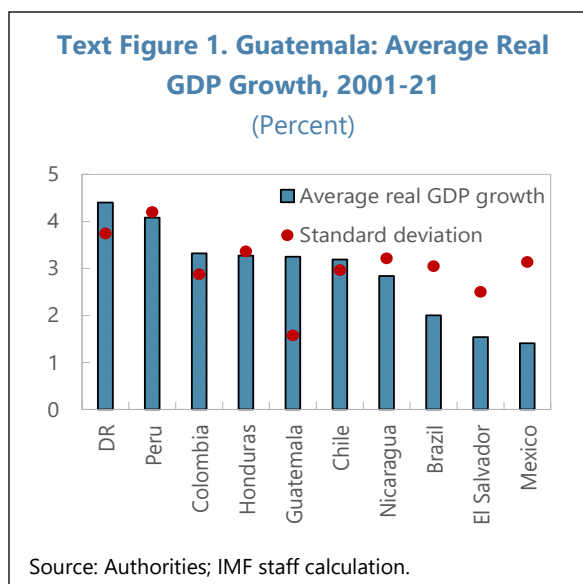


CONTEXT AND RECENT DEVELOPMENTS

A. Context

1. **Guatemala entered the pandemic with strong economic fundamentals but persistent social and infrastructure gaps.** Guatemala has enjoyed a prolonged period of macroeconomic stability underpinned by prudent fiscal management, credible monetary policy, and a sound financial system. This has resulted in moderate levels of debt, anchored inflation expectations, a strong external position, and the steadiest growth rate in Latin America in the past two decades (Text Figure 1). However, slow implementation of business climate and public sector reforms (including governance and anti-corruption), limited capacity for public investment and low quality and coverage of basic public services over the years have limited developmental progress.



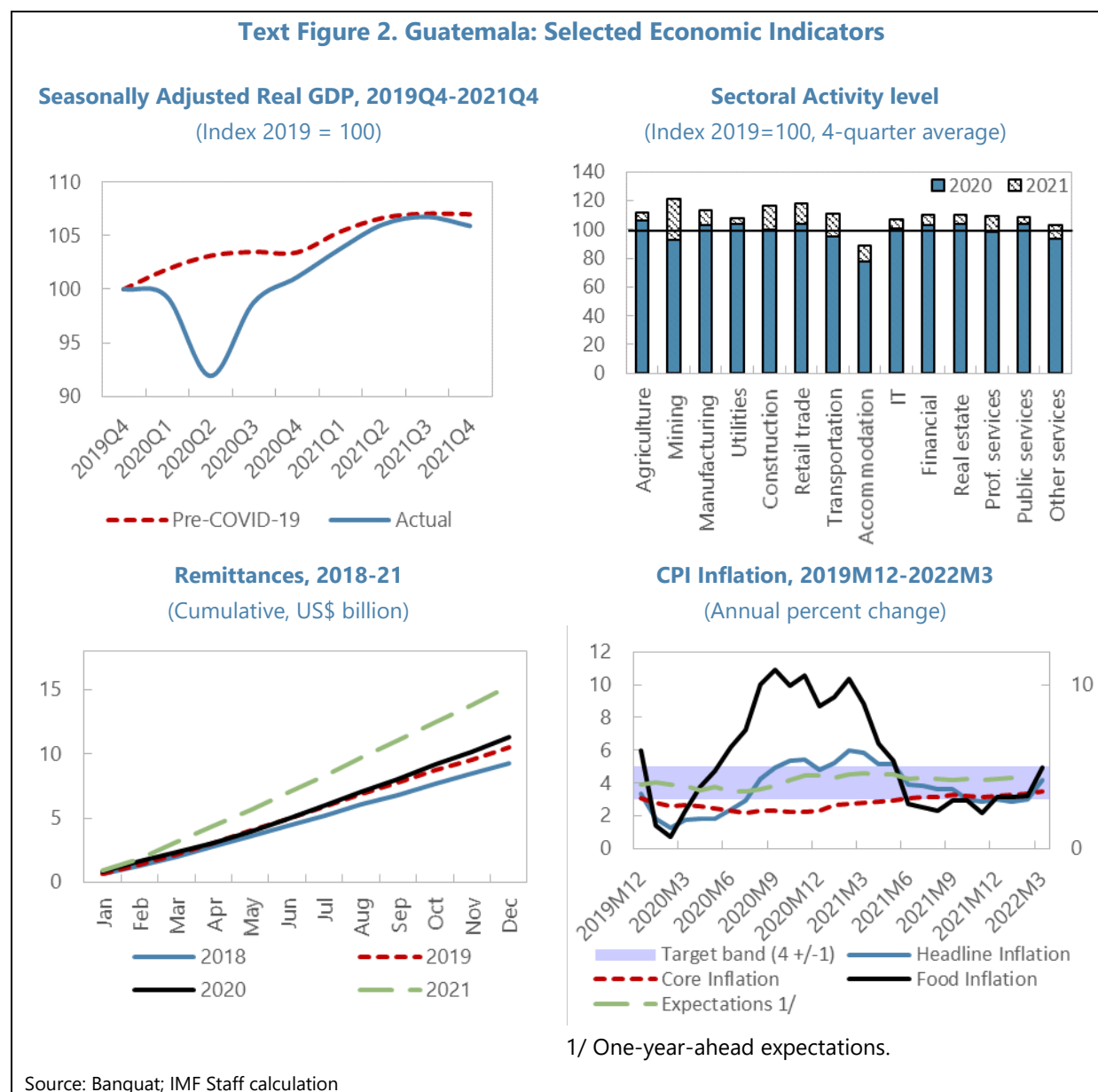
2. **A swift, coordinated, and comprehensive policy response mitigated the economic impact of the pandemic and paved the way for a robust recovery.** A fiscal package of about 2.3 percent of GDP was deployed in 2020 to protect the most vulnerable, improve healthcare capacity, and support SMEs. Banguat reduced the policy rate by 100 bps to a historic minimum and activated liquidity facilities. The Monetary Board relaxed reserve requirements and eased credit regulations temporarily to facilitate restructuring of bank loans. Despite lockdown measures and a collapse of external demand, the economy contracted moderately in 2020 supported by policy measures, remittances and a favorable production and export mix.

B. Recent Developments

3. **COVID-19 reported infections and deaths have been relatively moderate (Figure 1).** Infections and deaths have broadly tracked global waves. As of April 18, 2022, there have been 839,416 (4.8 percent of the population) confirmed cases of COVID-19 and 17,457 (0.1 percent of the population) deaths. About 35.8 percent of the population had received two doses of the vaccine. Authorities plan to reach 60 percent by end-2022.

4. **A strong and broad-based recovery in 2021 has almost returned output to its pre-pandemic trend (Text Figure 2).** The policy response, strong remittances inflows (concurrent with the strong economic rebound in the United States), a favorable external environment and accommodative credit conditions have supported private consumption, and an export and investment rebound. Real GDP growth at 8 percent in 2021 was led by the manufacturing,

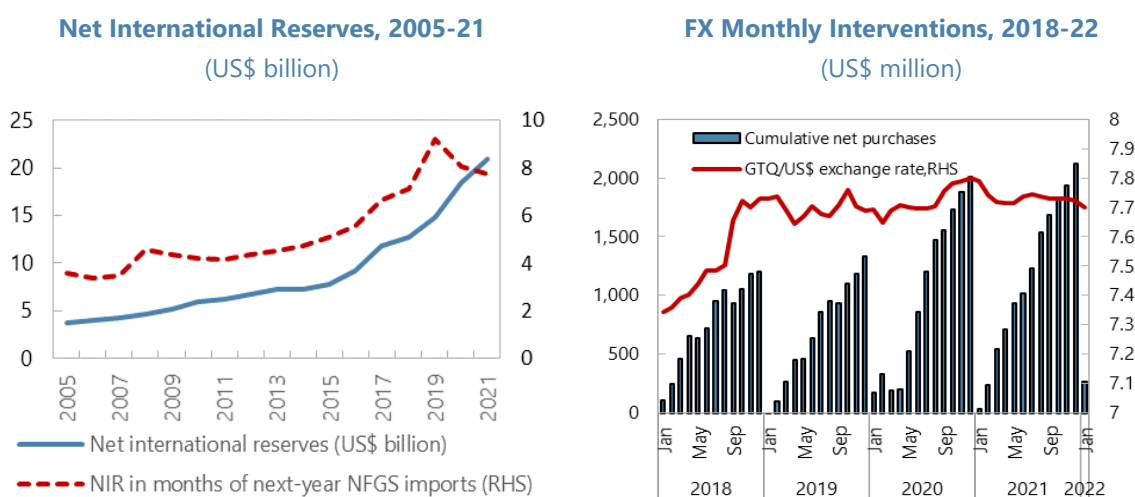
construction, trade and services sectors (transportation, hospitality and health), while formal employment regained its pre-pandemic level (Figure 2).



5. Inflationary pressures were contained in 2021, although there are some signs of external price pressures in the latest data. Temporary pandemic and climate-related disruptions led annual headline inflation to breach the upper limit of the target band (4 ± 1 percent) between 2020H2-2021H1. Thereafter, as those factors faded, headline inflation eased towards the lower limit of the target band. However, in line with global inflationary pressures and a closing output gap, inflation rates for food, some energy, and household goods have begun to increase since 2021Q4. Two-year ahead inflation expectations—as measured by Banguat’s surveys—remain firmly anchored around 4 percent.

6. Monetary policy has remained accommodative, and reserves rose in line with the current account surplus. The policy rate has remained unchanged at 1.75 percent since June 2020, over 200 bps lower than what a neutral stance would imply.¹ The GTQ/US\$ exchange rate was solidly anchored with little volatility in 2021, partly due to Banguat's FX market intervention policy.² Net international reserves increased by US\$2.5 billion to US\$20.9 billion in 2021 (7.7 months of next-year imports; Text Figure 3). There was also a contribution from the 2021 general SDR allocation (US\$ 586 million), which authorities intend to keep as reserves.

Text Figure 3. Guatemala: International Reserves and FX interventions



Source: Banguat and IMF Staff calculations.

7. The external position was considerably stronger than the level consistent with medium-term fundamentals and desirable policies in 2021.

