exports is not a constraint, even with the country's lack of trade agreements, because its exports are small, concentrated, growing, and enjoy comparative advantages. STP gained market share in global cocoa-bean exports between 2005 and 2015, though it remains a relatively small supplier worldwide. STP also has a revealed comparative advantage in certain agriculture and fishery products, and it has underexploited tourism potential.

13 While trade barriers are not a significant constraint on STP's exports, its accession to the World Trade Organization (WTO) could signal the government's commitment to economy openness to investors and traders. WTO accession could encourage inflows of foreign investment and technological know-how that could boost productivity and improve governance across sectors, strengthening economic resilience. Finally, STP could also diversify its exports, both in terms of products and markets, which would help reduce volatility and improve the sustainability of the external accounts.

14 The second key challenge is weak trade connectivity. STP's small size and remote location limit its connections to global and regional markets, and its international economic ties are weak even by the standards of peer countries. STP's relative isolation is a major constraint on private-sector-led growth, and enhancing its linkages with the global economy will require a combination of policy reforms and infrastructure investments.

15 Improving port operations and customs performance could improve trade connectivity. Ending the state

monopoly in port operations, allowing the entry of private port operators and vertically integrated shipping companies, reviewing the rules and fees for storage and customs clearance outside the port, enabling the creation of inland "dry ports," and creating an expedited customs-clearance process could reduce transaction costs and make STP's exports more competitive on international markets.

16 The credit constraints imposed by high levels of nonperforming loans and challenges enforcing contracts are the third key challenge to a more balanced growth. These two challenges are related, as weaknesses in contract enforcement inhibit the financial sector's ability to use the collateral it possesses to resolve nonperforming loans. While administrative reform will be necessary to strengthen contract enforcement, balancing the government budget should help reduce the share of nonperforming loans, many of which are linked to government entities or suppliers.

17 To alleviate constraints on the credit market, the government must implement commercial justice reforms and measures to reduce loan risks for banks. Commercial justice reforms include the revision of the commercial code, the creation of specialized commercial courts, the provision of training for judicial staff, the automation of court processes, and the introduction of new case-management techniques. Reforms to the commercial code should reflect a thorough assessment of the advantages and disadvantages of joining or adhering to the standards of the Organization for the Harmonization of Business Law in Africa (Organisation pour l'Harmonisation en Afrique du Droit des Affaires, OHADA). Financial-sector reforms should include the establishment of a secured transaction system. In addition, an online registry for movable collateral, could expand the range of assets that can be used as collateral (e.g., equipment and machinery, receivables, and vehicles), while a well-designed risk-sharing facility could increase banks' risk appetite for lending to small and medium enterprises. Improvements in the credit information system, such as an upgrade to the credit registry and expanded financial reporting by businesses, could

structurally reduce nonperforming loans and reopen the credit channel. Although not linked directly to credit, expanding digital financial services, including mobile money, could reduce operating costs and provide affordable accounts for unbanked individuals and small businesses.

18 Enforcing commercial contracts is not the only aspect of the business climate that imposes a significant constraint on the growth of the private sector. STP ranked 170th out of 190 countries in the 2019 Doing Business Report, performing well below the level of many other small economies. STP's indicator rankings exceeded the regional average in just two of the 11 areas included in report: dealing with construction permits (111th), and trading across borders (122nd). Meanwhile, its rankings for registering property (173rd), enforcing contracts (185th), and protecting minority investors (188th) were near the bottom worldwide.

19 Significant reforms in the areas of resolving insolvency and paying taxes could address some of the most serious issues identified in the Doing Business Report. Comprehensive insolvency reform must be complemented by investment in institutional infrastructure and organizational capacity. The role of insolvency practitioners is critical and requires strong regulations and oversight. In the area of paying taxes, simple steps like organizing and publishing all tax legislation online and allowing taxes to be paid at any bank could have a highly positive impact, while structural reforms in tax administration could generate long-term gains. Starting a business in STP is relatively straightforward, but eliminating the paid-in capital requirement could further ease market entry. In addition, the government could further improve trade facilitation by making more information available online and introducing expedited procedures.

20 The lack of a proper land-information system and a weak government framework for land tenure create uncertainty over property rights, which is the fourth key challenge. Clear and enforceable property rights are the core element of land-tenure governance and essential to efficient

land markets. STP's land-information systems, including its property registry and cadaster, are paper-based, require manual bookkeeping, and do not interoperate, which reduces the quality of the information on which land policies are based. Administrative fragmentation is also an issue, as responsibility for land governance is spread across several governance agencies with overlapping mandates and different standards, which further undermines the accuracy and consistency of land information.

21 To reduce uncertainty over property rights, policymakers must design and implement a comprehensive land-administration system. Creating a parcel-based system and ensuring that cadastral processes are integrated with ownership information through a unique identification number will greatly strengthen property rights. Meanwhile, the legal framework governing land acquisition and foreign investment should be revised to allow private ownership of rural land, which would relieve the government of the burden of managing concession contracts, and clarify processes for foreign investors.

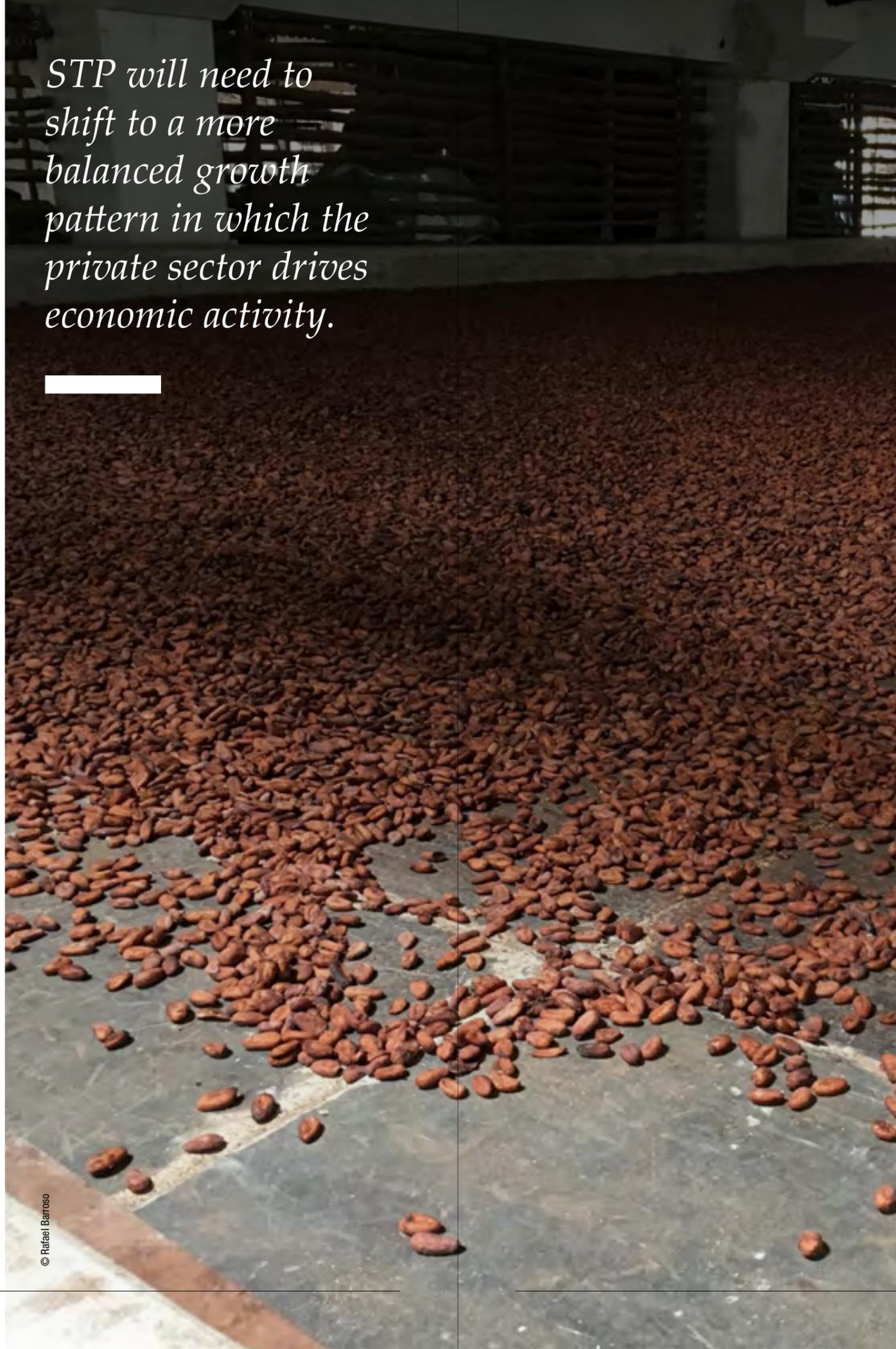
22 Poor infrastructure is the fifth key challenge for a more balanced growth and a contributor to challenges in other areas, such as trade connectivity. Deficiencies in energy, road, seaport, and airport infrastructure have an especially negative impact on economic activity. Electricity is expensive, unreliable, and often difficult to obtain, compelling firms to operate expensive diesel-powered generators. The spatial density of STP's road network is low, and a large share of its population relies on a single road for access to basic services. In addition, the country's roads suffer from chronically poor maintenance, which contributes to a high rate of road traffic accidents and fatalities. The country's only major seaport is constrained by its shallowness, small hinterland area, and limited room for expansion. Finally, the sole international airport faces important challenges related to safety and security.

23 To overcome these infrastructure constraints, the government will need to execute a carefully targeted

investment program that maximizes private financing. Reducing costs and increasing reliability are the most urgent priorities for the electricity sector. The World Bank is already supporting the government's implementation of a Management Improvement Plan for the national utility, and the authorities must now launch competitive bids for the energy generation projects ranked in the Least-Cost Power Development Plan. In the road sector, the government needs to ensure stable budgetary funding for road maintenance, rehabilitate the road from the capital city to the northern region, and address critical chokepoints in the feeder-road network. Port efficiency could be dramatically improved by the acquisition of new equipment, which would allow the port to stack more containers, and the policy recommendations of trade connectivity could further streamline port operations. Concurrently, the government must undertake a cost-benefit analysis of building a new port, though preliminary analysis indicates that a deep-sea transshipment port would not be viable in STP. Finally, airport reforms should focus on obtaining EU cargo export certification and improving safety and security.

24 **STP's agriculture exports are internationally competitive provided some product characteristics are present, but policymakers need to address risks in key export sectors.** The characteristics that determines country's agricultural exports competitiveness are: have high value-to-weight ratios, be transportable by tourists, have low perishability, be resilient to climate change, reflect the country's uniqueness, and have a positive social and environmental image. However, issues with agricultural logistics, climate change, price volatility, inadequately harmonized policies, and animal and plant health risks could inhibit the sector's growth. Improvements in infrastructure, trade connectivity, and credit access could accelerate the growth of agriculture, supported by the implementation of sector-specific policy reforms. The resumption of air exports would benefit agricultural producers, while a more reliable agricultural logistics chain could reduce production costs. The government could boost the agricultural sector's contribution to growth by: (i) implementing measures to reinforce climate resilience, (ii) revising the national agriculture

STP will need to shift to a more balanced growth pattern in which the private sector drives economic activity.



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policy and strategy, (iii) collaborating with private firms to prioritize public investments in agricultural promotion, animal and plant health, and innovation; (iv) increasing investment in innovation and risk management; and (v) improving access to basic agricultural and climate statistics.

25 **Limited air connectivity is a key challenge on the growth of the tourism sector and thus for a more balanced growth pattern.** Average spending per tourist in STP is high and not very price sensitive, and increasing the number of tourist arrivals could boost foreign-exchange inflows and promote economic activity within and beyond the tourism sector. While air connectivity is the key challenge to increasing tourist arrivals, raising STP's digital presence could increase demand for tourism in STP. In addition, the international research shows that positive social attitudes towards sexual and gender minorities can positively impact tourist arrivals.

26 **Improving air connectivity will require a concerted public and private effort to gather data, approach airline management, and jointly market new connections.** To demonstrate the financial viability of new air connections, the government and tourism firms must collect monthly data on occupancy ratios of flights and hotels. These data will enable private and public actors to approach airline representatives at regional aviation conferences and provide compelling evidence that there is ample demand for expanded service to STP. Positive feedback on tourist exit surveys could bolster the case for additional air connections. The World Bank and other development partners have supported the development of a tourism strategy and marketing plan, which now needs to be implemented. Marketing efforts, especially in digital channels, can be a cost-effective means to overcome the informational barriers associated with small countries and can strengthen STP's image as a unique destination that offers an accepting and safe environment.

27 **Weak governance in the fisheries sector has led to the overexploitation of marine resources, which is**

the sixth key challenge. The sector also suffers from outdated and unsafe vessels and inadequate equipment, dilapidated and poorly managed infrastructure, and inadequate health and sanitation practices. However, only the overexploitation of resources is a binding constraint, because it undermines the possibility of increasing the value added by the sector and tarnishes the STP's image as ecologically pristine and an advocate of the blue economy approach.

28 **To address the overexploitation of marine resources, STP must improve data collection, introduce co-management of fishery facilities with fishing communities, and ultimately consider implementing a catch-reconstruction program.** The first priority is to improve the government's capacity to collect data on the number of fishing boats and the volumes and types of species being fished. Data collection should be undertaken in collaboration with the fishing community to raise the awareness of the importance of sectorial governance and the enforcement of fishing licenses. Co-management of landing-site infrastructure will help reduce post-harvest losses and ease pressure on fish stocks. After these two priorities have been addressed, the government will be better equipped to decide whether a catch-reconstruction program is warranted.

29 **STP's public sector suffers from low capacity, poor interinstitutional coordination, and a limited focus on results.** Public-sector staff generally await instructions from higher administrative levels before taking action, rather than working continuously on a predetermined set of deliverables or mandates. The culture of the public sector is hierarchical, with a high concentration of managerial power, limited delegation of responsibilities, and very little emphasis on monitoring outcomes or delivering results. Creating a public-sector culture based on technical independence, professional competence, and high-quality service delivery will require a commitment at the highest levels that is clearly communicated across the public administration and accompanied by clear expectations and a system to ensure accountability for results.

30 **STP has made considerable progress in fostering gender equality in education, but it has been unable to translate these gains into the widespread economic empowerment of women.** Between 1990 and 2012, the average fertility rate fell from 5.8 to 3.6 births per woman, which was accompanied by a similarly sharp decline in the infant mortality rate. However, the total fertility rate is well above average among rural women (5.2), and the adolescent fertility rate is close to those of low-income comparator countries. High rates of adolescent fertility and total fertility among rural women, as well as norms that leave women with most responsibility for domestic tasks, have prevented STP from leveraging gender parity in both primary and secondary education to achieve the broad-based economic inclusion of women. The female-to-male labor-force participation rate is just 69 percent, and women's lack of economic power is reflected in their lack of power within households, as evidenced by high rates of gender-based violence and the limited participation of women in household decision-making.

31 **Sexual and gender minorities face stigma, discrimination, and social exclusion in STP, which reduces the country's economic potential.** STP's limited connectivity with countries that have made significant advances in protecting the rights of lesbian, gay, bisexual, transgender, and intersex (LGBTI) people pose a critical challenge to its sexual and gender minorities. LGBTI people in STP face discrimination in the education and healthcare sectors, as well as in the labor market. Greater social and economic inclusion of LGBTI people would generate important benefits at the macroeconomic level and in the tourism sector. At the macroeconomic level, expanding the economic participation of a significant portion of the population would increase the allocative efficiency of labor, which is particularly important for a country with a small population. In the tourism sector, creating an inclusive environment for international LGBTI tourists could boost arrivals of tourists overall and create new employment opportunities for local members of sexual and gender minorities.

32 **To address these constraints and rebalance growth toward the private sector, STP must establish a detailed reform agenda with clear, well-prioritized objectives.** Implementing reforms in small island developing states can be especially challenging, as a small population size tends to limit domestic capacity to design, analyze, and implement policies. The authorities must therefore develop a prioritized and sequenced reform plan that reflects a realistic estimate of STP's implementation capacity, as well as an understanding of the opportunities and constraints facing the country. To ensure accountability for the implementation of reforms, detailed plans should be backed by realistic targets, objectives, and timeframes, as well as clearly defined accountability mechanisms.

33 **A credible political commitment, strong executive leadership, effective communication between the government and the public, and close collaboration between the government and its development partners will be crucial to the success of the reform agenda.**² The reform program should be anchored at the prime ministerial level, and the leadership of the major line ministries should have a strong sense of ownership over their respective elements of the agenda. Administrative buy-in will be especially important for STP's newly elected government, as the literature reveals that there is a relatively short political window of opportunity to advance difficult but necessary reforms. In addition, effective communication between the government and the public can help ensure accountability and build a public consensus in favor of reform. Finally, STP's development partners can augment the government's implementation capacity by providing technical assistance and targeted financial support.

TABLE 1: POLICY RECOMMENDATIONS

LEGEND

 recommendation addresses key constraint

 recommendation embodies blue economy dimensions

 reforms that can yield relevant gains in short period of time

 recommendation addresses gender aspect

 recommendation addresses SOGI aspect

 short term

 medium term

 long term

Policy Recommendations at the Macroeconomic Level	Key Constraint, Quick Win or Cross-Cutting Issue	Time
Replace the existing limited consumption taxes with a dual system composed of a broad-based value-added tax and an excise tax		
Build the capacity of the tax administration office to administer the value-added tax		
Formally establish a large-taxpayer unit and apply modern audit techniques to ensure tax compliance among large taxpayers		
Control expenditures by avoiding salary increases and refraining from hiring new public-sector workers		
Improve revenue forecasts and strengthen cashflow management to avoid taking on unmanageable financial commitments		
Initiate the World Trade Organization accession process		
Diversify export products and markets		
Assess the use of fiscal rules to reduce fiscal policy volatility and balance the budget		
Strengthen public investment management to ensure the selection and implementation of investable, cost-effective, and high-quality infrastructure projects		
Policy Recommendations at the Structural Level	Key Constraint, Quick Win or Cross-Cutting Issue	Time
Ensure that the cost of decommissioning oil rigs is covered by oil companies and that the process complies with the highest standards		
End the state monopoly on port operation to allow the entry of private port operators and vertically integrated shipping companies		
Review the rules and fees for storage and customs clearance outside the port to enable the establishment of dry ports and create an expedited customs-clearance process	 	
Update commercial and civil laws, and conduct a legal study to assess the pros and cons of accession to OHADA or adoption of its standards		
Train judges and court staff to specialize in commercial justice cases		
Introduce case-management techniques at the courts, including the collection of statistics to identify opportunities for efficiency gains		
Automate judicial procedures by using information technology systems and equipment		

Publish all judicial decisions at all levels to strengthen transparency and promote consistency			
Revise the insolvency law and create adequate institutional infrastructure and organizational capacity to enforce it			
Organize and publish all tax legislation online			
Allow taxes to be paid at any commercial bank			
Eliminate the paid-in capital requirement to start a business			
Make all customs and trade regulations available online			
Introduce a single point of enquiry responsible for answering all questions about import and export procedures			
Provide adequate resources to enable the Trade and Investment Promotion Agency (APCI) to effectively promote investment in close coordination with other agencies			
Develop an investor roadmap with clear timelines that devotes special attention to land-acquisition procedures			
Expand the online business-registration platform to include licensing modules			
Create an online registry for movable collateral to allow borrowers to secure loans with movable assets (e.g., equipment and machinery, receivables, and vehicles)			
Create a risk-sharing facility to increase banks' risk appetite for small-business lending			
Improve the credit information system by upgrading the credit registry and expanding financial reporting by businesses			
Expand digital financial services to reduce operating costs and provide affordable accounts to unbanked individuals and small enterprises			
Implement the recommendations of the asset-quality review, with a focus on enforcing recapitalization requirements and upgrading prudential standards and supervisory skills			
Upgrade the national payment system and connect it to the international credit card network			
Create a parcel-based land information system and ensure that cadastral processes are integrated with ownership information through a unique identification number			
Harmonize institutional mandates on land administration to coordinate processes and avoid overlapping responsibilities or administrative gaps			
Propose nondiscriminatory policies and laws that recognize and protect the land rights of women, especially those in de facto marital unions			
End state ownership and public management of rural land			
Clarify the regulatory framework for foreign investment in land and the rights of current owners			
Implement the Management Improvement Plan for the national water and electric utility (EMAE)			
Launch a competitive bid for the first two energy generation projects identified in the Least-Cost Power Development Plan			

Implement demand-side management measures in the electricity sector such as investments in energy-efficient lighting	Key	⚡		ST
Ensure stable funding for road maintenance through the National Road Fund	Key			MT
Acquire restacking equipment to allow more containers to be stored at the port and open space in the port hinterland	Key	⚡		ST
Equip the port with infrastructure to handle frozen cargo	Key			ST
Carry out a cost-benefit analysis to assess the economic viability of building a new port				MT
Obtain the EU certification (ACC3) for air-cargo exports	Key	⚡		ST
Acquire safety and security equipment for the airport	Key			ST
Provide English language and technical training for air-control staff				ST
Ensure that the entire airport and runway are securely fenced				ST
Resurface the airport apron				MT
Expand airport terminal				MT
Policy Recommendations at the Sectorial Level	Key Constraint, Quick Win or Cross-Cutting Issue			Time
Invest in the adoption of climate-smart agricultural technologies for farmers and agribusinesses		≈		MT
Develop a national medium-term agricultural strategy and policy, including an approach to private agribusiness development				ST
Increase the participation of private firms in the prioritization of public investments in agricultural infrastructure, innovations, and the management of plant and animal health risks				ST
Conduct an agricultural census				MT
Create an agriculture information system with data on prices, yields, land use, and other variables to strengthen the analytical basis for private investment decision and public policy formulation				MT
Promote agriculture products in external markets				ST
Introduce a system of warehouse receipts to enable producers to manage their inventory, hedge against price fluctuations, and use their produce as financial collateral				MT
Prepare the data analytics and strategy to approach airlines to expand air routes using a public-private alliance				ST
Harmonize tourism statistics across agencies and implement recurrent visitor surveys				ST
Invest in marketing, especially digital marketing, to enhance STP's image as a unique tourism destination		≈	♀ ⊖	MT
Implement the national tourism and marketing strategy				MT

Improve the capacity of public agencies to collect data on the number of fishing boats and the volumes and types of species being fished	Key	≈		ST
Introduce co-management of landing-site infrastructure	Key			MT
Undertake research in collaboration with regional peers				MT
Continue to promote the use safer fishing vessels in line with the objectives of the West Africa Regional Fisheries Program (PRAO)				ST
Create a homologation system for fishing vessels to deal with registration		≈		MT
Develop climate-smart fishery infrastructure		≈		MT
Develop semi-industrial offshore fisheries				LT

TABLE 2: SÃO TOMÉ AND PRÍNCIPE: SELECTED ECONOMIC INDICATORS

	2013	2014	2015	2016	2017	2018
Real Economy	<i>Percentage of GDP</i>					
GDP at constant prices	4.8	6.5	3.8	4.2	3.9	2.7
GDP deflator	10.7	8.2	5.1	5.1	2.0	4.7
Consumer prices						
End of period	7.1	6.4	4.0	5.1	7.7	9.0
Period average	8.1	7.0	5.3	5.4	5.7	8.2
Fiscal Accounts						
Total revenue	30.0	26.5	28.9	29.3	28.0	23.7
Tax revenue	15.5	13.6	14.6	12.7	12.8	12.5
Non-tax revenue (excl. oil)	2.5	1.5	1.4	1.4	1.1	0.6
Grants	12.0	11.4	12.1	14.2	13.5	8.2
Total expenditure	30.9	31.9	37.3	35.5	33.3	26.8
Current expenditure	17.1	16.4	17.2	16.2	17.2	16.4
Capital expenditure	13.7	15.0	18.2	17.9	14.7	9.1
Of which: financed by the Treasury	1.4	1.0	1.2	1.1	0.6	1.4
Financed by external sources	12.4	14.0	17.0	16.9	14.1	7.7
HIPC Initiative-related social expenditures	0.3	0.1	0.6	0.2	0.3	0.1
Overall balance	(0.8)	(5.4)	(8.4)	(6.2)	(5.3)	(1.9)
Domestic primary balance	0.1	(1.8)	(1.7)	(2.6)	(3.3)	(4.1)
Public debt	82.7	106.8	114.3	114.5	105.7	117.6
Selected Monetary Accounts	<i>Annual Percentage Change</i>					
Base money	29.4	23.2	37.5	5.0	(9.6)	0.8
Credit to the economy	(1.0)	(1.0)	3.8	8.3	2.5	(1.6)
Central Bank reference interest rate (percent)	14.0	12.0	10.0	10.0	9.0	9.0
Average bank lending rate (percent)	23.6	23.1	23.3	19.6	19.6	19.9
External sector	<i>Percentage of GDP</i>					
Current account balance (incl. official transfer)	(17.3)	(21.6)	(12.2)	(6.6)	(13.3)	(11.1)
Current account balance (excl. official transfer)	(33.6)	(32.4)	(24.8)	(20.5)	(24.4)	(19.7)
Foreign direct investments	3.7	6.6	8.1	6.0	11.0	6.7
Net international reserves						
Millions of U.S. dollars	49.0	50.6	56.3	49.7	46.8	28.6
Months of imports	5.1	5.3	5.9	3.1	2.9	1.8
Exchange rate (LCU per US\$, annual average)	18.4	18.5	22.1	22.1	21.7	20.9
Exchange rate (LCU per US\$, end of period)	17.8	20.1	22.4	23.4	20.5	21.5
Memorandum item						
Gross Domestic Product						
Millions of new dobra	5,589	6,444	7,031	7,698	8,154	8,763
Millions of U.S. dollars	302.9	348.9	318.3	347.5	375.0	422.6
Per capita (in U.S. dollars)	1,661	1,876	1,677	1,794	1,897	1,943

Source: São Tomé and Príncipe Authorities and WB and IMF staff estimates and projections

LIST OF BACKGROUND NOTES

#	TITLE	AUTHORS
1	Economic growth and volatility in São Tomé and Príncipe	Rafael Barroso & Chenli You
2	Is it sustainable for São Tomé and Príncipe to have a large current account deficit and a fixed exchange rate?	Carlos Arteta & Patrick Kirby
3	Where has trade growth come from in São Tomé and Príncipe?	Jose E Signoret
4	Update on oil and gas exploration and production in São Tomé and Príncipe	Patrice de Vivies
5	How does STP connectivity compare with peer countries?	Christina Wiederer
6	Stock take on business environment reform in São Tomé and Príncipe	Zenaida Uriz
7	What are the bottlenecks on land governance and how to remove them to support tourism and agriculture development?	Ivonne Moreno Horta & Camilo Pardo
8	How to increase the availability of financing needed to stimulate private sector investment? A review of the state of and barriers to access to financial services in São Tomé and Príncipe	Rúben Barreto & Carlos Vicente
9	Map of tourist locations	Benjamin Stewart
10	What are the obstacles to agricultural development in STP? A review of current agriculture production structure and potential	Diego Arias, John Horton & Pablo Valdivia
11	What is the potential and hindrances for the tourism sector in São Tomé and Príncipe?	Gabriel Monte-Rojas
12	What is the potential and obstacles for the fisheries sector in São Tomé and Príncipe?	Julien Million & Mirko Serkovic
13	What do we know about gender in São Tomé and Príncipe?	Daniel Kirkwood
14	The case for economic inclusion of Sexual and Gender Minorities in São Tomé and Príncipe	Clifton Cortez and John (Ioannis) Arzinos
15	Blue Economy and Environmental Resiliency	Charlotte de Fountalbert, Nicolas Desramaux, & Peter Devine

This CEM has been shared with the authorities and a seminar to present the main findings was organized on September 2019 with officials from the Ministry of Planning, Finance, and the Blue Economy. Overall, the government officials agreed with the main findings on the report. There were, however, some comments on the bindingness of some constraints. For example, the audience believed that the fish catch loss might be overstated since palayes tend to salt or smoke the fish. There was also some questioning regarding the need and precedence to extend the airport runway. Some members of the audience also highlighted the binding constraint imposed by the deficiencies of the judicial system. Finally, the audience suggested the development partners to increase financing to the private sector and think of ways to leverage the impact of its finance, including on local capacity and implication to external accounts.

INTRODUCTION

The objective of this Country Economic Memorandum is to understand the challenges facing São Tomé and Príncipe (STP) and provide the analytical foundation for a strategy to achieve a more balanced growth.

This report begins by examining macroeconomic challenges, including STP's sensitivity to shocks, and evaluating the impact of its monetary and fiscal policies. The report goes on to analyze economywide structural constraints, including poor infrastructure and an underdeveloped financial sector. Finally, the report considers specific challenges to the development of key sectors, such as agriculture, fisheries, and tourism. Cross-cutting issues, including environmental resiliency, the "blue economy", environmental resiliency, gender, and sexual-orientation and gender identity (SOGI) are addressed throughout the report.

STP is a lower-middle-income, small island country, and many of the challenges it faces are common among small states. STP has a surface area of just 1,001 km² and a total population of approximately 200,000, about 43 percent of whom are under the age of 14. In 2016, STP's per capita GDP was US\$1,714. STP's small population, small land area, geographic remoteness, and high fixed costs for public goods impact the capacity of its public sector, as well as its trade dynamics, fiscal accounts, and social development indicators.

STP's economy is dominated by agriculture and highly dependent on imports, with a large government footprint. After achieving independence from Portugal in 1975, STP became a centrally planned economy until 1991. Agriculture has played a large role in STP's economy since the colonial era, and while cocoa remains STP's largest export, the focus of agricultural production has shifted over time from export-oriented cash crops toward food crops for the domestic market.³ Public spending, and especially public investment, also remains an important driver of growth. Public spending averages about 38 percent of GDP, and the government owns four large state-owned enterprises (SOEs) and employs about 11,000 people. Oil exploration has been underway since 2013, but commercial oil production is not expected over the near term. With pristine beaches, unspoiled natural habitats, and a unique local culture, STP has a comparative advantage in tourism,⁴ which is an increasingly important economic activity. Due to its small size and limited resources, STP depends heavily on imports, including oil for power generation.

STP's economy regressed until 2000 but entered a fast-growth period since then with capital deepening and productivity growth. STP's economy shrank significantly during the 1980s—a decade marked by high growth volatility (Table 3). After its transition away from central planning, the GDP growth rate turned positive, but remained low, and per capita GDP continued to decline until 2000. A steep decline in total factor productivity accompanied the shift from a centrally planned economy to a market-based economy, but by the 2000s a robust recovery was underway. The annual GDP growth rate averaged 5 percent between 2000 and 2014, and GDP per capita grew by 1.9 percent per year. STP's expansion moderated between 2015 and 2018, but GDP growth remained relatively strong and stable.

TABLE 3: STP - GDP Growth and Volatility and Contribution to Growth by Period: 1981-2018

	Real GDP growth rate		GDP per capita	Contribution to growth		
	Average (percentage)	Volatility (std deviation)	(PPP constant percentage)	Capital	Labor	Productivity
1981-1990	-1.36	5.74	-3.9	2.4	-2.4	100.0
1991-2000	1.50	0.74	-0.5	272.1	60.2	-232.4
2001-2014	5.00	2.4	1.9	46.5	16.8	36.7
2015-2018	3.64	0.65	1.2	N.A.	N.A.	N.A.

Source: IMF and Author's calculation based on Penn World Tables 9.0 (PWT)

Although still high by historical standards, the annual GDP growth rate fell to an estimated 2.7 percent in 2018. Foreign direct investment (FDI) linked to oil exploration temporarily boosted growth around 2010, but subsequently tapered off. Public investment reached 31.5 percent of GDP in 2011, then dropped to 9 percent in 2018. More recently, the tourism sector's growth momentum has slowed, while both the volume and value of STP's agricultural output have fallen.⁵

Even after the shift to a market-based economy, growth has remained excessively dependent on public spending—and especially public investment, which is financed mostly by grants and external loans. Public investment averaged 22.9 percent of GDP between 2010 and 2014, then fell to 15 percent of GDP between 2015 and 2018. Meanwhile, grants and external loan disbursements declined from 16 and 8 percent of GDP to 12 and 4.4 percent of GDP, respectively, over the same period.

The decline in external grants has rendered STP's public-expenditure-led growth pattern anymore, and the country is in debt distress. Grants from development partners have been declining since 2011, and this trend is expected to continue now that STP graduated to lower-middle-income status according to the United Nations classification. The external and domestic borrowing space has been exhausted, and the debt-to-GDP ratio has almost doubled since the country reached the completion point of the Heavily Indebted Poor Countries/Multilateral Debt Relief Initiative (HIPC/MDRI). STP is classified as being in debt distress due to the prolonged arrears on its post-HIPC external debt.

STP's attempt to extend the viability of its public-expenditure-led growth pattern contributed to a bloated and inefficient public sector, severe fiscal imbalances, and domestic arrears that compounded the public debt, and reduced international reserves. STP has recorded primary budget deficits in nine out of the last ten years. Government arrears soared from 6.3 percent of GDP in 2010 to 36.5 percent in 2018, and by April 2019 net international reserves (NIR) had fallen to 1.8 months of imports. Meanwhile, the lack of exploitable oil discoveries has contributed to a decline in FDI. Even the country's current, relatively modest growth levels are threatened by: (i) the government's fragile fiscal position; (ii) a banking sector that faces a high level of nonperforming loans (NPLs) and low capital-adequacy ratios; and (iii) external imbalances.

STP needs to transition to a more balanced growth pattern with a greater role for the private sector. The government is aware that public spending alone cannot sustain economic growth over the long term, especially given the country's fiscal and debt dynamics. The government will still play an important part in the country's growth, but it must retrench and refocus on providing essential public goods and creating a conducive business climate. To perform these functions effectively and sustainably, the government will need to dramatically increase the efficiency of its operations.

Six key challenges inhibit STP's transition to a more balanced growth pattern. The need to finance a widening current-account deficit (CAD), which is caused by large fiscal deficits, in an environment of declining external aid and tax revenues threatens to derail macroeconomic stability. Inadequately defined and unevenly enforced property rights hinder the development of agriculture and tourism, as well as the credit market. In the financial sector, a high NPL ratio and the difficulty of enforcing commercial contracts have largely halted domestic lending. A large infrastructure gap and poor trade connectivity are structural challenges that affect the entire private sector, but they have an especially acute impact on agriculture and tourism. STP lacks a direct air link to Europe, which constraints the export potential of high-value-added crops, hinders the emergence of new export products, and slows the growth of tourism. An insufficient, unreliable, and expensive energy supply increases costs across the private sector, but its impact on fisheries is particularly significant, as the lack of cold storage and adequate processing facilities at landing docks increases waste and limits export potential. Finally, the overexploitation of fishery resources has negative implications for the fishery and tourism sectors and may adversely affect nutrition quality and inhibit social development.

STPs challenges are complex, but actions in several priority areas could greatly enhance its economic growth and development outlook. Implementing a value-added tax (VAT) could significantly increase tax revenues and help manage the trajectory of the CAD. Measures to boost agricultural output and foster the growth of tourism could also contribute to narrowing the CAD, and recertifying São Tomé International Airport to allow direct air cargo export to Europe should be regarded as a top priority. Establishing a forum for collaboration between the government and tourism stakeholders could enable detailed data collection, which in turn could inform negotiations with airlines around the establishment of new routes to STP. The swift implementation of the management-improvement plan for the National Water and Electricity Company (Empresa de Água e Electricidade, EMAE) could help stabilize its financial position and build the confidence necessary to attract private participation in expanding energy generation capacity. Finally, the government should introduce a catch-reconstruction program for fisheries, which could be accomplished without reducing the income of fishery workers if processing losses are reduced.