- **Current account (CA) developments.** The CA balance declined from 5.5 percent of GDP in 2020 to 2.5 percent in 2021, as continued strength in remittances was more than offset by a substantial increase in imports in line with the economic recovery and weaker terms of trade.³ The strong inflow of remittances was accompanied by significant accumulation of reserves which helped maintain relatively stable GTQ/US\$ exchange rate and real effective exchange rate.
- **EBA CA assessment.** The EBA methodology suggests a CA norm of around -2.3 percent of GDP. As in the 2021 Article IV, staff made an adjustment of 2 percentage points of GDP to account for security conditions on investment (Annex I). Nonetheless, the CA norm remains below the CA

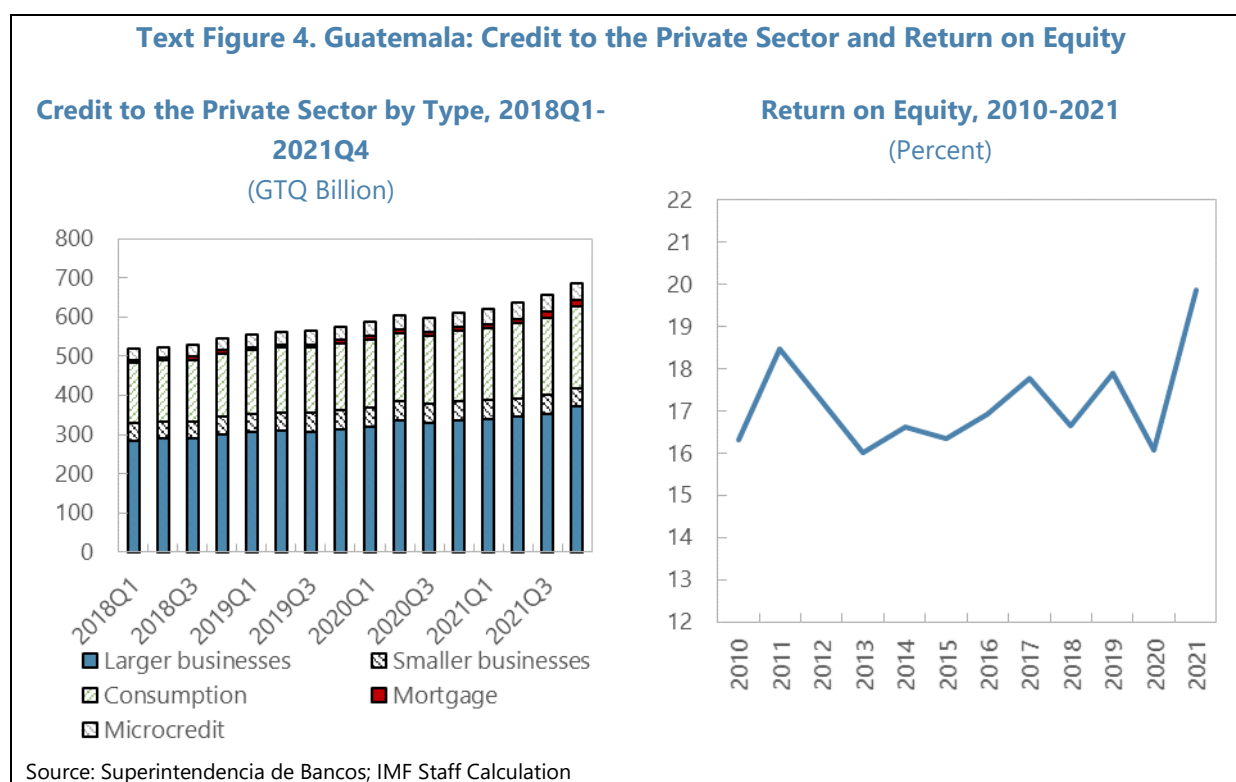
¹ Staff estimate the neutral real rate to be between 0 and ½ percent.

² Guatemala's *de facto* exchange rate arrangement is classified as stabilized arrangement.

³ Analysis in Annex VI, which statistically assesses the impact of remittances on other external sector variables, identifies a temporary but significant positive effect of remittances on imports in Guatemala.

deficit adjusted by pandemic-related factors of 3.3 percent. Assuming that the CA gap is closed by a further deterioration of the trade balance, the EBA model implies an undervaluation of the REER of 16 percent. While a REER appreciation may be effective at closing the CA gap, it may worsen the trade balance further. In this context, fiscal reforms that close infrastructure and social gaps (¶17-¶20) and structural reforms that improve business conditions, labor market outcomes and productivity (¶21-¶22), are crucial to attract investment and lower migration and remittance inflows.

8. The banking sector has remained resilient and profitable. All regulatory forbearance measures ended in 2021 with nonperforming loans estimated at 2 percent of total loans at end-December. Banks' capital adequacy ratio improved in 2021 and liquidity indicators have remained broadly in line with pre-pandemic levels. Private credit growth rose 12.1 percent y/y in 2021 driven by large corporates (10.2 percent) and consumer loans (15.1 percent), in line with the economic recovery. Deposits further increased in 2021 and banks' ROE reached its highest level since 2010 (Text Figure 4).



9. The 2021 fiscal balance improved by more than expected. (Text Table 1). Without Congress sanctioning a budget law, authorities operated within the 20220 nominal fiscal targets.⁴ The recovery, higher import prices, and tax administration gains boosted tax revenues to 11.7 percent of GDP in 2021. Total expenditure fell to 13.5 percent of GDP in 2021 due to the lapse of

⁴ Despite increasing the expenditure ceiling, the draft 2021 budget law sparked protests due to proposed social programs cuts.

pandemic-related programs (Text Table 2) and under execution of capital expenditure plans. Overall, a primary surplus of 0.6 percent of GDP was recorded in 2021.

Text Table 1. Guatemala: Fiscal Framework, 2019-22
(Percent of GDP)

	2019	2020	2021		2022	
	Est.	Est.	Auth. ¹	Est.	Budget	Proj.
Total Revenues	11.2	10.7	10.6	12.4	11.4	12.3
Tax Revenues	10.6	10.1	9.9	11.7	10.6	11.6
Direct Taxes	3.7	3.6	3.4	4.3	3.9	4.0
Indirect Taxes	6.9	6.4	6.6	7.4	6.8	7.6
Non Tax Revenues	0.7	0.6	0.7	0.6	0.7	0.7
Total Expenditures	13.5	15.6	14.0	13.5	14.1	14.6
Current Expenditures	10.7	12.6	11.2	11.2	11.5	12.0
Consumption Expenditures	5.9	6.3	6.2	6.4	6.7	6.7
Interest	1.6	1.7	1.9	1.7	1.5	1.7
Transfers	2.3	3.7	2.2	2.2	2.6	2.6
Other	0.9	0.9	0.9	0.8	0.8	0.9
Capital Expenditures	2.7	3.0	2.8	2.4	2.6	2.7
Primary Balance	-0.6	-3.2	-1.5	0.6	-1.3	-0.6
Fiscal Balance	-2.2	-4.9	-3.4	-1.2	-2.8	-2.3

Source: Ministry of Finance; IMF staff calculations.

¹ Authorities budget within the 2020 nominal targets.

Text Table 2. Guatemala: COVID-19-related public expenditure, 2020-22
(Percent of GDP)

	2020	2021	2022
	Est.	Est.	Budget
Total expenditure	2.3	0.4	0.4
Health expenditure	0.2	0.4	0.4
of which: vaccines	0.0	0.2	0.1
Priority Social Expenditure	2.0	0.0	0.0
of which: social protection and household support	1.4	0.0	0.0
of which: food program	0.1	0.0	0.0
Business Support	0.1	0.0	0.0

Source: Ministry of Finance; IMF staff calculation.

10. Congress passed a budget law for the first time since 2019. The 2022 budget law envisaged an overall deficit of 2.8 percent of GDP, driven by a 0.6pp increase in public expenditure and a 1pp decline in revenues. The implied fiscal impulse is estimated at 1.9 percent of GDP. Since the start of the war in Ukraine, authorities have announced temporary measures (around 0.2 percent

of GDP) to mitigate the impact of recent energy and food price increases,⁵ as well as an infrastructure budget increase equivalent to 0.45 percent of GDP. These measures—support to the vulnerable plus infrastructure—will be largely financed by cash resources accumulated in 2021 due to the better-than-expected fiscal outturn. Overall, authorities estimate a 2.2 percent of GDP overall deficit and a fiscal impulse of 1.1 percent of GDP, given updated revenue projections and assuming historical expenditure execution rates.⁶ Consistent with authorities, staff projects an overall deficit of 2.3 percent of GDP.

OUTLOOK AND RISKS

11. The economy is expected to fully return to its pre-pandemic trend in 2022, while inflation is projected to pick up in line with global price pressures. Real GDP growth is projected at 4 percent in 2022 supported by a favorable policy mix, continued recovery of lagging sectors (such as tourism), still favorable credit conditions, and the resilience of the U.S. economy (including the strength of its labor market), spurring robust remittances. Driven by external price pressures, inflation is projected to increase but remain within Banguat's target band (4 ± 1 percent) averaging 4.4 percent in 2022. Medium-term growth is expected close to potential (around $3\frac{1}{2}$ percent) while inflation is projected to gradually return to the midpoint of the inflation target band in response to policy normalization and abatement of global inflationary pressures. Fiscal prudence is expected to continue, stabilizing public debt around 30 percent of GDP (Annex II).

12. Higher import prices and slower growth in remittances—in line with lower U.S. growth—are projected to further deteriorate the trade balance in 2022. Further ahead, the CA balance is expected to return to surplus as commodity prices ease, tourism gradually recovers, while remittances decelerate from their pandemic-related surge. Absent substantial structural reforms to foster investment, FDI (in percent of GDP) is projected at the pre-pandemic average during 2015-19 (1.3 percent of GDP).

13. Key public appointments are scheduled in 2022, ahead of the 2023 general elections. These include the selection of the Attorney General (17 May), the Human Rights Attorney (20 August), and the Comptroller General (6 December). These processes are crucial for Guatemala's governance framework. The 2023 elections (President and Congress) are expected to cause further delays to the legislative agenda.

14. There are significant, mostly external, downside risks (Annex IV). The Guatemalan economy faces a highly uncertain external outlook, including from the war in Ukraine and new COVID-19 variants. De-anchoring of inflation expectations in advanced economies, continued global supply chain disruptions, and potential changes to investor risk sentiment could all lead to an abrupt tightening of global financial conditions. Elevated and volatile commodity prices, amplified by the

⁵ These include decrees to: extend gas subsidies for 90 days that support the cooking of low-income households, a subsidy to small farmers to deal with higher input prices, a subsidy to the price of diesel and regular gasoline and an electricity subsidy to benefit about 170,000 new households.

⁶ As of March 2022, revenues had exceeded authorities' targets by 0.3 percent of GDP.

war in Ukraine, introduce additional uncertainty and could accelerate global inflationary pressures and slowdown external demand. Social discontent could be triggered by rising food and energy prices affecting the most vulnerable or during the selection of key public officials.

POLICY DISCUSSIONS

In the near term the pace of policy normalization—led by monetary policy—will need to be carefully calibrated and communicated to mitigate inflationary pressures and the possible materialization of downside risks. To boost inclusive medium-term growth, overcome long-standing bottlenecks and build resilience against climate change, authorities should create durable fiscal space to address infrastructure and social gaps, foster private sector investment through a more efficient business environment (advancing governance and anti-corruption reforms, addressing labor market weaknesses and security concerns) and strengthen the financial system and financial inclusion. The structural reforms agenda should be carefully crafted to be ambitious but realistic given the limited political space.

A. Navigating and Sustaining the Economic Recovery

15. Authorities' policy mix is expected to support the recovery in 2022 amid elevated uncertainty. The policy mix is expected to remain supportive in 2022, amid global uncertainties, as a gradual data-driven normalization of monetary policy will be aided by a more expansionary fiscal policy stance.

- **The fiscal stance** in 2022 is appropriate. The approved 2022 budget plus rightly announced temporary initiatives to mitigate the impact of higher import prices as well as the increase in the infrastructure budget—using fiscal space created in 2021—will support the recovery. If economic conditions worsen, authorities should stand ready to increase targeted transfers temporarily, for example by re-deploying some of the 2020 social measures, to shield the most vulnerable and contain risks of possible social discontent.⁷
- **Monetary policy** has adequately supported the economy through the pandemic while steering inflation and inflation expectations towards the mid-point of the target band. Normalization must be carefully calibrated amid tighter global financial conditions and remain data driven. The timing of a policy change is also crucial as a delayed reaction could de-anchor inflation expectations and necessitate greater-than-initially-warranted policy rate increases that could derail the recovery. A clear and consistent communication strategy can provide support by further guiding market expectations, while greater exchange rate flexibility can also help absorb external shocks.

⁷ Temporary, targeted transfers are considered appropriate to protect low-income households from energy and food price increases in the context of Guatemala. If targeted transfers are not readily available and while capacity is being developed, the temporary energy subsidies announced by authorities are deemed as second-best substitutes to support the vulnerable.