This report is divided into six chapters. Following the introduction, chapter two examines STP's long-term growth performance and evaluates its most pressing macroeconomic, structural; and sectorial challenges. Chapters four, five, and six examine specific issues involved in STP's transition to a more balanced growth pattern. The report is underpinned by a detailed background analysis, which is presented in the second volume of the CEM.



The six key challenges are the most binding constraints for STP's development.

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BOX 1

High Fertility Rates Slow per Capita GDP Growth

From 1981 to 2017, STP's per capita GDP growth rate was well below the level of many comparable countries. In the 1980s and 1990s, STP's economic performance was among the worst of any country in its peer group, as its GDP per capita contracted by 3.9 percent in the 1980s and by 0.5 percent in the 1990s. Meanwhile, per capita GDP among peer countries grew at average rates of 2.0 percent in the 1980s and 2.6 percent in the 1990s (Figure 1). From 2001 to 2014, STP's per capita GDP growth rate recovered to an average of 1.9 percent, albeit still below the 2.7 percent average observed among its peers. Between 2015 and 2017, STP's per capita GDP growth rate slowed to 1.5 percent, while the peer-country average remained broadly stable at 2.6 percent.

Slow overall GDP growth from 1981 to 2000 was largely responsible for the poor performance of STP's GDP per capita during the period, but since 2001 high population growth rates have offset an accelerating GDP growth rate. In the 1980s and 1990s, STP's annual GDP growth rates were -1.4 and 1.5 percent, respectively, while the average rates for its peers were at 4.1 and 4.5 percent, respectively (Figure 2). From 2001 to 2014, STP's GDP growth rate reached 5 percent, exceeding the average rate of its peers (4.2 percent) for the first time, and its GDP growth rate remained above average after 2015, albeit by a narrower margin. However, STP's population growth rate, which was previously in line with those of its peers, suddenly increased. During the 1980s and 1990s, STP's population growth rate averaged 1.8 and 2.0 percent, respectively, close to the peer-group average of 2.0 percent in both periods (see Figure 3). From 2001 to 2014, however, STP's population growth rate accelerated to 2.3 percent, while its peer-group average slowed to 1.7 percent. This dynamic persisted after 2015.

STP's rising population growth rate reflects higher fertility rates, including rates of adolescent pregnancy, combined with declining rates of infant mortality. STP's overall fertility rate and fertility rate for adolescents consistently exceeded the peer-group average from 1981 through 2017, and the gap with the peer-group average did not narrow significantly over time. STP's overall fertility rate in from 2001 to 2014 was 4.9 births per woman, well above the peer-group average of 3.2 (Figure 4 and Figure 5). The most recent census found that the overall fertility rate had fallen to 3.6 births per women, which is still above the peer-group average. Meanwhile, the infant mortality rate declined from 60.1 deaths per 1,000 live births in 1981 to 25.2 in 2017. Nevertheless, STP's infant mortality rate remains above the levels of all peer countries except Comoros (Figure 6).

Figure 3: Per Capita GDP Growth Rates, STP and Peer Countries, 1981-2017 (%)

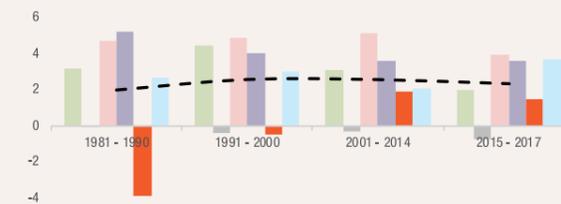


Figure 4: GDP Growth Rates, STP and Peer Countries, 1981-2017 (%)



Figure 5: Population Growth Rates, STP and Peer Countries, 1981-2017 (%)

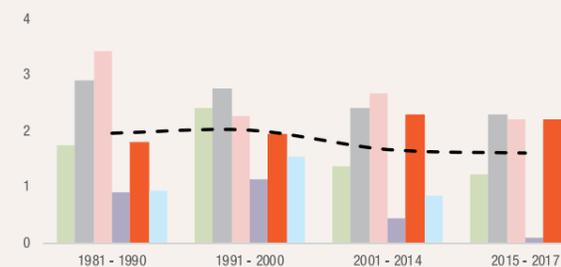


Figure 6: Fertility Rates, STP and Peer Countries, 1981-2017 (births per woman)

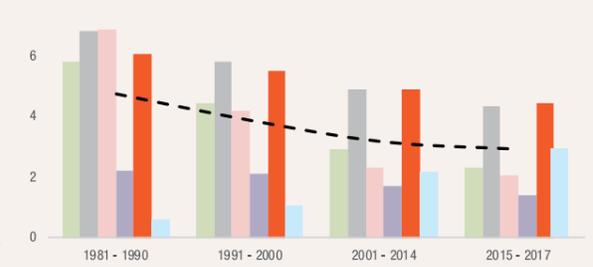


Figure 7: Adolescent Fertility Rates, STP and Peer Countries, 1981-2017 (births per 1,000 women aged 15-19)

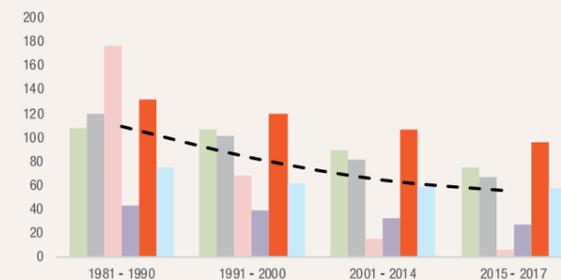
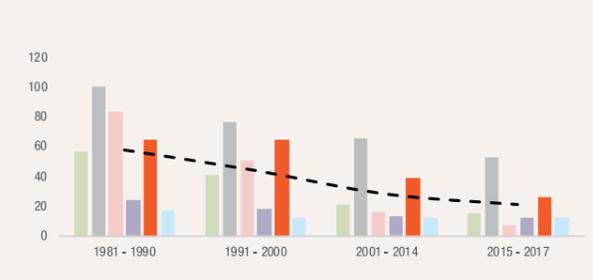


Figure 8: Infant Mortality Rates, STP and Peer Countries, 1981-2017 (deaths per 1,000 live births)



Source: WDI



WHAT ARE THE SPECIFIC DEVELOPMENTAL CHALLENGES OF SMALL-ISLAND DEVELOPING STATES?

A. Many of STP's Socioeconomic Characteristics Are Common among Developing States in Sub-Saharan Africa and among Small Island States Worldwide

STP is a democracy, marked by unstable governments and where women are underrepresented in decision-making roles. STP consists of two main islands in the Gulf of Guinea. The country is divided into six districts, plus the Autonomous Region of Príncipe (Região Autónoma do Príncipe, RAP), and protected areas cover around 30 percent of its land area. STP is a unitary state with a presidential system, though the constitution grants the largest share of political power to the prime minister. STP is a multiparty democracy, and most elections have not awarded a legislative majority to a single party, resulting in a series of unstable coalition governments. As a result, STP is currently in its 17th government, while Cape Verde—another former Portuguese colony that also achieved independence in 1975—is now in its 9th government. The latest round of parliamentary elections was held in October 2018, and it yielded a coalition government. Although women have held many high-profile government positions, including prime minister and president of parliament, they remain underrepresented in public decision-making roles. Under a legal quota, 30 percent of parliamentary seats are to be held by women, but in the last election the share of seats actually held by women declined from 18 to 13 percent. Deep gender disparities are also evident in the executive branch, where only three out of 12 government ministers are women, and especially in local governments, where women make up just 9 percent of local councilors.

STP's economy is dominated by the primary and tertiary sectors, and recent growth has not contributed to poverty reduction. Currently, the primary sector represents 11.8 percent of the country's GDP, while industries and services represent 14.8 and 71.4 percent, respectively. The tertiary sector accounts for 60.5 percent of employment, and the primary sector accounts for 27.3 percent (Figure 9 and Figure 10). The recent poverty assessment report of the World Bank based on the 2017 household survey, estimates that the incidence of poverty in 2017 using the national poverty line is 66.7 percent. Moreover, 34.5 percent of the country's population lives on less than US\$1.9 PPP per day. Income concentration, as measured by the Gini index, was 56.3 in 2017, and the unemployment rate was 9.1 percent in 2017.

Figure 9: Supply-Side Contributions to GDP, 2001-2017 (%)

Source: INE

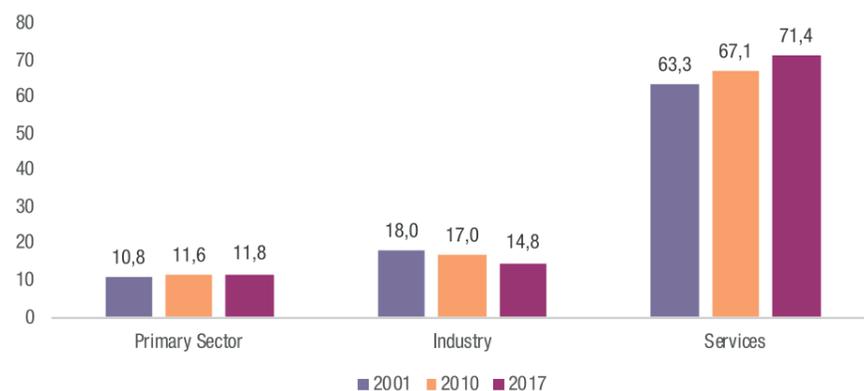
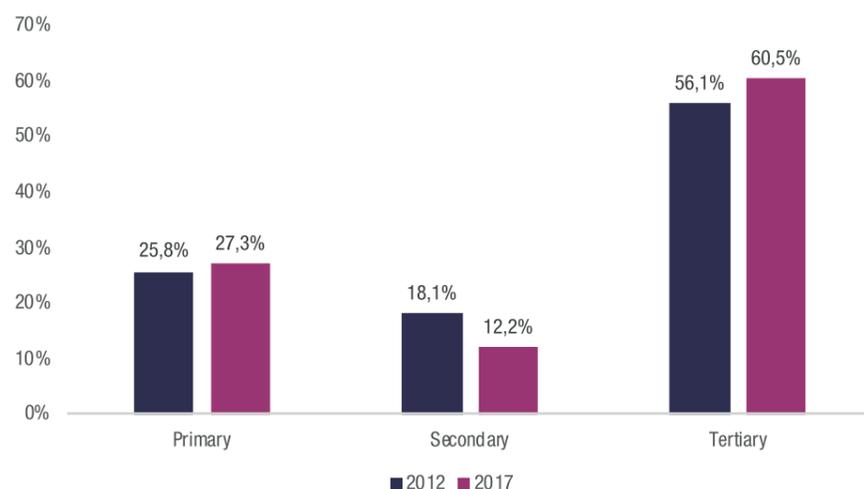


Figure 10: Employment by Sector, 2001-2017 (%)

Source: INE



The gender gap in educational attainment has narrowed, but women are still more likely to drop out of secondary school, due in part to adolescent pregnancy. The gender parity index⁶ is 97 percent at the primary level and 106 percent at the secondary level. However, the 2012 population census found that girls are increasingly likely to drop out as they move from lower to upper secondary school, and just 35 percent of upper secondary students are female. Early childbearing is a key constraint on educational attainment among girls, which is exacerbated by social norms that place less value on girls' education and allocate a greater share of household responsibilities to women and girls. While pregnant girls may continue to attend school via special night classes⁷ the limited availability of such classes may hinder the ability of young mothers to manage both their schooling and their parental responsibilities (UNICEF, 2016). High rates of early childbearing may also contribute to the country's large share of single-parent households, with adverse consequences for childhood development. In STP, 60 percent of female household heads lead single-parent households.

Women in STP experience high rates of domestic violence and often have limited influence over household decisions. Domestic and gender-based violence (GBV) are relatively common despite legal protections. The latest household survey data show that 20 percent of women think domestic violence is acceptable for at least one of five possible reasons, while over one-quarter of women reported experiencing sexual and/or physical violence over the 12 months prior to the survey. A full 27 percent of women reported

experiencing physical violence by their husband or partner at some point, higher than the level recorded for South Africa (20 percent), where the cost of GBV has been estimated at 1.3 percent of GDP (KPMG, 2017).

Sexual and gender minorities in STP face numerous challenges, including limited information on sexual orientation and gender identity (SOGI) issues, isolation from international SOGI networks, social exclusion within STP, barriers to accessing education, healthcare, and labor markets, and, in some cases, violence. STP's limited connectivity with countries that have made significant advances in protecting the rights of lesbian, gay, bisexual, transgender, and intersex (LGBTI) people pose a critical challenge to its sexual and gender minorities. A survey conducted as part of an HIV program found that among a sample of gay, bisexual and other men who have sex with men (including an even smaller sample of transwomen), only 40 to 50 percent had completed lower secondary education.⁸ While health professionals are often unable to adequately address the unique issues faced by sexual and gender minorities, the denial of service to sexual and gender minorities in health clinics seems to be relative rare. Although data are limited, violence based on sexual orientation also appears to be rare, but violence based on gender identity or gender expression may be more common.⁹

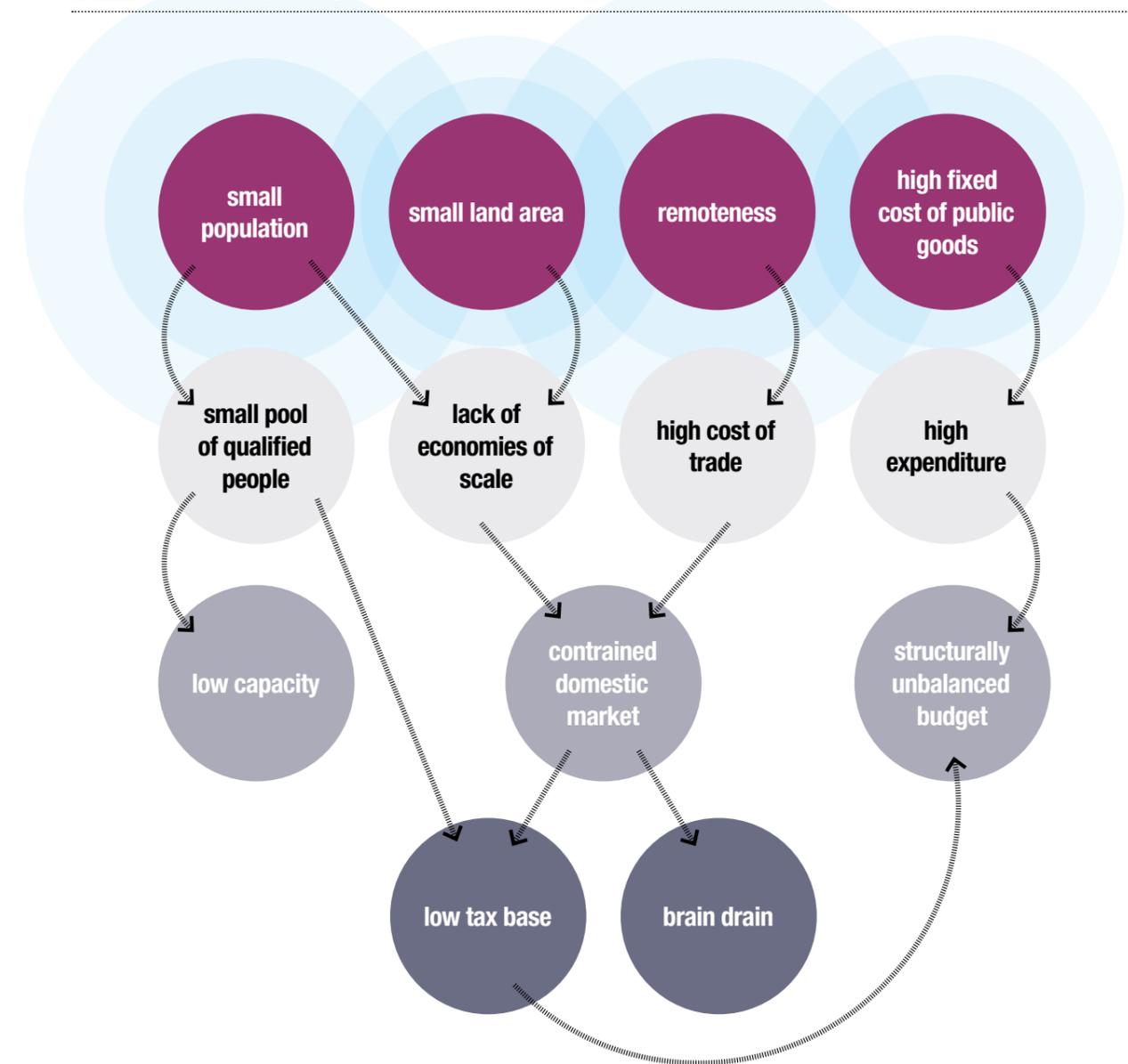
STP's LGBTI legal environment is relatively progressive by the standards of peer countries, but societal attitudes toward sexual and gender minorities are still generally negative. STP decriminalized homosexuality in 2012 and has ratified several important human rights treaties. While STP does not explicitly recognize same-sex marriage, civil unions, or domestic partnerships, the government has ratified the African Charter on Human and Peoples' Rights¹⁰ and is a member of the African Union, which has supported LGBTI antidiscrimination policies.¹¹ However, same-sex relationships are still subject to considerable societal stigma, though attitudes may be improving over time. Most sexual and gender minorities reportedly rely on temporary jobs, especially in the tourism sector or in sex work.

B. Small Islands Face Serious Development Challenges, but These Challenges Are Not Binding Constraint

Small island states are subject to various structural challenges related to their geography and population size. For example, the small size of the labor force may prevent the formation of economies of scale in labor-intensive sectors while also limiting the scope for diversification and contributing to import dependence. Similarly, a small land area can constrain productive possibilities, especially in the agricultural sector. Geographic remoteness tends to increase trade costs, compounding the challenges of a small domestic market. In addition, high unit costs of public goods (including public administration), combined with a small tax base, can lead to fiscal imbalances. Many of these factors also interact with one another, exacerbating their impact on economic development (Figure 11).

Small states are normally defined by the size of their total population, although other measures such as working-age population, land area, and GDP are also used in the literature. The World Bank defines small states as countries that either have a population of less than 1.5 million or that belong to the Small States Forum. According to this classification, there are 50 small states in the world, many of which are island nations. The remoteness of small island states is not solely a matter of their distance from the nearest continent or from developed countries, but also reflects a lack of international connectivity due to limited sea, air, and telecommunications infrastructure. For example, many small Caribbean nations are relatively close to the United States yet have few or no direct flight and vessel services to the U.S., while small islands worldwide often have limited internet connectivity. Finally, indivisibilities in public administration combined with small populations lead to high marginal costs for essential public goods and services. For example, the hospital in the island of Príncipe has only 20 beds, while studies consistently show evidence of economies of scale for hospitals with 200–300 beds.¹²

Figure 11: Common Challenges Facing Small Island States



The characteristics of small islands have important consequences for public-sector capacity, trade, the fiscal accounts, and social development. In addition to high unit costs, public administrations in small island states may have difficulty finding qualified personnel—particularly specialists—in the small domestic labor force. Meanwhile, a constricted domestic market can also limit demand for labor skills, contributing to the emigration of skilled workers, and remoteness increases transportation costs and reduces economic connectivity, further inhibiting the growth and diversification of the private sector. Small, undiversified markets can in turn contribute to a narrow tax base, compounding the fiscal impact of an expensive public sector. Consequently, budgetary volatility and unsustainable fiscal balances are core governance challenges in small island states.

Though serious, these challenges are not binding constraints, and many small island states have achieved high levels of social and economic development. Small island states are highly diverse and represented at all income levels. Some are rich in natural resources, but resource endowments are not critical to the success of small island states. For example, Cape Verde has graduated from least-developed-country to middle-income status, while Maldives, Mauritius, and Seychelles have reached upper-middle-income levels, though none of these countries is resource-rich. STP however, remains a low-income country, with a per capita GDP similar to that of Comoros (Figure 12 and Figure 13).

Figure 12: Annual Per Capita GDP, 1980-2017 (US\$ in PPP terms) Source: IMF

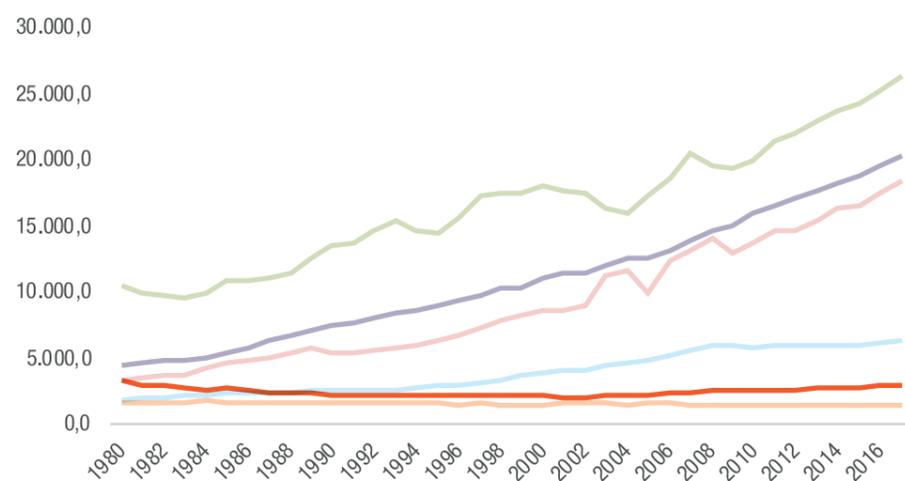
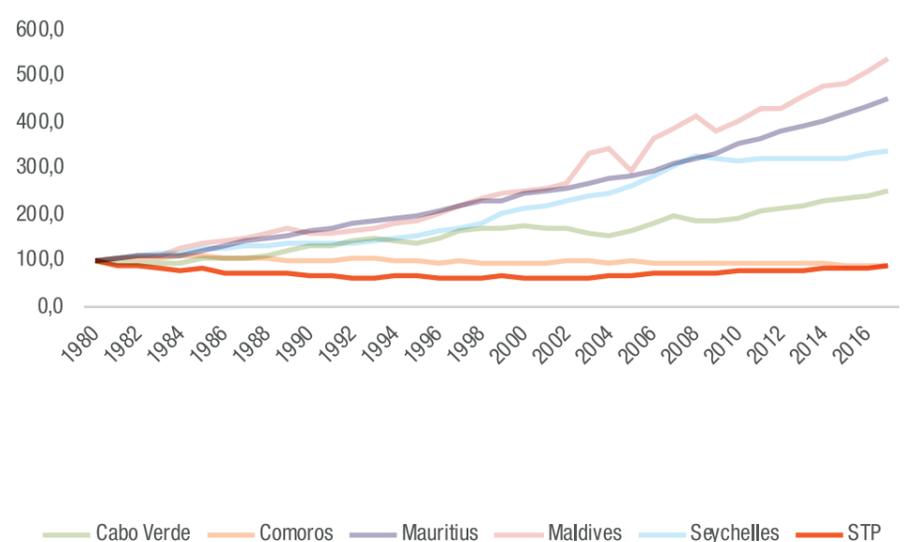


Figure 13: Change in Per Capita GDP, 1980-2017 (1980 = 100) Source: IMF



C. Broad Economic Diversification is Generally Infeasible in Small Island States, Which Tend to Have Specialized Production Structures

The structural characteristics of small island states favor specialization. While economic diversification can help mitigate output volatility, leading to higher long-term growth rates, empirical studies and the policy literature acknowledge that broad economic diversification is typically not feasible in small states due to the characteristics described above.¹³ Nevertheless, small states can still benefit from a limited degree of diversification by exploiting opportunities in specialized export markets, upgrading value chains, or diversifying within the narrow range of sectors where they enjoy a comparative advantage.¹⁴ Promoting the sustainable exploitation of marine areas can help offset the drawbacks of a small land area (Box 2).

Researchers have proposed three types of economic development in small islands.¹⁵ Because imports play a crucial role in the economies of small islands, the three models focus on differences in how imports are financed. In the migration, remittances, and aid-bureaucracy (MIRAB) type, imports are financed by a combination of remittance inflows and external aid, which sustains a large government bureaucracy. In the PROFIT (People considerations, resource management, Finance, insurance, and taxation and transportation (PROFIT) types, imports are financed through a shrewd mix of policies governing taxation, financial regulation, natural resources, transportation, and/or the movement of people. Finally, in the small island tourist economy (SITE) types, imports are financed primarily by tourism exports.

BOX 2

What is the Blue Economy?

The World Bank defines the Blue Economy as the sustainable and integrated development of maritime economic sectors. Overfishing, marine pollution, coastal erosion, and climate change are degrading oceanic ecosystems to the detriment of the millions of people who depend on healthy oceans for jobs, nutrition, economic growth, and ecosystem services. Central to the Blue Economy approach is the recognition that the social and economic benefits of oceanic resources should be maximized over the long term.

Ensuring the sustainable development of the Blue Economy requires:

- Identifying clear policy objectives that reflect the economic, social, cultural, and environmental value of marine areas;
- Leveraging empirical analysis of the current use of marine resources, the needs of different stakeholders, the potential of emerging technologies, and the evolving nature of economic activities to provide sound guidance to policymakers and greater certainty to the private sector;
- Protecting valuable ecosystem services and natural resources through a comprehensive understanding of the cumulative environmental and economic effects of different marine activities;
- Promoting the efficient use of marine and coastal areas, striking a balance between competing pressures, and integrating diverse activities into shared marine and coastal spaces;
- Anticipating the impacts of climate change on the marine environment and embracing appropriate mitigation and adaptation measures; and
- Ensure an inclusive policy dialogue on the use of marine resources that involves a diverse range of stakeholders, including women and members of vulnerable groups.

STP most closely aligns with the MIRAB model, with a relatively weak migration and remittances component and a strong aid and bureaucracy component. STP's remittance revenues are modest, averaging just 5 percent of GDP between 2010 and 2018, and have declined in recent years. Remittances revenues have averaged 5 percent of GDP from 2010 to 2018. STP's diaspora is estimated at about 65,000 people,¹⁶ mostly concentrated in Angola and Portugal. Large-scale emigration is a relatively recent phenomenon, having only begun in earnest after independence, and the diaspora is primarily located in countries that have recently suffered negative economic shocks—and these factors contribute to STP's modest remittance inflows. The recent household survey also shed light on this by showing that 50 percent of the remittances were sent by third parties, thus outside of official statistics, which understates the macroeconomic relevance of remittances. Meanwhile, external grants averaged 14.2 percent of GDP during the same period—almost three times the level of remittances—and financed almost all of the public investment budget, which is a key component of economic growth.¹⁷ In addition to budget support and project finance, STP receives large amounts of in-kind aid, such as food, medicine, and agricultural equipment. Most of the government's own-source revenue finances the civil service payroll, which is an important driver of consumption.

To achieve a more balanced growth pattern, STP must shift from the MIRAB type to a PROFIT- or SITE-type. The MIRAB model is associated with negative outcomes among small island states worldwide,¹⁸ and in STP its sustainability is being threatened by weak remittances and a decline in aid. Moving toward a private-sector-led growth pattern in line with the PROFIT and SITE models. STP's tourism sector is already substantial, bringing in around US\$60 million in annual revenue (around 14 percent of GDP), but it ranks 38th out of the 40 countries on measures of tourism penetration.¹⁹ STP also has some of the traits of a PROFIT economy, but these policies have failed to generate significant economic activity. The country's greatest natural resource is the fishing rights to its large exclusive economic zone (EEZ), but these rights earned STP an average of just 0.3 percent of GDP in annual revenues from 2010 to 2018. Similarly, the country's geographic location could be a valuable asset, but the country has yet to realize its potential as a hub for air and sea transportation and currently receives only modest rents from a Voice of America station. While no country exactly fits any of the three models, STP appears better positioned to shift toward the SITE model than the PROFIT model. While oil discoveries could make the PROFIT model more viable, its exploitable oil reserves appear to be small, and production is not expected to commence before 2026.

STP'S LONG-TERM GROWTH PERFORMANCE: FROM CENTRALLY PLANNED ECONOMY TO A FADING GOLDEN GROWTH PERIOD²⁰

STP has evolved from a colonial plantation economy to a centrally planned economy after independence.

STP was uninhabited until 1470, when it was discovered by the Portuguese, who transformed it into a hub for the Atlantic slave trade. Populated primarily by African

slaves, STP's domestic economy focused on sugarcane, coffee, and cocoa produced under a system of plantation agriculture. Cocoa production declined throughout the 20th century due to increased enforcement of labor regulations, lower international cocoa prices, and the departure of skilled Portuguese managerial staff. Following independence in 1975, STP aligned itself with communist governments in Angola, Cuba, and the Soviet Union and nationalized all plantations, merging them into 15 SOEs.

Figure 14: Growth Rates in STP, 1981-2018 (LCU constant, %)

Source: IMF

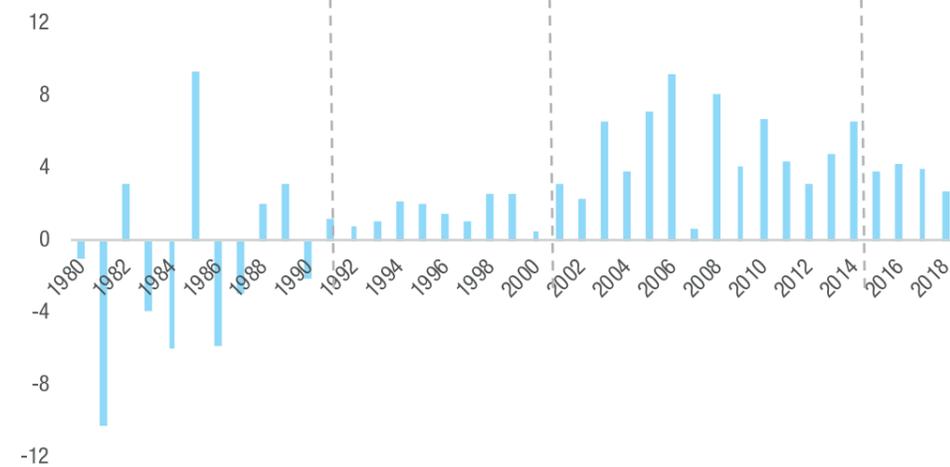


Figure 15: Per Capita GDP in STP, 1980-2017 (PPP constant, US\$)

Source: IMF

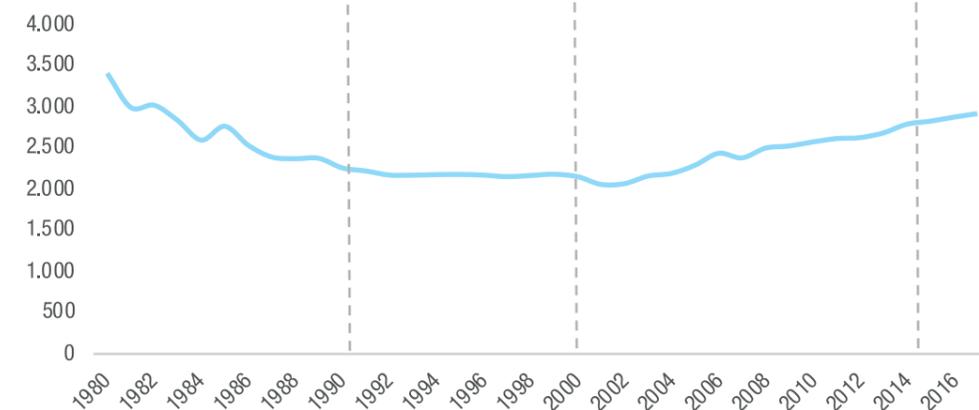
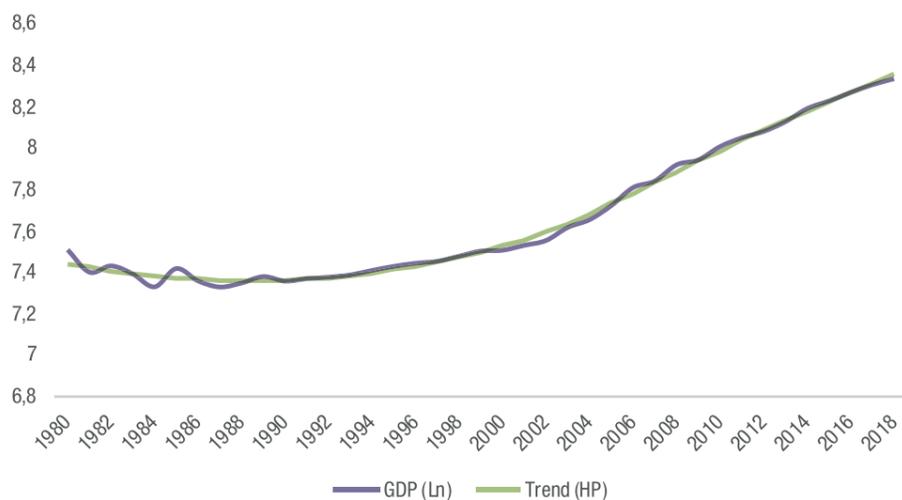
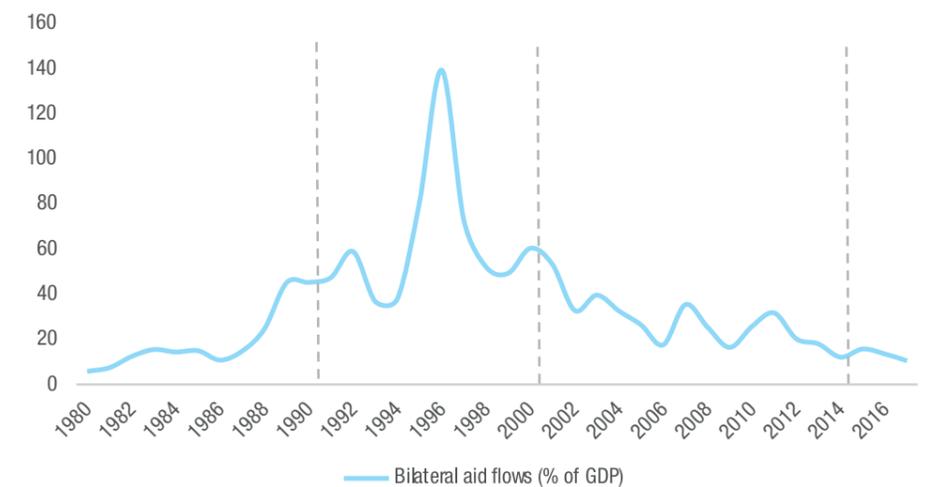
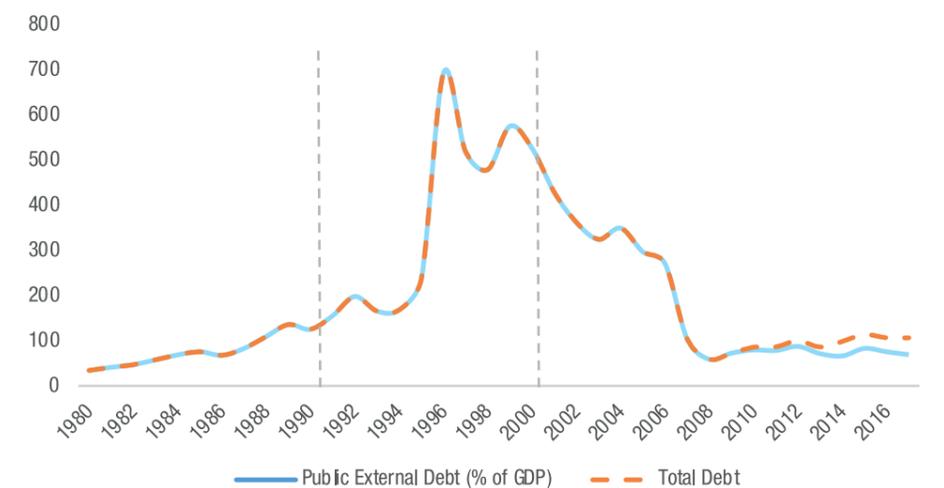


Figure 16: Real GDP and Trend GDP, 1980-2018 (Ln) Source: Author's elaboration**Figure 17: Contribution to Growth, 1981-2014 (% of total)** Source: Author's elaboration based on PWT 9.0

The centrally planned economy²¹ of the 1980s was marked by declining output and intense volatility. GDP and GDP per capita growth rates were negative over the decade, contracting at an average annual rate of 1.4 and 3.9 percent, respectively (Figure 14). By 1990, STP's per capita GDP was 24.4 percent lower than in 1981 (Figure 15). STP's economic output was also extremely volatile during the 1980s (Table 1), and its growth volatility was exceeded only by Belize and Fiji (see Background Note #1). The GDP contraction reflected large decline in agriculture output (-18.8 percent), especially in the cocoa subsector (-56.9 percent), which also experienced a steep drop in prices (-39.1 percent). STP suffered from a lack of appropriate stabilization and structural policies as it grappled with the consequences of nationalization, central planning, and the economic deterioration of the communist bloc.