16. Banguat could consider making additional upgrades to its inflation targeting framework (ITF) through greater FX flexibility, and further communication improvements.

Reflecting Banguat's FX intervention policies, the quetzal has been one of the most stable currencies in the CAPDR region in recent years. These policies have led to a sizeable accumulation of international reserves amid sizeable remittances inflows, often exceeding those suggested by the rule-based framework. Despite effective sterilization of FX interventions, bank liquidity has remained relatively ample with excess liquidity lodged at the central bank. This has also led to limited credit penetration and the under development of a secondary interbank market, further mitigating the effectiveness of monetary policy transmission.⁸ Hence, FX interventions should be limited to addressing disorderly market conditions and remain rules-based, with the rationale of such interventions clearly communicated to avoid misperceptions about Banguat's policy objectives thereby helping to anchor inflation expectation further. Moreover, FX interventions have contributed to Banguat's losses in recent years, eroding its capital base.⁹ In that context, recapitalization of the central bank, in line with Article 9 of Banguat Law, would help to reduce excess liquidity in the banking system, further develop the local currency bond market¹⁰ and enhance the central bank's credibility further. On the latter, Guatemala's ITF framework has led to notable transparency and credibility gains. Additional refinements to the forward-looking communication strategy could be made by providing stronger emphasis on the prospects for monetary policy under the baseline and sensitivity scenarios, consistent with the growth and inflation projections and risk scenarios.¹¹

B. Addressing Long-Standing Social and Infrastructure Gaps

17. Addressing social and infrastructure gaps, while remaining fiscally prudent, crucially depends on higher tax revenues and spending efficiency improvements. Over the medium term, authorities envisage countercyclical fiscal policies, led by a gradual reduction of the fiscal deficit to 1.4 percent of GDP by 2026 to rebuild buffers (Text Table 3). Relative to the proposed budget for 2022, this corresponds to a 1pp of GDP reduction in primary expenditure (to historical averages) and a 0.4pp of GDP increase in total revenues.¹² Enhancing social transfers, spending efficiency (including tax spending), and increasing tax revenues (including the reduction of tax exemptions) could help reduce social safety and infrastructure gaps while helping narrow the CA gap and maintaining fiscal sustainability. In this regard, recent progress on tax compliance improvements—including strengthening of the clearance process and imports valuation controls in customs and enhanced control of medium and large taxpayers—and implementation of digital invoices are welcomed.¹³ Authorities are considering improvements to their procurement law and

⁸ These developments had occurred prior to the pandemic, see IMF Country report 19/168.

⁹ The Fund has provided technical assistance (TA) in this regard (Annex VII).

¹⁰ IMF Country report 21/111.

¹¹ Annex VII for details on how Fund TA has supported modelling and forecasting improvements in Banguat.

¹² Staff projects a fiscal balance of -1.8 percent of GDP by 2026, due to more conservative tax administration gains and higher interest payments than the authorities.

¹³ Annex VII for details on how Fund TA has supported the tax agency (SAT).

could further leverage transparency and digitalization efforts¹⁴ in line with proposed measures under the 2020-2024 *General Policy of the Government* and pursue a reform of the civil service and salaries laws to align compensation with performance and promote recruitment based on merit. Building on progress in recent years, it is essential to further enhance the public finance management framework (PFM)¹⁵ which will also create fiscal space to address social and infrastructure needs.

18. Further emphasis on policies that address long-standing social gaps is necessary to alleviate poverty and strengthen social cohesion.

Low social transfers (below 0.1 percent of GDP in recent years) only reach a small percentage of the population relative to those living in poverty (estimated at around 46 percent of the population in 2019).¹⁶ They are concentrated in the Department of Guatemala (which has the lowest poverty rate), leaving rural areas with minimal access to public services (Text Figure 5). Allocating additional resources to assess poverty and priority social needs periodically could improve the calibration and targeting of policies and yield a more results-based approach to tackle long-standing social gaps. In this regard, the completion of the ongoing *National Households' Income and Expenditure Survey (ENIGH)*¹⁷ is essential as well as current initiatives such as a pilot program to collect data on poverty, nutrition, and housing conditions. Meanwhile, priority social spending could be scaled up using existing fiscal space and leveraging upon the experience gained with the *Bono Familia* program.

Text Table 3. Guatemala: Multi-year Budget, 2022-26
(Percent of GDP)

	2022	2023	2024	2025	2026
Total Revenues	11.4	11.6	11.7	11.8	11.9
Tax Revenues	10.6	10.9	10.9	11.0	11.1
Non Tax Revenues	0.7	0.8	0.8	0.8	0.8
Total Expenditure	14.1	13.9	13.7	13.4	13.2
Primary Expenditure	12.6	12.3	12.1	11.9	11.7
Interest	1.5	1.6	1.5	1.5	1.5
Primary Balance	-1.3	-0.7	-0.4	-0.1	0.2
Fiscal Balance	-2.8	-2.3	-2.0	-1.6	-1.4

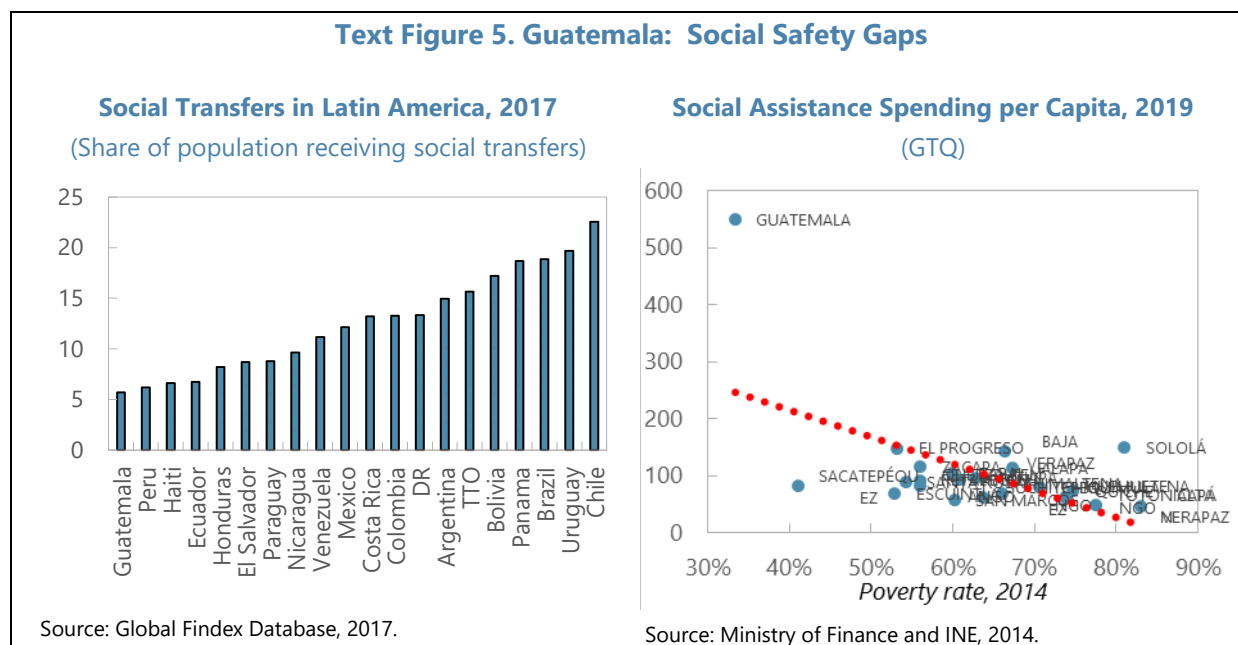
Source: Ministry of Finance, Budget Law 2022-26

¹⁴ The Ministry of Finance publishes all expenditures on its transparency portal and disseminates all procurement contracts, (including publishing Covid-19 related beneficial ownership—through the individual tax identification number—and legal entities awarded contracts) through its comprehensive procurement (Guatecompras) portal (see IMF Country Report 21/111). The Comptroller General produces annual auditing reports that are presented to Congress, with the next one—which will cover 2021—scheduled for May, as well as performance reports, see <https://www.contraloria.gob.gt/index.php/informes-de-gestion/>. The 2020 report submitted to Congress last year (<https://www.contraloria.gob.gt/wp-content/uploads/2022/02/memoria-de-labores-2021-02-02-2022.pdf>) included a summary on COVID-19 related audit activities.

¹⁵ Box 3, IMF Country Report 21/111 highlighted areas for PFM improvement. In this sense, recent Fund TA has supported improvements to macroeconomic forecasting and debt sustainability analysis as well as making recommendations for better management of the single Treasury account (Annex VII).

¹⁶ Source: The World Bank. The latest official estimate is for 2014, where the poverty rate was at 59 percent.

¹⁷ The last ENIGH was published in 2014. The IMF is providing TA to support the compilation and analysis of the survey (Annex VII).

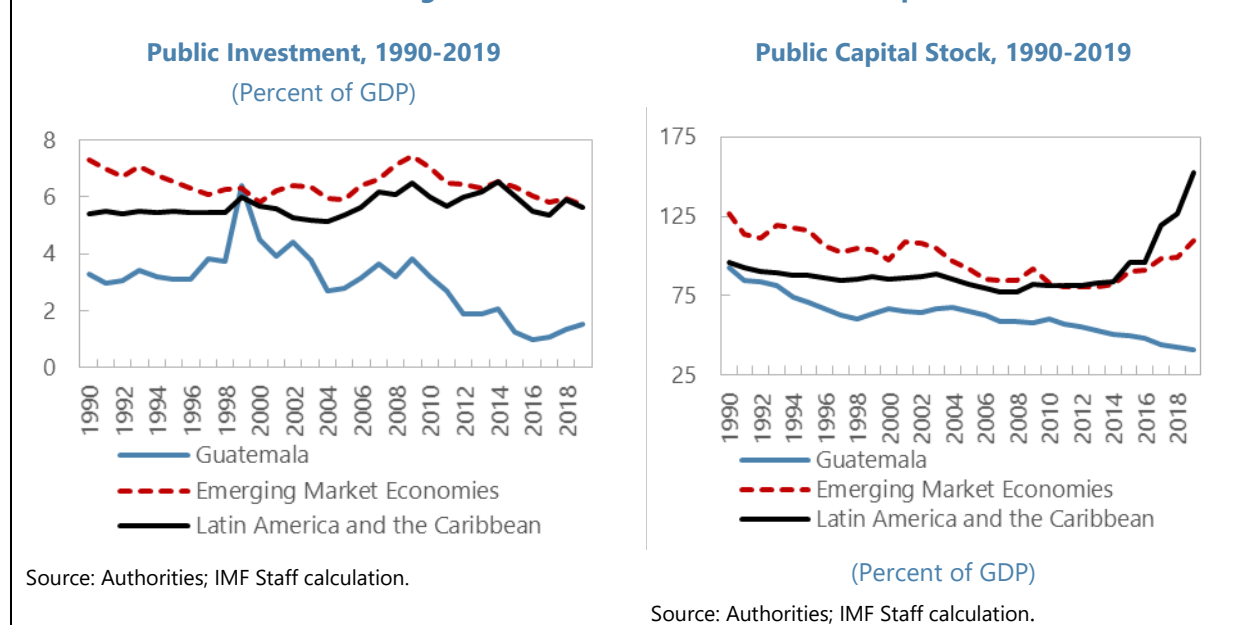
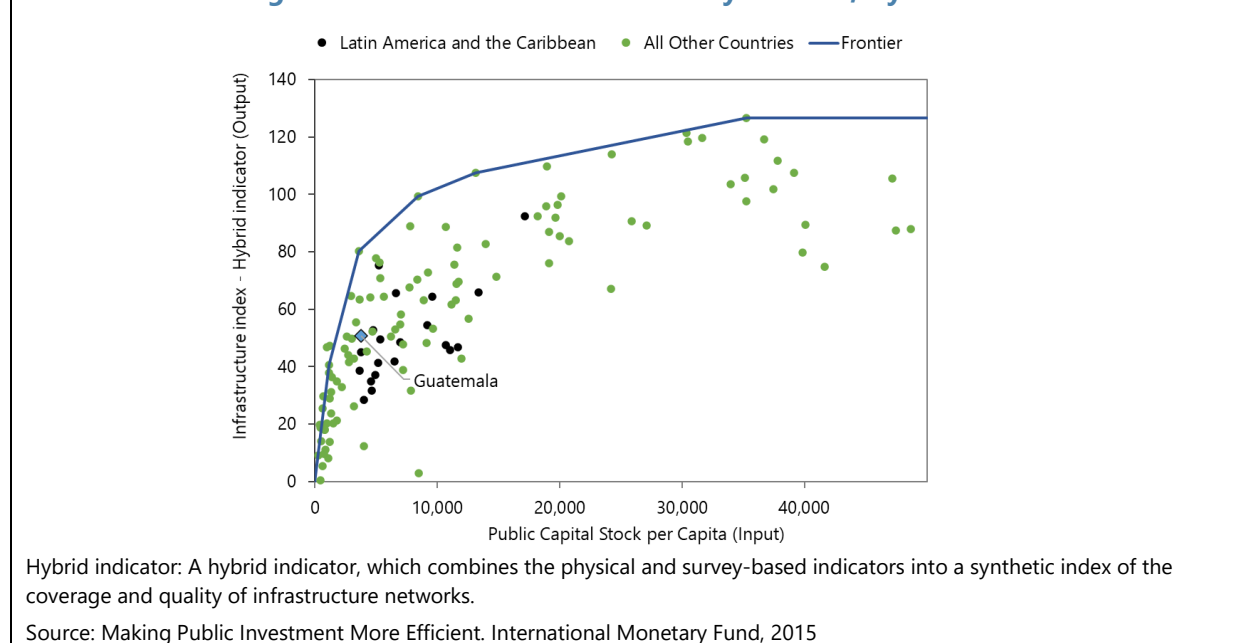
Text Figure 5. Guatemala: Social Safety Gaps