The poor economic outcomes of the 1980s led STP to adopt market-oriented reforms in the 1990s, but despite the recovery of agricultural productivity and the receipt of large aid inflows, per capita GDP did not improve.

In the 1990s, growth stabilized, and the economy expanded at an average rate of 1.5 percent per year (Figure 16), though due to population growth GDP per capita declined by an average of 0.5 percent per year. Agriculture rebounded dramatically, with production values increasing by 89 percent over the decade. Price controls were lifted, SOEs were privatized, and land was conceded to private investors. As a result of the international political realignment and the introduction of market-oriented reforms, external aid and loan inflows increased significantly, boosting public investment and increasing the contribution of capital accumulation to growth (Figure 17). Bilateral aid flows rose from an average of 20.3 percent of GDP per year in the 1980s to 63.5 percent in the 1990s (Figure 18), while the public external debt stock grew from 125 percent of GDP in 1990 to 525.6 percent in 2000 (Figure 19). This decade was also marked by very high inflation rates, which averaged 39.7 percent.

Figure 18: Total Bilateral Aid Flows, 1980-2016 (% of GDP) Source: OECD**Figure 19: The Public Debt Stock, 1980-2017 (% of GDP)** Source: MPFBE and BCSTP

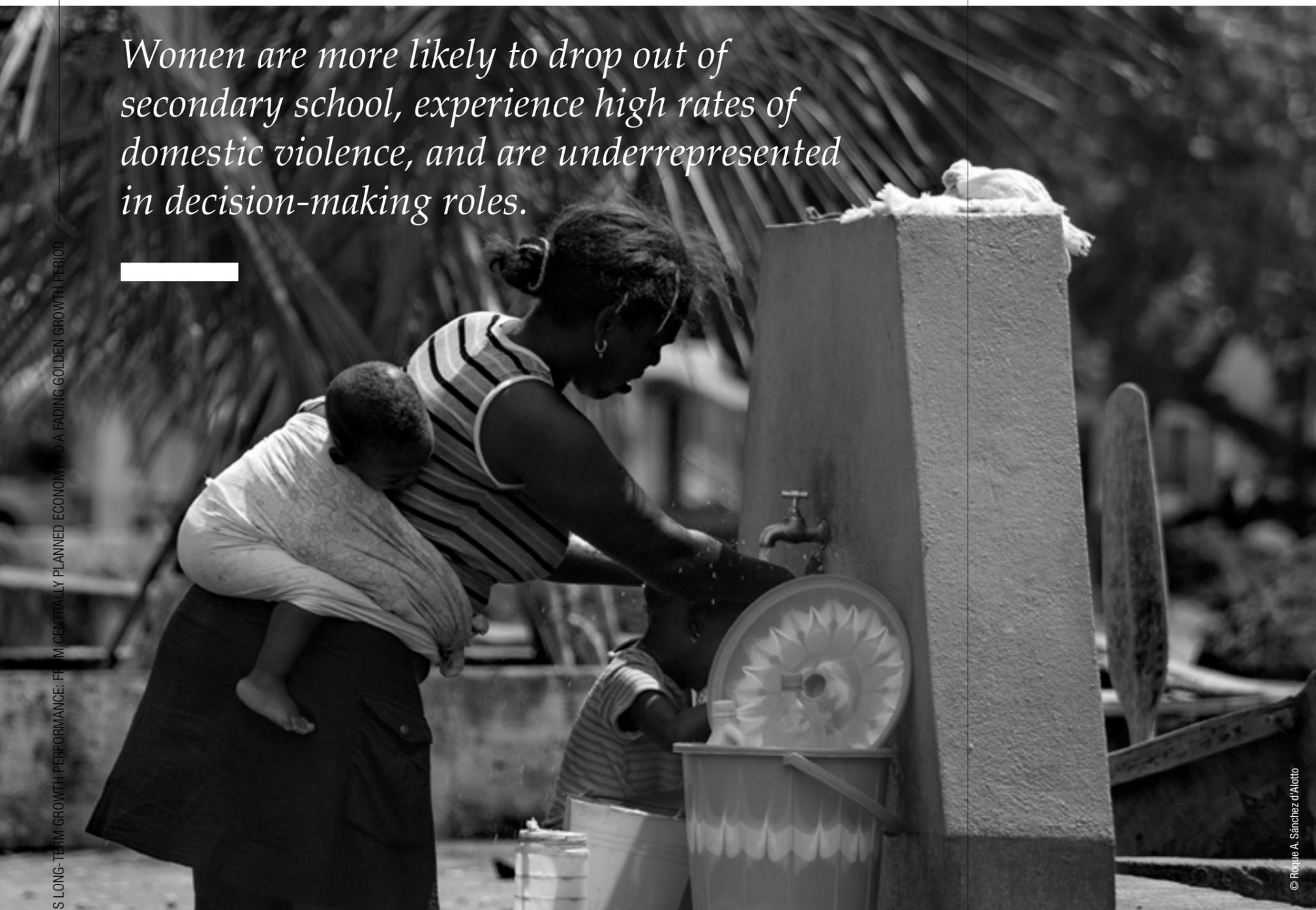
Between 2001 and 2014, STP experienced its most robust economic expansion of the modern era. The annual GDP growth rate averaged 5 percent, and while the per capita GDP growth rate reached 1.9 percent, supported by a balanced pattern of capital accumulation and productivity growth. STP experienced a surge of oil-related FDI around 2010; a second mobile operator entered the market; and public investment drove the continued growth of the external debt stock. The tourism sector also began to flourish, with arrivals growing by 216 percent.

Women are more likely to drop out of secondary school, experience high rates of domestic violence, and are underrepresented in decision-making roles.

During this period, STP's rapid growth was accompanied by positive macroeconomic developments. STP benefitted from a more stable macroeconomic environment and historically high cocoa prices, which rose by 193.2 percent between 2001 and 2010, and the current-account deficit narrowed. Inflation fell to an annual average of 14.5 percent, and the introduction of the exchange-rate peg in 2010 both reduced and stabilized the inflation rate. Grant inflows remained high at an annual average of 27.4 percent of GDP, but HIPC/MDRI debt relief enabled STP to drastically reduce its public debt stock. Lower debt-service payments facilitated an increase in public investment and pro-poor spending, while also ensuring adequate financing for the current-account deficit. The external public debt stock plummeted from 525.6 percent of GDP in 2000 to 66.1 percent in 2014, though the total debt stock—including domestic debt, arrears to suppliers, and SOE liabilities—began to increase again in 2008.

Growth started to slow in 2015... The annual GDP growth rate has been declining since 2014 and reached 2.7 percent in 2018, its lowest level since 2007. Cocoa prices and production also declined by 27 and 7.4 percent, respectively, between 2015 and 2018. The tourism sector, which grew by a remarkable 36 percent from 2015 to 2017 and generated US\$60 million in 2018 alone, has seen its growth momentum slow in recent years. Grants fell to an average of 13 percent of GDP per year from 2015 to 2017, their lowest level since 1980, and a sharp drop in external loan disbursements threatened current-account financing and prompted a reduction in public investment. In 2018, STP experienced a severe energy crisis, which combined with the disruptive impact of the election cycle, caused a significant slowdown in economic activity.

...and macroeconomic fundamentals weakened. The average annual inflation rate remained low at just 6.45 percent between 2015 to 2018, but it has been increasing since its 2015 nadir. External indebtedness was reduced, but this trend was driven by the diminished availability of external financing, and the government started to borrow domestically and accumulate arrears. When all debt sources are included, the total public-debt-to-GDP ratio peaked in 2015 at 113.5 percent and has remained above 100 percent since then. Due to the decline in external grants and loans, net international reserves fell to US\$28.3 million in February 2019, equivalent to just 1.8 months of imports. Following rapid credit growth fueled by the expectation of oil production, vulnerabilities emerged in the banking sector that required central bank intervention. The share of NPLs in total loans increased from 15.6 percent in 2011 to 24.9 percent at end-2017 before falling to 17.0 percent by September 2018, albeit with significant provisioning.



Public finance has long been a major source of macroeconomic instability and are once again deteriorating. Although STP lacks extensive and consistent time-series data on public finances, the available data indicate recurrent budget deficits. A recent Public Expenditure Review (PER)²² for STP found that these deficits do not reflect high and unchecked expenditures, but rather low and declining tax revenues, which dropped from 17.7 percent of GDP in 2010 to 12.6 percent in 2018. Diminishing grants compounded falling tax revenues, forcing the government to borrow to sustain previously grant-funded public investments while supporting a large public-sector workforce, weakening the aid-bureaucracy element of its economic model.

A rising domestic public debt stock has created challenges to the banking system. Since 2015, the government has resorted to issuing domestic debt to fund part of the fiscal deficit, primarily via Treasury bills (T-bills) held by commercial banks. As of September 2018, banks held STN 346 million (equivalent to USD 16.5 million) in T-bills, equivalent to 8 percent of the total bank assets. Delays in the repayment of T-bills could expose banks to liquidity challenges. This vulnerability is amplified by the banks' credit exposures to government agencies, SOEs, and a small number of private firms that supply services to government.

The resources that drove STPs recent expansion are now exhausted, and the government's attempt to extend the expansion through domestic borrowing has given rise to macroeconomic imbalances. A combination of external aid and external loans enabled the economy to grow rapidly within the MIRAB framework. As external loans dried up and own-source revenues failed to compensate, the government resorted to accumulating arrears to suppliers, issuing T-bills to domestic borrowers, and ultimately borrowing from local banks. The rising domestic public debt stock has crowded out private lending and intensified the exposure of banks and private firms to the public sector, which now lacks the resources to support continued growth.

Before growth can resume, the government must rectify the macroeconomic imbalances it created and move away from the MIRAB model to a more balanced economic structure with a greater role for the private sector. Because an unstable macroeconomic environment will prevent the growth of private firms, the government's first priority must be to reinforce macroeconomic stability. Policymakers must curb fiscal deficits, control government borrowing, and ensure that foreign-exchange reserves are adequate to meet the needs of the private sector. The authorities must then address structural barriers to private-sector-led growth.

STP's new growth pattern would entail a different role for the public sector. The government must refocus on creating the necessary conditions for growth—especially by improving the quality of public investment and regulation—rather than acting as the economy's principal growth driver. For example, the government should strengthen the regulation of the energy sector and ensure the financial soundness of the national electric utility to attract independent power producers. Accomplishing this will require building the capacity of the public sector while realigning the attitudes and expectations of firm owners and civil servants.

Greater inclusiveness could accelerate economic growth, as the economic marginalization of women and sexual and gender minorities entails a large opportunity cost. The ratio of male to female labor-force participation rates is 69 percent.²³ Due to the large gender gap combined with low overall levels of labor-force participation, the female labor-force participation rate is just 41 percent—well below the rate in Cape Verde (49 percent) and far below the rates of Ghana and Cameroon (over 70 percent). The exclusion of women from the labor force lowers aggregate economic output and may also contribute to an inefficient allocation of labor. A recent analysis in Cape Verde, where the female-to-male labor force participation ratio is 48 percent, found that closing the gender gap could increase GDP by as much as 12 percent.²⁴

The social exclusion of sexual and gender minorities and other marginalized groups further reduces economic output. Sexual and gender minorities are likely overrepresented among the poorest 40 percent of the population.²⁵ Social exclusion inefficiently skews the allocation of labor, and hiding one's identity can diminish individual productivity.²⁶ A World Bank study found that in India the economic cost of social exclusion could be as high as US\$30 billion of economic output per year.²⁷

WHAT ARE THE CHALLENGES AT THE MACROECONOMIC LEVEL?

A. Sustainable financing to the current account and fiscal deficits is a constraint for the sustainability of the fixed exchange rate peg, which is beneficial to STP.

STP pegs its currency, the dobra, to the euro, but its large CAD and persistent inflation differential with the euro area could destabilize the peg. In other countries, this combination of factors has proven unsustainable, as inflation differentials cause the real exchange rate to appreciate, which can reduce export competitiveness, and a worsening trade imbalance combined with rising debt levels ultimately forces the abandonment of the peg. Small states such as STP can reap considerable benefits from a fixed exchange rate, but only if they share several necessary conditions with the currency issuer or currency area, including common and symmetric shocks, common responses to shocks, and the ability to adjust quickly to shocks. Large inflation differentials, persistent government deficits, and a lack of market trust in the central bank's commitment to the peg can destabilize fixed exchange rates. In addition, substantial stress in the private sector or on bank balance sheets can lead to financial crises, which can also threaten exchange rate pegs. A strong foreign-exchange position is vital to ensure the sustainability of a currency peg.

STP's currency peg appears very vulnerable. STP is subject to a very different range of shocks than the euro area; factor mobility is limited, especially for labor; fiscal transfers come in the form of non-cyclical aid; and the euro area offers no guarantees on the banking system. A persistent inflation differential has caused the dobra to appreciate by more than 50 percent, in real terms, since the peg was introduced in 2010 (Figure 21 and Figure 20). STP's public external debt stock remains high at over 60 percent of GDP, and the domestic debt stock is increasing, driven by government arrears and the recognition of contingent liabilities. STP's has a conventional

“soft” peg, which is defended by a limited fund of reserves worth less than two months of imports and a credit line from the Government of Portugal. The nonfinancial corporate sector has limited access to finance and thus its indebtedness poses little risk to the peg, but the banking sector presents some risks due to its high level of NPLs.

Despite meeting few of the conditions for stability, STP's peg may nevertheless prove sustainable. Small, open economies with small financial sectors appear to garner substantial benefits from fixed exchange rates while suffering fewer of the downsides.²⁸ This may explain why, of the 33 small developing economies, only Mauritius and Seychelles have a floating exchange rate, while one-third use pegs similar to STP's. Despite sharing many of the same vulnerabilities as STP, the majority of these fixed exchange-rate regimes have been stable for more than a decade.²⁹

In small, open economies, fixed exchange rates can significantly reduce transaction costs while anchoring inflation. International trade represents a large share of economic activity in small, open economies, and in STP, exports and imports are equivalent to about 75 percent of GDP. In this context, reducing transaction costs and eliminating currency risk are more beneficial than they would be in larger economies. Rogoff et al. (2003) suggest that the value of a flexible exchange rate increases as a country becomes more mature and integrated within the global financial system.³⁰ For a small developing country like STP, a fixed exchange-rate regime can prove stable and beneficial.

The sustainability of the peg is determined by the drivers and financing sources of the CAD through the three core macroeconomic identities: the trade balance, net savings, and capital inflows.³¹ Various shocks can affect the CAD and its financing sources, including further real exchange-rate appreciation, weakening external demand, widening fiscal deficits, increasing borrowing costs, declining foreign aid, or a change in FDI flows due to the discovery of oil or other natural resources. Evidence supporting the Marshall-Lerner condition—that a stronger exchange rate should eventually lead to a deterioration in the trade balance, and vice versa—is mixed, especially in the case of small economies. Imam (2008) finds that changes in the real effective exchange rate (REER) do not drive improvements in the current account among small states, primarily because both imports and exports are price inelastic.³² Many imports are necessities that are not produced domestically, such as food and fuel, with prices that incorporate high, fixed distribution costs. Meanwhile, exports are often priced in foreign currency, and devaluation does not stimulate purchases from foreign buyers. Nevertheless, IMF (2015) finds that devaluation in small states does improve the trade balance, largely by compressing expenditures and import demand.³³

Figure 20: The Real Effective Exchange Rate of the STP Dobra, 2005-2017 (index) Source: BCSTP

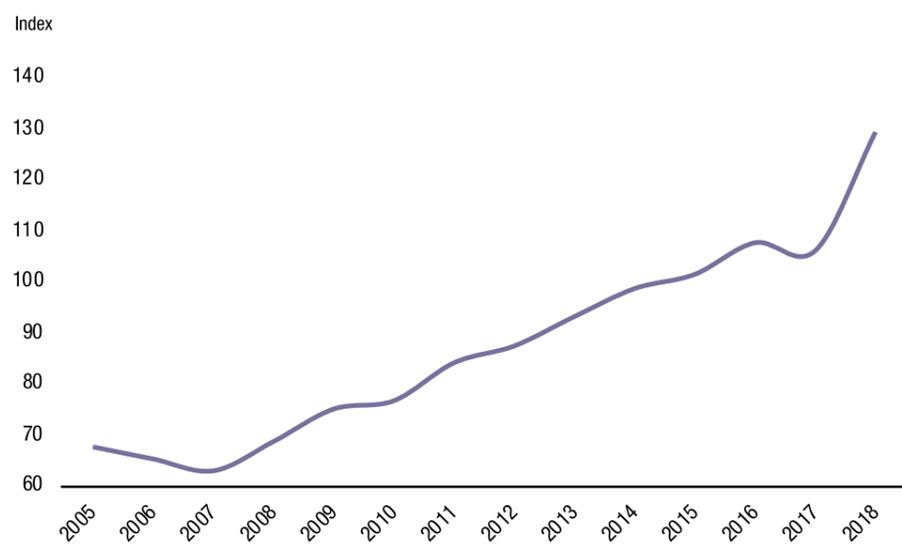
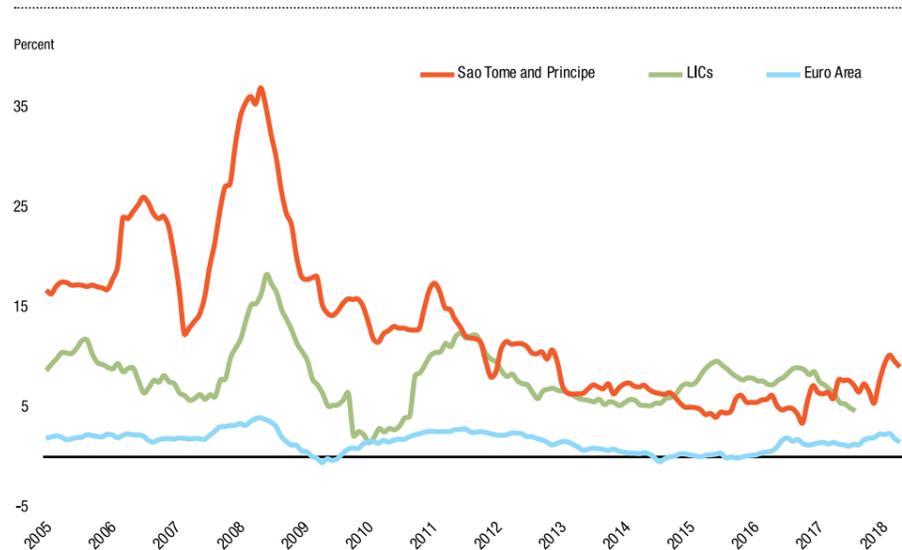


Figure 21: Inflation Rates in STP, Low-Income Countries, and the Euro Area, 2010-2017 (%) Source: BCSTP, IMF, WB, and Eurostat



In STP, the continued real appreciation of the dobra could cause the trade balance to deteriorate, potentially threatening the peg, but thus far the real appreciation of the dobra has not coincided with a widening CAD. STP's experience suggests that the exchange rate may not be a dominant driver of its trade balance. The CAD shrunk from 44 percent of GDP in 2010 to 18 percent in 2016 despite the substantial appreciation of the dobra over the period (Figure 22 and Figure 23).

Figure 22: The Current Account Balance and Trade Balance, 2010-2017 (% of GDP) Source: IMF, WB

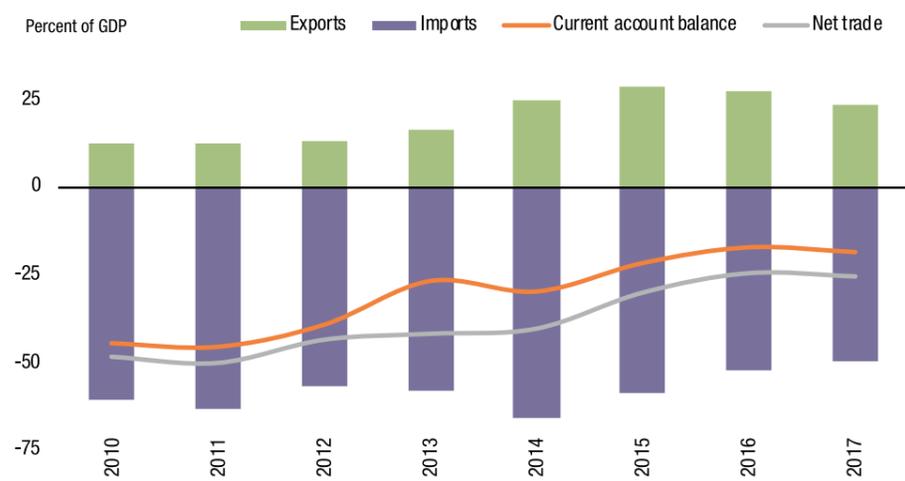
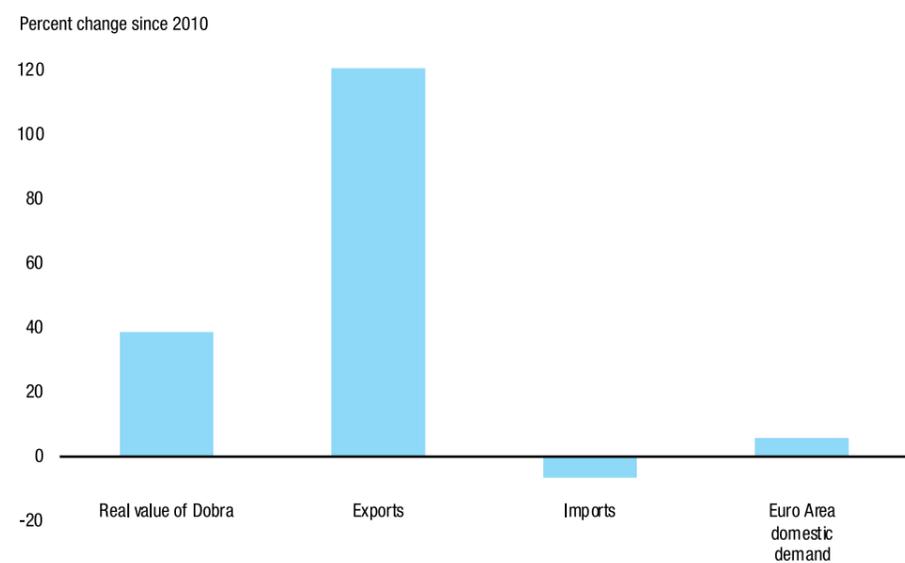


Figure 23: Changes in Trade-Balance Components, 2010-2017 (%) Source: BCSTP, IMF, WB, and Eurostat



The current account reflects the difference between national saving and investment and as such deteriorating fiscal balances can threaten the peg. For small economies with limited financial systems, borrowing from abroad is necessary to finance the investment needed for development. In STP's case, external financing in the form of grants and concessional loans has allowed the government to run persistent budget deficits while also providing funding for domestic investment. STP's external borrowing has been on a downward trend, mirroring the narrowing of the current account deficit, however this trend could be interrupted by any shock that increases the size of the government's deficits.

Since STP's current account deficits are predominantly financed by aid and concessional loans, the country's current account deficit overstates this vulnerability and the threat to the peg in the short term. Countries relying on capital inflows to finance a large and persistent CAD are typically thought to be in an unstable position, and to be vulnerable to currency crisis (Roubini and Wachtel 1999).³⁴ Edwards (2005) finds that it is rare for advanced economies to maintain large CAD for more than a few years; and when the current account corrects, it is often accompanied by a severe fall in GDP.³⁵ Persistent deficits reflect an imbalance between domestic saving and investment, which can result in a potentially destabilizing build-up of debt. Nonetheless, a decline in capital flows would have to be matched by a decrease in consumption and/or investment. Either would likely have adverse impacts on the economy, which the central bank may choose to mitigate by abandoning the peg.

Evidence suggests that current account deficits are determined by fiscal deficits and that real currency depreciation would not significantly alter the external position. Although not conclusive, the evidence suggests that an overvalued exchange rate and a trade deficit are not the main drivers of STP's current account deficit. The counter-intuitive response of the trade balance to the real appreciation of the dobra suggests that the current account deficit is not being driven by declining international trade competitiveness, but rather by STP's fiscal deficits, which are in turn enabled by foreign aid flows. This causality is common among emerging markets and developing economies (Chinn and Prasad 2003, Duarte and Schnabl 2015).³⁶ This suggests that the primary driver of STP's current account deficits is the country's capital inflows. Fiscal deficits tend to increase the current account deficit by increasing imports, but do not normally threaten the sustainability of the current account since they are financed by aid inflows. In the absence of sufficient aid, however, fiscal deficits can lead to payment arrears, higher domestic debt, and a depletion of foreign reserves, all of which tend to threaten the peg.

In order to preserve the peg and its benefits, STP needs to move away from the MIRAB-type economy towards a growth model with balanced budgets and less external finance needs supported by more stable sources of financing. The fixed exchange rate peg is beneficial to STP and the evidence does not seem to point to the REER appreciation as the driver of the CAD and a threat to the peg in the short term. On the contrary, the CAD is driven by the fiscal deficits and enabled by foreign aid and loans inflows. Nonetheless, if the REER continues to appreciate the financing needs will be higher and can become a threat to the peg in the long term. IMF estimates REER overvaluation to be between 10 and 27 percent. Thus, in the current scenario in which foreign aid and loans are declining, it is imperative that STP moves away from the MIRAB type to a structure in which budgets are balanced and the financing requirements are lower and supported by more stable sources of financing such as tourism receipts. This could be achieved by developing further the tourism and agriculture sectors and structural reforms to increase productivity such as business environment and credit markets.

Policymakers could mitigate risks to the peg by broadening the country's revenue base, developing a domestic debt market, and diversifying exports. Since fiscal deficits are the driver of the deficit, the government could address its imbalances by broadening its revenue base (see section V.B). A reduction in government spending would also lessen the need for foreign funding, while ensuring that investment expenditures provide a sustained boost to potential output. The GoSTP could reduce its dependence on foreign sources of financing and develop domestic debt markets to provide options for domestic borrowing. Diversifying exports would help reduce the financing needs and the volatility of the country's terms of trade, while boosting productivity would help reduce reliance on imported goods. Continued progress on reducing inflation would prevent further declines in competitiveness. In the case that significant oil reserves are found - which is not the baseline scenario (See Box 4) - the resulting revenues could be used to fund a stabilization fund to avoid sudden fiscal adjustments, or to bolster foreign exchange reserves.



B. Low domestic revenue mobilization drives the country's recurrent fiscal deficits, constrains economic growth, and threatens the fixed exchange-rate regime

Because fiscal consolidation is vital to sustain the fixed exchange rate, the fiscal deficit is a threat to macroeconomic stability. STP has consistently failed to balance its budget due to low domestic revenue mobilization and weaknesses in public financial management (PFM). The resulting fiscal deficits are the main contributor to the CAD, which puts the fixed exchange rate at risk. Historically, external aid inflows have enabled STP to run deficits in both its fiscal and external accounts without destabilizing its macroeconomic policy framework, but the ongoing decline in external aid inflows is making fiscal consolidation more urgent than ever.

STP suffers from rigid public expenditures, but expenditure rigidity is not the main cause of the fiscal deficit. Almost all domestic revenue is used to pay civil-service salaries, either directly or through transfers to regional governments and autonomous agencies, or to service the debt. Rigid expenditures—conservatively defined as the sum of payroll and interest payments—reached 11.3 percent of GDP in 2016, equivalent to 80 percent of that year's current revenue. Expenditure rigidity makes it difficult for the government to adjust its budget to a sudden shortfall in revenue. However, the authorities successfully reduced current public spending from 21 to 16.4 percent of GDP between 2010 and 2018, and expenditure levels are not excessively high by the standards of peer countries.

Low levels of revenue mobilization and weak PFM systems drive STP's recurrent fiscal deficits. The country's tax burden is below the level of its peers, indicating additional scope to raise revenue to finance public expenditures and reduce the deficit. The government also lacks the capability to accurately forecast revenue, resulting in a lax expenditure ceiling. Finally, parallel and incomplete controls over the expenditure-authorization process lead the government to assume more commitments than its resource envelope allows, generating payment arrears.

Figure 24: Tax Revenue in STP and Selected Comparators, 2010-2017 (% of GDP)

Source: OECD Revenue Statistics and REO 2018

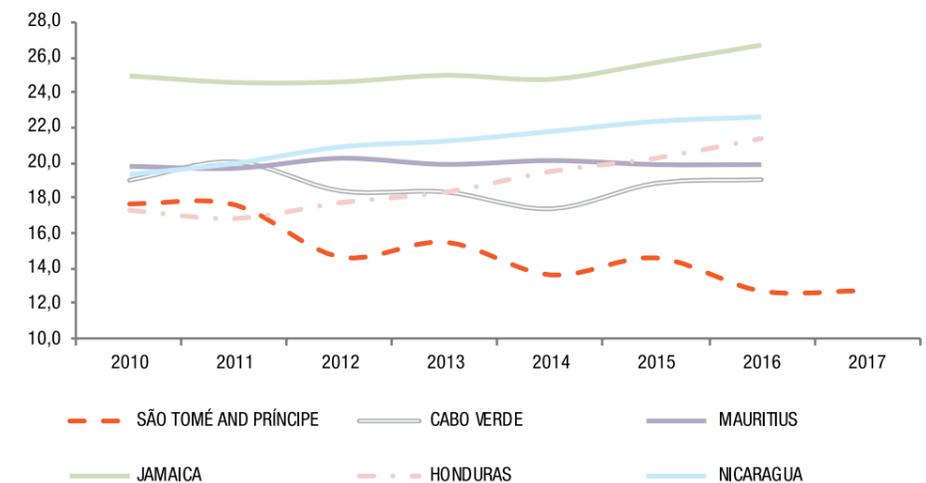
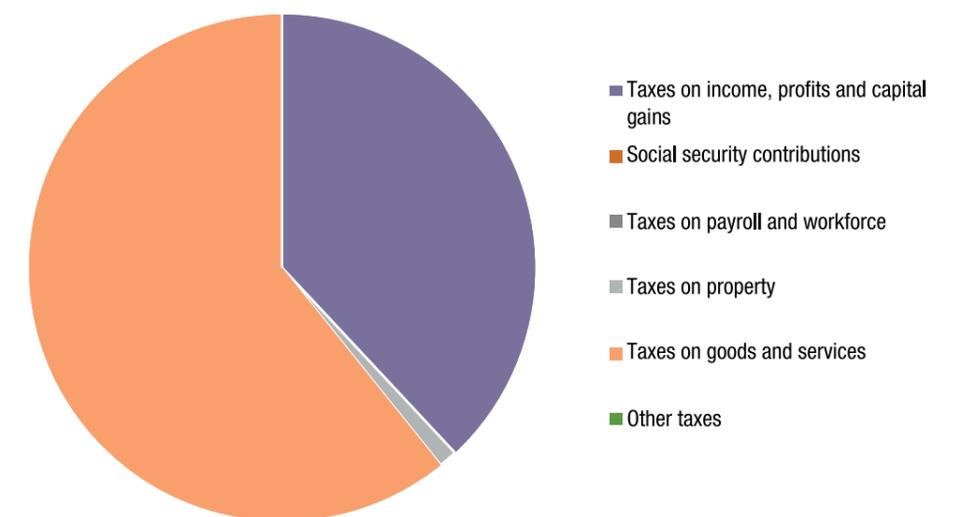


Figure 25: STP's Tax-Revenue Structure, 2017 (% of total tax revenue)

Source: REO 2018



The government could increase domestic revenue by 3 to 5 percentage points of GDP by reforming tax policies and improving tax administration. International benchmarks and econometric estimations show STP's actual public revenue to be 3 to 5 percentage points of GDP below its potential, indicating a "tax gap." For example, Cape Verde's tax burden was 19 percent of GDP in 2016, while STP's was just 12.7 percent (Figure 24).

Replacing STP's current system of multiple consumption taxes with an excise tax and a value-added tax (VAT) should be regarded as the government's top tax-reform priority. A modern consumption-based tax structure should include a VAT on general consumption combined with an excise tax on selected goods and services, especially those with negative externalities, such as tobacco products, sugary drinks, and alcohol. Among the 54 African countries, STP is one of just eight that do not impose a VAT. A VAT is less distortive than other consumption taxes and has built-in incentives against underreporting. A well-structured VAT should have few exemptions, and it should tax all goods and services the same rate or apply a narrow range of rates.

The government must adequately prepare the Directorate of Taxation (DI) to administer a VAT. Currently, the DI lacks the personnel, information-technology (IT) systems, and skills required by a modern tax administration. Successfully implementing a VAT will require: (i) revamping the current IT system; (ii) recruiting new staff; and (iii) training new and existing staff. The government has already procured a new IT system, and the authorities should create a dedicated structure with proper project management skills to steer its development and ensure that the relevant staff are fully capable of operating and maintaining it. New staff will also need to be recruited, as the DI's existing workforce is too small to implement a VAT. Both new and existing staff will need to be trained by external experts in tax administration and VAT implementation. Finally, the government needs to create the capacity to ensure that VAT fillings are checked and that refunds are paid promptly.

The government also needs to establish a fully functioning large taxpayer unit (LTU) and apply more modern audit techniques to improve tax administration. A very small share of taxpayers provides the bulk of public revenue. Setting up an LTU would help manage compliance risks among these large taxpayers. Despite some recent progress, the DI still lacks an effective process for segmenting taxpayers. For example, there are no tax officials exclusively dedicated to large taxpayers, and officials cannot perform audits due to the agency's bylaws. To establish an effective LTU, the DI will need to upgrade its audit techniques and collect more data on taxpayer behavior from both internal and external sources.

In addition to low domestic resource mobilization, the disconnect between the expenditure-authorization process and cash-flow planning results in arrears. The country's budget units are allowed to take several steps prior to committing to expenditures without confirming that cash is available. Moreover, these steps are not captured in the government's integrated financial management information system (IFMIS), which makes it difficult for the Directorate of the Treasury to gauge the timing and the amount of forthcoming expenditures. Improving revenue estimates should help create more realistic budget ceilings for spending agencies. However, the treasury needs to obtain more information on expenditure commitments from the budget units earlier in the process, preferably through the IFMIS, and match them with cash-flow projections.