19. Enhancing the infrastructure governance framework could boost high-quality investments to achieve long-term inclusive development. The public capital stock has fallen 20pp since 2010, weighing on the business climate and private investments (Text Figure 6).¹⁸ Low resource allocation for public investment is not only due to low domestic revenues, but also planning, allocation, and implementation inefficiencies (partly due to governance weaknesses). The IMF's public investment efficiency frontier shows that Guatemala has a relatively low infrastructure index relative to its public capital stock per capita (Text Figure 7). Given Guatemala's infrastructure gaps, the output multiplier for infrastructure investment is likely substantially higher than for other fiscal interventions (Annex V). Scaling up public investment could improve competitiveness and accelerate productivity growth both in the short and long run. Improving the legal framework on Public-Private Partnerships (PPPs), including enhancing safeguards against corruption risks, could further promote infrastructure projects, attract investment, and improve project quality, including maintenance, over a longer horizon. Staff welcome authorities' initiatives for streamlining procedures of the legal framework for PPPs¹⁹ and their interest in participating in the IMF's Public Investment Management Assessment (PIMA) program, including the module on climate, to establish a standardized diagnostic of their public investment framework along a set of concrete recommendations for improvement to best international standards. Given that Guatemala is highly vulnerable to climate risks,²⁰ designing climate-resilient infrastructures and strengthening the enabling environment for their development are essential to mitigate the impact of climate shocks.

¹⁸ Improving roads are particularly crucial to boost economic development as Guatemala has one of the lowest road connectivity and quality among emerging market economies.

¹⁹ Smaller PPP initiatives, with the right safeguards, could also be fast-tracked.

²⁰ IMF Country Report No. 21/111.

Text Figure 6. Guatemala: Infrastructure Gaps**Text Figure 7: Public Investment Efficiency Frontier, Hybrid Indicator**

20. Further strengthening the Medium-Term Fiscal Framework (MTFF) could support social and infrastructure objectives, while maintaining fiscal sustainability. Guatemala has been traditionally fiscally prudent, making use of the existing normative framework and budget evaluation and programming to achieve a low debt-to-GDP ratio, ensure appropriate safeguards to repay its debt, avoid arrears, and meet its commitments. Within that framework, policies are guided by prudent standalone annual fiscal deficits rather than by an explicit medium-term fiscal strategy.

During the Article IV mission, staff recommended that the governance and regulatory fiscal framework be enhanced (including reducing rigidities of existing expenditures) and institutional capacities be gradually developed to formalize the implementation of the MTFF, underpinned by an explicit medium-term anchor, operationalized through consistent annual deficit limits and a medium-term fiscal strategy. Staff noted that calibrating fiscal targets, maintaining rigorous and transparent methodologies, monitoring policy tradeoffs, inconsistencies, risks (including to climate events), and biases in intertemporal fiscal projections would complement an improved MTFF and further enhance communication and fiscal credibility.^{21 22} Similarly, staff recommended further improvements in the Medium-Term Debt Sustainability framework detailing a public debt strategy—including composition of domestic and external debt and maturity plans—aligned with the MTFF, which could better anchor market and investors' expectations, which in turn could help attract foreign investments and lower Guatemala's risk premium. In that sense, authorities could provide more details about their financing strategy to address their response to large climate events (for example how to supplement risk retention instruments) and meet any financing gap to implement their mitigation and adaptation targets.

C. Boosting Medium-Term Growth

21. Addressing structural weaknesses in the labor market and improving the business climate could help Guatemala reap its demographic dividend, mitigate migration, lift productivity and potential growth. With the working-age population expected to grow by 1.9 percent per year until 2035, labor market and business climate reforms are necessary to keep up with increasing labor supply and mitigate migration flows. Due to a large-wage premium relative to productivity and impediments to firm creation, formal sector job creation has remained subdued, with 75 percent of Guatemalans employed in the informal sector. In this respect, staff welcome the passage of the law to facilitate insolvency procedures which should promote firm creation, and the establishment of the Construction Single Window which eases the bureaucratic steps needed for the issuance of construction licenses. Authorities continue to implement the *Guatemala No Se Detiene Plan* which rightly seeks to improve the business environment and labor market flexibility, focusing on e-commerce, digitalization, transparency, fostering export (Box 1) and tourism development, and enhancing human capital and infrastructure. Moreover, the IGSS (social security institute) is seeking to operationalize ILO Convention 175 (formalizing part-time work) which should support formal employment and encourage female labor force participation (38 percent vs 84 percent for men).

22. Anti-corruption and governance measures, including improvements to the judiciary and legislative environment, are essential for durably raising economic prospects. In the immediate aftermath of the withdrawal of the UN-backed International Commission against Impunity (CICIG) in 2019, authorities sought to strengthen the Attorney General's Office (AGO). Recent efforts have focused on further improving transparency and digitalization initiatives across

²¹ See the 2016 IMF's Fiscal Transparency Evaluation (FTE) report for Guatemala. A forthcoming update to the FTE will provide some benchmarks relative to best international practices

²² Tasks typically conducted by an independent fiscal council.

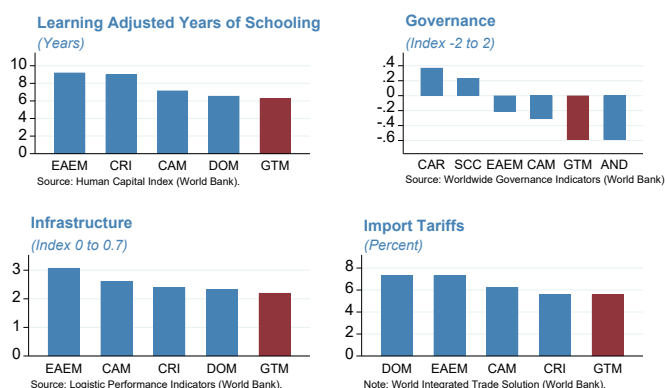
the public administration, including to the Comptroller's office. These efforts, as well as the passage of the law to facilitate insolvency procedures, are welcomed steps. Nevertheless, reforms aimed at reducing bureaucratic impediments, tackling corruption and lowering court cases backlog remain essential. Strengthening the AGO will therefore be an important step in the process.

Box 1. Structural Reforms and Export Development in Guatemala¹

Education, infrastructure, governance and business climate reforms could enhance export development and, therefore, economic growth and labor market outcomes.

Guatemala has lagged most other Central American countries in the per capita level and complexity (defined as in Hidalgo and Hausmann, 2009) of its exports. These are handicaps to Guatemala's economic development as higher and more complex exports are associated with higher productivity, GDP per capita and higher quality jobs. Guatemala ranks unfavorably relative to other Central American and Emerging Market countries in education, governance, infrastructure, and high formal labor costs, all of which are typically identified by the empirical literature as key determinants of exports development and complexity: i) learning Adjusted Years of Schooling is low; ii) governance ranks poorly (because of weak Rule of Law and Control of Corruption, and high homicide rate); iii) infrastructure development is weak—with weak roads, railroads, ports, and airports, and electricity costs to households among the highest in the world; and iv) the minimum wage is high, with its ratio to GDP among the highest among middle income countries.

Exports Determinants in Guatemala and Comparators



Note: Country acronyms are ISO3.
CAM=Central America and Mexico; EAEM=East Asia Emerging Markets.
Regional subgroupings described in Table A.1. of accompanying Selected Issues Paper.

Improvements in these areas could improve export complexity and development. For example, the accompanying Staff Issues Note suggests that the combined effect of reaching Costa Rica's level of educational attainment, overall governance, and infrastructure quality would generate significant export development matching those of Costa Rica and East Asian Emerging Market countries. Authorities' initiatives under the Guatemala no se Detiene Plan seek to overcome some of these challenges. These reforms should also increase private investment (and thus imports) and employment in the formal sector, as well as reduce migration and remittances.

¹ A Staff Issues Note provides further details.

23. The banking system remains sound, but reforms to improve the supervisory and regulatory framework should be expedited. The amendments to the Banking and Financial Groups Law—which incorporate international standards that support financial stability—and the draft law on AML/CFT—which aligns with FATF standards—are still pending approval by Congress. Fintech can boost inclusive growth and financial inclusion, even though it presents risks to the financial system if regulation and supervision are not up to date with related current and future initiatives. Staff welcome the preparation of the legal framework for e-money to address legal,

supervisory, and regulatory challenges and encourage their speedy implementation²³. Furthermore, the adoption of the new Securities Market Law should support the development of financial markets while strengthening the corresponding supervisory and regulatory framework.²⁴

Authorities' Views

24. Authorities broadly concurred with staff's outlook. They emphasized that the economic momentum is strong, driven by broad-based recovery—including robust private investments and a favorable external environment. Authorities expect a larger increase in remittances and lower inflation than staff for 2022. They indicated that while risks are tilted to the downside, they are largely exogenous and the economy is well-placed to absorb shocks. They also agree with staff that the current account in 2021 was stronger than the level implied by fundamentals and desirable policies, although they do not see any misalignment in the REER once temporary factors are accounted for. Similar to the previous Article IV, they noted that excessive FX inflows could not be smoothly absorbed by a small FX market and expressed concerns that these could have a significant adverse impact on the real sector, which provided justification for their participation in the FX market.

25. The Ministry of Finance's priority is to sustain the economic momentum and spur further investments, including from foreign sources. To help alleviate poverty and inflationary pressures, authorities have enabled targeted and temporary subsidies and have announced an increase in infrastructure spending to support the recovery. They are also committed to better capture social indicators to design more efficient policy responses going forward. Authorities reiterated their objectives to improve the business climate to generate an investment push that creates employment opportunities and reduces poverty. They emphasized that considerable efforts and initiatives (such as in tax administration, digitalization, transparency, passage of insolvency law) are underway to promote Guatemala as a sustainable and stable environment for economic activities. Authorities highlighted their track record and continuous commitment to very prudent fiscal policies and are in the process of rebuilding buffers to quickly return the debt level to its pre-pandemic level. They emphasized that their current MTFF has enabled those prudent policies that have resulted in a low and sustainable level of public debt, but they are interested in exploring ways to improve it further. They concurred on the need to improve the public investment framework (including measures to streamline the PPP framework) to improve efficiency of capital spending given limited fiscal space availability and large needs. Authorities reiterated their commitment to their pledges made for COP 26, including securing resources for mitigating deforestation.

26. Authorities agree with staff that monetary policy should continue to be data driven and clearly communicated and that financial regulation measures should be expedited. At the time of the mission, they indicated that conditions for withdrawing monetary accommodations were not fully met given low levels of inflation and anchored inflation expectations. Authorities noted that

²³ The draft laws on Fintech and e-money establish that the AML/CFT framework in force will be applicable.

²⁴ Annex VII for details of previous Fund TA on financial issues including supporting the AML/CFT upgrades, stress testing and for the Fintech law.

they have continued to make proposals to Congress to recapitalize the central bank. They emphasized that COVID-19 support measures to the financial sector were successfully withdrawn without any worth noting issues. Authorities also underscored that the direct bond placements with Banguat did not have any negative impact on the economy and markets. They acknowledged the need to continue to closely monitor financial stability risks and expedite the passage of the banking law, the revised AML/CFT law and to finalize the legal framework for Fintech and e-money to address legal, supervisory, and regulatory challenges. Finally, they noted that adoption of the new Securities Market Law will be important to strengthen the necessary foundations for the development of financial markets and, at the same time, to strengthen the corresponding supervisory and regulatory framework.

STAFF APPRAISAL

27. The Guatemalan economy was remarkably resilient during the pandemic and the near-term outlook is favorable, but long-standing social and infrastructure gaps remain.

Underpinned by a favorable external environment and the authorities' swift, comprehensive, and coordinated policy response in 2020 that laid the foundations for a strong recovery. Real GDP grew 8 percent in 2021 and is projected to grow around 4 percent in 2022 and then converge to its potential rate of 3½ percent. While inflationary pressures were mostly contained in 2021, inflation is projected to rise in 2022 in line with global inflationary pressures but should remain within Banguat's inflation target range. The external position remains stronger than the level implied by medium-term fundamentals and desirable policies, but the gap is expected to narrow. Despite such resilience, social indicators likely deteriorated during the pandemic and longstanding infrastructure and social gaps persist.

28. With a well-entrenched recovery, near-term policies need to be carefully calibrated to sustain economic momentum but remain agile to evolving macroeconomic and social conditions. The fiscal stance in 2022—including the temporary measures announced to mitigate the impact of higher import prices and the increase in the infrastructure budget—are appropriate. If economic conditions worsen, authorities should consider temporarily re-deploying some of the targeted 2020 social measures. Monetary policy normalization must be carefully calibrated amid tighter global financial conditions, and remain data driven to maintain inflation expectations anchored. A clear and consistent communication strategy will help guide market expectations, while greater exchange rate flexibility can also help absorb external shocks. The SIB should continue to closely monitor nonperforming loans and any potential financial stability risks, including those stemming from tighter global financial conditions.

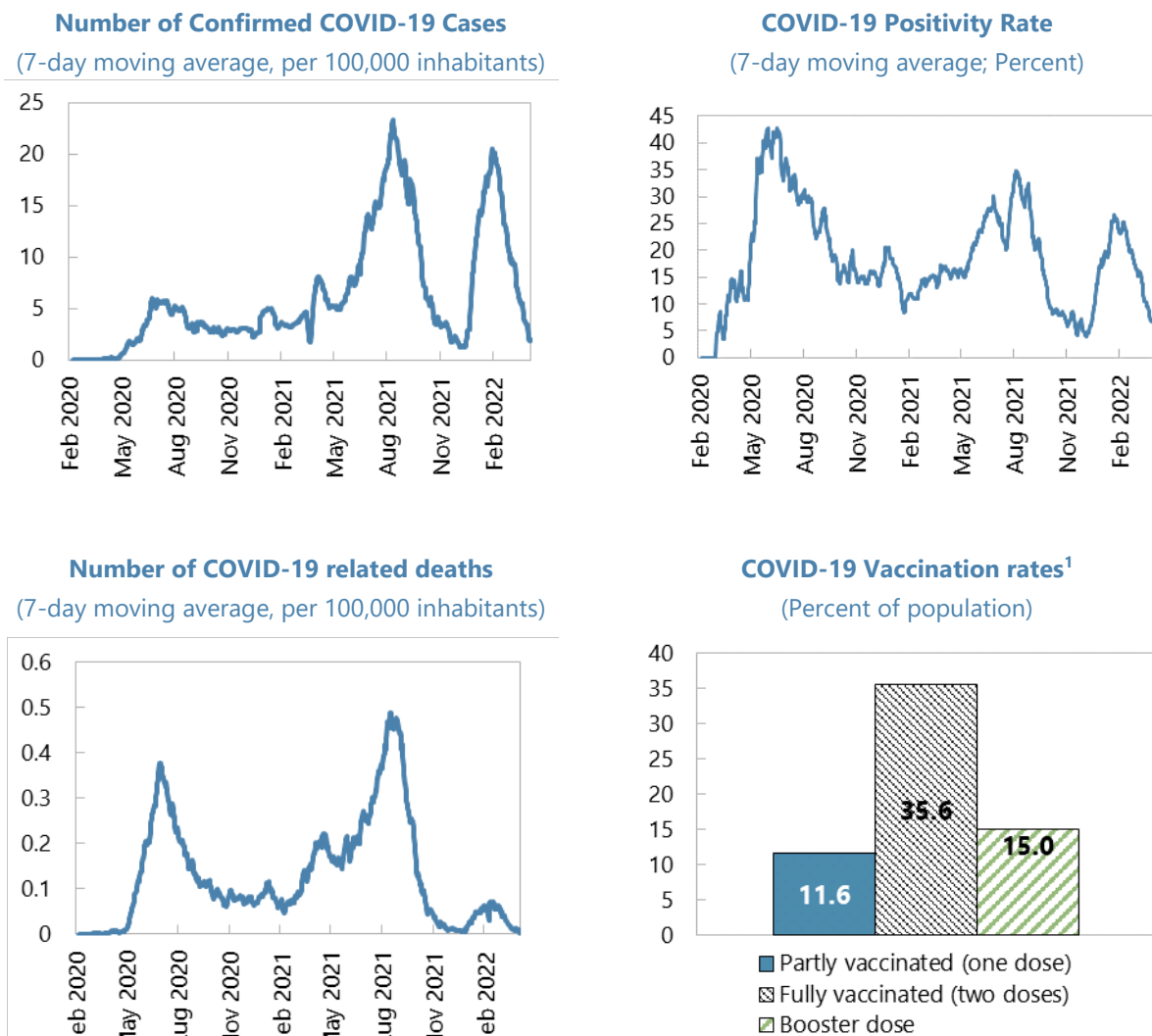
29. Accelerating efforts to address long-standing social gaps is crucial while maintaining fiscal sustainability. Increasing tax revenues further and improving spending efficiency to create fiscal space is necessary to close these gaps. In that regard, SAT should build upon recent tax administration improvements. On the spending side, reforms should focus on increasing budget flexibility, bolstering the cost-effectiveness of procurement, improving the coverage and quality of public services, and rationalizing tax incentives and exemptions. Authorities could further strengthen

their long-term strategic infrastructure vision with a focus on projects with highest inclusive growth potential. To support these efforts, while maintaining the long-standing and very prudent fiscal policy in Guatemala, additional upgrades to its medium-term fiscal framework could be explored such as on multi-annual budget planning and the formalization of an explicit fiscal anchor.

30. The government rightly aims to enhance the business climate and promote investment opportunities to boost economic growth. The passage of the law to facilitate insolvency procedures should promote firm creation. The recently introduced Construction Single Window, which eases the issuance of construction licenses, and the government's efforts to boost affordable housing and streamlining the PPP framework to expedite key identified infrastructure projects, should bolster private investment. Formalizing part-time work could further help lift formalization. In addition, staff encourage authorities to expedite the implementation of the 2020-2024 *General Policy of the Government, and the Guatemala No Se Detiene Plan* to improve the business climate, and security. On the governance and anti-corruption fronts, reforms improving the judiciary and legislative environment, including strengthening the Attorney General's Office, remain important. In that regard, broad-based transparency and digitalization efforts undertaken across the public administration are welcomed. A results-based approach could help ensure these and other efforts fully translate into sustainable and concrete outcomes for all Guatemalans.

31. The banking system remains sound, but reforms to improve the supervisory and regulatory framework should be expedited. The Banking and Financial Groups and AML/CFT laws, which align regulations with Basel III and FATF standards respectively, are pending Congress approval. Staff encourage the speedy implementation of the legal framework for Fintech and e-money, which is well underway, and welcome the adoption of the new Securities Market Law, which will support the development of financial markets while strengthening the supervisory and regulatory framework.

32. It is recommended that the next Article IV consultation with Guatemala be held on the standard 12-month cycle.

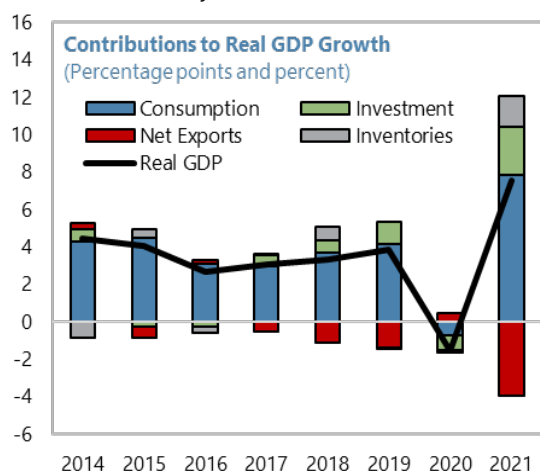
Figure 1. Guatemala: COVID-19 Cases and Vaccination Rates as of April 18, 2022

¹ It represents 14.5 million doses administered.

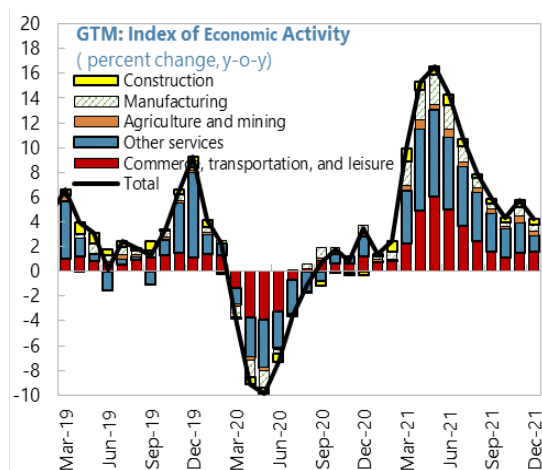
Source: COVID-19 Dashboard, Ministry of Health.