Fiscal consolidation through higher domestic resource mobilization is critical not only to sustain the fixed exchange rate, but also to achieve further gains in poverty reduction and economic growth. The government must increase domestic revenue mobilization and consolidate its fiscal stance in order to boost the supply of public goods and services to the level necessary for robust growth. The international literature³⁷ indicates that tax revenue must equal at least 15 percent of GDP for a government to function effectively, and small islands likely face a greater revenue minimum due to their lack of economies of scale combined with indivisibilities in the cost of public goods. Raising additional revenue will enable the government to fund poverty-reduction programs such as conditional cash transfers and invest in economically vital infrastructure such as the road network. Increased revenue will also allow the government to fund a larger share of public investment, reducing the volatility of the investment budget caused by its dependence on external aid.

C. External demand and trade barriers are not a constraint to a more balanced growth, but diversifying export products and markets, and joining free trade agreements can bring benefits

STP's relatively low export-to-GDP ratio does not reflect weak external demand or a lack of international competitiveness. STP is a small economy with concentrated exports, high levels of trade openness, and a large trade deficit by the standards of comparable countries. While trade openness is common among island economies, STP's level of trade openness is 20 to 30 percentage points of GDP higher than its income level would imply (Figure 26). STP imports significantly more goods than what it exports, and the trade deficit has widened in recent years. Between 2000 and 2017, the compound annual growth rate of imports was 10 percent, while the rate for exports was 8 percent. Although all comparator countries also run merchandise trade deficits, STP's imports-to-exports ratio was the largest among comparators in 2015, as goods imports were about 15 times larger than goods exports. Moreover, STP's exports-to-GDP ratio is the lowest among peer countries at about 3 percent, versus 24 percent for Seychelles and 15 percent for Belize and Mauritius (Figure 27). STP's export value per capita is also the lowest among comparable countries at US\$47, whereas Comoros, Seychelles, and Mauritius all exceed US\$1,000 in exports per capita.

Figure 26: Trade Openness and GDP per Capita, 2015

Source: Staff elaborations from WDI data

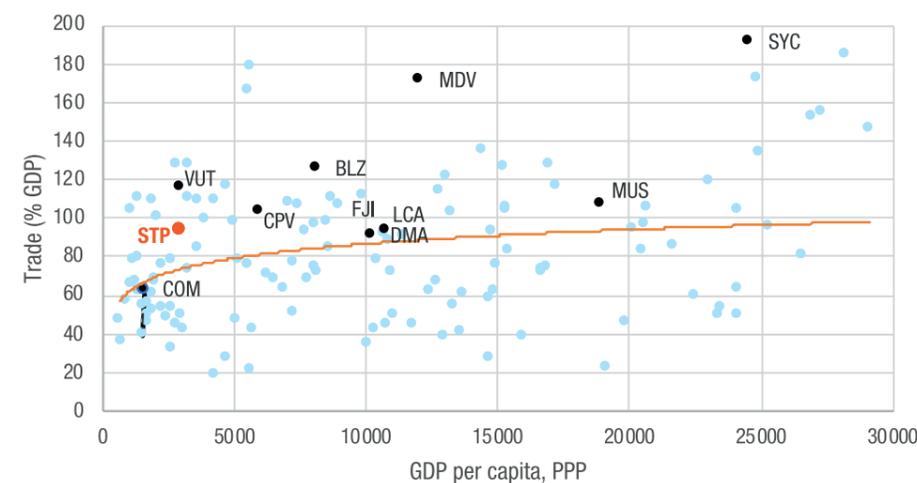


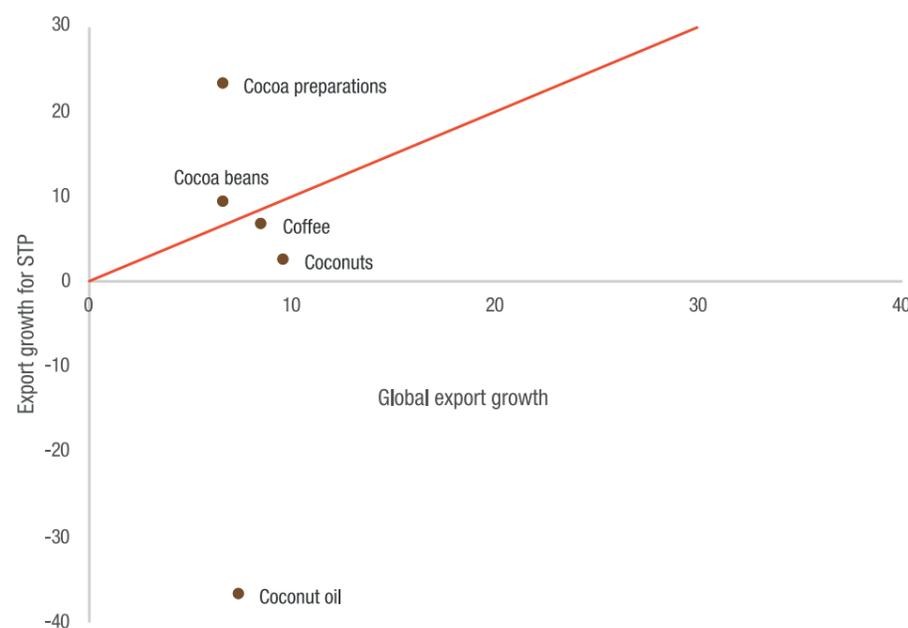
Figure 27: Goods Exports as a Share of GDP and Goods Exports per Capita, STP and Comparators, 2015

Source: Staff elaborations from Comtrade and WDI data



Figure 28: Growth Rates of Major Goods Exports, STP and Worldwide, 2005–2015

Source: Staff elaborations from Comtrade data



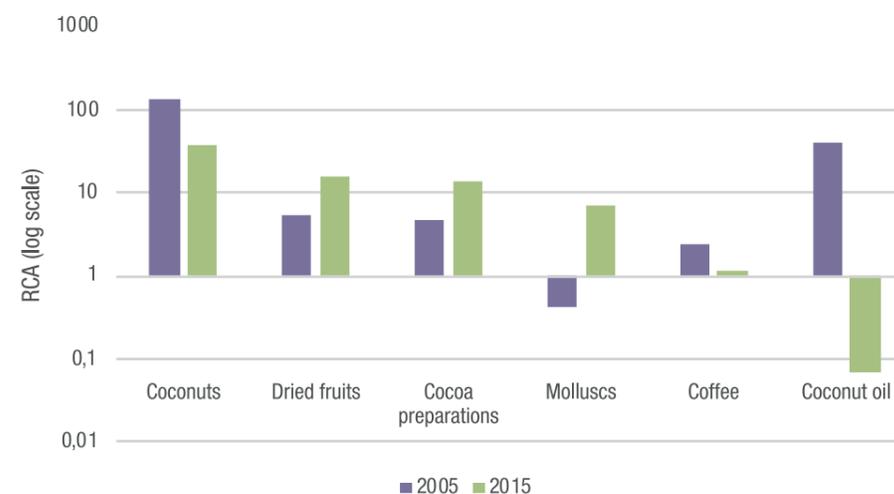
Despite STP’s recent growth, exports have become more concentrated.

Cocoa output has risen rapidly, albeit from a small base, and cocoa exports are increasing at an average rate of about 9 percent per year. Given these trends, cocoa is expected to remain STP’s dominant export. From 2005 to 2015, STP’s exports of cocoa beans increased faster than global exports of cocoa beans (Figure 28), enabling the country to expand its global market share—though it remains as a small supplier worldwide. Meanwhile, STP’s exports of coconut oil have declined despite growing global demand, causing STP to lose global market share.

Although STP’s exports are more diversified in terms of markets than in terms of products, market concentration is also high. Among comparator countries, STP exported over US\$10,000 worth of goods to the smallest number of markets. In 2015, STP exported over US\$10,000 worth of goods to 13 markets, which is more than the number of products it exported. STP’s exports also tend to be less concentrated in destination markets. The Herfindahl-Hirschman index shows that while STP is the most concentrated exporter in terms of product among comparator countries, it is in the middle of the pack in terms of markets. STP’s index score for market concentration is 0.2, while its index score for product concentration is 0.8. By comparison, Mauritius is the most diversified exporter in terms of export markets, based on both the number of markets served and the concentration of exports in these markets.

Figure 29: STP’s Revealed Comparative Advantage in Agricultural Goods (excl. cocoa beans), 2005 and 2015

Source: Staff elaborations from Comtrade data



Selling new products to new markets accounts for very little of STP’s export growth.

The introduction of an existing export product into a new export market is more common than the introduction of a new product into a new market. Moreover, new export markets for some goods are often already export markets for other goods. For example, STP has expanded its exports by selling prepared cocoa in markets to which it had previously only exported cocoa beans.

In addition to cocoa beans, STP has a revealed comparative advantage (RCA) in multiple agricultural and fishery products. The country exhibits a strong comparative advantage in cocoa beans, with RCA indices for 2005 and 2015 above 1,800. In 2005 and 2015, STP also had an RCA in coconuts, dried fruits, prepared cocoa, and coffee (Figure 29). However, STP’s comparative advantage in coconut oil has diminished over time. Meanwhile, pepper is a relatively recent export product for STP, and significant sales to France indicate specialization. Finally, exports of mollusks (such as scallops and octopus) have gained prominence, yielding a comparative advantage.

STP also has a comparative advantage in tourism-related services exports.

In 2015, STP showed an RCA index score for travel services (based on total services) of 3.3, suggesting a comparative advantage relative to the global economy. Among comparators, STP’s RCA index score for tourism exports were higher those of Belize, Cape Verde, Comoros, Fiji, Mauritius, and Seychelles, but lower than those of Dominica, Maldives, St. Lucia, and Vanuatu. Most of these are island economies, and also show comparative advantages in travel services.

BOX 3

What other products could STP possibly export?

A product-space analysis can measure a country's current position in terms of its exportable goods and their proximity to other export goods. Proximity to other goods in the product space may indicate untapped export potential, as it suggests that the country already has capabilities closely associated with the production and exportation of these goods. While countries are more likely to successfully export goods that are similar to those in which they have an RCA, STP's small size limits its potential for diversification. Moreover, the product-space analysis does not imply that any given country could produce goods that are closely related to its current exports, only that countries which produce its current exports also tend to produce related goods.

STP has a huge comparative advantage in cocoa bean exports, but cocoa beans are proximate to only a few related products. The same is true for other exports in which STP has an RCA, including coffee, pepper, and seafood (Figure 30). While chocolate production is located within a much denser product cluster, its proximity to other foodstuffs and related nonfood items (e.g., packaging) likely reflects the concentration of the chocolate confectionary industry in Europe. The product space for cocoa beans is proximate to cocoa butter, coconuts, and natural rubber, reflecting both processing (as cocoa beans are transformed into cocoa butter) and agricultural conditions (as a good climate for cocoa beans also tends

to be a good climate for coconuts and rubber). While STP does not produce rubber, it does have an RCA in coconut production (Figure 31), and coconut production is linked to basketware, which STP does not currently export but could expand into. From basketware, similar skills and productive technology may be used to produce wood ornaments and a diverse cluster of products related to apparel. However, it is not clear that an apparel industry is viable in STP due to the small size of its workforce. STP also has an RCA in coffee and pepper production, but both are relatively distant from other product clusters.

Figure 30: Product-Space Analysis for STP, 2015

Source: Atlas of Economic Complexity

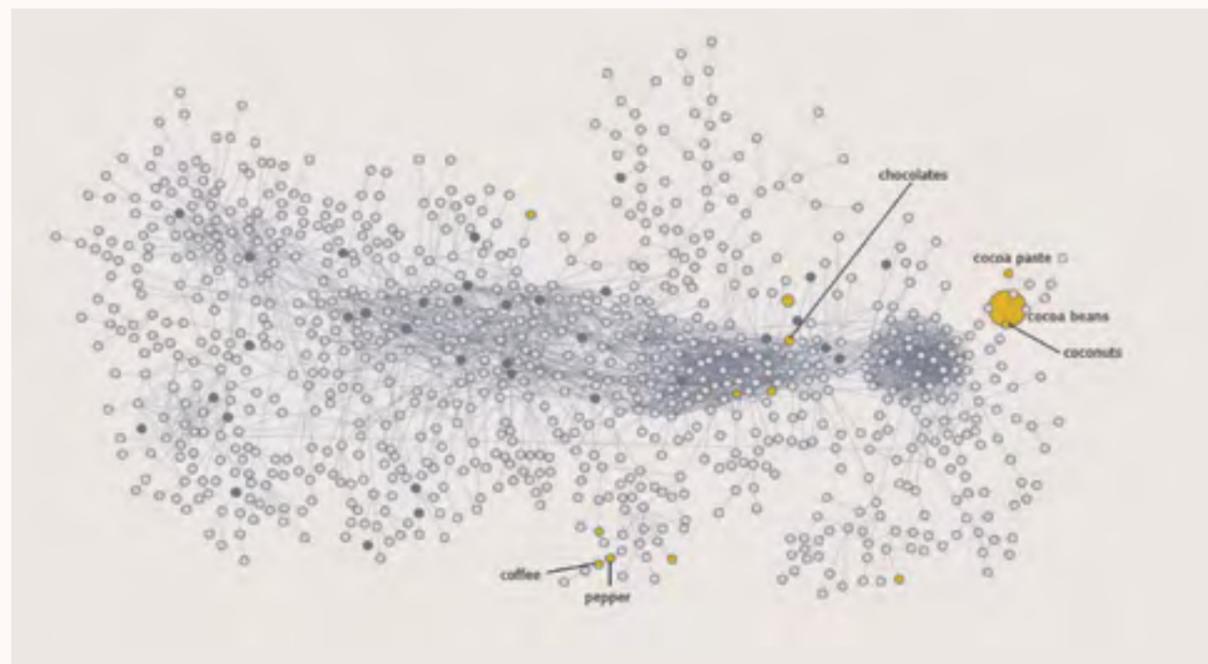
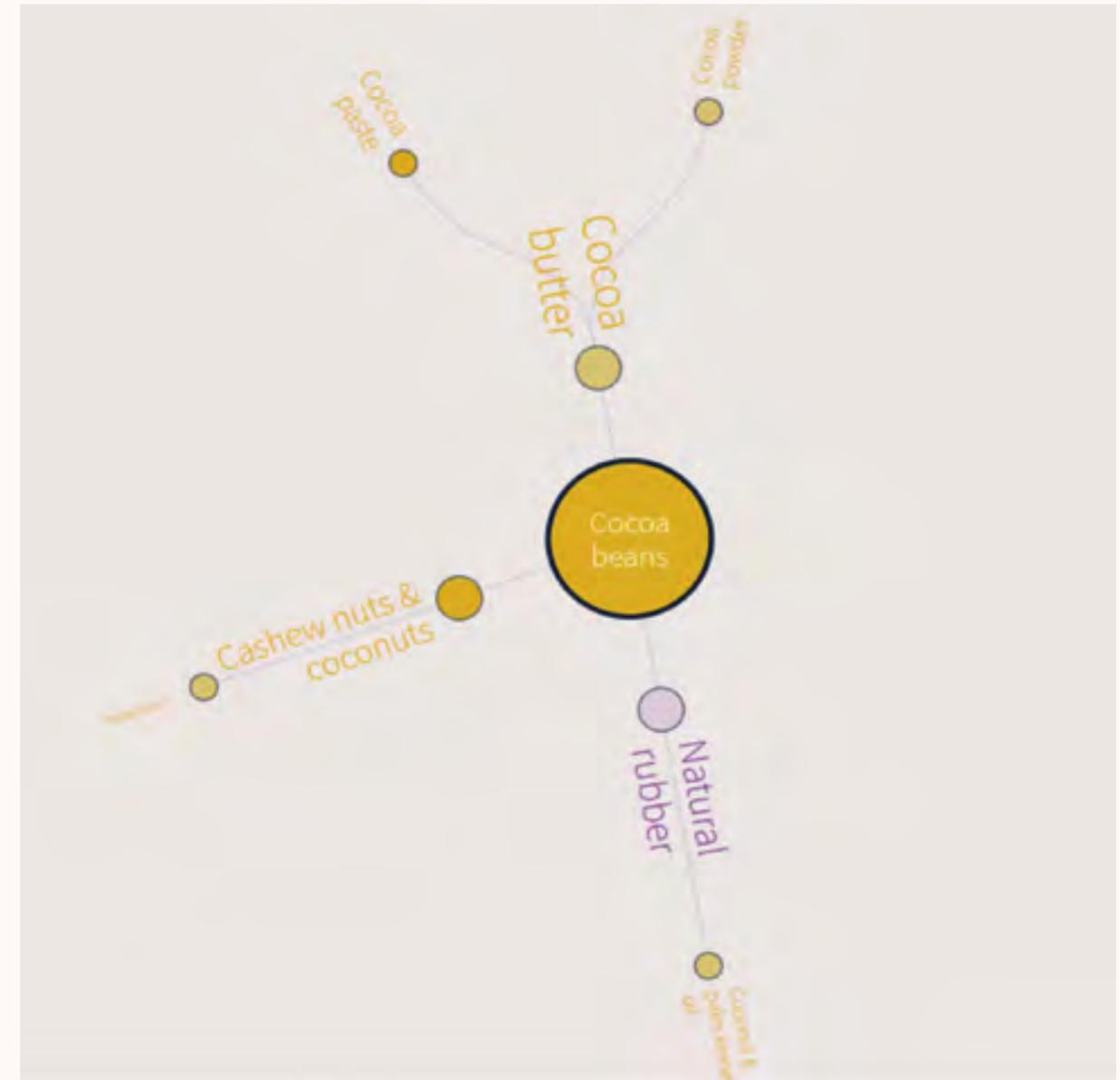


Figure 31: Product-Space Analysis for STP, 2015

Source: Atlas of Economic Complexity



Unlike many comparator countries, STP has no free-trade agreements. Belize, Fiji, Mauritius, Seychelles, and St. Lucia have all signed free-trade agreements with the EU. STP could negotiate an Economic Partnership Agreement (EPA) with the European Union as part of the Central Africa region. EPAs go beyond unilateral preferential regimes to encompass nontariff barriers, trade facilitation, trade capacity-building, and “rendezvous clauses”³⁸ designed to continue deepening the agreement across other reform areas.

Among peer countries, STP and Comoros are the only two that are not WTO members. STP has been an observer at the WTO since 2001, but is one of only few countries around the world that is not yet a member, and little progress has been made toward accession. The government expressed interest in joining the WTO in 2005, and a working group was established that year to pursue the possibility. However, STP has not yet presented a Memorandum on the Foreign Trade Regime (the first set of necessary documents on which to base discussions), and the working group has yet to convene a meeting. Over a decade after applying for WTO accession, STP remains at the very beginning of the process. By contrast, Comoros applied for membership in 2007 and has already concluded several rounds of negotiations.

While STP’s current exports are competitive and in demand on the global market, diversifying its range of export products and markets and joining free-trade agreements could stabilize its trade dynamics and encourage foreign investment. Due to its small size, STP can continue increasing its current exports indefinitely without any significant impact on global prices. However, the continued real appreciation of the exchange rate might reduce the space for export diversification. STP has an RCA in tourism and various agricultural commodities, and neither the government nor the private sector reports that exports are hindered by trade barriers. Nevertheless, WTO accession could send a clear signal to investors and traders regarding the government’s commitment to economic openness, encouraging the inflows of foreign investment and technology transfer necessary for economic diversification. Expanding STP’s range of export products and markets could help reduce volatility and reinforce the sustainability of the external accounts.

BOX 4

Should São Tomé and Príncipe consider oil production in its baseline scenario?

STP is surrounded by oil-producing countries, but no commercially viable oil deposits have yet been discovered in its territorial waters. Oil exploration is underway in both the country’s Exclusive Economic Zone (EEZ) and its Joint Development Zone (JDZ) with Nigeria. The EEZ is a “frontier area” for oil and gas exploration, with a probability of success of less than 15 percent. The EEZ includes deep waters and ultra-deep waters, with little seismic data, no active drilling, little established infrastructure, and a challenging work environment. The JDZ was explored from 2009 to 2013, but no commercially viable oil reserves were discovered, and further exploration is currently suspended. Natural gas was discovered in the JDZ, but not in commercially viable volumes.

Even if viable oil or gas discoveries were made as early as 2022, no commercial production should be expected before 2030. No wells have yet been drilled in the EEZ, which means that no company has passed the first stage of the exploration and production process.³⁹ The most active oil companies in STP are Kosmos and BP, which have indicated that in the best-case scenario their first exploration wells would be drilled in 2022. If viable reserves were discovered, it would take another five to ten years or more to start commercial production. Given the long lead times involved in oil projects, the nascent stage of oil and gas development, and the low probability of discovering commercially exploitable reserves, oil production should not be included in any baseline scenario for STP.

The prospect of oil production also entails considerable risks. Increase exploration activity and eventual extraction could have negative effects on other oceanic sectors, including fisheries and coastal tourism. Foremost among these risks are the seismic and environmental impacts of drilling, including accidental and operational discharges. Any related increase in maritime traffic will also have negative impacts on beaches and marine life, and damage from pollutants and debris could pose risks to the local population and to shipping. Small-scale but continuous oil leaks can inflict more damage than large spills, and fish can be exposed to oil if it becomes mixed in the water column. If oil exploitation moves forward, the government will need to ensure that the cost of decommissioning obsolete oil rigs is borne by the oil companies and that the decommissioning process complies with the highest standards.

TABLE 4: POLICY RECOMMENDATIONS AT THE MACROECONOMIC LEVEL

Policy Recommendations at the Macroeconomic Level	Key Constraint, Quick Win, or Cross-Sectional	Time
Replace the existing limited consumption taxes with a dual system composed of a broad-based value-added tax and an excise tax	Key	MT
Build the capacity of the tax administration office to administer the value-added tax	Key	LT
Formally establish a large-taxpayer unit and apply modern audit techniques to ensure tax compliance among large taxpayers	Key	MT
Control expenditures by avoiding salary increases and refraining from hiring new public-sector workers	Key	ST
Improve revenue forecasts and strengthen cashflow management to avoid taking on unmanageable financial commitments	Key	LT
Initiate the World Trade Organization accession process		LT
Diversify export products and markets		LT
Assess the use of fiscal rules to reduce fiscal policy volatility and balance the budget		LT
Strengthen public investment management to ensure the selection and implementation of investable, cost-effective, and high-quality infrastructure projects	Blue Economy	ST

LEGEND



recommendation addresses key constraint



recommendation embodies blue economy dimensions

ST

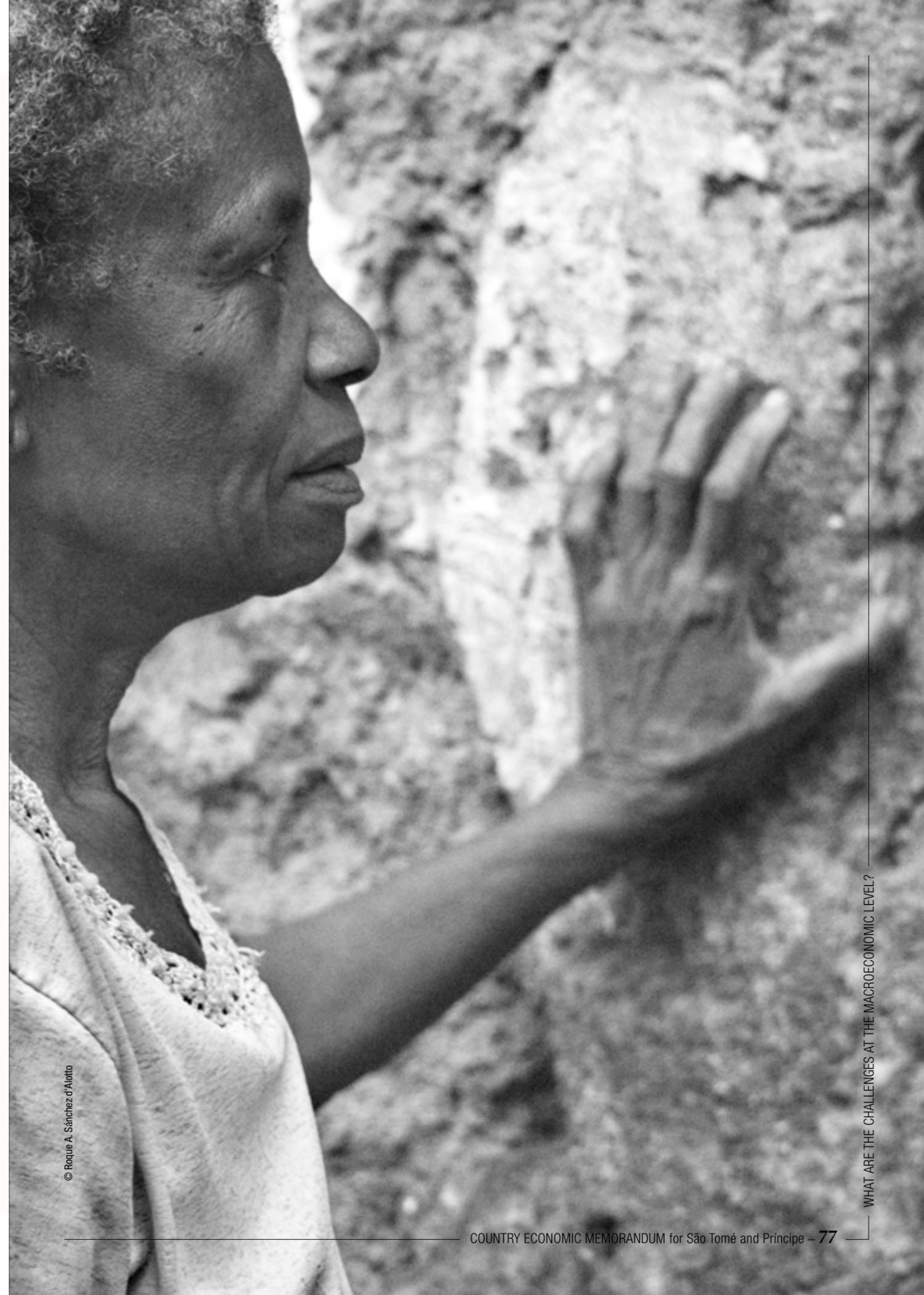
short term

MT

medium term

LT

long term



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WHAT ARE THE CONSTRAINTS AT THE STRUCTURAL LEVEL?

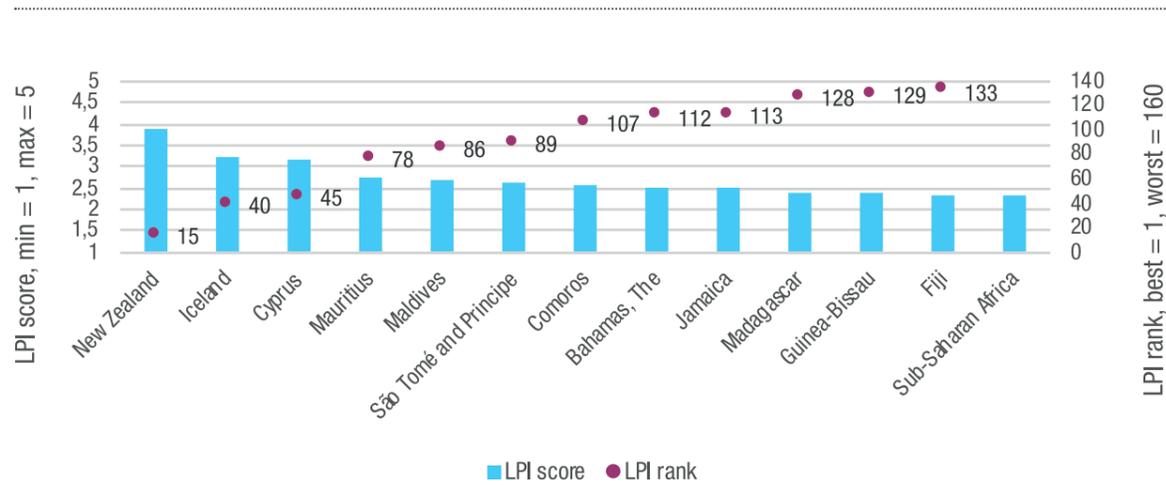
A. Trade connectivity is a constraint to growth that can be improved by policies, despite unfavorable geoeconomic conditions, airport security certification being the lowest hanging fruit.

Trade connectivity encompasses not only the physical links between countries, but also their relative integration into global service networks. Trade connectivity depends on commercial infrastructure, such as roads, seaports, and airports, as well as access to information, logistics, and financial services. For a small island nation like STP, maritime and air-transport connectivity are especially vital, and inefficient ports and airports and infrequent and expensive cargo services can impose a major constraint on growth. Maritime trade connectivity encompasses the structure and performance of shipping networks, port efficiency and capacity, and the quality and quantity of domestic transportation infrastructure.⁴⁰ Air connectivity primarily reflects the country's relative importance as a node in the global air transport system, which is influenced by the scale and efficiency of its airports and the state of domestic transportation networks.

STP's trade connectivity is generally poor. The country's connectivity is heavily inhibited by structural factors such as its island status, remote location, and distance from shipping hubs. The maritime transportation sector lacks economies of scale in shipping connections, leaving STP largely dependent on connections to a single country. Moreover, the entire central Africa region is constrained by its marginal position in global logistics networks and unbalanced trade flows. Local inefficiencies compound these constraints in STP and neighboring countries.

STP scores poorly on the Logistics Performance Index (LPI), and from 2012 to 2018 it consistently ranked in the bottom half of countries worldwide. The LPI measures logistics performance across six dimensions, three of which are policy areas (customs, infrastructure, and logistics services) and three are performance outcomes (timeliness, international shipments, and tracking and tracing).⁴¹ STP's LPI scores and rank are broadly similar to those of its peers (Figure 32). The LPI also shows that good policies and infrastructure can overcome the structural constraints of being a remote island, as evidenced by New Zealand, the 15th best performer among 160 countries in the LPI 2018.

Figure 32: Logistics Performance Index Scores and Ranks, STP and Comparator Countries, 2018 Source: World Bank Logistics Performance Index, 2018

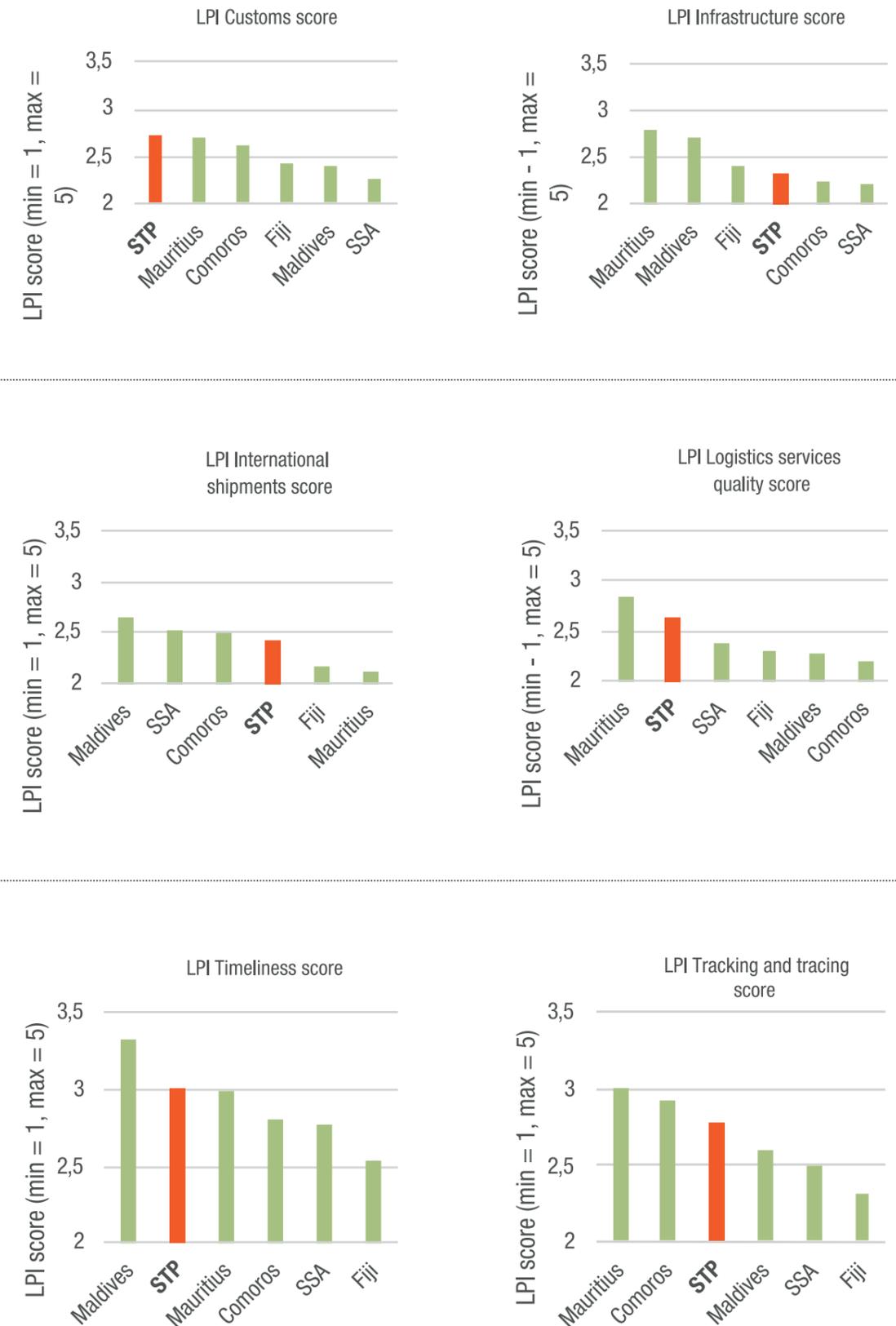


Note: No recent data are available for Antigua & Barbuda, Barbados, Belize, Cape Verde, Dominica, East Timor, Seychelles, St. Kitts & Nevis, St. Lucia, or Vanuatu. Regional aggregates are not included in the rankings.

STP's logistical strengths are evident in its customs and timeliness indicators, while infrastructure is its major weakness. The country's connectivity is heavily inhibited by structural factors such as its island status, remote location, and distance from shipping hubs. The maritime transportation sector lacks economies of scale in shipping connections, leaving STP largely dependent on connections to a single country. Moreover, the entire central Africa region is constrained by its marginal position in global logistics networks and unbalanced trade flows. Local inefficiencies compound these constraints in STP and neighboring countries.

Figure 33: Logistics Performance Index Scores by Component, STP and Comparator Countries, 2018

Source: World Bank Logistics Performance Index 2018; SSA = Sub-Saharan Africa regional average



WHAT ARE THE CONSTRAINTS AT THE STRUCTURAL LEVEL?

WHAT ARE THE CONSTRAINTS AT THE STRUCTURAL LEVEL?

Trade costs⁴² in STP are high compared to those of other island states.