Figure 2. Guatemala: Recent Economic Developments

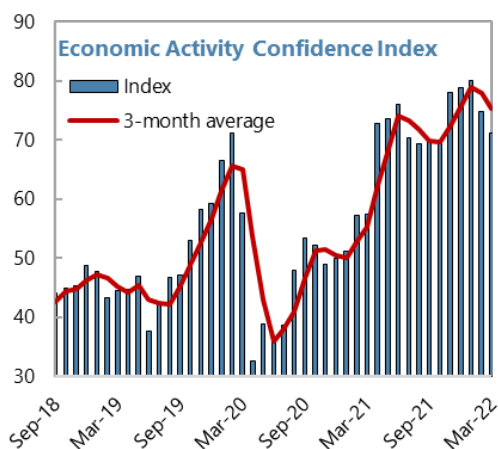
Supported by remittances, private consumption has led a broad-based recovery...



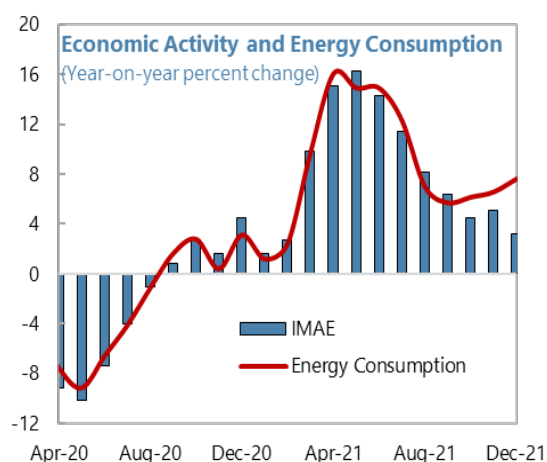
...translating in a recovery led the tertiary sector.



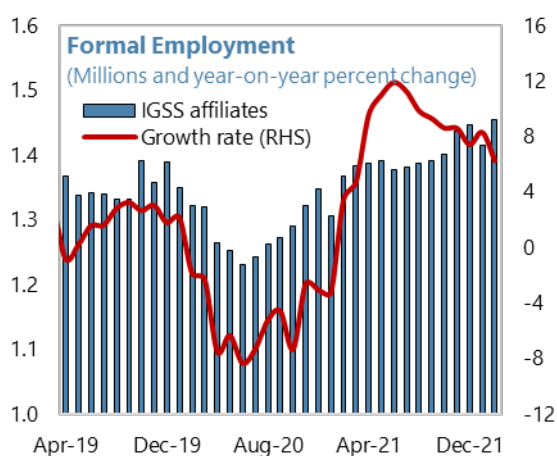
Confidence improved significantly with the reopening of the economy and reached multi-year highs...



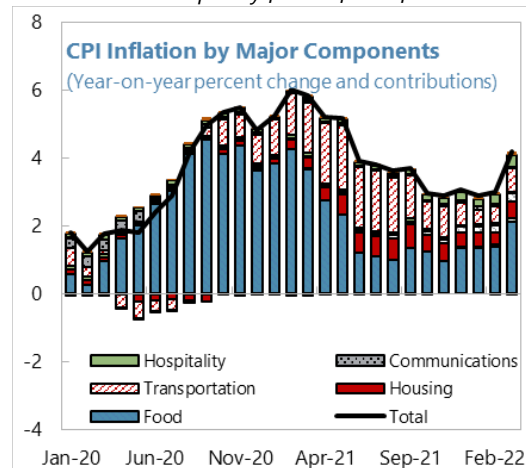
...enabling a substantial recovery since April 2021...



With Job creation following suit.



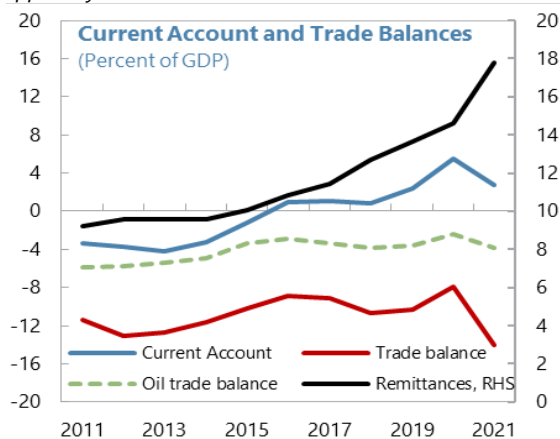
Inflation bucked a global trend as pandemic and weather-related temporary factors faded fast



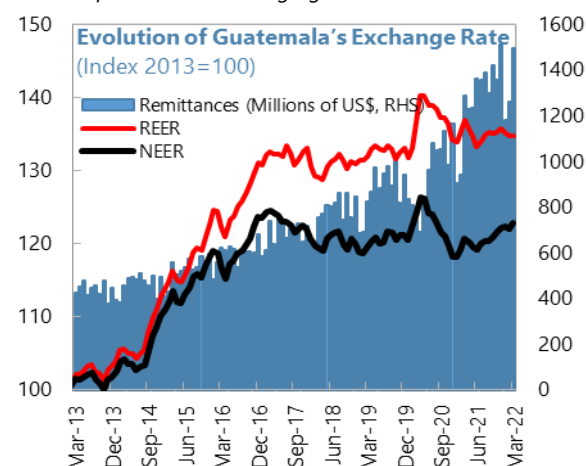
Sources: National Authorities and IMF Staff Calculations.

Figure 4. Guatemala: External Developments

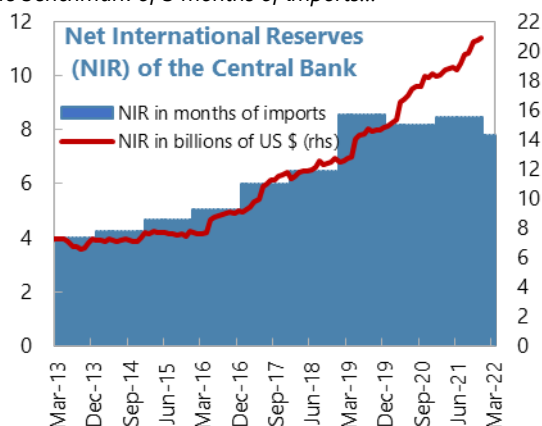
The CA surplus deteriorated significantly in 2021 despite support by remittances, as the trade balance worsened....



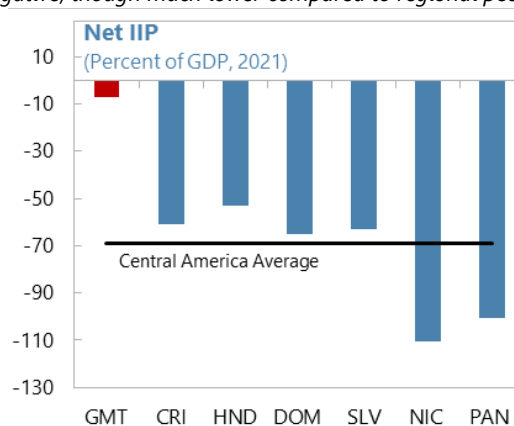
...and real effective exchange rate slightly depreciated in 2021 despite remittances high growth.



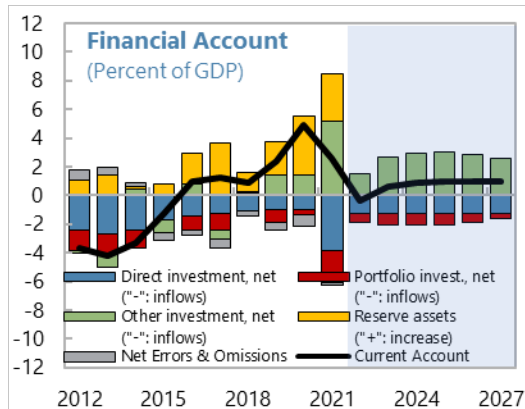
International reserves are on the rise and well above the benchmark of 3 months of imports...



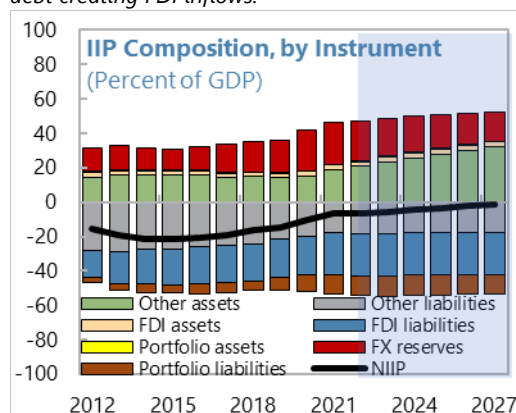
...and the net international investment position remains negative, though much lower compared to regional peers.



The current account is expected to remain in surplus over the medium term ...



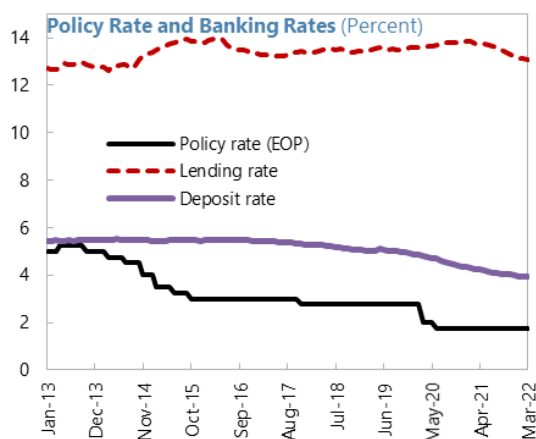
...and a large share of external liabilities constitutes non-debt creating FDI inflows.



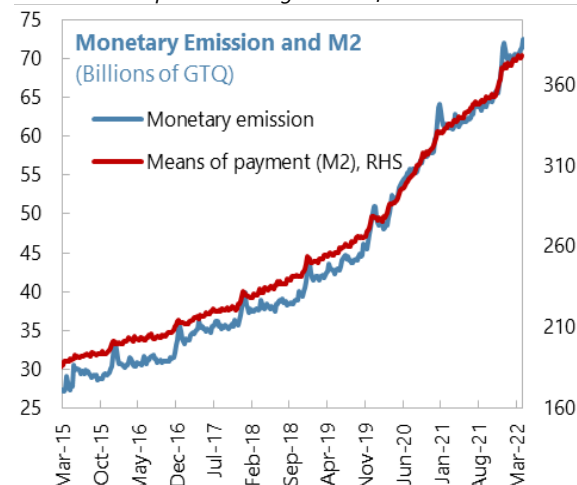
Sources: National Authorities and IMF Staff Calculations.

Figure 5. Guatemala: Monetary Policy and Financial Sector Developments

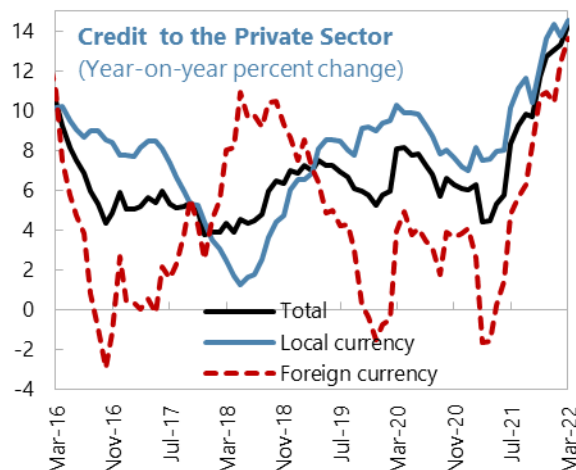
Banguat lowered the monetary policy rate pre-emptively to a historic low of 1.75 percent in 2020...