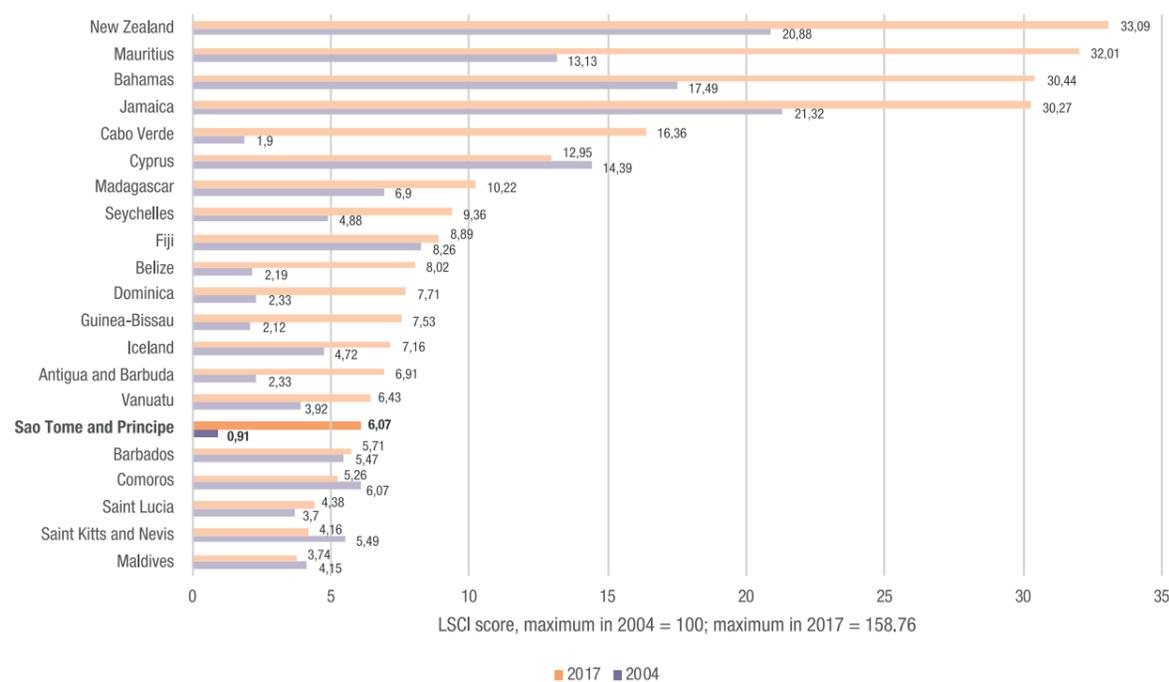
STP's remoteness from major markets increases its average trade costs, and trade costs with especially distant and non-historical trading partners (e.g., the United States and South Africa) are especially high. STP is also a comparatively costly trade partner for other countries. For example, Spain's trade costs with STP are 125 percent higher than with Cape Verde, 82 percent higher than with Mauritius, and 52 percent higher than with Madagascar. At 159 percent, trade costs with Portugal, STP's largest historic trading partner, are relatively low by comparison but still high in absolute terms. Beyond distance, the key drivers of trade costs include maritime and air transport connectivity and logistics performance.

STP performs poorly on the Liner Shipping Connectivity Index (LSCI).

STP's LSCI index score is one-fifth that of Mauritius and less than half that of Cape Verde (Figure 34). Among peer countries, only the Maldives, St. Lucia, and Comoros have lower LSCI scores. STP's maritime trade connectivity is limited by its low cargo volumes and lack of diversity in shipping connections. Countries in West Africa rarely have more than one type of connection, which means they must transship in Europe to trade with other destinations. STP's maritime connectivity is further hampered by its port infrastructure. As an isolated island state, STP's options for minimizing trade costs and increasing its access to international markets depend on its connectivity to regional hub ports.

Figure 34: Liner Shipping Connectivity Index, STP and comparators, 2004 and 2017

Source: UNCTAD LSCI 2018⁴³

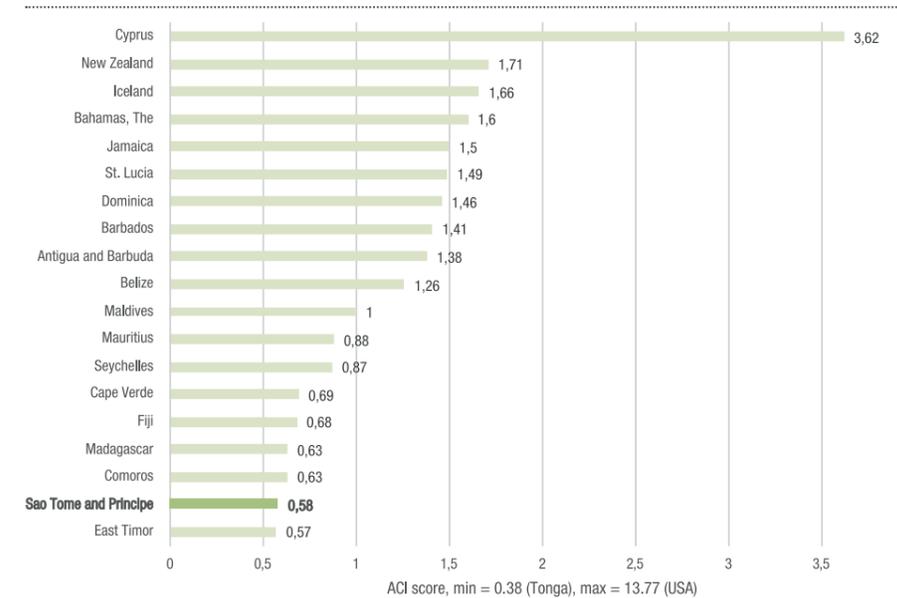


STP ranks near the bottom of the Air Connectivity Index (ACI) at 148th out of 154 countries.

STP's ACI score of 0.58 is close to those of Comoros, Fiji, East Timor, Madagascar, Samoa, Mozambique, and the Central African Republic (Figure 35). St. Lucia (1.49) and Dominica (1.46) perform best among STP's comparator countries, and the United States has the world's highest ACI score (13.77). However, the most recent ACI data are from 2012 and do not reflect recent changes in air connectivity.⁴⁴ Air cargo accounts for less than 1 percent of world trade shipments by volume, but about 35 percent by value,⁴⁵ and a country's air connectivity indicator is positively correlated with both its total trade value and its participation in global value chains.⁴⁶ STP's export opportunities are further constrained by its lack of E.U. security accreditation for air exports. Instead of exporting air cargo directly to Europe, producers in STP must route E.U.-bound air exports through Angola, which raises trade costs.

Figure 35: Air Connectivity Index Scores, STP and Comparator Countries, 2012

Source: World Bank Air Connectivity Index 2012⁴⁷



STP's limited air and maritime trade connectivity is a major constraint on private-sector growth. Anecdotal evidence from private companies and freight services operating in STP support the findings of the LPI and other indices. For example, Claudio Corralo, the country's oldest chocolate company, has seen its exports dwindle after the loss of direct air-cargo routes with Europe. Representatives from NAI, STP's largest freight operator, report that fees have been increasing while logistical agility is decreasing and cite the poor infrastructure and high costs of the port.

STP's major port suffers from structural constraints, inadequate infrastructure, and policy challenges. The port is shallow both along the entrance channel and alongside the quays, which requires barges to transship cargo between vessel and port. On the land side, the port has limited space for container storage and inadequate equipment for container handling. Revising port regulations, tariffs, and customs procedures could allow cargo to be handled in an inland "dry port," opening space in the port area and creating jobs and opportunities in warehouse logistics and transportation. The port also lacks the equipment necessary to handle frozen cargo, but installing that equipment should be relatively simple.

Beyond infrastructure improvements, several highly cost-effective reforms could improve maritime trade connectivity. The port is managed by an SOE, ENAPORT, which lacks the resources to invest in enhancing port capacity and efficiency. Attracting vertically integrated shipping companies that are also involved in terminal operations and potentially even inland logistics could augment ENAPORT's limited resources.⁴⁸ Further policy options for increasing the efficiency of maritime logistics⁴⁹ include revising the laws on public tenders and contracts to allow private-sector participation in infrastructure investments and facility operations and ending ENAPORT's monopoly.

STP faces especially binding constraints on air connectivity. TAP, the Portuguese air carrier, transported cargo from STP until limited cargo space,⁵⁰ weak demand, and the cost of the certification made it unprofitable. Constraints on air-cargo connectivity are increasing costs for current exporters, who must route E.U.-bound cargo through Luanda, discouraging the development of new exports with small initial output volumes, and increasing the country's vulnerability to any shock that affects the port.

The key barrier to air connectivity is E.U. security certification. The cost of air-cargo certification was previously paid by TAP as the cargo transporter.⁵¹ However, STP's airport-management or cargo-handling SOEs are eligible to apply for certification as aviation agents.⁵² Certification would verify that STP meets the security requirements for screening air cargo and mail entering the European Union, enabling firms to resume direct air-cargo exports to Europe. The cost of certification could be recovered through cargo-handling fees.

B. Infrastructure is a constraint, which requires large investments in the case of energy and the port, better funding for road maintenance, and some soft infrastructure fixes that can yield high return for the airport.

Transportation infrastructure is critical to economic development, especially in a small island economy that depends heavily on international trade. Domestic connectivity is also important to the production of goods at a commercial scale and to the delivery of basic services. Beyond traditional forms of infrastructure, such as roads, ports, and utilities, digital technologies can unlock new pathways for economic growth, innovation, job creation, and access to services.⁵³ Internet access and advances in information and communications technology (ICT) can have a large impact on small island economies by bridging efficiency or accessibility gaps in public services, offering new economic opportunities, and increasing regional connectivity.

Deficiencies in STP's energy, roads, ports, airports, and ICT infrastructure are key constraints on economic competitiveness and private-sector development. Although public investment was long a major growth driver in STP, the infrastructure gap remains wide, and most of the country's infrastructure dates from the colonial period. Capital formation made a large contribution to growth over the past two decades, and STP's public capital stock as a share of GDP is high compared to its structural peers,⁵⁴ but poor infrastructure quality indicates low returns on public investment. STP performs poorly on measures of both traditional forms of infrastructure (Figure 36) and ICT (Figure 37), which hinders the development of tourism, agriculture, fisheries, and the private sector in general.

Electricity is expensive and unreliable in STP, and access rates are low. STP has the third-highest electricity supply cost in SSA,⁵⁵ reflecting the small-scale operations, a lack of interconnectivity between systems, underinvestment in energy infrastructure, high production costs, and management challenges at the national utility company, EMAE.⁵⁶ Consequently, STP's average electricity tariff is among the highest in the region.⁵⁷ Access to electricity is low compared to peer countries, with a significant gap between rural and urban areas,⁵⁸ and due to the unreliability of the power grid, most businesses utilize costly private diesel generators. In 2018, a poorly planned attempt to expand the power grid, underinvestment in generating capacity, and

EMAE's inadequate financial resources led to an energy crisis that cut supply by as much as 75 percent. STP urgently needs to increase its generation capacity while implementing medium-term solutions based on its Least-Cost Development Plan for the energy sector.

STP has multiple options for improving energy-sector governance, regulation, and the management of EMAE, but the government's implementation capacity must be significantly increased. Over the last two years, with support from the World Bank and other development partners, the government developed a Least-Cost Power Development Plan, a set of quality standards and concession contracts, and a plan to reform the management of EMAE. Development partners also provided grants and concessional loans to finance power generation and distribution infrastructure. Despite this extensive technical and financial support, the government's low implementation capacity has prevented any tangible improvements in the performance of the energy sector.

Poorly maintained roads and limited transport services constrain access to markets, inputs and economic opportunities. STP's population and economic activities are concentrated along the coastlines, where the primary road network is located. Indicators of transportation accessibility in rural areas are similar to those of peer countries (Figure 36). However, STP's road infrastructure suffers from chronically poor maintenance. Poor road conditions also contribute to a high number of fatal accidents, and STP's road-accident mortality rate was 33.1 deaths per 100,000 people in 2015, the highest rate among peer countries.

High rates of coastline erosion exacerbate risks to STP's coastal resources and infrastructure. Intensifying and increasingly unpredictable storm surges, combined with extensive illegal sand mining for construction, have led to high rates of coastline erosion, averaging about 0.2-1.2 meters a year.⁵⁹ The concentration of the road network and economic activity, including tourism, in coastal areas exacerbates the risks posed by coastal erosion and increases its economic costs.

Improving the road network would have a highly positive economic impact. STP has three national roads, which connect the capital city to the northern, central, and southern regions. Because STP's road-network spatial density is low, and a large share of its population relies on a single road to access basic services, ensuring road safety and maintaining all-year accessibility are critical. For instance, the National Road 1 provides transport access to basic social services and economic opportunities to around 60 percent of São Tomé's population. The 27 km road is part of an economic development corridor connecting the city of São Tomé (70,000 inhabitants) to the major towns of the northeast region, Guadalupe (20,000) and Neves (15,000). It is also the only road link to the fuel port and depot at Neves, which is a critical infrastructure node, as the fuel imported at Neves is used for transport services and to provide electricity to the rest of the country. The road is also used by small farmers and fishermen from the western part of the island to bring their products to the markets in the capital. The quality of the roads has deteriorated markedly since the European Union stopped funding the community-based groups that maintained the roads, a securing a consistent source of funding for these groups is essential to maintain the

Figure 36: Access to Electricity and Transport Connectivity Indices (STP=100)

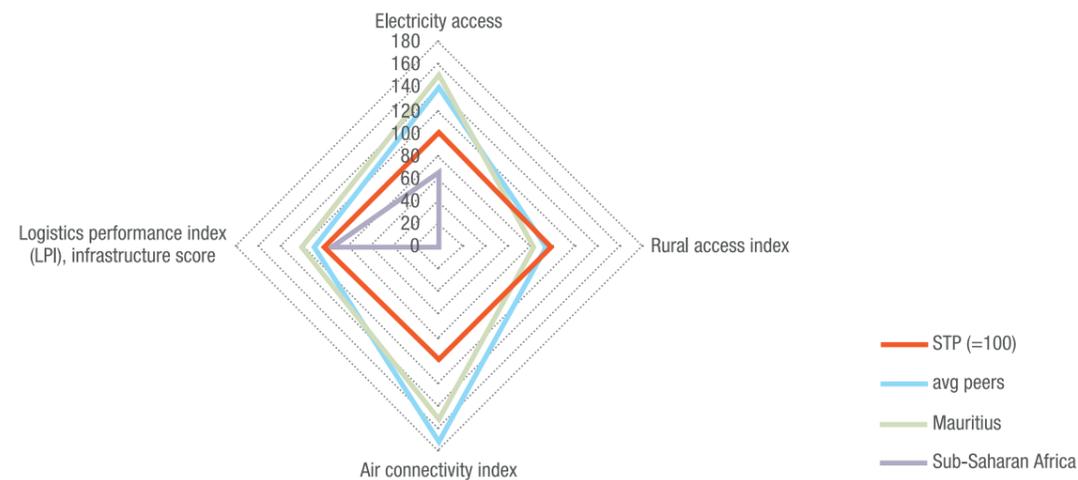
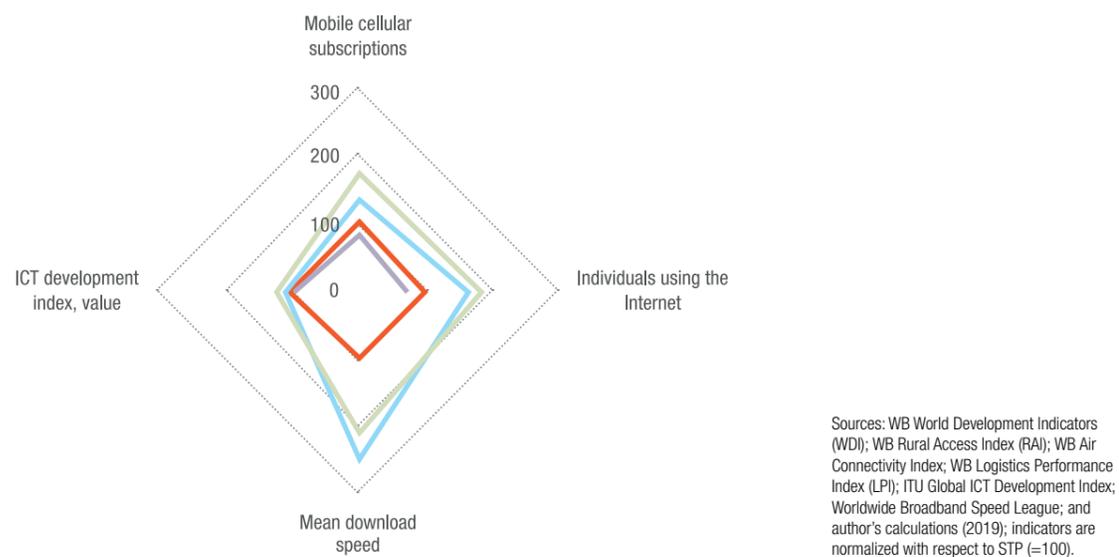


Figure 37: ICT Indicators (STP=100)



Sources: WB World Development Indicators (WDI); WB Rural Access Index (RAI); WB Air Connectivity Index; WB Logistics Performance Index (LPI); ITU Global ICT Development Index; Worldwide Broadband Speed League; and author's calculations (2019); indicators are normalized with respect to STP (=100).



Central to the Blue Economy approach is the recognition that the social and economic benefits of oceanic resources should be maximized over the long term.

road network. A rough estimate indicates that US\$1 million per year would be sufficient, once the backlog is cleared. The World Bank is financing the rehabilitation of National Road 1, while other development partners will finance the rehabilitation of the road that connects the airport to the capital.

Poor airport infrastructure and limited operational capacity constrain trade and tourism. While the authorities have cited the runway as the key challenge, the current runway is in fact capable of receiving most types of aircraft serving international air transportation markets with no or little weight restriction. Expanding the runway to 3200 meters would be extremely expensive and would entail serious environmental risks related to sea currents and sediment. The key constraint is not the runway, but rather air safety and security in order to allow airplanes to arrive and depart from STP with no restrictions. Improving safety and security would involve relatively small investments in equipment (e.g., the replacement of runway lights, the purchase of new navigation, communication, and air surveillance equipment, etc.), the construction of secure fencing around the entire airport and runway, as well as English language and technical training for air control staff. Once these issues have been addressed, the government could expand

the current terminal by constructing an adjacent building where the VIP lounge is currently located. Finally, the airport apron needs to be resurfaced as soon as possible. An initial estimate indicates that US\$4 million would be sufficient to finance the security, safety, and resurfacing investments, while the expansion of the terminal would require an addition US\$15 million.

São Tomé and Príncipe needs to improve and increase port capacity; however, a detailed study should be carried out before deciding to build a new port. The three constraints of the current port are the following: (i) shallowness, (ii) small hinterland, and (iii) lack of area to expand due to its location within the city. The depth is only 3.5m to 4m at high tide and approximately 2.5m at low tide. It is therefore not possible for large vessels to come alongside quay and most ocean vessels are forced to anchor off the port, about one to 1.5 miles off shore, which requires the use of barges for unloading the ships, making it costlier and time consuming. The second constraint is the small port hinterland area, which makes it difficult to maneuver and store cargos and containers. The location of the port within the city makes it unfeasible to expand its hinterland and increased traffic would only degrade the city roads even more. Lastly, the port lacks structure

for refrigerated cargo. These problems do not necessarily need to be solved by constructing a new port. The shallowness might be solved by using piers, while the small hinterland and lack of space to expand could be solved with offsite deposits and dry ports. The government needs to carry out a detailed study, including a demand study and cost benefit analysis to decide between reforming the current port and building a new one, which would require a lot of complimentary investments on accessibility, energy, water connection, etc. For both solutions, incentives and regulations should be well thought to attract private investors.

However, a transshipment deep-sea hub port is not economically viable.

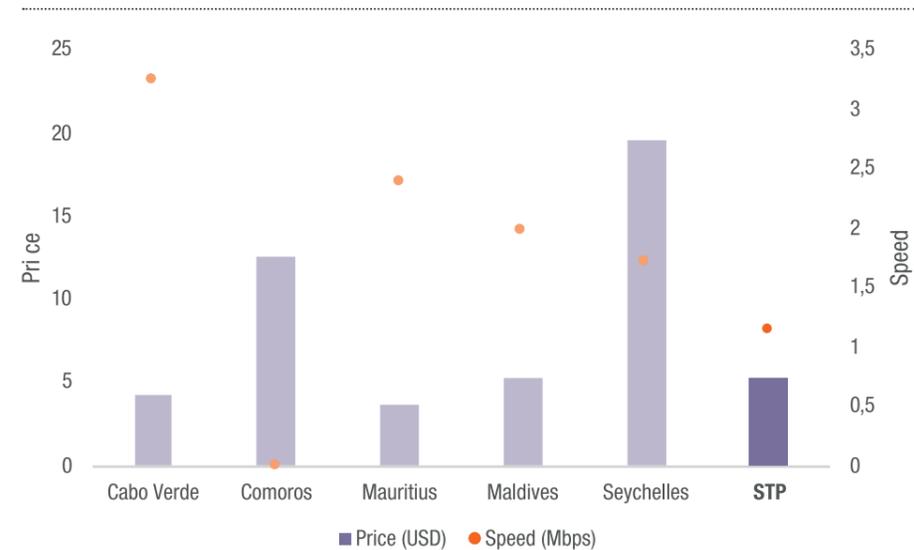
The successful development of transshipment ports requires a location near major shipping lanes, a high level of operational efficiency, a strong regulatory regime, and policy clarity. West Africa has too many medium-sized ports, and some are already striving to expand into hubs. The proposed deep-sea transshipment port at Fernão Dias, which does not have a captive domestic market, would have to demonstrate clear competitive advantages in terms of equipment, handling charges, fuel prices, and turnaround time. The government would need build the workforce skills required in a modern port, upgrade port-related infrastructure, and ensure access to inland infrastructure at competitive prices. A thorough analysis of the proposal is warranted before any further action is taken.

The installation of the regional submarine cable and the introduction of competition in the telecommunication sector have accelerated the development of ICT in STP. The installation of the Africa-Coast-to-Europe (ACE) submarine cable significantly expanded broadband coverage and telecommunications infrastructure to and within STP, while reducing prices for telecommunications services. Better infrastructure and lower prices attracted a second mobile operator and internet service provider to STP, and the rate of cellular phone penetration has doubled in the past ten years to reach 85 phones per 100 people in 2017. Nevertheless, STP’s mean broadband download speed is the lowest among peer countries, while the mean mobile internet speed is the second-lowest (Figure 38). STP also lags its peers in the ICT development index and in various indicators of ICT use (Figure 37).

Leveraging improved ICT infrastructure to unleash development potential. While there has been a marked improvement in ICT infrastructure accessibility, the country is still in its infancy regarding the effective use of this infrastructure to deliver on potential digital transformation activities. The development and use of ICT applications is lagging. For example, the use of ICT in the area of education, health, and government could significantly enhance efficiency of government services. In order to identify the main potential areas and obstacles for full use of its ICT development, it is recommended that the government conducts a comprehensive assessment of the country readiness to reap the benefits of the Digital Economy using the Digital Economy for Africa (DE4A) Diagnostic Tool.

Figure 38: Average Price and Download Speed for Mobile Broadband, STP and Comparators, 2018

Source: cable.co.uk



STP faces significant financial challenges for developing infrastructure, and therefore needs to mobilize private finance for infrastructure development. Grants – the main financing for public investments – are declining and are expected to play a smaller role in financing future investments. The fiscal space is limited to increase public investment spending, and long-term financing is curtailed by high public indebtedness and a shallow domestic financial market. Furthermore, the small size of STP’s economy limits economies of scale in infrastructure projects, and the exposure to natural disasters and climate change increases the risk profile of infrastructure investments. Facing similar challenges as STP, small island states show a growing interest in mobilizing private finance to address their infrastructure needs, including through Public-Private Partnerships (PPP).

Public-Private Partnerships⁶⁰ are an option for developing infrastructure in STP, but they require an adequate policy and institutional framework. There have been few PPPs in the energy, telecommunications, and transport sector in STP, including a concession contract with an airport operator.⁶¹ PPPs are complex arrangements and come with substantial (fiscal) risks, which require an operational PPP framework including policies and institutions to promote PPPs in infrastructure; assess and deal with the potential fiscal costs and risks arising from PPP projects.⁶² STP has approved a new PPP law in 2018, establishing the regulatory framework to promote, develop and regulate PPPs. However, the PPP selection and management are not fully integrated into overall public investment management (PIM) processes, including the budget processes. Moreover, current PIM practices are inadequate, including project preparation, selection, and implementation.⁶³ PIM practices needs to be strengthened to ensure the selection and implementation of investable, cost-effective and high-quality infrastructure projects, including PPPs, aligned with development priorities.

The enabling environment including an adequate investment policy framework and sector regulation play an important role in attracting private sector participation. An effective and independent regulatory system for infrastructure is needed to protect consumers and investors through transparent and predictable decision-making.⁶⁴ The GoSTP has taken important steps to create an environment conducive to private sector participation, including the establishment of the multi-sector regulatory agency (AGER). Ideally, the PPP framework should be aligned with specific-sector regulation, including tariff setting, quality of service and performance monitoring, governance and transparency.

While bridging the infrastructure gap requires significant financing and time, there are short- to medium-term policies that can reduce production and trade costs, including investments in soft infrastructure. Due to the criticality of energy supply for the economy, long-term reforms focusing on the physical energy infrastructure should be complemented by short-term measures at EMAE, including aggressive demand side management starting with efficient lighting. Besides the necessity of investments in energy and transport, the chapters on agriculture, fisheries and trade highlighted the importance of soft infrastructure including logistics services (relevant transport services, access to storage), customs procedures, and regional standards to increase production and facilitate trade. The availability of post-harvesting infrastructure including warehousing, cold storage, and safety standards for transport and storage could support the development of value chains in agriculture and fisheries and the promotion of private sector investments. Trade connectivity could be improved through improved security and safety standards at port and airport facilities.

C. Enforcing commercial contracts is a key constraint but business environment reforms can also yield significant return to resolve insolvency and ease the burden of paying taxes.

Private-sector-led growth in STP will be driven by domestic microenterprises and by foreign investment in larger ventures. Accurate data on the size and composition of STP's private sector are unavailable, but data from the National Institute of Statistics (Instituto Nacional de Estatísticas, INE) indicate that only 14 companies have more than 100 employees, including the public utilities and transport-sector SOEs. Meanwhile, 80 percent of firms for which data are available have fewer than five employees. Most firms are concentrated in the commerce, construction, and tourism sectors.

Given the profile of STP's private sector and the importance of rebalancing toward private-sector-led growth, the government must focus on business environment⁶⁵ reforms that provide a level playing field for microenterprises and foreign investors, as well as implementing policies to attract and nurture foreign investment. Good regulations and a level playing field are critical to maximize opportunities for private investment. Burdensome regulations can hamper the competitiveness of export-oriented sectors, which are essential to sustainable growth and job creation in STP. Moreover, sectors that depend on natural or cultural assets, such as tourism, require high-quality regulations and planning to protect their value. Anecdotal evidence shows that private investors are generally expected to navigate the process of obtaining approvals for their projects from different authorities on their own and not always under clear, consistent, or transparent procedures, which leads some investors to abandon it.

The available indicators show that STP's regulatory environment remains inhospitable. STP ranked 170th out of 190 countries in the 2019 Doing Business report, and it performed poorly against other small economies (Figure 39). STP's score on the "ease of doing business" indicator, which measures the country's distance to the best regulatory practice, was 45.15 out of 100,⁶⁶ up slightly from 44.84 in 2018. The country's indicator score has increased by 1.2 points in recent years, but its gains have not been sufficient to close the gap with peer countries (Figure 40).

Figure 39: Ease of Doing Business Ranking, 2017/18 Source: Doing Business database; World Development Indicators

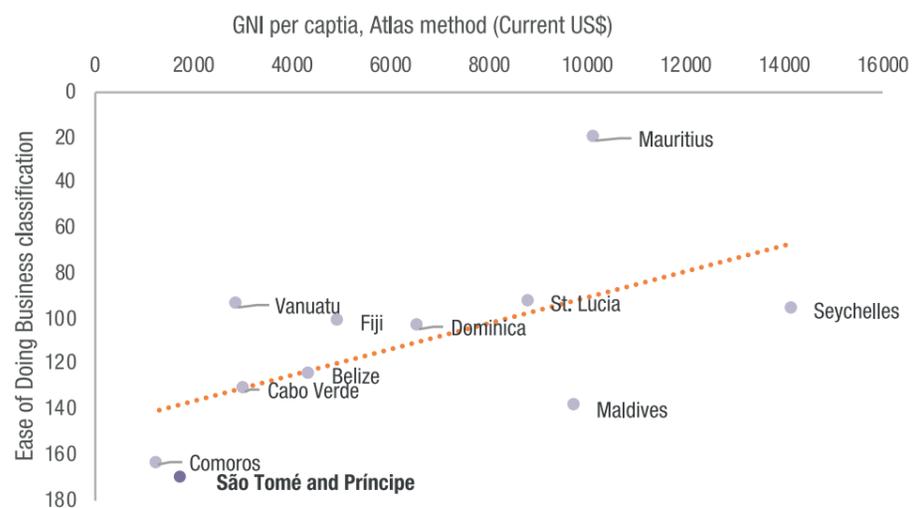


Figure 40: Changes in the Ease of Doing Business Score, STP and Comparators, 2016-2019 Source: Doing Business database

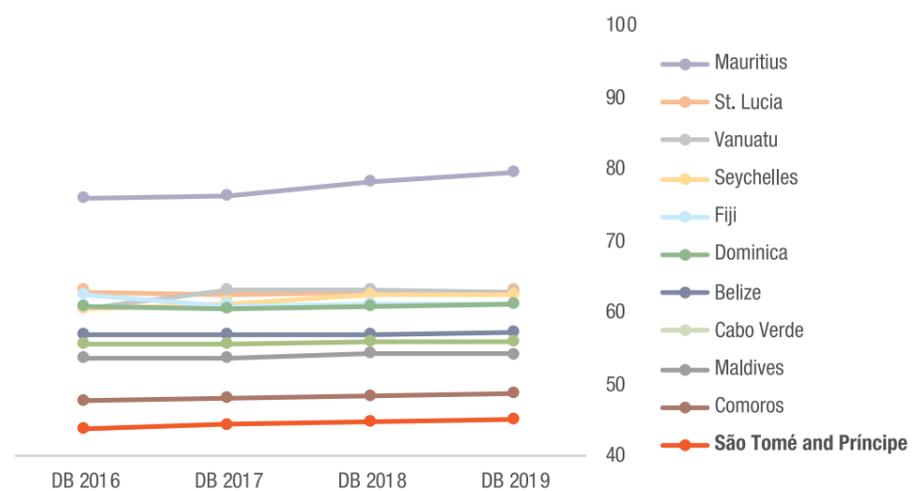


Figure 41: STP's Performance on the Doing Business Index, 2017/18 Source: Doing Business database

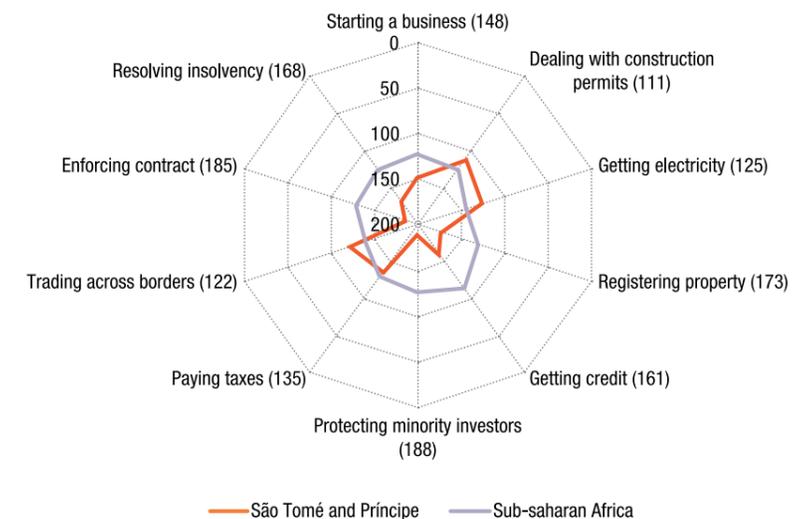
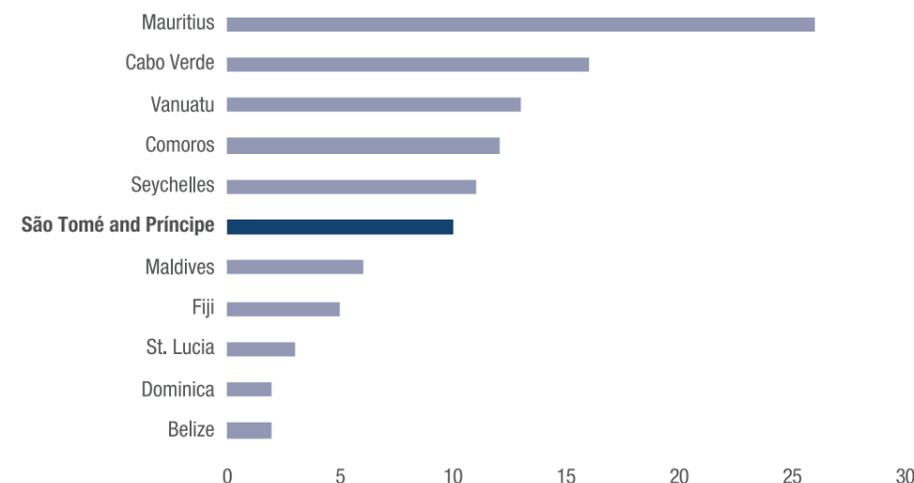


Figure 42: Number of Business Reforms Recorded in the Doing Business Report, 2010-2018⁶⁷ Source: Doing Business database



STP's performance varies significantly across the 11 areas included in the Doing Business report, but the country ranked above the regional average on just two indicators (Figure 41). STP ranked relatively high on indicators of the ease of dealing with construction permits (111) and trading across borders (122), but it ranked much lower on indicators related to registering property (173), enforcing contracts (185), and protecting minority investors (188).⁶⁸

The government has taken important steps to improve the business environment in recent years. Since 2010, STP has recorded 10 positive reforms in areas measured by the Doing Business report,⁶⁹ five times more than Dominica or St. Lucia, but almost half as many as Mauritius (Figure 42). Business registration and licensing reforms have reduced barriers to entry, while the implementation of a single window for trade has simplified import and export procedures. The liberalization of visa requirements has enabled an increase in the number of visitors to the country. The government also reformed the investment code to attract foreign investment and has updated regulations on the financial sector, court fees, notary and registration services, and other business-related activities. The legislature passed electronic data laws that enabled the introduction of e-government services and electronic signatures. However, further improvements are constrained by low levels of institutional capacity, outdated regulations, and limited resources for modernizing government systems.

Deep reforms could yield positive results in three out of STP's four poorest-performing Doing Business indicators. STP's lowest indicator scores are for enforcing contracts, resolving insolvency, paying taxes, and protecting minority investors. Although the latter is STP's worst-performing indicator, it is more relevant to countries where stock companies are common. Reforms affecting the credit market and property registration will be addressed separately in the following sections.

Contract enforcement is slow and inefficient, and deficiencies of the justice system hinder the resolution of commercial disputes. According to the 2019 Doing Business report, resolving a simple commercial dispute at the courts takes an average of three years, and another year is required to enforce the judicial decision—longer than in any of STP's comparator countries (Figure 46). The government's 2017-2020 Justice Reform Program described the justice system as being in a state of deep crisis. Key challenges include: (i) slow judicial processes due to backlogs and outdated procedural rules, including the Code of Civil Procedure; (ii) insufficient human and technical resources; (iii) instances of political interference; and (iv) limited judicial access to legislation and information, including Supreme Court decisions.