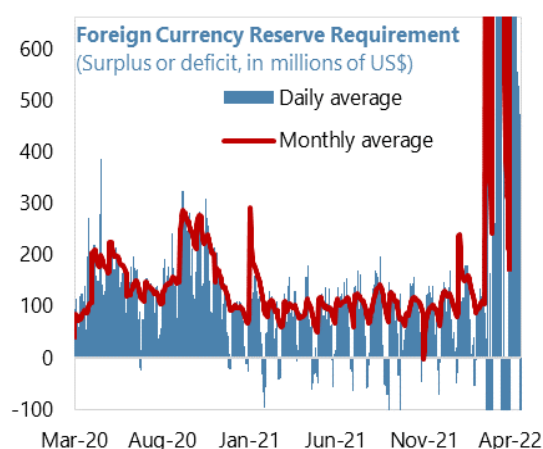
... providing the financial system with ample liquidity as the COVID-19 pandemic began to unfold.



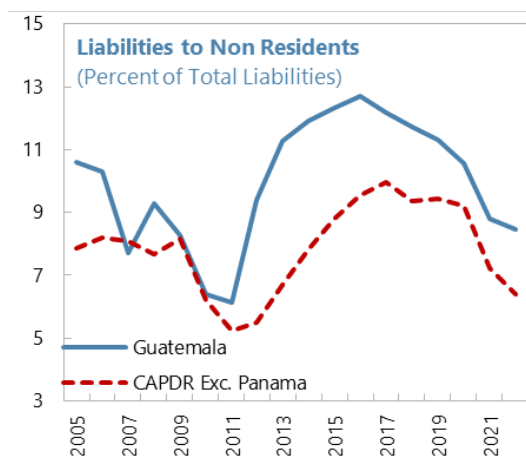
Timely regulatory forbearance supported credit expansion despite the pandemic...



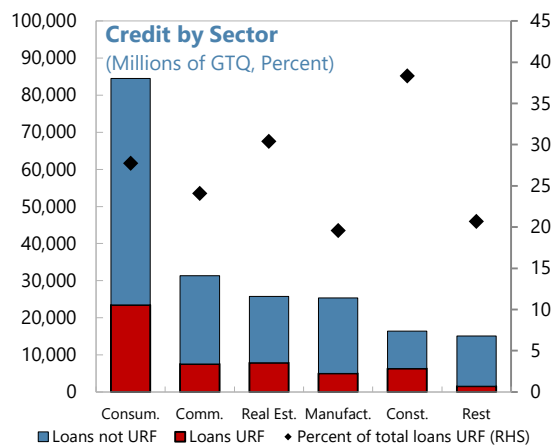
... and provided confidence in the financial system with a great influx of FX in the end of 2021 and beg. of 2022.



Liabilities to Non-residents continued to decline...



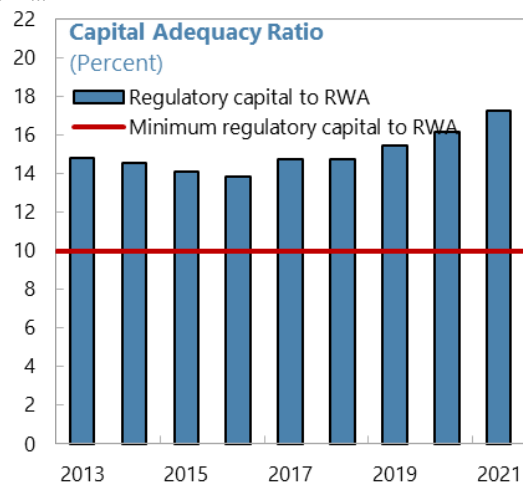
... and the five largest lines of credit own nearly 90 percent of loans under regulatory forbearance...



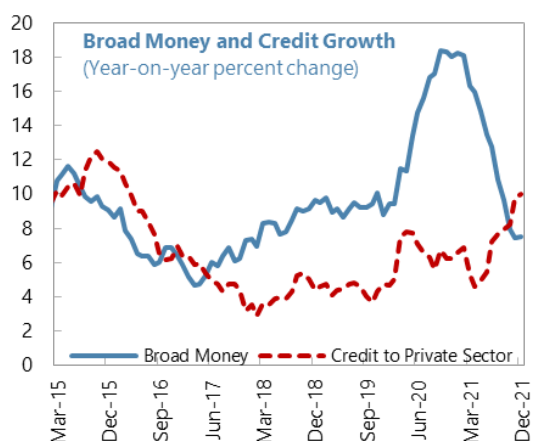
Sources: National Authorities and IMF Staff Calculations.

Figure 6. Guatemala: Financial Sector Developments

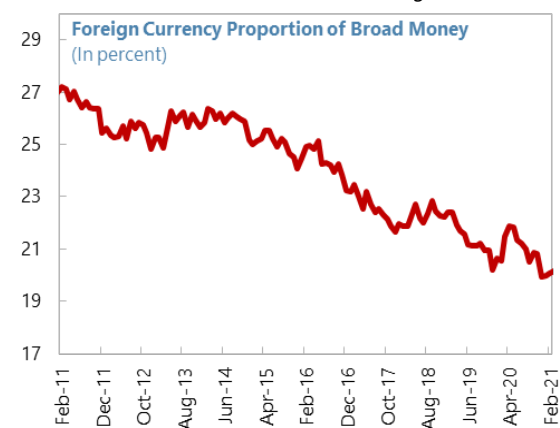
Banks' capital adequacy ratio continued to increase in 2021...



The strong stimulus in 2020 was reversed with a small uptick during the end-2021...

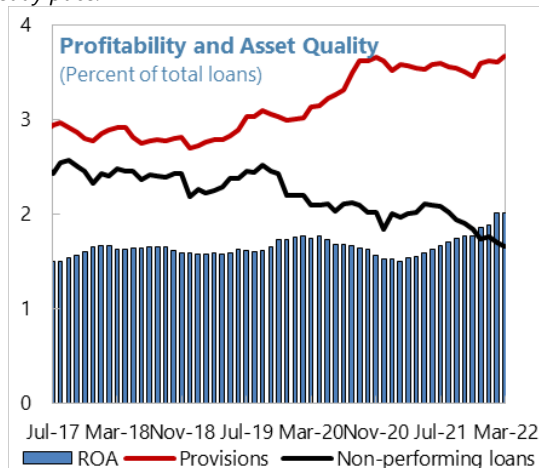


The dollarization ratio continued declining....

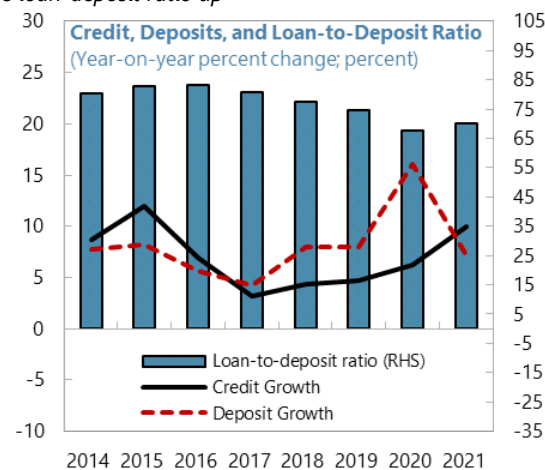


Sources: National Authorities and IMF Staff Calculations.

...while non-performing loans continued to decline at a steady pace.



...alongside deposits which followed a strong decline bringing the loan-deposit ratio up



... while banks overall exposure to FX remains positive.

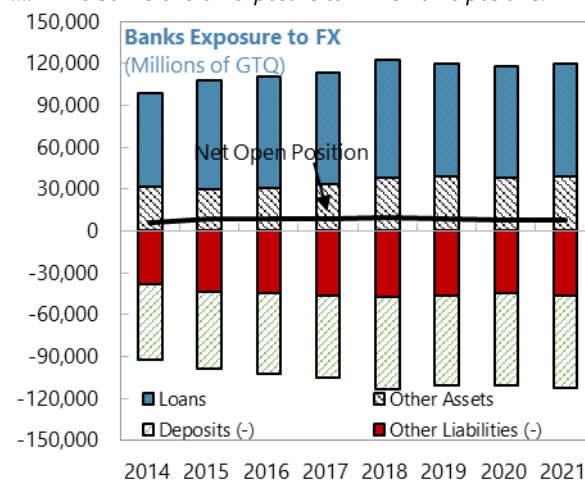


Table 1. Guatemala: Selected Economic Indicators

I. Social and Demographic Indicators										
Population 2021 (millions)	17									49
Percentage of indigenous population (2016)	41									74
Population below the poverty line (Percent, 2014)	59									19
Rank in UNDP development index (2019; of 189)	127									5,025
II. Economic Indicators										
	2018	2019	2020	2021	2022	2023	Projections			
							2024	2025	2026	2027
(Annual percent change, unless otherwise indicated)										
Income and Prices										
Real GDP	3.4	4.0	-1.8	8.0	4.0	3.6	3.5	3.5	3.5	3.5
Consumer prices (average)	3.8	3.7	3.2	4.3	4.4	4.3	4.2	4.0	4.0	4.0
Consumer prices (end of period)	2.3	3.4	4.8	3.1	4.8	4.5	4.0	4.0	4.0	4.0
Monetary Sector										
M2	9.4	9.6	18.9	11.6	7.1	7.5	7.3	7.0	7.0	7.0
Credit to the private sector	7.0	4.9	6.4	12.7	6.9	7.2	7.2	7.2	7.2	7.2
(In percent of GDP, unless otherwise indicated)										
Saving and Investment										
Gross domestic investment	13.8	14.3	13.3	17.0	16.2	15.1	14.9	14.9	14.9	14.9
Private sector	12.2	12.4	12.2	14.7	15.0	14.0	13.8	13.8	13.8	13.8
Public sector	1.5	1.9	1.3	1.0	1.2	1.1	1.1	1.1	1.1	1.1
Gross national saving	14.7	16.7	18.2	19.5	15.8	15.7	15.8	15.8	15.9	15.8
Private sector	14.9	16.8	21.6	19.1	16.5	16.1	16.1	16.2	16.1	16.1
Public sector	-0.2	-0.1	-3.4	0.4	-0.7	-0.4	-0.3	-0.3	-0.2	-0.2
External saving	-0.9	-2.4	-4.9	-2.5	0.4	-0.6	-0.9	-1.0	-1.0	-0.9
External Sector										
Current account balance	0.9	2.4	4.9	2.5	-0.4	0.6	0.9	1.0	1.0	0.9
Trade balance (goods)	-10.9	-10.3	-8.1	-12.7	-14.8	-13.9	-13.4	-12.9	-12.4	-12.0
Exports	13.2	12.9	13.0	14.4	15.4	14.7	14.0	13.6	13.1	12.7
Imports	24.0	23.2	21.2	27.1	30.1	28.6	27.4	26.4	25.5	24.7
Of which: oil & lubricants	4.0	3.8	2.5	4.1	5.6	4.9	4.4	4.1	3.8	3.7
Trade balance (services)	0.2	0.0	-0.3	-1.5	-1.3	-1.1	-0.9	-0.8	-0.8	-0.8
Other (net)	11.5	12.6	13.4	16.8	15.7	15.6	15.1	14.6	14.2	13.7
Of which: remittances	12.6	13.6	14.6	17.8	16.9	16.9	16.3	15.8	15.3	14.9
Capital account balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account balance (Net lending (+))	0.5	1.8	4.2	2.4	-0.4	0.6	0.9	1.0	1.0	0.9
Of which: FDI, net	-1.1	-1.0	-1.0	-3.9	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Errors and omissions	-0.4	-0.6	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
Change in reserve assets (Increase (+))	1.3	2.3	4.1	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Net International Reserves										
(Stock in months of next-year NFGS imports)	6.5	8.6	8.0	7.7	7.7	7.5	7.2	7.0	7.0	7.0
(Stock over short-term debt on residual maturity)	1.9	2.4	3.6	3.3	3.4	3.2	3.0	2.7	2.5	2.5
Public Finances										
Central Government										
Revenues	11.3	11.2	10.7	12.4	12.3	12.0	11.8	11.6	11.6	11.6
Expenditures	13.2	13.4	15.6	13.5	14.6	14.0	13.7	13.5	13.5	13.5
Current	10.6	10.7	12.6	11.2	12.0	11.5	11.2	11.1	11.0	11.0
Capital	2.6	2.7	3.0	2.4	2.7	2.6	2.5	2.5	2.5	2.5
Primary balance	-0.3	-0.6	-3.2	0.6	-0.6	-0.3	-0.2	-0.2	-0.1	-0.1
Overall balance	-1.9	-2.2	-4.9	-1.2	-2.3	-2.0	-1.9	-1.9	-1.8	-1.8
Financing of the central government balance	1.9	2.2	4.9	1.2	2.3	2.0	1.9	1.9	1.8	1.8
Net external financing	0.1	1.2	-0.3	0.8	1.0	0.7	0.6	0.4	0.4	0.3
Net domestic financing	1.8	1.1	2.5	0.4	1.3	1.3	1.4	1.5	1.4	1.5
Central Government Debt										
External	26.4	26.4	31.5	30.8	30.5	30.5	30.4	30.3	30.1	29.9
Domestic 1/	11.5	11.7	13.5	12.9	13.3	13.3	13.0	12.6	12.2	11.7
	14.9	14.7	18.0	17.9	17.2	17.2	17.4	17.7	17.9	18.2
Memorandum Items:										
GDP (US\$ billions)	73.3	77.2	77.6	86.0	91.3	96.3	103.4	110.6	118.4	126.7
Output gap (% of GDP)	-0.1	0.4	-3.9	-0.4	-0.1	0.0	0.0	0.0	0.0	0.0