Improving the efficiency of the commercial justice system will require comprehensive reforms. First, legislative reforms are necessary to update the Commercial Code and the Civil Procedure Code, as well as the rules governing the functioning of courts. One option to update the business law framework would be to consider joining the Organization for the Harmonization of Business law in Africa (OHADA) or adopting its legislation. A legal study could be undertaken to assess whether this would be a good option for STP. Sharing a common legal framework with 16 other African countries could help foster trade and investment. However, adopting the OHADA uniform acts would not be enough to strengthen legal security. Significant effort would be needed to train legal professionals and ensure consistency of STP's legal framework. Reforms of procedural laws would still be necessary. Second, the government must invest in training judges and judicial personnel and promoting specialization. Third, there are opportunities to introduce case-management techniques, including collecting statistics on the duration of judicial cases to identify bottlenecks

and opportunities for efficiency gains. Fourth, court automation could facilitate case management, and IT solutions could enable the introduction of electronic procedures such as e-filing and process serving. Fifth, judicial decisions at all levels should be published to strengthen transparency and consistency. Finally, alternative dispute-resolution mechanisms, including mediation, conciliation, and arbitration, should be promoted to reduce the burden on the courts.

STP lacks an updated insolvency framework. On indicators of resolving insolvency, the 2019 *Doing Business* report classifies STP as a “no practice” country due to a lack of judicial reorganization or improvements in debt-enforcement procedures over the last five years. Insolvency procedures are governed the Code of Civil Procedure, which was established by a Decree Law dating from 1961. This legal framework is not in line with modern insolvency legislation, as it does not encourage the reorganization of viable firms and limits creditors' right to participate in the insolvency procedures. Consequently, the most likely outcome of an insolvency procedure is the liquidation of the company's assets. By contrast, Mauritius's insolvency framework promotes the reorganization of viable firms. According to a Doing Business case study, insolvency procedures in Mauritius take an average of 1.7 years, and investors can expect to recover 67.4 percent of their investment.

A comprehensive insolvency reform effort in STP could follow the example of other Lusophone countries. Portugal and Mozambique have modernized their insolvency frameworks, while Angola is in the process of developing an insolvency law. While a sound legal framework is a necessary first step, an effective insolvency reform requires an adequate institutional infrastructure and the organizational capacity necessary to implement it. The enforcement framework includes the judicial authorities, an insolvency oversight authority or regulator, and insolvency practitioners. The role of insolvency practitioners is critical, and they require strong regulations and oversight.

Figure 46: Average Time Required to Enforce Contracts, STP and Comparators (days) Source: Doing Business database

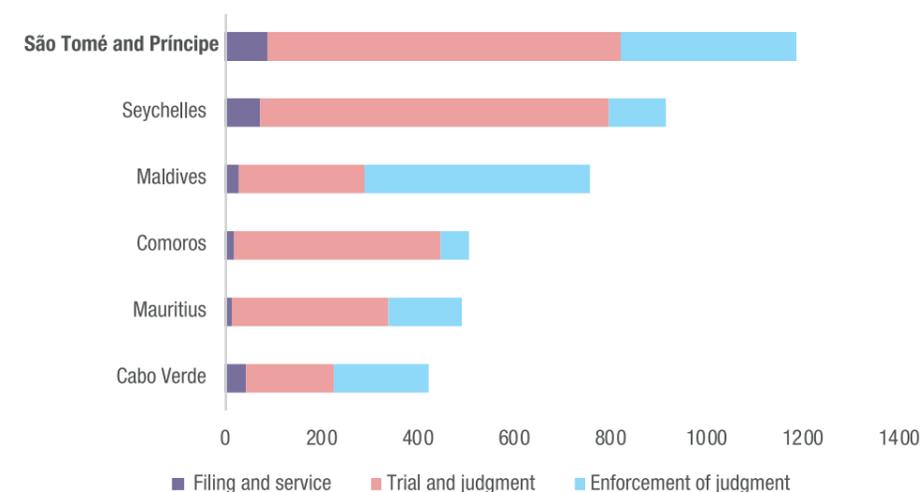


Figure 43: Doing Business Rank on the Ease of Paying Taxes, STP and Comparators, 2019

Source: Doing Business database

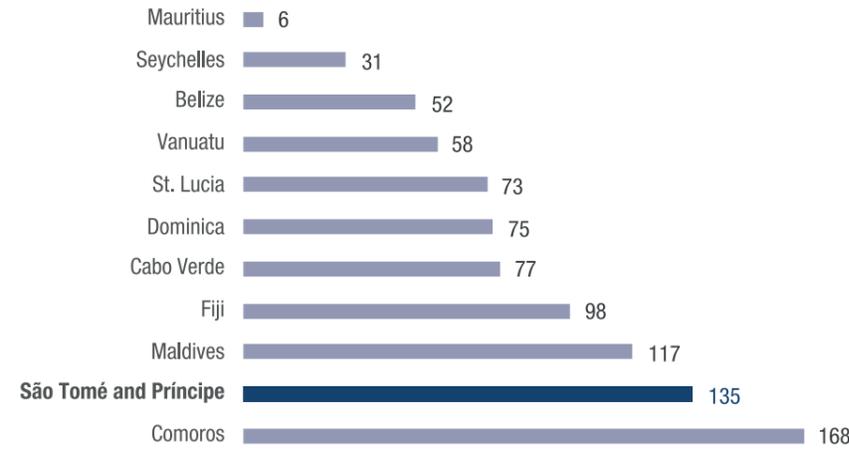
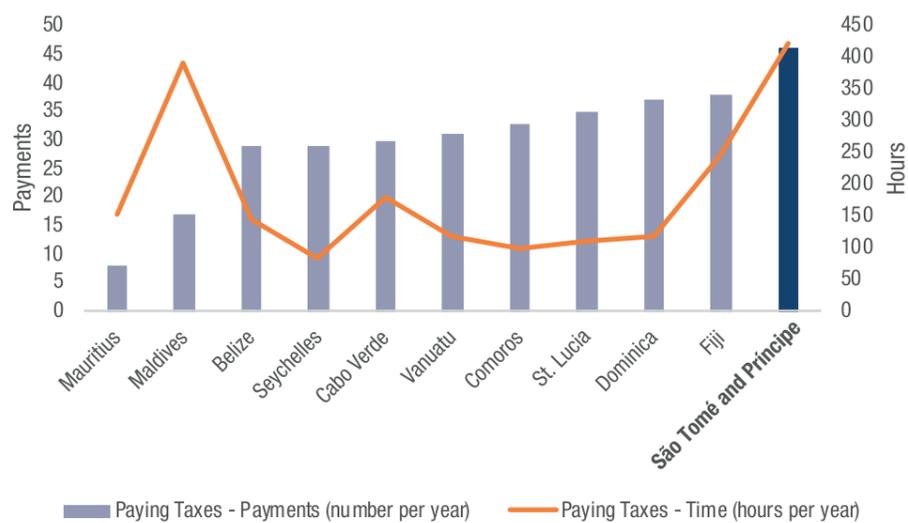


Figure 44: Average Number of Payments and Time Required for Midsized Firm to Pay Taxes in STP, 2019

Source: Doing Business database



WHAT ARE THE CONSTRAINTS AT THE STRUCTURAL LEVEL?

Businesses in STP report difficulties with tax compliance. In the 2019 *Doing Business* report, STP ranked 135th out of 190 countries on the ease of paying taxes, indicating considerable scope to increase the efficiency of tax administration. Among peer countries, only Comoros ranked lower (Figure 43). It takes a medium-size company 46 separate payments and 424 hours to comply with tax and social security regulations in STP, more than in any of the comparator countries (Figure 44). The relatively high compliance burden reflects the complexity of taxes and the lack of electronic systems for filing and paying taxes and making social security contributions. The *Doing Business* report has recorded no significant improvements in tax administration in STP aside from a reduction in the corporate tax rate in 2010. Improving tax policy and administration will be critical to boost domestic resource mobilization and address the country’s fiscal fragility.

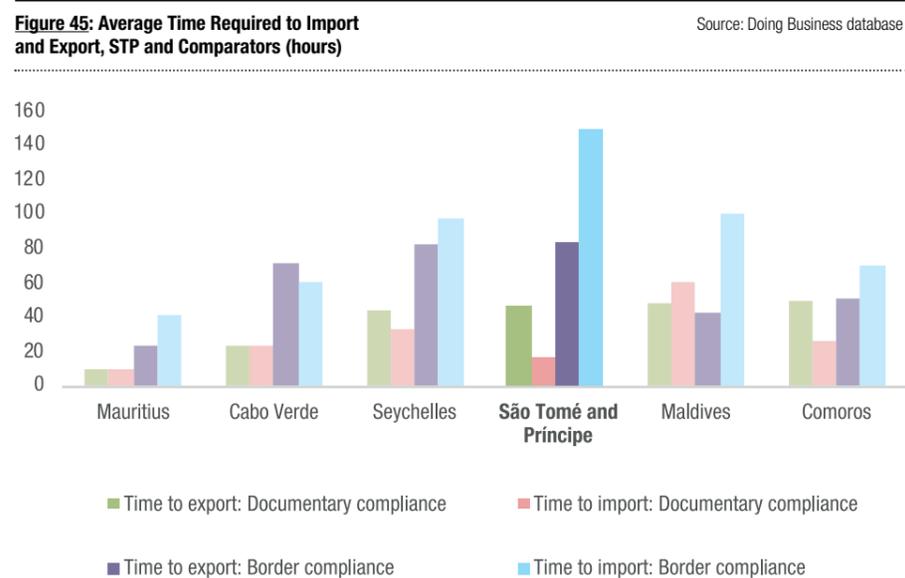
The recently concluded World Bank PER identified several opportunities to consolidate and simplify taxes and address deficiencies in tax administration. STP lacks a broad-based consumption tax such as a VAT or an excise tax. Instead, it uses a plethora of narrow-based consumption taxes. In addition, STP charges a stamp tax on several administrative procedures, including notarization, which significantly increases the number of payments a company has to make to comply with taxes. STP’s tax administration needs to embrace a client-centered approach by making it easier to pay taxes. Simple steps like organizing and publishing all tax legislation online and allowing taxes to be paid at any bank could greatly reduce the burden of paying taxes. More detailed policy recommendations can be found in the PER.

The process for starting a business in STP is relatively straightforward but eliminating the paid-in capital requirement would be a significant improvement. The creation of a Single Business Window (*Guiche Único da Empresa*) significantly reduced the steps, time, and cost involved in starting a business. According to the *Doing Business* report, it now takes six steps and seven days to start a domestic limited liability company in STP,⁷⁰ and the average cost is equivalent to 12.3 percent of per capita income. STP’s process is faster than those of all peer countries except Mauritius, and the relative cost is lower than in all peers except in Mauritius and St. Lucia. However, STP is one of just 59 countries that still impose a paid-in capital requirement, which is equivalent to 178.5 percent of the country’s per capita income. Research has shown that paid-in minimum capital requirements are not an effective protection for creditors.

STP has consistently implemented improvements in trade facilitation, but there is still scope for further improvement, including through easily implemented reforms such as publishing information online and introducing expedited procedures. In 2011, the government began introducing the electronic customs platform ASYCUDA World, which served as the basis for a series of improvements that led to a fully functional electronic single window for trade transactions. The establishment of the single window significantly reduced the time required to import and export. Between 2014 and 2018, the time to comply with border regulations fell from 115 to 83 hours for exports and from 163 to 150 hours for imports. However, STP continues to lag comparator countries (Figure 45). Currently, the

WHAT ARE THE CONSTRAINTS AT THE STRUCTURAL LEVEL?

government agencies involved in international trade have little or no online presence, and detailed information is not easily accessible to users. A single point of enquiry or help desk to address questions regarding import/export procedures facilitate the trade process. The Customs Code is silent about issuing rules of origin for exports, and their legal basis should be clarified. In addition, the provisions necessary to establish an authorized operator program with expedited control procedures have not yet been implemented. Finally, there are no provisions to authorize the expedited release of express consignments or air cargo—a policy reform that, together with dry ports, could improve STP’s international connectivity.



Limited skills, especially advanced technical and managerial skills, likely constrain growth and diversification. Despite anecdotal evidence that skills are a constraint to more balanced growth, no hard data are available to assess how the skills of the labor force align with the needs of the private sector. The most recent household survey will provide information on the supply side. A World Bank project on social protection and workforce skills found that although the physical infrastructure of many of the technical and vocational training institutions is satisfactory, the current system does not adequately equip graduates with the skills needed to succeed in the labor market due to a lack of coordination, insufficient linkages with the private sector, and the low overall quality of the training provided. Instructors have little training, the curricula are excessively theoretical and insufficiently practical, and a misalignment between the offered programs and the needs of employers.

Given STP’s small size and remoteness, the country must actively promote itself to investors or risk being overlooked. STP is not included in many databases and information sources that investors rely on, such as those managed by the World Economic Forum. The country also has a limited online presence and lacks a single internet portal for investors available in English or other foreign languages. Representatives from STP have rarely participated in high-level investor forums or relevant trade shows.

The Trade and Investment Promotion Agency (*Agência de Promoção de Comércio e Investimento, APCI*) lacks the capacity to fulfill its role in facilitating investment. The APCI was created in 2012 to attract and facilitate investment.⁷¹ The agency is required to issue an opinion (*parecer*) on all investments above EUR 50,000, and once the contract is signed, the APCI issues a certificate of registration of private investment. However, the agency lacks the resources and institutional support to carry out its mission. The regulatory framework envisions an agency operating with a high degree of organizational and financial autonomy⁷² in line with good practices, but the APCI both the budgetary resources and organizational autonomy to operate effectively. Consequently, the APCI has little capacity to facilitate or promote private investment. Despite these challenges, the Tourism Directorate, the APCI, and other entities involved in the approval process are working to provide a clear investor roadmap and support to prospective investors in the tourism sector.⁷³

Promoting private-sector development will require the clarification and simplification of procedures as well as more active engagement by the APCI. Providing the agency with adequate resources to fulfil its mandate and ensuring close coordination by all entities involved in the investor-approval process would strengthen efforts to attract investors. Eliminating duplicative requirements and providing investors with a clear roadmap and timeline for obtaining all the necessary authorizations, including land acquisition, would further streamline the investment process. Finally, improving STP's score on the *Doing Business* indicators would signal to investors that the authorities are committed to providing a conducive business environment.

Financial inclusion is relatively low, particularly among women.

D. Targeted investments in new delivery channels, financial infrastructure, and risk-mitigation schemes could help address the high level of nonperforming loans, which is a key constraint

STP's financial sector is small and concentrated, and credit is declining due to high levels of NPLs. STP's financial-sector assets declined from 79 percent of GDP in 2012 to an estimated 50 percent in September 2018,⁷⁴ making it one of the smallest financial systems in the world. The banking sector is highly concentrated: in 2017 the country's largest bank, BISTP, controlled 53 percent of the sector's assets, 55 percent of credit, and 72 percent of deposits. The government's deteriorating fiscal position pushed the stock of NPLs to 24.4 percent in 2018, increasing banks' risk aversion and discouraging financial intermediation. The banking system appears to be sound on average, but it remains vulnerable to poor asset quality and low profitability. The average capital-adequacy ratio was 31 percent in 2018. Provisions covered 93.6 percent of NPLs, which suggests that banks have some cushion to mitigate expected losses. Banks' ability to generate capital through profits is limited. The system is liquid, reflecting a lack of good lending opportunities in an environment of high NPLs.

Credit is costly, with annual nominal lending rates at around 19 percent, due to macroeconomic imbalances, high operating costs,⁷⁵ and high credit risk premiums. The real average annual lending rate stood at about 8.5 percent in 2018. With T-bills paying an annual rate of 3 percent, the high market rates for loans imply a high-risk premium on lending. High credit

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WHAT ARE THE CONSTRAINTS AT THE STRUCTURAL LEVEL?

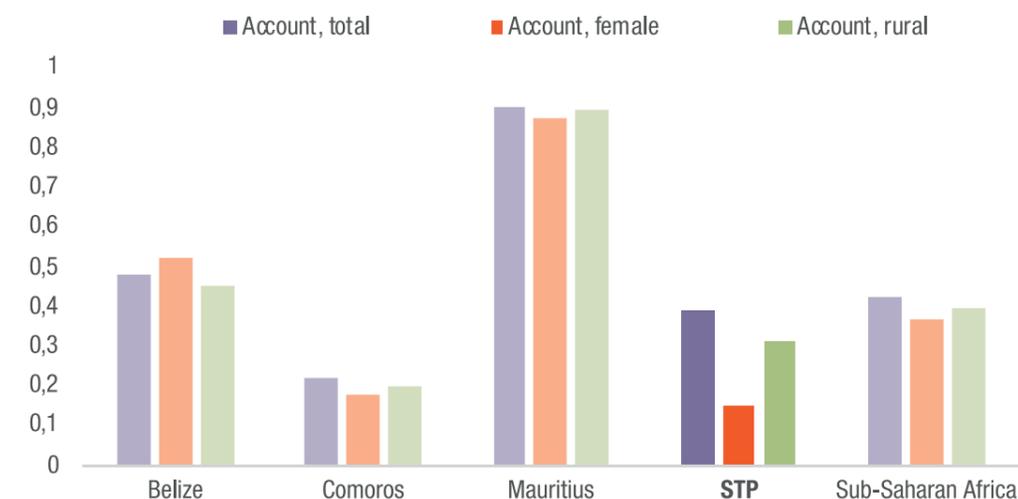
risk premiums mainly reflect weak mechanisms for contract enforcement and the absence of a reliable secured transaction framework and other tools that can mitigate the risks of strategic defaults by borrowers (moral hazard), as well as the lack of a well-functioning credit information system that could help investors screen out poor investments (adverse selection). The high cost of credit reduces the capacity of many borrowers to repay their debt, but any effort to reduce interest rates that does not also deal with the abovementioned causes will eventually fail.

Banks prioritize large borrowers and offer limited credit to agriculture, fisheries and tourism. Data from the credit registry shows that from March 2011 to June 2017, the largest 5 percent of firms received 54 percent of total corporate credit, while the largest individual borrowers received 29 percent of retail credit. Agriculture (including fisheries) received less than 2 percent of credit, whereas tourism received only 0.2 percent.⁷⁶ These sectors' shares of total credit are far smaller than their contributions to GDP. Most credit in the economy goes to construction (34 percent), retail trade (21 percent), and consumer lending to households (21 percent).⁷⁷

Banks have been tightening their lending requirements in response to the high level of NPLs, and many firms identify access to credit as the main constraint on their growth. The latest bank survey on credit market conditions, conducted in July 2017, showed that the main factors cited by banks to justify their tight requirements are: (i) uncertainties associated with claims on collateral in cases of default, which reflect the weaknesses in the commercial justice framework described above; (ii) low anticipated economic growth rates; and (iii) the high level of NPLs. According to the 2017 Financial Inclusion Survey, of the micro, small and medium enterprises (MSMEs) that had applied for a loan, only 10 percent had their loan applications approved. Moreover, 32 percent of the individual entrepreneurs and 26 percent of the MSMEs that responded to the survey cited lack of financing as the main obstacle to the growth of their businesses.

Financial inclusion indicators are relatively low, particularly among women. The 2017 Financial Inclusion Survey showed that only 39 percent of respondents had a bank account (Figure 47), even though 98 percent believe it was important to have one. This share is below the SSA average of 43 percent, and the gender gap is unusually wide, with only 15 percent of women reporting having a bank account. Financial inclusion especially low in poorer districts such as Lembá (19 percent), Caué (21 percent), and Lobata (22 percent). In the absence of other types of transaction accounts (such as mobile money), cash is the dominant medium of payment for transactions among individuals. 73 percent of respondents reported receiving their income in cash, although many of the poorest respondents reporting receiving most of their income in the form of in-kind payments of fish or agriculture products.

Figure 47: Financial Inclusion in São Tomé and Príncipe and peers
(account ownership, in percent, age 15+, 2017)



Sources: BCSTP and Findex 2017.
Notes: The table shows the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or report personally using a mobile money service in the past 12 months. Data for Belize is for 2014 and for Comoros is for 2011.

Targeted investments in new delivery channels, financial infrastructure, and risk-mitigation schemes could alleviate constraints that prevent creditworthy businesses and individuals from accessing finance.⁷⁸ Key investments include: (i) the expansion of digital financial services, including mobile money, to reduce operating costs and provide affordable transaction accounts to unbanked individuals and MSMEs; (ii) a secured transaction system, including an online registry for movable collateral, to allow borrowers to pledge movable assets (e.g., equipment and machinery, receivables, and vehicles) as collateral;⁷⁹ (iii) a well-designed risk-sharing facility to increase banks' risk appetite for MSME lending;⁸⁰ and (iv) improvements in the credit information system, including the upgrading of the credit registry and the expanded use of financial reporting by businesses.

Digital financial services, including mobile money, could reduce the operational costs of financial institutions and help provide unbanked low-income individuals and MSMEs with access to affordable transaction accounts. The recently passed law on payment systems establishes a framework for mobile-money operations, including regulatory provisions for payment service providers and operators. The law designates the Central Bank of São Tomé and Príncipe (*Banco Central de São Tomé e Príncipe*, BCSTP) as responsible for oversight and supervision of digital financial services. Mobile-money operations will be supported by a network of certified agents, helping to further expand the number of access points for financial transactions available to the population. In addition, digital financial services and new financial technology—including alternative data (e.g., behavioral insights, transaction data, social data, psychometric test, biometrics) and analytical models (e.g., machine learning)—could help analyze risks and trends, provide tailored services to excluded segments of the population, and improve financial behavior. As 85 percent of the adult population owns a mobile phone, mobile financial services could greatly increase financial inclusion. However, the development of mobile financial services requires a reliable communications infrastructure.

The establishment of a secured-transactions system that allows the use of movable assets as collateral could expand financial access and help reduce credit risk premiums. Banks identify the lack of formal credit histories and deficiencies in the legal framework for creditor rights in areas such as leasing and non-possessory lending practices as obstacles to increased lending, particularly lending to MSMEs. A modern secured-transactions system could expand credit access across all economic sectors and actors. These systems are an alternative to traditional lending, because they serve borrowers with characteristics that fall outside a bank's traditional business. Secured-transaction loans typically use a company's movable assets—including accounts receivable, inventory, and equipment—as collateral, and they primarily benefit startups and MSMEs that lack immovable property to mortgage. Moveable-asset-based lending has also been proven to promote lending to female entrepreneurs, particularly when supported by efficient online registries that reduce transaction costs.

A well-designed public risk-sharing facility could increase banks' risk appetite to lend to MSMEs, given the high liquidity and risk aversion in STP's banking sector. A risk-sharing facility would be especially beneficial for lending to the agriculture and fisheries sectors.⁸¹ The international experience shows that the success of risk-sharing facilities hinges on sound governance, adequate coverage, effective claims management, and affordable pricing. However, the lack of scale in STP would likely require a substantial subsidy component and may complicate the scheme's risk diversification.

Agricultural insurance can help small producers invest in more-productive farming and nonfarming ventures, but limited scale and a small risk pool makes a market-based agricultural insurance scheme less viable in STP than it would be in other countries.⁸² Indeed, the expected volume of premiums would likely be too low to even ensure coverage of operational costs. However, publicly funding a risk-transfer instrument (such as an insurance scheme) that could provide a quick response to agricultural-sector emergencies may present a more viable alternative. Such a system could be designed in the context of the country's broader social protection and disaster-risk financing systems.

STP also needs appropriate credit information infrastructure to help banks identify promising borrowers and manage risk. Expanding the sources of credit information would support this effort, particularly upgrading the credit registry (*Central de Riscos de Crédito*), expanding financial reporting by businesses, or establishing a repository of balance sheets for nonfinancial corporates. Accelerating the ongoing upgrading of the credit registry will be critical to improve data quality and coverage, provide value-adding services, and enhance data recovery and business continuity.

Broadening access to financial services requires a stable and sound financial sector. Further efforts will be needed to improve the BCSTP's understanding of financial risks and strengthen preventive measures. In the context of the high risks imposed by NPLs, the ongoing Asset Quality Review (AQR) will provide a full and accurate picture of the quality of bank assets and recommend actions to improve the overall soundness of the banking sector. The BCSTP should fully implement the recommendations of the AQR, with a focus on enforcing recapitalization requirements and upgrading prudential standards and supervisory skills.

E. Uncertainty regarding land rights due to the absence of a proper land information system and a weak land governance framework is a key constraint, especially on agriculture and tourism.

Agriculture and tourism development require efficient land markets, which in turn rely on formal, clear, and enforceable property rights. Agricultural and tourism development are strongly influenced by the security of property rights, as both involve large investments in immovable property. Formal land rights are also critical to credit access, especially in the absence of a secured-transactions system, as well as to fiscal capacity and to public-sector efficiency. Finally, establishing and maintaining a functioning land-governance system can enhance public accountability and governmental legitimacy.

Land-use planning is essential to maximize the value of land and is particularly critical for tourism and agricultural development. The development of STP's tourism sector is likely to increase demand for land and the potential for land-related conflicts. Moreover, public and private investments in building, revamping, or expanding tourism infrastructure will be more efficient if they are supported by accurate land information. Land-use planning is a key component of environmental protection and therefore essential to the development of sustainable tourism. Land information systems also provide a basis for designing national agricultural models

and determining the appropriate combination of economic activity and soil potential. Similar to the tourism sector, land-use planning in agriculture increases the productivity of land while safeguarding its value for future generations.

STP has adopted several different land-tenure structures since independence, but none have supported sustained rural development.

After independence, all land was nationalized, and agricultural production was organized around a network of state-owned agricultural enterprises. A lack of market incentives combined with mismanagement, and low investment resulted in the collapse of the system, and agriculture was privatized in the 1990s. Through large-scale land reform, the government sought to transform the plantation economy into a new structure dominated by small and medium-sized farmers. More than two-thirds of plantation lands were redistributed to smallholders, but the reform failed to increase export revenue or diversify agricultural exports.

Currently, most rural land is privately exploited under usufructs distributed by the government, which maintains ownership, but private property over rural land is also recognized. Individuals can gain access to rural land either by formally requesting a new concession from the Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural, MADR) or through the transfer of existing concessions with authorization from MADR. Formal transfer of ownership occurs after a deed is signed by the parties involved and registered in the country's Real Estate Registry. Given the lack of functioning land information systems, there is no inventory of privately held rural land.

Despite the move to a more market-based regime, inefficiencies in land markets remain a constraint to more balanced growth. Key challenges include the legal framework, the land and property registries, women's access to land, and the lack of formal titles in much of the country. Although the government has put in place an ambitious plan for the 2017-19 period, and considerable improvements have been made in strengthening land governance, clearly defined formal property titles remain absent across a large portion of the country, especially rural areas.

The legal framework regulating foreign investment in land is weak.

Foreign individuals are permitted to receive concession contracts for land that is to be used for investment projects authorized by the MADR, in accordance with the relevant legislation.⁸³ However, the rules regarding the maximum size and duration of land concessions are unclear. The rights of current concession holders and rules pertaining to investments on land held informally are unclear. Two legal initiatives have been proposed to address this legal vacuum—a bill updating the Property Ownership Law and another updating the Cadaster Law—but to date neither has been approved.

Women's access to land is equal under the law, but likely constrained by customary practices. While there is no statutory discrimination between women and men in terms of land rights, little information is available on actual gender disparities in land ownership and access. The land reforms of the 1990s redistributed land to more than 10,000 families, of which a

TABLE 5: THE ALLOCATION OF LAND-GOVERNANCE MANDATES BY AGENCY IN STP

INSTITUTION	MANDATE	OVERSIGHT MINISTRY
General Directorate of Notaries and Registries (DRGN)	Direct, guide and coordinate: <ul style="list-style-type: none"> • Civil Registry • Real Estate Registry • Vehicle Registry • Commercial Registry • Notary records 	Ministry of Justice and Human Rights
Directorate of Geographical and Cadastral Services (DSGC)	Execute the cadastral and mapping policies	Ministry of Infrastructure and Natural Resources and the Environment
Ministry of Agriculture and Rural Development (MADR)	Design, implement, and evaluate agricultural and rural development policy	Ministry of Agriculture and Rural Development
Tax Directorate	Implement tax policies and administer revenue collection	Ministry of Planning, Finance, and the Blue Economy
National Statistics Department	Produce and publicize statistical information on economic, social, demographic, cultural, and environmental issues	Ministry of Planning, Finance, and the Blue Economy
Directorate of State Patrimony	Manage state-owned property	Ministry of Planning, Finance, and the Blue Economy

STP's land-information systems, including the property registries and cadaster, are outdated and are not interoperable. Property registries in STP follow the *folio real system*,⁸⁶ are paper-based, and require manual bookkeeping, which increases the likelihood of human error and generates risks related to security, transparency, corruption, and legal certainty. Geographical information of parcels is generated, stored, and managed manually. Without a common identifier, data sources cannot be cross-referenced, and thus the ownership information produced by the property registries cannot be integrated with the geographical location produced by the cadaster, greatly reducing the efficiency of land management. The lack of interoperability among these sources of information results in data fragmentation, increases transaction costs, prevents economies of scale, and negatively affects the quality of information used to inform public policy.

STP requires a comprehensive plan for designing and implementing a new land-administration system. Sources of land information, such as the property registries and the cadaster, are critical to define and adjudicate property rights and assess land values. Based on information provided by the

third were female-headed rural households (Government of São Tomé and Príncipe, 2015). While 87 percent of women and men report having access to land, an estimated 75 percent of titles are registered in the name of only one spouse. Research from other countries in the region indicates that when land is registered in one spouse's name, it tends to be that of the man. This disparity may negatively impact female farmers' incentives to making productive investments in their land and prevent female entrepreneurs from using their land as collateral for business loans (Goldstein and Udry, 2008).⁸⁴ Consequently, efforts to promote joint land titling are likely to disproportionately benefit women. For example, in Rwanda, a pilot Land Tenure Regularization program increased the likelihood that female-headed households would make soil-conservation investments by 19 percentage point, double the impact observed among men (Ali et al., 2014).⁸⁵

Land-governance mandates are spread among several government agencies located in different ministries (Table 5). These include: (i) the General Directorate for Registries and Notaries (*Direcção Geral de Registos e Notariados*, DGRN) under the Ministry of Justice and Human Rights, which oversees notary records along with the different registries for civil, real estate, vehicle, and commercial registries; (ii) the Directorate of Geographical and Cadastral Services (*Direcção de Serviços Geográficos e Cadastrais*, DSGC) under the Ministry of Infrastructure and Natural Resources and the Environment, which oversees the management of the geographical cadaster; and (iii) the MADR, which is in charge of land management and rural development. The DGRN's mission is to direct, guide, and coordinate the services of all registries, including the real estate registry; it is also responsible for the civil registry, the vehicle registry, the commercial registry, and the notary records. The DSGC oversees the management of the geographical cadaster and is charged with executing the cadastral and mapping policies. The MADR is also responsible for managing rural state lands granted to individuals through concession contracts, and in this role it either grants or denies access to rural land to both individuals and firms. The overlapping mandates of these agencies increase the risk of administrative redundancy, and inconsistencies in the definitions they use may undermine the accuracy of data collection.

property registry and the cadaster, governments define regulations for land use that reflect national priorities. Together, these policies should create the basis for sustainable socioeconomic development by establishing clear rules and providing accurate information to individuals, firms, and policymakers.

The government should consider creating a parcel-based land-information system and ensuring that cadastral processes are integrated with the information stored in the property registries. Establishing unique identification numbers for land parcels will provide a sound basis for a reformed land-administration system. Geographical and legal information about land must also be updated and digitized, eliminating all manual bookkeeping.

The legal framework governing land acquisition and foreign investment in land should be revised to reflect STP's current development challenges. The current system of state rural land ownership and public management through concession contracts imposes an unnecessary burden on both state agencies and private investors. By allowing private ownership of rural land, or the free exchange of concession contracts, existing government agencies can reallocate their scarce capacity and resources to the actual management of land as a primary resource for sustainable socioeconomic development. STP also requires an explicit regulatory framework detailing the process for foreign investors to acquire land and specifying the rights of current owners.

Improvements in the legal framework can strengthen women's rights to property. Many women are either unaware of their land rights or lack the necessary documents to enforce them. Although existing legislation requires that land titles include both spouses, enforcing women's rights to property remains a challenge, especially in cases of informal but de facto marital unions.

Reforms to land governance should be accompanied by efforts to improve and strengthen the institutional structure governing land-related issues. The government should revise and amend the regulatory and legal frameworks governing land, as well as the institutional mandates and internal processes of relevant agencies. The central aim of this effort should be to harmonize institutional mandates within a rational and coordinated system that avoids duplication or gaps in responsibility.

TABLE 6: POLICY RECOMMENDATIONS AT THE STRUCTURAL LEVEL

LEGEND



recommendation addresses key constraint



recommendation embodies blue economy dimensions



reforms that can yield relevant gains in short period of time



recommendation addresses gender aspect



recommendation addresses SOGI aspect



short term



medium term



long term

Policy Recommendations at the Structural Level	Key Constraint, Quick Win or Cross-Cutting Issue				Time
Ensure that the cost of decommissioning oil rigs is covered by oil companies and that the process complies with the highest standards		⋈			LT
End the state monopoly on port operation to allow the entry of private port operators and vertically integrated shipping companies	🔑				ST
Review the rules and fees for storage and customs clearance outside the port to enable the establishment of dry ports and create an expedited customs-clearance process	🔑		⚡		ST
Update commercial and civil laws, and conduct a legal study to assess the pros and cons of accession to OHADA or adoption of its standards	🔑				MT
Train judges and court staff to specialize in commercial justice cases	🔑				MT
Introduce case-management techniques at the courts, including the collection of statistics to identify opportunities for efficiency gains	🔑				MT
Automate judicial procedures by using information technology systems and equipment	🔑				MT
Publish all judicial decisions at all levels to strengthen transparency and promote consistency			⚡		ST
Revise the insolvency law and create adequate institutional infrastructure and organizational capacity to enforce it					MT
Organize and publish all tax legislation online			⚡		ST
Allow taxes to be paid at any commercial bank			⚡		ST
Eliminate the paid-in capital requirement to start a business			⚡		ST
Make all customs and trade regulations available online			⚡		ST
Introduce a single point of enquiry responsible for answering all questions about import and export procedures					ST
Provide adequate resources to enable the Trade and Investment Promotion Agency (APCI) to effectively promote investment in close coordination with other agencies					ST
Develop an investor roadmap with clear timelines that devotes special attention to land-acquisition procedures					MT
Expand the online business-registration platform to include licensing modules					MT

Create an online registry for movable collateral to allow borrowers to secure loans with movable assets (e.g., equipment and machinery, receivables, and vehicles)	Key				MT
Create a risk-sharing facility to increase banks' risk appetite for small-business lending	Key				MT
Improve the credit information system by upgrading the credit registry and expanding financial reporting by businesses	Key				MT
Expand digital financial services to reduce operating costs and provide affordable accounts to unbanked individuals and small enterprises					MT
Implement the recommendations of the asset-quality review, with a focus on enforcing recapitalization requirements and upgrading prudential standards and supervisory skills.					ST
Upgrade the national payment system and connect it to the international credit card network			⚡		ST
Create a parcel-based land information system and ensure that cadastral processes are integrated with ownership information through a unique identification number	Key				MT
Harmonize institutional mandates on land administration to coordinate processes and avoid overlapping responsibilities or administrative gaps					ST
Propose nondiscriminatory policies and laws that recognize and protect the land rights of women, especially those in de facto marital unions				♀	MT
End state ownership and public management of rural land					ST
Clarify the regulatory framework for foreign investment in land and the rights of current owners					ST
Implement the Management Improvement Plan for the national water and electric utility (EMAE)	Key				ST
Launch a competitive bid for the first two energy generation projects identified in the Least-Cost Power Development Plan	Key				MT
Implement demand-side management measures in the electricity sector such as investments in energy-efficient lighting	Key		⚡		ST
Ensure stable funding for road maintenance through the National Road Fund	Key				MT
Acquire restacking equipment to allow more containers to be stored at the port and open space in the port hinterland	Key		⚡		ST
Equip the port with infrastructure to handle frozen cargo	Key				ST
Carry out a cost-benefit analysis to assess the economic viability of building a new port					MT
Obtain the EU certification (ACC3) for air-cargo exports	Key		⚡		ST
Acquire safety and security equipment for the airport	Key				ST
Provide English language and technical training for air-control staff					ST
Ensure that the entire airport and runway are securely fenced					ST
Resurface the airport apron					MT
Expand airport terminal					MT



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WHAT ARE THE CONSTRAINTS AT THE SECTORIAL LEVEL?

A. STP could reduce its agricultural trade deficit by addressing sectorial risks and focusing on competitive export products.

Agriculture accounted for 5.1 percent of STP's GDP in 2017. Agricultural land covers half of the national territory, and one-third of the population lives in rural areas. The gross value of agricultural production declined after independence in 1975, but began to recover following the market-oriented reforms of 1991. At independence, cocoa production represented about half of agricultural output, but cocoa production has fallen significantly in both absolute and relative terms. Since 1991, products for local consumption have comprised about half of gross agricultural production by value, with bananas and coconuts representing over 50 percent of sectorial output (Figure 48). An estimated 64,000 people live in rural areas in STP, or about 33 percent of the population. The 1990 agriculture census estimated that 44,760 hectares, or about 47 percent of the national territory (Figure 49) was agricultural land (PNSAN, 2012), with cocoa production accounting for the largest share of cultivated land area (FAOSTAT, 2016). Agricultural MSMEs operate in the agriculture and food sectors, where they focus on export markets for cocoa, chocolate, pepper, coffee, and dried fruits.

As STP runs a trade deficit in agribusiness products, improvements in agricultural production will positively impact the external accounts, helping to address one of the country's key macroeconomic challenges. Cocoa accounts for 89 percent of total exports, excluding reexports, while all other agricultural exports (pepper, chocolate, coffee, copra, dried fruits, seeds, nuts, foliage and flowers) represent an additional 11.9 percent. Overall, agricultural exports generate US\$9.2 million and represent almost 100 percent of total exports, excluding reexports. Imports stood at US\$132.8 million in 2018, of which 22 percent were food imports. STP is highly dependent on agricultural exports relative to comparator countries, and its reliance on a single crop, cocoa, is especially strong. Meanwhile, STP's food imports represent a larger share of total imports than those of comparator countries, which magnifies the impact of the agricultural sector's performance on the overall trade balance.

While STP will remain a net importer of food and agricultural products for the foreseeable future, agricultural reforms could reduce import dependence and expand exports. The animal feedstock and horticulture subsectors offer especially important opportunities for import substitution, and there is scope to expand palm oil and cocoa production. Given STP's lack of comparative advantage in the production of cereals for animal feed, importing cereals is the most efficient option to maintain the competitiveness of STP's livestock sector.⁸⁷ Export opportunities lie primarily in cocoa products as well as in emerging non-traditional agricultural exports.

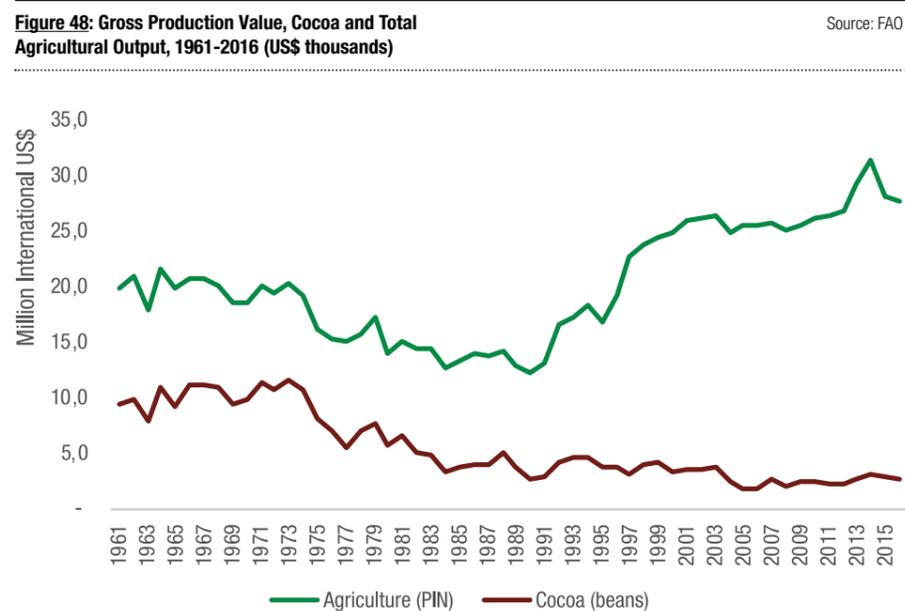
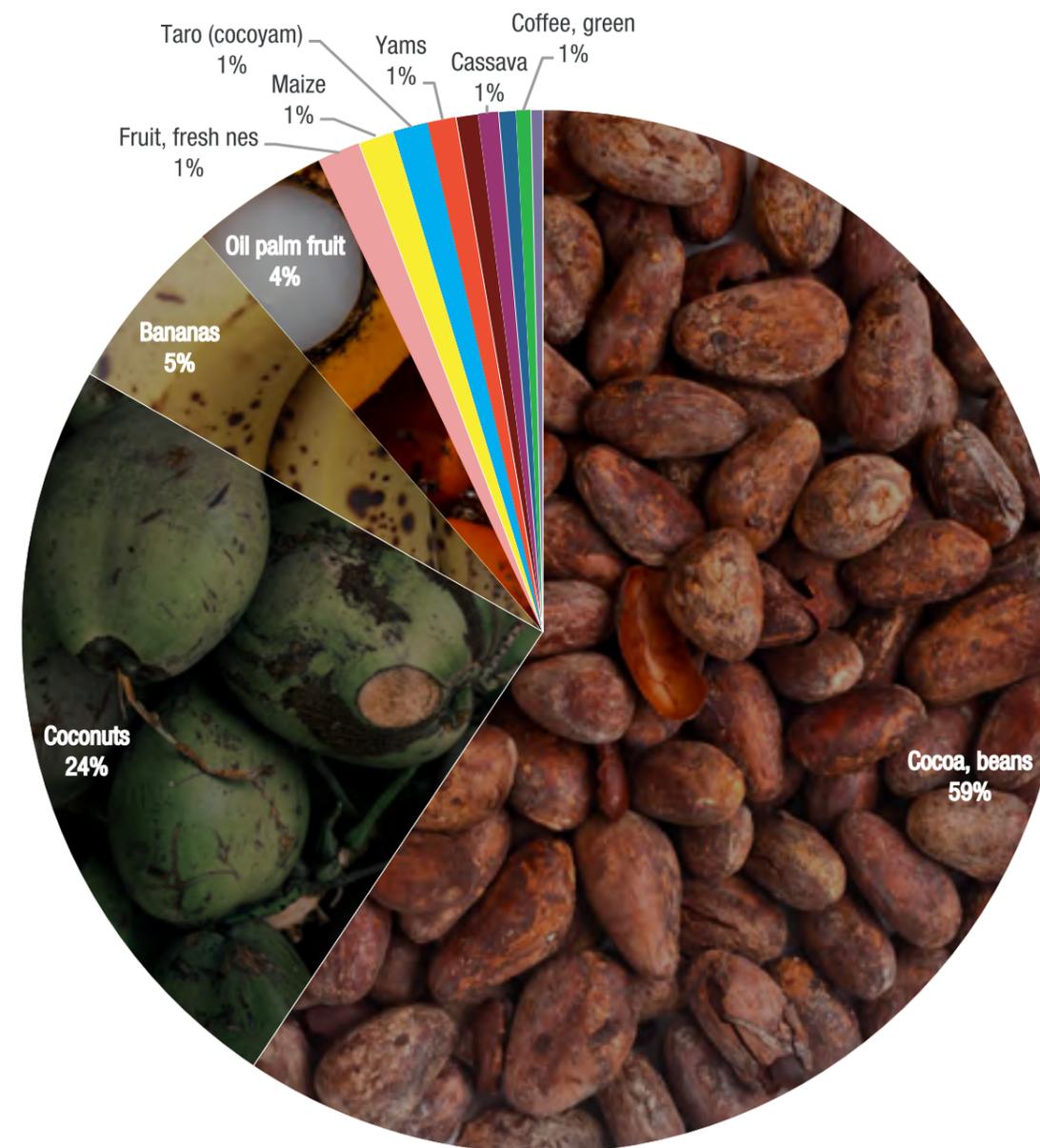
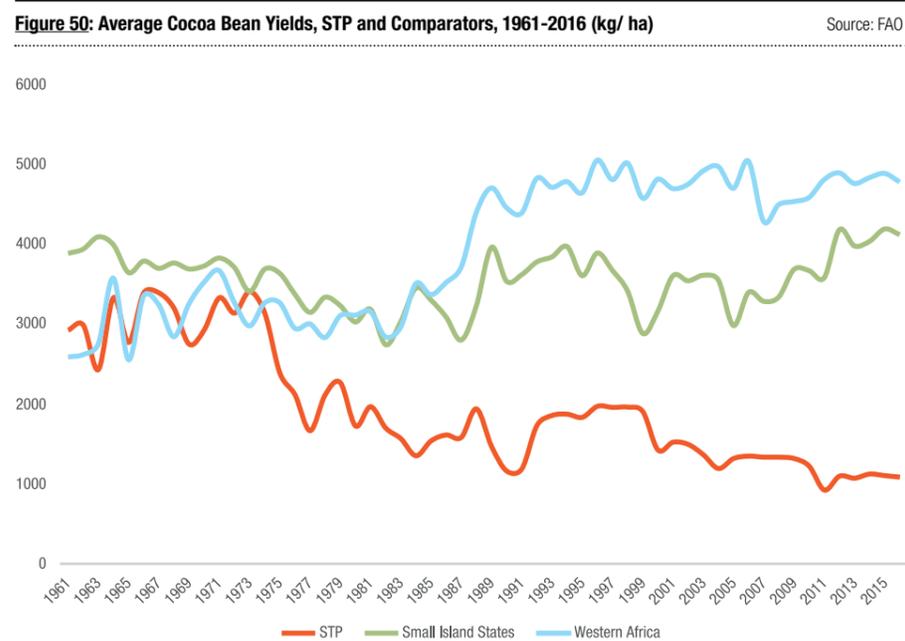


Figure 49: Agricultural land as a Share of Total Land Area, 2016 (%)

Source: FAO



Average yields for export commodities and local food products in STP are significantly lower than in comparators countries. STP's average cocoa yield per hectare is just one-fifth of the average for West Africa and one-fourth of the average for small island developing countries (Figure 50), while average banana yields in STP are 60 percent of the average of West African countries and half of the average for small island developing countries. Several factors contribute to STP's large productivity gap, including: (i) the low quality of agricultural research, education, and extension services; and (ii) high and unpredictable costs of agricultural logistics.



A country-level competitiveness exercise reveals that various existing, emerging, and potential rural supply chains could support a sustainable increase in STP's agricultural output and exports (Table 7). The following characteristics are vital to the competitiveness of agricultural products in STP:

- **High value-to-weight ratios.** The lack of economies of scale in transportation in a remote island renders large-volume products uncompetitive. Conversely, a high value-to-weight ratio can help overcome the challenges of reaching a commercially viable volume threshold.
- **Transportability by tourists.** Focusing on agricultural products that can be purchased and transported by tourists can help producers sidestep the logistical difficulties involved in exporting. Agricultural and rural-economy products that tourists can purchase and transport to their home countries become “embedded exports,” effectively representing a direct sale to the foreign consumer without the need to manage transportation logistics and the related expenses.
- **Low perishability and ease of storage.** Focusing on products that can be stored for long periods with minimal spoilage can help reduce losses during post-harvest handling and processing. Given the extended period over which products in a small economy must be accumulated before they can reach commercially viable shipment volumes, the stability profile of the product is critically important.
- **Compatibility with domestic household needs and tropical farming systems.** STP's high degree of dependence on imported food, and its vulnerability to trade-related shocks on both the supply and demand sides, heightens the importance of boosting production for domestic consumption. Reinforcing food security does not imply producing the same foods that are currently imported. Instead, products must be compatible with household needs and priorities (e.g., foods that can be produced as a supplemental business without significantly altering current household production patterns) and aligned with the parameters of tropical farming.
- **Climate-change resilience.** Farmers in STP report increasing challenges from rainfall variability, including droughts and flooding. Climate-change resilient agriculture includes plant or animal production that offers anti-erosive or erosive-neutral profiles, requires little water and can cope with a variable water supply, and that is less vulnerable to plant and animal pests and diseases, especially those that are likely to worsen as the climate changes.
- **Product differentiation based on origin.** High-value niche markets place a premium on products from unusual or unique origins, and remote provenance can offer price advantages that more than offset the higher costs of input procurement. STP can leverage its identity as the epicenter

of the historic cocoa trade and the pristine nature of the Príncipe Biosphere Reserve to claim a strong position in various premium supply chains. An unusual or unique origin can also increase tourists' demand for transportable goods.

- **Positive social and environmental identity.** Like the premium for goods from unique or unusual origins, products that have a positive environmental and/or social identity can command higher prices. Fair trade and environmental sustainability certification can help strengthen this identity in export markets. STP's recently approved biosphere apiculture code establishes a framework for harnessing the benefits of both a unique origin and a positive environmental identity for apiculture products such as honey and royal jelly.
- **Appeal to the diaspora.** While STP has experienced less emigration than some comparator countries, such as Cape Verde, the STP diaspora in Portugal is about 30 percent the size of the domestic population. Products that appeal to this market by capitalizing on nostalgia or cultural identity could offer unique opportunities for producers in STP.
- **Upward labor mobility.** Products that entail the adoption of agricultural innovations or the possibility of technology transfer through joint ventures with foreign partners can boost agricultural productivity. Given the modest value added to STP's agricultural production and the country's relatively high rates of literacy, workforce training and the introduction of new technologies could offer especially large returns.
- **High labor intensiveness/low land intensiveness.** Labor-intensive products that can be produced on a relatively small amount of land would align with STP's factor endowment, especially when they offer opportunities for specialization within the supply chain. While STP exports small amounts of ornamental plants, other tropical countries have succeeded in the market for high-value floral or ornamental certified seeds, a niche subsector that employs large numbers of semiskilled laborers in limited greenhouse areas.

TABLE 7: KEY COMPETITIVENESS CHARACTERISTICS OF STP'S AGRICULTURE VALUE CHAINS

	High Value-to-Weight	Portable by tourists	Low Perishability	Food security	CC resilience	STP uniqueness	Upward labor mobility	High Labor requirement
Cocoa	✓	✓	✓		✓	✓	✓	✓
Cafe	✓	✓	✓		✓	✓	✓	✓
Basic Grains			✓	✓				
Peppers	✓	✓	✓		✓	✓	✓	✓
Horticulture				✓	✓		✓	✓
Poultry				✓				
Swine				✓				
Palm Oil			✓					✓
Banana				✓	✓			✓

Cocoa production remains the dominant agricultural value chain and is positioned to expand even as other nontraditional value chains emerge. Linked to its unique identity, sustainable rainforest management, and pristine pesticide-free growing conditions, the cocoa sector establishes a precedent for other emerging chains, which could collectively contribute to the image of STP as a superior provenance for high-value agricultural goods. A successful strategy of utilizing tourism, particularly high-end ecotourism, as an essential part of the value chain could offer particular advantages to a small, isolated economy by utilizing direct sales to overcome export challenges while raising the profile of STP's goods in foreign markets.

BOX 5

Policy Recommendations for Key Agricultural Supply Chains

- **Cocoa and chocolate.** STP must reinforce its image as one of the highest-quality cocoa and chocolate producers in the world, based on its history, environmental advantage for organic production, and unique cocoa species, while investing in measures to make cocoa production more resilient to climate change. Efforts to integrate tourism and chocolate production by having tourists tour the plantations and learn about the harvesting, drying, and chocolate-making process would boost embedded exports while raising STP's profile as a superior provenance for chocolate. Financial innovations could allow smallholder cocoa farmers to lock in prices through fixed-price contracts with buyers, and the creation of a system warehouse receipts would enable them to borrow against their inventory.
- **Local horticulture and livestock.** These two supply chains produce for domestic consumption. The use of greenhouses has enabled local horticulture to flourish. Upgrading production technologies and utilizing water-management strategies would enable the sustainable expansion of horticulture. Meanwhile, the main constraint on livestock production is the inconsistent availability of feed. Improving agricultural logistics, including storage, and maximizing the utilization of available feed, is necessary to boost livestock output in a context where domestic feed production is not viable.
- **Spices.** Pepper production has grown substantially in STP based on the positive social and environmental image of organic pepper producers organized as a cooperative that is highly inclusive of women. The country and its development partners should now create financing arrangements to scale up production. Producers would also benefit from diversifying into other high-value spices such as turmeric and from investing in the rejuvenation of vanilla production.

Promising export value chains include cocoa spirits, cosmetics, and spices.

If cocoa pulp spirits or other spirits or liqueurs are produced on a commercial scale, they will become the country's highest-value export product, with no post-harvest or shelf-life issues. Similarly, if the experimental production of cosmetics and/or essential oils currently underway in Príncipe yield a commercially exploitable supply, it would provide an important new source of livelihoods and export revenue. The tourist marketing channel could facilitate the expansion of both industries, facilitating the gradual establishment of new markets abroad. Meanwhile, black-pepper producers are poised to expand their operations and could diversify into other spices.

Supply chains for import substitution have already been established, and the production of key local food products, including palm oil, horticulture, eggs, poultry, and swine, is expanding.

While self-sufficiency is not the goal, these import-substitution value chains collectively generate income and employment that rivals or surpasses that of the export value chains. These products are lower-value but offer large market volume accessible to a broad segment of producers, including those generating supplemental income. Import substitution also obviates the challenges involved in exportation.

Increasing local food purchases by the tourism sector are not expected to substantially alter conditions in the domestic food market.

Based on an average tourist stay of four days, STP's tourist population is estimated to equal just 0.2 percent of its total population, albeit with a much higher average income level. While the value of food sold to tourists visiting STP is likely to be significantly higher, on a per capita basis, than the value of food sold in the domestic market, the tourism sector's total demand for food should be modest relative to the size of the total domestic food market. However, given the importance of embedded exports, especially exports of unique or characteristic food items, ensuring the best quality foods are available for consumption and purchase by tourists should be a top priority. Embedded exports via tourism will continue to drive an increase in demand for similar food products by future tourists, as well as food exports to tourism source countries. Private investment in tourism-linked agriculture should focus on improving the quality of food products offered to tourists and eventually exported at premium prices.

Multiple sources of risk to the agricultural sector must be addressed by public policy. Key challenges include: (i) poor agricultural logistics; (ii) a lack of agricultural trade promotion; (iii) fluctuating cocoa prices; (iv) animal and plant diseases; (v) the lack of a unified agricultural policy; (vi) the lack of information and data to guide public policy and de-risk private investment; (vii) uncertain property rights and land tenure insecurity, as described in earlier sections; and (viii) the lack of adequate agricultural innovation support, including research, education, and technical assistance.



Agriculture can be competitive provided goods have some specific characteristics.

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Climate change poses a complex challenge to the agricultural sector. Precipitation and temperature are the two critical climate variables that threaten agricultural production. Between 1951 and 2010, average annual precipitation decreased at a rate of 1.7 mm per year. Similarly, March through May seasonal rainfall has significantly decreased since 1960 at an average rate of 10.5 mm per month per decade, while the extent of the dry season (gravana) has lengthened in recent decades. STP also experienced an increase of 1.5°C in average annual temperatures between 1951 and 2010. The number of disaster entries in the Emergency Events Database shows only three major events between 1900 and 2017, but the database may be underreporting other hazards with impacts at both the national and farm level. The World Bank's Climate Change Knowledge Portal⁸⁸ reports that floods frequently affect STP, especially, towns and communities along the coast, such as Praia Melão, Malaza, Santa Catarina, and Ribeira Afonso.

Private investment in increased resilience and risk mitigation will be necessary to manage the threat to agricultural production posed by climate change. A recent study of the prospective impact of different climate scenarios on the production potential of maize, matabala (taro), cocoa, and pepper found yield decreases exceeding 30 percent in the most extreme scenarios.⁸⁹ Given the vulnerability of STP's agricultural sector to climate variability and climate change, private investment will be necessary to increase resilience and reduce risks. Climate-smart agricultural practices and technologies may help STP: (i) increase the returns on private investment; (ii) improve adaptation and resilience to climate variability and climate change; and (iii) reduce greenhouse gas emissions.

Stakeholders have identified the economic losses and uncertainty generated by the agricultural logistics system as the most important obstacles to the development of sectorial value chains and the promotion of private investment. Farmers and agribusinesses cited logistics challenges as one of the key drivers of economic losses in

the sector, as they create new risks and increase farmers' risk exposure and vulnerability. In terms of frequency and impact, farmers classified logistical risks as the most commonly recurring issues leading to the largest losses.

Rural development policy has focused on hard infrastructure over agricultural logistics. The government and its development partners have invested in rehabilitating and expanding the rural road network and enhancing irrigation systems. However, there is no clear public policy for improving the agricultural logistics network, which includes port and airport services, warehousing, cold storage, safety standards for transport and storage, etc. Upgrading logistical infrastructure is crucial in STP, which faces inherent logistics challenges as a small island economy that cannot achieve the scale required for most maritime shipping.⁹⁰

STP has made little effort to promote its agricultural sector in international markets. Countries with an export-oriented agriculture sector often spend a significant portion of their budget on promoting their agriculture products abroad,⁹¹ opening new markets, and helping the sector manage the risk of changes in tariff and nontariff barriers in current export markets. The APCI has launched initiatives to facilitate trade processes (e.g., the single window for trade) and produces export guides, but it does not actively promote STP's food products in export markets or assist agribusinesses in overcoming export challenges or exploiting new opportunities.

Cocoa farmers have also identified price variations as an important source of uncertainty and a frequent cause of losses. Cocoa, like most agricultural products, is an internationally traded commodity with prices set by world markets. Moreover, since the farmer is paid only after the product arrives at the destination, STP's remoteness translates into an especially long wait between shipping and payment. Without warehouse receipts to enable advance payment, farmers must wait two to three months to be paid after delivering their product.

Animal and plant health programs are funded based on specific threats, with little investment in overall system strengthening. Funding for animal and plant health is allocated based on specific pests and diseases, such as avian flu, foot and mouth disease, rabies, tsetse fly, etc. The allocation of this funding is not based on probabilistic analysis, and private-sector representatives do not provide input into funding priorities or leverage co-financing.

STP lacks an overarching strategy for the role of the public sector in agricultural development.

Agriculture in STP is dominated by private farmers, cooperatives, and firms, but the public sector (including development partners) plays an important role in providing public goods and services, as well as direct support to farmers and cooperatives with the overall goal of reducing rural poverty, improving food security, and ensuring the sustainable management of natural resources. Without clarifying and circumscribing the public sector's purpose in agriculture, private investment in the sector will be suboptimal, as investors will factor in the risk of ad hoc policies changing the returns to investment.

Agricultural information and statistics are a key area for improvement, as a lack of information inhibits private investment in the sector. The lack of statistics on agriculture production, productivity, land use, inputs, and product prices directly impact investors' decisions by increasing uncertainty. Furthermore, public policies cannot be evaluated or improved without adequate data to assess progress, especially spatially disaggregated data at the district and community level. STP has not conducted an agriculture census since 1990, but a recent household survey

included agricultural production information and will provide useful insight into the current state of the sector.

The government's agricultural R&D and education priorities focus on specific value chains and selected regions. STP's Agronomic Research and Technology Center (*Centro de Investigação Agronômica e Tecnológica*, CIAT), which is responsible for providing public support to farmers to encourage the adoption of agricultural technology and improve plant and animal health, has limited budgetary and human resources, yet it is well organized and demonstrates a high degree of professional commitment. Currently, CIAT focuses on building agronomic expertise and investing in institutional strengthening, while agriculture research and extension services are mostly provided through donor-funded projects, with a focus on family farming. No private-sector input is involved in setting priorities for agriculture innovation investment or capacity building.

B. Improving air connectivity could boost tourist arrivals while policymakers continue to focus on high-spending segments of the tourism market.

Tourism is already an important economic activity in STP, but there is room to expand the tourism sector and increase its positive impact on other parts of the domestic economy. STP has seen a large increase in tourist arrivals over the last 10 years ([Figure 51](#)). Tourism is now a comparative advantage of the country and one of its most important private-sector activities and sources of employment. Tourism represents 10.8 percent of GDP, the 12th largest share worldwide, but the ratio between annual tourist arrivals and the population is 14.5 percent, only the 18th highest ratio worldwide ([Figure 52](#)).

The government has recently put in place a strategy to guide tourism development. In 2018, with the support of the World Bank and other development partners, the government completed its Tourism Strategic Plan.⁹² The plan's vision is to make STP the best-preserved island destination in Equatorial Africa, known for its unique natural environment, rich biodiversity, pristine beaches, local hospitality, and historical and cultural legacy of cocoa and coffee plantations. The implementation of the plan is still in its early stages, but a key priority is to sensitize the population to the importance of tourism and the opportunities and benefits it presents, while also emphasizing the responsibility of communities to preserve the key assets of STP's tourism sector, such as its natural habitats and beaches, public safety, and cultural heritage. The plan should help address some of the obstacles that inhibit STP's development as a tourist destination, including costly airfare, limited international and domestic air connectivity, inadequate cleanliness and sanitation, a lack of online presence, a small stock of human resources, poor internet connectivity, and low infrastructure quality, including private infrastructure such as hotels and leisure activities, tourist information, and financial services.

Figure 51: International Tourist Arrivals per Year, 2002-2017

Source: DGTH

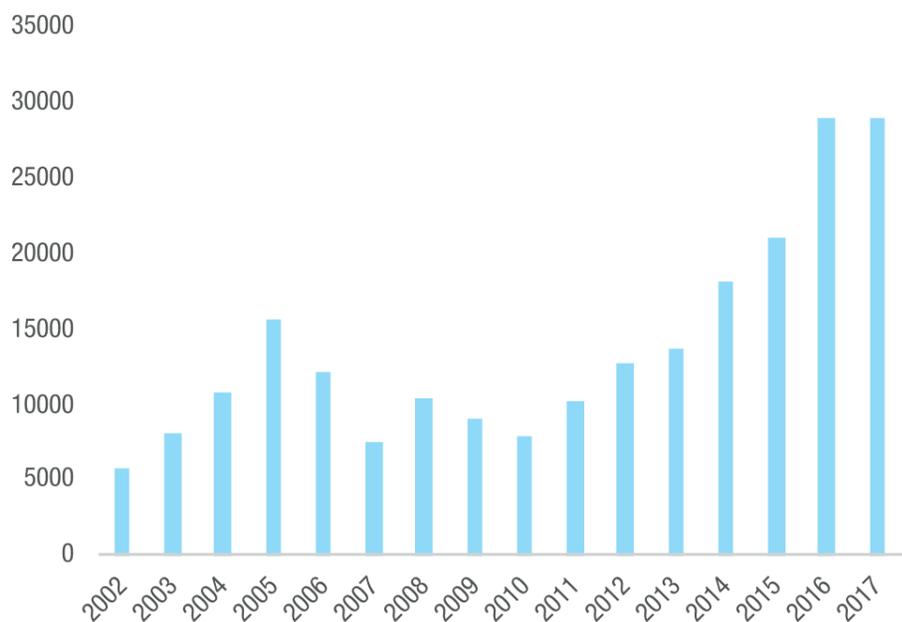
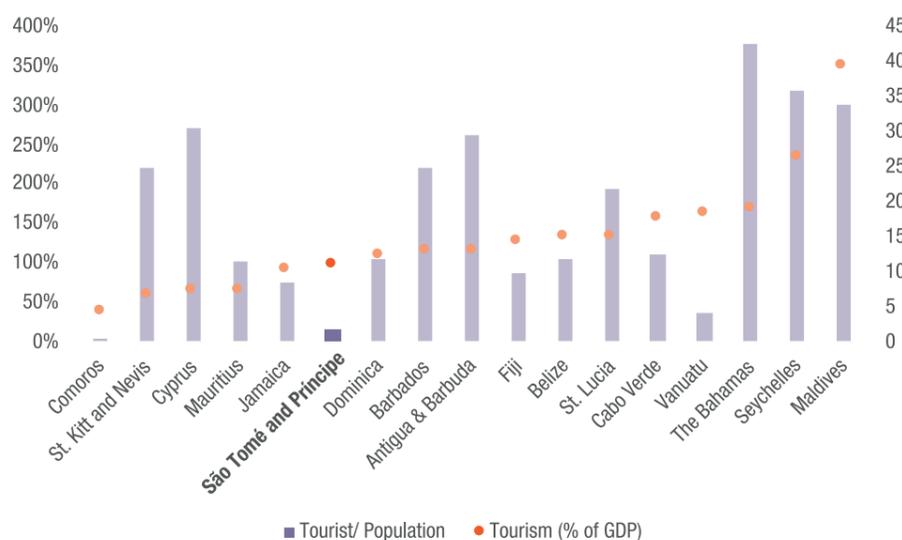


Figure 52: Tourist Arrivals Relative to the Total Population (right) and the Tourism Sector as a Share of GDP (left), STP and Comparators, Latest Available Data

Source: UNWTO



WHAT ARE THE CONSTRAINTS AT THE SECTORIAL LEVEL?

Policymakers must have an accurate understanding of STP’s natural environment and resources to maximize their economic value. STP’s ecological integrity and variety of natural experiences, such as bird and whale watching, must be preserved to support the development of tourism. As tourism increases, damage to natural resources could intensify if these resources are not properly managed. Increasing tourism will also require boosting the supply clean water and sanitation services, and it may increase demand for certain rare or high-quality foods.

Protecting São Tomé’s seafront will contribute to future tourism development, as the area has significant economic potential. Currently, the seafront is flooded about 10 times per year, when waves break over the seawalls. Due to poor maintenance and a lack of large-scale rehabilitation projects, the local transportation infrastructure has been extensively damaged, preventing the full exploitation of its tourism potential. While infrastructure investment is expensive, mitigating the impact of climate change will be critical to minimize economic disruptions and support tourism development. Efforts to strengthen the resilience of waterfront areas should utilize nature-based solutions and proper coastal zone management to maximize the value of economic development while conserving their natural capital.

The tourism sector offers many economic opportunities for women, but public policies must help women move beyond their current concentration in the lowest-paying jobs. Globally, the tourism sector offers more opportunities for women than many other sectors, and it can provide an especially conducive environment for upward mobility among women. In Africa, however, women make up an estimated 90 percent of the workers employed tourism sector’s lowest-paying jobs, such as servers, cleaners, and travel agency salespersons.⁹³ STP’s Tourism Strategic Plan notes that women represent 53 percent of STP’s tourism workforce, with significant evidence of occupational sex segregation. To leverage the tourism sector’s potential as a source of economic opportunity for women, policymakers and development partners must devote more attention to analyzing gender issues in tourism.

The positive impact of tourism on economic development is well documented in the international literature. Trade competitiveness is associated with higher GDP growth rates, and tourism, as an important export service, especially for small countries that may have limited export opportunities in other sectors. The contribution of tourism to economic growth is confirmed by Dritsakis (2004) for Greece, Balaguer and Cantavella-Jordá (2002) for Spain, Oh (2005) for Korea, Durbarry (2004) for Mauritius, and Tosun (1999) and Gunduz and Hatemi (2005) for Turkey. Cross-country studies by Sequeira and Campos (2006) and Brau et al. (2003) demonstrate that tourism-specialized countries grow more than others. Sinclair’s (1998) survey indicates that tourism boost growth primarily by generating foreign exchange, which can finance imports of capital goods—a critical step to becoming a SITE economy. Culiuc (2014) uses a gravity model to reveal that source countries’ income, real exchange rates, and bilateral trade flows all strongly impact tourist arrivals, though this effect is weaker for smaller countries (in line with the adequacy of the exchange rate peg). Wolfe and

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Romeu (2011) reached similar conclusions. Lederman and Maloney (2007) also find that tourism exports are more stable than other natural resource-based industries, which is important to STP, as its current export mix is relatively volatile.⁹⁴

The economic literature shows that tourism demand is affected by relative prices and income levels but also by a host of other factors. The price and income elasticities of tourism are specific to different types of tourism destination. Research also shows that tourism demand is affected by distance, air connectivity, language, culture, and bilateral trade ties, among other factors. More recent studies have emphasized the role of digital media and digital presence as a key determinant of tourist decisions. As an extensive qualitative analysis of STP's strengths and weaknesses as a tourism destination was already prepared for the Tourism Strategic Plan, this section presents a quantitative analysis of tourism determinants and examines how STP fares in relation to peer countries (Box 6).

BOX 6

An Empirical Approach to Tourism Estimations

Following the literature, two models were estimated to assess STP's tourism performance and the price elasticity of tourism demand. This first is a random-effect panel data model, which establishes correlation and association between the tourism outcome variables and a set of tourism determinants. The model thus produces a hedonic regression in which multiple characteristics are used as determinants of a given outcome variable.

The first model produces results that are in line with the standard conclusions of the literature: GDP in the source country and exports in the destination country are positively associated with tourism demand. The results suggest that a 1 percent increase in the number of seats available on inbound flights would boost tourism arrivals by 0.12 percent, with no impact on expenditures per tourist. Using the LGBTI environment analysis presented in

the CEM, the model explores the effect of changing criminal laws targeting the LGBTI community using a difference-in-differences approach. This analysis uses a dummy variable that takes the value 1 if the country does not criminalize the LGBTI community and 0 if it does.

The second model, a dynamic panel data model, was regressed to estimate the price elasticity of tourism demand.

This model is appropriate for this estimation for two reasons: (i) tourism arrivals and receipts are likely to have a clear temporal persistence; and (ii) data availability only allows the use of total aggregate tourist arrivals from all destinations. The so-called Nickel bias (i.e., that the model cannot be estimated consistently by conventional methods such as ordinary least squares or fixed effects) is addressed by estimating a model in differences (to eliminate fixed effects), with instruments used for the lag of the dependent variable following

the procedure developed by Anderson and Hsiao (1981, 1982). Since there are more instrumental variables than parameters, it is common to consider the Generalized Method of Moments (GMM) implementation used by Arellano and Bond (1991) and Blundell and Bond (1998). The empirical model used here is the Roodman (2009a, 2009b) GMM with collapsed instrumental variables.

The second model reveals two important findings. The first is that tourist arrivals and expenditures per tourist have a persistent effect, meaning that increases in one year tend to be maintained in future years. The second is that a real devaluation of the currency increases tourist arrivals, but by a smaller margin, and that currency appreciation also increases total expenditures, because expenditures per tourist increase more than tourist arrivals decline.⁹⁵

The analysis yields five findings, the first of which is that while STP performs well in terms of expenditures per tourist, it has scope to boost tourist arrivals. Using a comprehensive list of determinants and a hedonic model of tourist arrivals and expenditures per tourist, the empirical analysis reveals that STP had a lower number of tourists in 2016 than would be predicted by the model, but expenditures per tourist were larger than the model would predict. The rising level of spending per tourist in STP reflects the appreciation of the real effective exchange rate. However, the average spending per tourist includes airfare, which is costly due to the low competition for routes to STP. Airfare therefore tends to skew the figures for spending per tourist upward, and these figures do not necessarily reflect how much tourists spend at the destination.

The second finding is that the importance of improving air connectivity is verified by empirical analysis. STP could receive more tourists than it does. It has low ratios of tourists to population and to land area, and flight demand meets supply as measured by seats sold on incoming flights. Moreover, the international evidence clearly shows that more air connectivity benefits any tourism destination.⁹⁶ Increased competition among airlines could also reduce prices, as tourists who spend less money on transportation may have more to spend at the destination.

STP's poor air connectivity is reflected in the connecting flights needed to reach nearly all major tourism source markets. STP ranks low in centrality indexes for air connectivity, below the other five island nations in its comparator group.⁹⁷ Because most flights to STP originate in Lisbon, European tourists from anywhere other than Portugal typically need to fly to Lisbon and connect to STP. As connections decrease utility and propensity to spend on destinations, STP could greatly benefit from establishing connections to central hubs. Adding one weekly flight to a major hub would significantly impact STP's connectivity rankings. The tourism elasticity of seat availability is estimated at about 0.1, which means that a 10 percent increase in the number of available seats will boost tourism arrivals by 1 percent.

The successful experience of Cape Town demonstrates that improving air connectivity requires a concerted public and private effort. Air connectivity is a coordinated action problem: airlines will not increase the supply of available seats unless demand for service rises, but hotels and other tourist operators will not invest in expanding their capacity if air connectivity remains limited. Established in 2015, Cape Town Air Access is a collaborative effort led by the Cape Town and Western Cape Tourism Trade and Investment (WESTGRO), which includes other government agencies and private partners. WESTGRO's goal is to increase air connectivity between the Western Cape region and targeted African and international markets. After gaining the trust of its private-sector partners, WESTGRO was able to obtain data on hotel occupancy ratios, which it used to approach airline representatives at regional aviation conferences and convince them to increase flight frequency and create new routes. WESTGRO's private partners and airlines then cofinanced the marketing campaign for the new routes. The initial target was to establish three new routes in three years. In less than three years, WESTGRO had helped create 13 new routes and 15 route

expansions, boosting inbound capacity at Cape Town by 750,000 seats. In order to replicate this successful initiative, STP needs to improve the quality, reliability and timeliness of its tourist arrivals and occupancy ratio statistics.

The third finding is that increasing STP's digital presence could be a cost-effective means to boost tourism demand, though data limitations prevent a thorough statistical analysis. STP performs relatively well on digital-presence indicators, but with a high degree of variation across time. This may indicate difficulty in maintaining a consistent digital presence or the large influence of one-off factors such as publicity campaigns or events. A preliminary data analysis using Instagram posts reveals that only Belize and the Maldives were able to increase and sustain a significant presence on the platform over time. While STP converged with other peer countries, all remain at a low level of digital presence. The literature suggests that digital presence increases tourism demand,⁹⁸ and while this strand of the research is based on a limited dataset, there is enough evidence to justify efforts by both the public and private sector to boost STP's digital profile.

The fourth finding is that a positive attitude towards SOGI, as measured by criminal laws, is associated with an increase in tourist arrivals. A causal analysis shows that decriminalizing the LGBTI community has large positive effects on tourism development. The identification analysis, as is common in difference-in-differences in a dynamic panel data model, assumes that after controlling for observable characteristics, the timing of the implementation of the positive change in LGBTI legislation is not related to other tourism policies. Using a panel data set with 15 countries, the analysis explores whether legislative changes such as STP's decriminalization of the LGBTI community in 2012 are associated with changes in tourism arrivals. The LGBTI-tolerance variable is positively associated with tourist arrivals, and there is no relationship with spending per tourist. Assuming that, conditional on the countries' observed characteristics, a change in the LGBTI legal environment is not correlated with unobserved characteristics, the causal effects are valid and highlight the importance of SOGI tolerance and security for attracting tourists.

Decriminalizing the LGBTI community positively impacts tourist arrivals. A point estimate of 0.431, statistically significant at 5 percent level, implies that decriminalization increases tourism arrivals by 43 percent. Including additional control variables in the baseline model also produces a positive and significant effect of 0.273. There is also a positive, but not statistically significant, effect for expenditures per arrivals. The results indicate that tourist arrivals are very responsive to social and legal attitudes toward the LGBTI community.

SOGI inclusion in the tourism sector boost its contribution to STP's economic growth, while helping to reduce poverty including among some of the country's most marginalized people. While the analysis of per tourist spending in STP is inconclusive, cross-country data show that tourists that choose more tolerant and inclusive destinations tend to spend more money.⁹⁹ LGBTI people travel more frequently, spend more money than their economically comparable non-LGBTI counterparts, and are more likely to choose alternative destinations, which makes this segment an ideal

target for STP's tourism marketing. SOGI-friendly destinations naturally attract more LGBTI tourists, because the safety risks are lower, but they also tend to attract more tourists of all types. The growth of the tourism sector leads to higher overall employment rates,¹⁰⁰ which can reduce poverty, and anecdotal evidence suggests that many sexual and gender minorities work in the tourism sector.¹⁰¹ Thus, a thriving tourism sector would offer more opportunities for local sexual and gender minorities while contributing to STP's economic growth.

The fifth finding is that tourism demand in STP is not very price sensitive, validating the country's strategic focus on high-spending tourists over mass tourism. The price elasticity of tourism is less than one, while the elasticity of expenditures per tourist is higher than one. In this context, efforts to maximize revenues should focus on high-spending tourists. Since tourists' arrivals have a high degree of persistence (as measured by the autoregressive parameter in a dynamic panel data model), the long-term effects are large. STP's currency has recently appreciated against the euro and the US dollar, and the latest data confirm that this trend has increased total real tourist spending.

C. The overexploitation of fish stocks is a key challenge, and outdated and unsafe vessels, inadequate equipment, dilapidated and poorly managed infrastructure, and inadequate health and sanitation practices also present major obstacles to the fishery sector's development.

Fisheries have played an important role in STP's economic and social development, but poor management is contributing to the overexploitation of fishery resources. Fishing accounted for an average of 6.5 percent of GDP from 2013 to 2017. The national statistics office estimates that fisheries employ 4.6 percent of the employed workforce, and 89 percent of fishery workers are men. Coastal and marine resources are showing signs of full or overexploitation, especially around São Tomé island. Before an effort is made to increase production of fishery resources, more information is required on the status of fish stocks, as greater data collection and research are necessary to understand the potential of these resources and accurately estimate a level of sustainable management. This estimate would then inform the sector's legal framework and governance, and it would underpin the potential development of a co-management system¹⁰² between the national authorities and the fishing communities.

The physical environment limits the productivity of STP's territorial waters. The narrowness of the continental shelf, the lack of coastal upwelling, and the absence of large estuaries limit the productivity of demersal¹⁰³ fisheries. STP's

territorial waters cover around 165,000 km², but the area of the continental shelf (depths less than 200 meters), which is considered the most accessible fishing grounds for artisanal fishery, is limited to about 1,660 km². The marine, physio-chemical, and bathymetric environment around STP is more favorable to offshore pelagic¹⁰⁴ fisheries than to coastal demersal fisheries. In addition, STP's fisheries are largely influenced by the Guinea current,¹⁰⁵ especially around the island of Príncipe, with warmer sea surface temperature and relatively low salinity, while the southern part of São Tomé island is affected by upwelling, which lowers surface temperatures and increases salinity. These conditions are generally unfavorable for intense primary production. However, STP's territorial waters also include one of the important migration routes for tuna species in the Gulf of Guinea. These resources are mostly exploited by foreign fleets operating in the EEZ under private licenses or fishing agreements such as the Sustainable Fishing Partnership Agreement (SFPA) with the European Union.

Fishing activities in STP are mostly artisanal or small-scale commercial.¹⁰⁶ A small fleet of semi-industrial vessels operates in national waters and in Gabon, but the fleet is aging and lacks investment and infrastructure. STP has no domestic industrial fleet, but a foreign fishing fleet targeting tuna is licensed to operate within STP's EEZ. Tuna catches are not landed in the country and do not supply the national market or create opportunities for local value addition. Under STP's SFPA with the European Union, the government receives about 12 percent of the value added from industrial fleets operating in its territorial waters.¹⁰⁷ This revenue, combined with the sale of private licenses to Spanish-owned tuna vessels, equaled 0.2 percent of GDP in 2017. The main source of sustainable revenue from the fisheries sector is the selling of industrial tuna fishing licenses to EU vessels operating within the STP-EU SFPA or to private shipowners under bilateral fishing agreements. The small domestic fisheries sector is largely untaxed and operates with almost no restrictions on access.¹⁰⁸

The status of the stocks of demersal and pelagic resources in STP's territorial waters is largely unknown. Estimated catches by the domestic artisanal and semi-industrial fleets have increased steadily over the last 20 years, and in 2015 they totaled an estimated US\$22.2 million. The authorities do not regularly conduct any fishery research, due primarily to a lack of funding and research assets, and few data are available on catches by the national fleet or other factors that would allow for reliable stock assessments. In 2015, following a 10-year hiatus, fishery data collection resumed in STP with support from an FAO project.

While there is no reliable information to assess the status of stocks, the observed dynamics of small-scale fisheries indicate the full or overexploitation of resources, especially around São Tomé island. These dynamics include conflicts of use between fishermen from different communities, the territorial expansion of traditional fishing activities, the remoteness of fishing grounds, declining catch sizes for some high-value species, the localized scarcity of some species, and reports that rising fish prices have encouraged locals to catch sea turtles for consumption.¹⁰⁹ Meanwhile, there are abundant stocks of some offshore species, from which STP's fishing sector derives little benefit.

The impacts of climate change on fisheries can be organized around four vectors: acidification, sea-level rise, higher water temperatures, and changes in ocean currents. These different vectors, however, are not equally known,

and their effects can be hard to model, both in terms of scope and severity. For instance, the impacts of acidification are not well understood but are likely to be the most severe and widespread, as acidification affects essentially any carbon-dependent ecological processes. Likewise, the effects of sea-level change will be felt differently in different parts of the world, and will affect each ecosystem in unique and often unpredictable ways. Despite this uncertainty, the current state of knowledge is sufficient to conclude that these impacts will be felt at two fundamental levels: first on fish stocks themselves, and second, and perhaps more importantly, on the marine and coastal ecosystems on which those fish stocks depend. Fishing activities will be affected by sea-level rise and changes in the distribution of fish resources, but also by changes in the phenology and physiology of marine resources. An ongoing study of the impact of climate change on marine fisheries in Africa estimates that by the end of the century, STP's maximum catch potential could decrease by 40 percent.¹¹⁰

Poor sectorial management drives overexploitation and is a major challenge to fisheries development. The full or overexploitation of demersal species is inconsistent with a BE approach and leaves little scope for increased production, while the catch of pelagic species could be further developed. There are no controls on the number of fishermen, the number of boats, or catch sizes, which contributes to overexploitation. While the number of foreign vessels and their catch sizes are, in principle, regulated by a licensing system, in practice this system is largely ineffective. The licensing, monitoring, and payment systems are subject to multiple types of error, and no control system is in place to oversee compliance. Beyond minimal access regulations, few fishery-management measures are included in the legal framework, especially for domestic fisheries, and enforcement is generally weak.

The old, inadequate, and unsafe fishing fleet further constrains the sector's potential. Most fishing vessels are single-person, wooden, non-motorized, small-capacity boats. There is also a small and outdated semi-industrial domestic fishing fleet. The state of the fishing fleet is inconsistent with the sector's continued development and cannot ensure the safety of fishermen at sea. The supply chain for fishing equipment and related activities is also underdeveloped, prompting the government to supplant the private sector as the main importer and seller of fishing equipment. However, the government lacks the institutional and technical resources to carry out these activities in a sustainable manner.

The artisanal processing of fish products adds little value. Catches from national fishing activities supply only the domestic market, with no significant export flows. Most fresh-fish production (70 percent) supplies São Tomé and is sold in the city's central market. The fishery value chain includes three main segments: (i) production, which includes artisanal and semi-industrial fishing; (ii) fish trading, primarily by fishmongers (palayes), most of whom are women, and by wholesalers mainly supplying hotels; and (iii) the small-scale processing of fish products such as dried, salted, or smoked fish, which is mostly done by women. The production segment represents 63 percent of value added, followed by commercialization at 33 percent, while the artisanal processing of fish products represents just 4 percent of value added.



TABLE 8: POLICY RECOMMENDATIONS AT THE SECTORIAL LEVEL

LEGEND



recommendation addresses key constraint



recommendation embodies blue economy dimensions



reforms that can yield relevant gains in short period of time



recommendation addresses gender aspect



recommendation addresses SOGI aspect



short term



medium term



long term

STP lacks the appropriate infrastructure for handling, preserving, and commercializing fish, which imposes another key challenge to the development of the sector. High levels of post-harvest losses, including physical losses and losses of value, reflect a lack of conservation facilities along the entire value chain. STP also lacks properly equipped landing sites, and better post-harvesting facilities and new processing methods could increase value addition. An unreliable energy supply inhibits investment in post-harvest facilities, and innovative off-grid solutions could facilitate access to energy for fishing facilities and communities, which would reduce post-harvest losses.

175. Investments in new infrastructure should be accompanied by improvements in the governance and management of landing sites and trading centers. The government and STP's development partners have funded the construction of several modern facilities to land, conserve, and commercialize fish, but most are currently not working for various reasons, including a lack of local ownership to due to inadequate consultations with communities during the design phase, a mismatch between facility design and local needs, and weak facility management. Mismanagement and neglect have resulted in the rapid deterioration of built infrastructure due to a lack of use and maintenance.

Poor commercial infrastructure has severe consequences for health and sanitation. The city's central market, the most important trading location for fisheries product in STP, lacks conservation facilities, which heightens health risks and contributes to significant post-harvest losses. Recently, a new central market was built in Bobo-Forro, but it is not yet functional, and its distance from the city center of São Tomé might pose some challenges. A general lack of basic hygiene throughout the sector impacts the safety of fish products on the domestic market, increasing health risks for consumers and inhibiting access to export markets.

The investments necessary for STP to capture more of the value generated by industrial fishing are costly and risky. STP does not currently have a national industrial fishing fleet, and capturing more value-added from the industrial vessels operating in its waters would require substantial investment and regulatory reforms. STP would need to increase its economic linkages to the EU and non-EU fleets, which would require substantial investment to modernize port facilities and develop services such as unloading, transshipping, supplying, bunkering, repair, and maintenance. In addition, STP would have to compete with other ports in the region to attract these fleets. Consequently, the risks associated with such investments would be very high.

The development of a domestic semi-industrial tuna longline fleet would be less risky. Such a fleet would enable STP to capture a larger share of the value of tuna catches in the EEZ. The fleet, being based in STP, would also provide local employment opportunities, potentially for artisanal fishers, which could help ease pressure on coastal fisheries, allowing demersal stocks to rebuild. However, the government would need to invest in training the crew that would work on the tuna fishing fleet, and it would need to review its access rules and fishing fees.

Policy Recommendations at the Sectorial Level	Key Constraint, Quick Win or Cross-Cutting Issue				Time
Invest in the adoption of climate-smart agricultural technologies for farmers and agribusinesses		☞			MT
Develop a national medium-term agricultural strategy and policy, including an approach to private agribusiness development					ST
Increase the participation of private firms in the prioritization of public investments in agricultural infrastructure, innovations, and the management of plant and animal health risks					ST
Conduct an agricultural census					MT
Create an agriculture information system with data on prices, yields, land use, and other variables to strengthen the analytical basis for private investment decision and public policy formulation					MT
Promote agriculture products in external markets					ST
Introduce a system of warehouse receipts to enable producers to manage their inventory, hedge against price fluctuations, and use their produce as financial collateral					MT
Prepare the data analytics and strategy to approach airlines to expand air routes using a public-private alliance					ST
Harmonize tourism statistics across agencies and implement recurrent visitor surveys					ST
Invest in marketing, especially digital marketing, to enhance STP's image as a unique tourism destination		☞	♀	⊖	MT
Implement the national tourism and marketing strategy					MT
Improve the capacity of public agencies to collect data on the number of fishing boats and the volumes and types of species being fished	♀	☞			ST
Introduce co-management of landing-site infrastructure	♀				MT
Undertake research in collaboration with regional peers					MT

ENDNOTES

1. World Bank (2018). "São Tomé and Príncipe Public Expenditures Review: Addressing the Causes of Fiscal Fragility". Washington, D.C.
2. For more information on how to implement a comprehensive reform agenda in a challenging context, see: World Bank (2018) Angola Country Private Sector Diagnostic. Other analytical work on public-sector reform in small island developing states include World Bank (2008), Graham Hassall (2018), and Commonwealth Secretariat (2016).
3. According to the FAO, the gross value of cocoa production declined by 64.7 percent between 1975 and 2016, while the total value of the agricultural production increased by 71.4 percent.
4. In 2015, STP showed a revealed comparative advantage (RCA) index for travel services (based on total services) of 3.3, indicating a strong comparative advantage relative to the global economy. STP's RCA index score for tourism was higher than those of Belize, Cape Verde, Comoros, Fiji, Mauritius, and Seychelles.
5. According to the latest FAO data, the value of the country's cocoa exports dropped by 5 percent between 2016 and 2018, and the total value of its agricultural production declined by 11.7 percent between 2014 and 2016.
6. For each level of schooling, the gender parity index for gross enrollment is the ratio of girls' to boys' enrollment rates in public and private schools.
7. United States Department of State (USDS), 2017. Country Human Rights Report for São Tomé and Príncipe.
8. These figures are from unpublished data accompanying the report "Revue du projet VIH et hommes ayant des rapports sexuels avec d'autres hommes à Sao Tome & Principe" submitted to the Global Fund Project and UNDP by Dr. Cheikh Eteka Traore. Dec. 13, 2017.
9. Consultations with local informants, October 2, 11, 31, November 14, 2018
10. Center for International Environmental Law. Human Rights and Climate Change Working Group. Country Profile: São Tomé and Príncipe.
11. African Commission on Human and Peoples' Rights. 2014. 275: Resolution on Protection against Violence and other Human Rights Violations against persons on the basis of their real or imputed Sexual Orientation or Gender Identity.
12. Giaccotti M, Guglielmo A, Mauro M (2017) Efficiency and optimal size of hospitals: Results of a systematic search. PLoS ONE 12(3): e0174533. <https://doi.org/10.1371/journal.pone.0174533>
13. McIntyre, Arnold et al. (2018). "Economic Benefits of Export Diversification in Small States". *IMF Working Papers* 18/86. Washington, DC: IMF
14. See Lederman, Daniel, Samuel Pienknagura, and Diego Rojas. 2015. "Latent Trade Diversification and Its Relevance for Macroeconomic Stability." Working Paper 7332, World Bank, Washington, DC.
15. Bertram, G. (2006). "Introduction: The MIRAB model in the twenty-first century". *Asia Pacific Viewpoint*, 47 (1): pp1-13. The three models apply to both sovereign and non-sovereign islands.
16. Source: Forum da Diáspora Santomeense (www.diasporastp.org). Accessed on May 30, 2019.
17. Earlier accounts point to an even greater size of foreign aid in STP. (Frynas, Wood & Soares de Oliveira, 2003) shows that in 1995 external aid was close to 200 percent of GDP.
18. Bertram, G. and B. Poirine. (2017). "Island Political Economy." *A World of Islands: An Island Studies Reader*. University of Prince Edward Island/University of Malta, pp.325-373.
19. McElroy, J.L. (2015). "Sustainable Island Tourism." *Tourism Research Frontiers: Beyond the Boundaries of Knowledge*. Published online on July 23, 2015; pp.123-140.
20. This chapter follows broadly the "quick scan" framework put forward by the new CEM 2.0 approach sponsored by MTI. In short, the quick scan is a series of macro and micro level questions that aim to quickly identify the main characteristics of past growth and the challenges faced by the country to ignite or sustain growth.
21. Central planning was implemented gradually after 1975, and the local currency was not introduced until 1977. In addition, the availability of macroeconomic statistics prior to 1980 is very limited.
22. World Bank (2018). "São Tomé and Príncipe Public Expenditures Review: Addressing the Causes of Fiscal Fragility". Washington, D.C.: World Bank.
23. Ratio of female to male labor force participation rate is calculated by dividing female labor force participation rate by male labor force participation rate and multiplying by 100.
24. World Bank. 2018. Systematic Country Diagnostic for Cabo Verde.
25. USAID; the Williams Institute. 2014. The Relationship between LGBT inclusion and Economic Development: An Analysis of Emerging Economies; OECD. 2017. LGBTI in OECD countries; and Emler CA: Social, economic, and health disparities among LGBT older adults. *Generations* 201 6 Summer; 40(2): 16–22.
26. M.V. Lee Badgett, Laura E. Durso, Angeliki Kastanis & Christy Mallory. The Williams Institute. May 2013. The Business Impact of LGBT-Supportive Workplace Policies. p14
27. Badgett, M.V. Lee. 2014. The economic cost of stigma and the exclusion of LGBT people: a case study of India (English). Washington, DC: World Bank Group.
28. While fixed exchange rates can control inflation and reduce trade costs, they also entail a loss of monetary-policy autonomy and a possible loss of competitiveness.
29. IMF. 2015. Macroeconomic Developments and Selected Issues in Small Developing States. Washington, DC: International Monetary Fund.
30. Rogoff, Kenneth S, Aasim M Husain, Ashoka Mody, Robin Brooks, and Nienke Oomes. 2003. "Evolution and Performance of Exchange Rate Regimes." IMF Working Paper 03/243, International Monetary Fund, Washington, DC.
31. Current account = Goods & Services Exports – Imports + Net income receipts = Net saving – Investment = – (Financial account + Capital account)
32. Imam, Patrick. 2008. Rapid Current Account Adjustments: Are Microstates Different? IMF Working Paper 08/233, International Monetary Fund, Washington, DC.
33. International Monetary Fund (IMF). 2015. Macroeconomic Developments and Selected Issues in Small Developing States. Washington, DC: International Monetary Fund.
34. Roubini, Nouriel, and P. Wachtel. 1999. "Current-Account Sustainability in Transition Economies." *In Balance of Payments, Exchange Rates, and Competitiveness in Transition Economies*, by M. I. Blejer and M. Skreb, 19-93. Boston, MA: Springer.
35. Edwards, Sebastian. 2005. "The End of Large Current Account Deficits, 1970-2002." NBER Working Paper 11669, National Bureau of Economic Research, Cambridge MA.
36. Chinn, Menzie, and Eswar S. Prasad. 2003. "Medium-Term Determinants of Current Accounts in Industrial and Developing Countries: an Empirical Exploration." *Journal of International Economics* 59(1): 47-76. Duarte, Pablo, and Gunther Schnabl. 2015. "Macroeconomic Policy Making, Exchange Rate Adjustment and Current Account Imbalances in Emerging Markets." *Review of Development Economics* 19(3): 531-544.
37. IDA, 2017. Report of the Executive Directors of the International Development Association to the Board of Governors. Additions to IDA Resources: Eighteenth Replenishment, p. 45.
38. A rendezvous clause is a commitment to engage in negotiations on other policy areas at a later date. For example, the parties might agree to future negotiations on e-commerce.
39. The exploration and production process has five stages: (i) land acquisition & exploration, (ii) appraisal; (iii) development; (iv) production and maintenance; and (v) abandonment.
40. Arvis et al. (2019): Maritime Networks, Port Efficiency, and Hinterland Connectivity in the Mediterranean, Washington, DC: The World Bank.

41. See Arvis, Jean-François, Lauri Ojala, Christina Wiederer, Ben Shepherd, Anasuya Raj, Karlygash Dairabayeva, Tuomas Kiiski (2018): *Connecting to Compete 2018. Trade Logistics in the Global Economy. The Logistics Performance Index and Its Indicators*. Washington, DC: The World Bank.
42. Trade costs are the price equivalent of the difference between international trade and the potential implied by domestic production and consumption in the origin and destination markets. Trade costs are expressed as percentages ad valorem. Bilateral trade costs capture the impact of: (i) tariffs, (ii) nontariff barriers and restrictions (e.g., quotas, standards, etc.); (iii) geographical distances between partners; (iv) logistics performance; (v) international connectivity; and (vi) customs clearance and other border procedures for contiguous countries.
43. Available at <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=92>. No data available for East Timor.
44. A new version of the index is planned for 2020/21.
45. IATA (2016). Value of air cargo: air transport and global value chains.
46. Shepherd, Ben, Anirudh Shingal and Anasuya Raj (2016): Value of Air Cargo: Air Transport and Global Value Chains, published by Developing Trade Consultants, commissioned by IATA.
47. No data available for Guiné Bissau, St. Kitts and Nevis, and Vanuatu
48. Arvis et al. (2019), xxv
49. Suggested in the 2013 Diagnostic of Trade Integration Study.
50. In April 2019, TAP introduced a larger A320 airplane that could, in theory, carry more cargo.
51. ACC3 - Air Cargo or Mail Carrier Operating into the Union from a Third-Country Airport.
52. RA3 - EU Aviation Security Validated Regulated Agents.
53. WB Africa's Pulse (2019). Harnessing the Digital Revolution to Eradicate Poverty in Africa.
54. IMF Investment and Capital Stock Dataset (2017).
55. Trimble, Chris et al. "Financial Viability of Electricity Sectors in Sub-Saharan Africa: Quasi-Fiscal Deficits and Hidden Costs" World Bank Policy Research Working Paper 7788, The World Bank Group, Washington D.C.: 2016. In 2014, STP had the region's third-highest cost of electricity service in US\$/kWh billed after Comoros and Sierra Leone.
56. Energy generation is highly dependent on costly fuel. Most of the country's energy comes from low-efficiency thermal generators, leading to high fuel consumption and aggravating the structurally high cost of energy.
57. World Bank, 2016. Average tariffs in STP are high at 0.23 US\$/KWh, well above the median value of 0.15 US\$/kWh for 39 SSA countries.
58. World Bank, 2019. World Development Indicators. In 2016, 65 percent of the population had access to electricity, including 73 percent of the urban population and 51 percent of the rural population. A recent survey (Energy Access Diagnostic Results based on Multi-Tier Framework, WB, 2018), found that 69 percent of households have access to the electricity grid: 76 percent in urban areas and 59 percent in rural areas.
59. World Bank, 2017. São Tomé e Príncipe Transport Sector Development and Coastal Projection Project.
60. PPPs are 'risk sharing' arrangements between public and private entities. There is a wide range of PPP models, including concession agreement; design, build, operate (DBO). See <https://ppp.worldbank.org/public-private-partnership/agreements/concessions-bots-dbos>
61. The airport of the island of Príncipe is currently operated by a South African company under a concession by the government.
62. IMF (2019). Public-Private Partnerships in the Caribbean Region: Reaping the Benefits while Managing Fiscal Risks
63. See STP Public Expenditure Review, PIM chapter.
64. WB (2015). Infrastructure Regulation: Developing countries.
65. This term refers to the regulatory and institutional framework underpinning private-sector activity.
66. The ease of doing business score, formerly known as the distance to the frontier indicator, benchmarks economies with respect to regulatory best practices by showing the absolute distance to the best regulatory performance for each *Doing Business* indicator.
67. Business reforms are improvements in the regulatory environment in the areas measured by the Doing Business Index. The figure includes reforms to labor regulations.
68. Other sections focus on specific aspects of the business environment, such as land administration (Section VI.E) and the financial sector (Section VI.D).
69. Not all improvements in STP's regulatory environment fall under the scope of the *Doing Business* report.
70. According to the *Doing Business* methodology, the minimum duration of a procedure is one day, or half a day if it can be done electronically.
71. São Tomé and Príncipe Investment Promotion Strategy 2017-2019 (2016), prepared with support from the IFC São Tomé and Príncipe Investment Climate Project.
72. Decreto No. 57/2013.
73. The IFC São Tomé and Príncipe Investment Climate Project supported capacity-building to facilitate tourism investment and clarify the approval procedures for potential investors.
74. As of September 2018, total assets were estimated at US\$220 million.
75. In 2017, the average cost-to-income ratio for banks was high at 73 percent, and the average interest rate spread was also very high at 15 percent. Small financial systems lack economies of scale, making the provision of financial services more expensive and limited compared to larger systems. As most costs involved in the provision of financial services are essentially fixed, fewer customers and transactions make it more expensive for financial institutions to operate branch networks, computer systems, and corporate governance structures. The limited number of borrowers also makes it difficult to diversify risks.
76. Investments in tourism projects are primarily funded through FDI. From 2013-2017, total FDI was equivalent to 7.2 percent of GDP per year.
77. There is however a large share of credit (16 percent) that has not been classified, and therefore these sector allocations must be interpreted with caution.
78. Aside from lack of creditworthiness among small businesses, which is also a significant obstacle to accessing credit.
79. An effective secured-transaction framework ensures that security interests over movable assets are well defined, easily registered, and can be easily seized if a default occurs without the need for a judicial process.
80. This report defines a "risk-sharing facility" as a contractual arrangement that allows the investor or creditor to share part of the transaction's underlying risk with a third party. Examples of risk sharing include a guarantee provided by a public institution to a lender to cover part of the risk of default by a borrower or a life insurance contract provided by an insurance company to a lender to cover the risk of death of the borrower.
81. A risk-sharing facility is a pool of capital used to provide financial institutions with guarantees that cover part of the risk that borrowers will default. Governments worldwide have established and funded such schemes to incentivize credit to underserved segments. For more information, see F. Abraham and S. Schmukler (2017). *Are Public Credit Guarantees Worth the Hype?* World Bank Research and Policy Briefs.
82. Except for China and India, with their large number of farmers and government programs that subsidize premiums, developing countries have struggled to establish markets for agricultural insurance. Challenges include the high costs of designing and delivering insurance products that meet the needs of smallholder farmers living in sparsely populated rural areas, in addition to the difficulties in establishing proper actuarial models that can guide pricing decisions particularly in the context of climate change.
83. Law No.3/91 on Property Ownership. Art. 29
84. Goldstein, M., & Udry, C. (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of political Economy*, 116(6), 981-1022
85. Ali, D. A., Deininger, K., & Goldstein, M. (2014). Environmental and gender impacts of land tenure regularization in Africa: pilot evidence from Rwanda. *Journal of Development Economics*, 110, 262-275
86. *Folio real* systems record information about the land in question—as opposed to personal systems, which record information about the owner.
87. World Food Program (WFP).Revisão Estratégica "Fome Zero" – Horizonte 2030. April, 2018.
88. Climate Change Knowledge Portal (http://sdwebx.worldbank.org/climateportal/countryprofile/home.cfm?page=country_profile&CCode=STP&ThisTab=NaturalHazards)
89. African Development Bank (AFD).Infrastructure Rehabilitation for Food Security Support Project.Project Proposal.May 2015
90. Príncipe faces especially serious logistical constraints, including hurdles to on-loading and off-loading cargo.
91. The OECD average for public spending on agriculture promotion is 15 percent of total public expenditures on agricultural public goods and services, which include rural infrastructure, animal and plant health systems, agricultural research, extension and education, and the promotion of agriculture products.

92. The plan includes a map of STP's tourist attractions, which is presented at the end of this report.
93. UNCTAD, 2017. Economic Development in Africa Report 2017: Tourism for Transformative and Inclusive Growth.
94. Dritsakis, N. (2004). Tourism as a long-run economic growth factor: an empirical investigation for Greece using causality analysis. *Tourism Economics* 10, 305–316. Balaguer, J. and Cantavella-Jordá, M. (2002). Tourism as a long-run economic growth factor: the Spanish case. *Applied Economics* 34, 877–884. Oh, C. (2005). The contribution of tourism development to economic growth in the Korean economy. *Tourism Management*, 26, 39–44. Durbarry, R. (2004). Tourism and economic growth: the case of Mauritius. *Tourism Economics* 10, 389–401. Tosun, C. (1999). An analysis of contributions international inbound tourism to the Turkish economy. *Tourism Economics*, 5, 217–250. Gunduz, L. and Hatemi-J, A. (2005). Is the tourism-led growth hypothesis valid for Turkey? *Applied Economics Letters* 12, 499–504. Sequeira, T.N., Campos, C. (2006). International tourism and economic growth: A panel data approach. In: Matias, A., Nijkamp, P., Neto, P. (Eds.), *Advances in Modern Tourism Research*, 153–163. Brau, R., Lanza, A. and Pigliaru, F. (2003). How fast are the tourism countries growing? The cross-country evidence. *CRENoS Centro Ricerche Economiche Nord Sud, Working Paper N003-09*. <http://www.crenos.it/working/pdf/03-09.pdf>. Sinclair, M.T. (1998). Tourism and economic development: a survey. *Journal of Development Studies*, 34, 1–51. Culiuc, A. (2014). Determinants of International Tourism. *IMF Working Paper No. 14/82*. Wolfe, A. and Romeu, R. (2011). Recession and Policy Transmission to Latin American Tourism: Does Expanded Travel to Cuba Offset Crisis Spillovers? *IMF Working Paper No.11/32*. Lederman, D. and Maloney, W.F. (2007). *Natural Resources: Neither Curse nor Destiny*. Washington, DC: World Bank; Palo Alto, CA: Stanford University Press.
95. The euro real exchange rate is statistically significant for both fixed-effect and Sys-GMM cases, while the US dollar and British pound are marginally significant. As a result, a depreciation of the exchange rate results in general in an incremental increase in the number of tourists. When taking into account the long-run elasticity, they are less than 1 in all cases. Moreover, the test for those elasticities being equal to one is always rejected. When looking at the real effective exchange rate's effects on expenditures per tourist, the effects show that an appreciation of the local currency boosts total spending, because spending per tourist rises more than tourist arrivals decline. In this case the effects are negative and significant for all currency comparison cases. The long-run elasticity is close to -1 in all cases.
96. For a review of the econometric evidence for the Caribbean, see Acevedo, S., Han, L., Kim, H.S. and Laframboise, N. (2016). Flying to Paradise: The Role of Airlift in the Caribbean Tourism Industry. *IMF Working Papers* 16/33.
97. STP had only five inbound connections in 2016, placing it at the 12.3 percentile of the connectivity distribution.
98. Rauch, James, E., and Vitor Trindade. 2003. "Information, International Substitutability, and Globalization." *American Economic Review*, 93 (3): 775-791. emphasize the role that informational barriers play in restricting trade and show how private networks can overcome those barriers. This is part of a large literature that highlights the role of digital media in alleviating informational constraints (e.g., Leung et al.; 2013; Standing et al.; 2014, Li et al., 2018).
99. World Travel & Tourism Council, 2017.
100. Ibid.
101. Consultations with local informants, October 2, 11, 31, November 14, 2018
102. This is a partnership between the government, the local community of resource users, and sometimes NGOs, research institutions, or other resource stakeholders designed to share the responsibility and authority for managing a resource FAO Fisheries and Aquaculture Department, 2018. Rome. <http://www.fao.org/fishery/topic/16625/en> [Cited 6 March 2019]
103. Demersal species live close to the seafloor, such as cods, grouper, and lobsters (see FAO glossary at <http://www.fao.org/3/y3427e/y3427e0c.htm>)
104. Pelagic species spend most of their life swimming in the water column and have little contact with the seafloor (see FAO glossary at <http://www.fao.org/3/y3427e/y3427e0c.htm>)
105. Institute of Marine Research, Norway, 2010. Cruise Reports of Dr. Fridjof Nansen, EAF – N2010/5 – Survey of the fish resources of São Tomé and Príncipe, May 2010. FAO Project CCP/INT/003/NOR.
106. Defined in law as being carried out in the coastal zone, using a boat whose means of propulsion is the paddle, the sail, or the outboard engine and having an autonomy of less than 24 hours.
107. Caillart, B. et al., 2017. Évaluation rétrospective et prospective du protocole à l'accord de partenariat dans le domaine de la pêche durable entre l'Union européenne et São Tomé-et-Príncipe. European Commission.
108. The only tax is for boat registration by the Port Authority/Coast Guard.
109. Fourth National Report on the Biodiversity, 2009.
110. World Bank, forthcoming. "At the nexus of climate change and marine fisheries: assessing vulnerability and strengthening adaptation capacity in Africa." Washington, DC: The World Bank