Sources: Bank of Guatemala; Ministry of Finance; and Fund staff estimates and projections.

1/ Does not include recapitalization of obligations to the central bank.

Table 2. Guatemala: Statement of the Central Government Operations and Financial Balance, GFSM 2001

	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Projections								
	(In millions of quetzales)								
Central government operations									
Revenue	66,551	64,063	82,107	87,272	92,149	96,837	102,293	109,410	117,118
Taxes	62,415	60,162	77,841	82,357	86,940	91,165	96,134	102,818	110,164
Other revenue	4,136	3,902	4,267	4,915	5,209	5,672	6,159	6,592	6,954
Expenditure	79,833	93,527	89,987	103,957	107,341	112,606	119,009	126,664	135,593
Expense	74,868	90,601	86,344	98,701	102,369	107,672	114,160	121,372	129,618
Compensation of employees	26,036	27,677	28,675	29,860	33,974	36,458	39,020	41,764	44,698
Use of goods and services	8,753	9,993	13,759	17,980	15,467	15,270	15,363	15,950	16,558
Interest	9,690	10,331	11,546	12,208	13,187	14,088	14,983	15,955	17,083
Other expense	30,390	42,600	32,364	38,653	39,741	41,857	44,794	47,702	51,279
Net acquisition of nonfinancial assets	4,964	2,926	3,643	5,256	4,972	4,934	4,849	5,293	5,975
Gross Operating Balance	-8,317	-26,538	-4,237	-11,429	-10,221	-10,835	-11,867	-11,961	-12,500
Net lending (+)/borrowing (-)	-13,281	-29,463	-7,880	-16,684	-15,193	-15,769	-16,716	-17,254	-18,475
Net acquisition of financial assets	-1,502	1,262	14,946	-6,235	-191	-170	-161	-153	-154
Net incurrence of liabilities	11,779	30,725	16,552	10,449	15,002	15,598	16,555	17,101	18,321
Financial Balance 1/									
Net financial worth 2/	-114,665	-139,483	-138,238	-155,603	-171,726	-186,576	-202,296	-218,445	-235,742
Financial assets	42,334	49,426	66,428	61,469	62,276	63,067	63,939	64,920	65,962
Domestic	42,334	49,426	66,428	61,469	62,276	63,067	63,939	64,920	65,962
Currency and deposits	42,334	49,426	66,428	61,469	62,276	63,067	63,939	64,920	65,962
Foreign	0	0	0	0	0	0	0	0	0
Net incurrence of liabilities	156,999	188,908	204,666	217,072	234,002	249,643	266,235	283,365	301,704
Domestic 3/	87,222	107,744	119,006	122,382	132,133	143,148	155,746	168,735	183,551
Debt securities	87,222	107,744	119,006	122,382	132,133	143,148	155,746	168,735	183,551
Foreign	69,777	81,165	85,660	94,690	101,869	106,494	110,488	114,631	118,154
Debt securities	31,796	41,541	48,862	52,234	57,227	61,240	65,254	67,661	67,661
Loans	37,981	39,623	36,798	42,456	44,641	45,254	45,235	46,969	50,492
	(In percent of GDP)								
Central Government Operations									
Revenue	11.2	10.7	12.3	12.3	12.0	11.8	11.6	11.6	11.6
Taxes	10.5	10.0	11.7	11.6	11.3	11.1	10.9	10.9	10.9
Other revenue	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Expenditure	13.4	15.6	13.5	14.6	14.0	13.7	13.5	13.5	13.5
Expense	12.6	15.1	13.0	13.9	13.4	13.1	13.0	12.9	12.9
Compensation of employees	4.4	4.6	4.3	4.2	4.4	4.4	4.4	4.4	4.4
Use of goods and services	1.5	1.7	2.1	2.5	2.0	1.9	1.7	1.7	1.6
Interest	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Other expense	5.1	7.1	4.9	5.4	5.2	5.1	5.1	5.1	5.1
Net acquisition of nonfinancial assets	0.8	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.6
Gross Operating Balance	-1.4	-4.4	-0.6	-1.6	-1.3	-1.3	-1.3	-1.3	-1.2
Net lending (+)/borrowing (-)	-2.2	-4.9	-1.2	-2.3	-2.0	-1.9	-1.9	-1.8	-1.8
Net acquisition of financial assets	-0.3	0.2	2.2	-0.9	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	2.0	5.1	2.5	1.5	2.0	1.9	1.9	1.8	1.8
Financial Balance 1/									
Net financial worth 2/	-19.3	-23.3	-20.8	-21.8	-22.4	-22.7	-23.0	-23.2	-23.4
Financial assets	7.1	8.2	10.0	8.6	8.1	7.7	7.3	6.9	6.5
Domestic	7.1	8.2	10.0	8.6	8.1	7.7	7.3	6.9	6.5
Currency and deposits	7.1	8.2	10.0	8.6	8.1	7.7	7.3	6.9	6.5
Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	26.4	31.5	30.8	30.5	30.5	30.4	30.3	30.1	29.9
Domestic 3/	14.7	18.0	17.9	17.2	17.2	17.4	17.7	17.9	18.2
Debt securities	14.7	18.0	17.9	17.2	17.2	17.4	17.7	17.9	18.2
Foreign	11.7	13.5	12.9	13.3	13.3	13.0	12.6	12.2	11.7
Debt securities	5.4	6.9	7.3	7.3	7.5	7.4	7.4	7.2	6.7
Loans	6.4	6.6	5.5	6.0	5.8	5.5	5.1	5.0	5.0

Sources: Ministry of Finance; Bank of Guatemala; and Fund staff estimates and projections.

1/ Based on available stock elements.

2/ Changes in net financial worth do not equal net lending due to valuation adjustments and statistical discrepancies.

3/ Does not include recapitalization obligations to the central bank.

Table 3. Guatemala: Summary Balance of Payments

	2018	2019	2020	2021	Projections					
					2022	2023	2024	2025	2026	2027
	(In millions of U.S. dollars)									
Current account balance	649	1,821	3,832	2,177	-331	574	917	1,066	1,191	1,193
Trade balance (goods)	-7,985	-7,967	-6,314	-10,920	-13,475	-13,406	-13,818	-14,219	-14,653	-15,216
Exports, f.o.b.	9,644	9,919	10,127	12,413	14,057	14,142	14,461	15,002	15,566	16,136
Imports, f.o.b.	17,629	17,885	16,441	23,333	27,533	27,547	28,279	29,221	30,219	31,352
Of which: oil & lubricants	2,901	2,911	1,919	3,552	5,113	4,689	4,556	4,518	4,554	4,666
Net services	166	38	-271	-1,308	-1,230	-1,070	-892	-907	-925	-963
Net income	-1,502	-1,404	-1,462	-1,659	-1,881	-2,081	-2,206	-2,343	-2,486	-2,635
Net transfers	9,971	11,154	11,879	16,065	16,255	17,130	17,834	18,536	19,256	20,007
Of which: remittances	9,272	10,494	11,326	15,279	15,420	16,250	16,889	17,525	18,173	18,849
Capital account balance	3	1	1	0	0	0	0	0	0	0
Financial account balance	384	1,390	3,231	2,036	-331	574	917	1,066	1,191	1,193
Foreign direct investment	-780	-796	-783	-3,311	-1,157	-1,220	-1,309	-1,401	-1,500	-1,605
Net acquisition of financial assets	142	375	222	181	192	203	218	233	249	267
Net incurrence of liabilities	922	1,171	1,004	3,492	1,349	1,423	1,527	1,634	1,749	1,872
Portfolio investment	94	-674	-277	-1,931	-585	-804	-832	-860	-690	-422
Net acquisition of financial assets	-30	19	1	69	69	69	69	69	69	69
Net incurrence of liabilities	-124	693	278	2,000	654	873	901	929	759	491
Of which: government bonds	-125	1,043	1,078	1,000	300	500	500	500	300	0
Financial derivatives	0	0	0	0	0	0	0	0	0	0
Other investment	83	1,062	1,103	4,468	1,411	2,598	3,058	3,327	3,381	3,220
Change in reserve assets	988	1,798	3,189	2,809	0	0	0	0	0	0
Errors and omissions	-268	-432	-603	-142	0	0	0	0	0	0
	(In percent of GDP)									
Current account balance	0.9	2.4	4.9	2.5	-0.4	0.6	0.9	1.0	1.0	0.9
Trade balance (goods)	-10.9	-10.3	-8.1	-12.7	-14.8	-13.9	-13.4	-12.9	-12.4	-12.0
Exports, f.o.b.	13.2	12.9	13.0	14.4	15.4	14.7	14.0	13.6	13.1	12.7
Imports, f.o.b.	24.0	23.2	21.2	27.1	30.1	28.6	27.4	26.4	25.5	24.7
Of which: oil & lubricants	4.0	3.8	2.5	4.1	5.6	4.9	4.4	4.1	3.8	3.7
Net services	0.2	0.0	-0.3	-1.5	-1.3	-1.1	-0.9	-0.8	-0.8	-0.8
Net income	-2.0	-1.8	-1.9	-1.9	-2.1	-2.2	-2.1	-2.1	-2.1	-2.1
Net transfers	13.6	14.5	15.3	18.7	17.8	17.8	17.3	16.8	16.3	15.8
Of which: remittances	12.6	13.6	14.6	17.8	16.9	16.9	16.3	15.8	15.3	14.9
Capital account balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account balance	0.5	1.8	4.2	2.4	-0.4	0.6	0.9	1.0	1.0	0.9
Foreign direct investment	-1.1	-1.0	-1.0	-3.9	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Net acquisition of financial assets	0.2	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Net incurrence of liabilities	1.3	1.5	1.3	4.1	1.5	1.5	1.5	1.5	1.5	1.5
Portfolio investment	0.1	-0.9	-0.4	-2.2	-0.6	-0.8	-0.8	-0.8	-0.6	-0.3
Net acquisition of financial assets	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Net incurrence of liabilities	-0.2	0.9	0.4	2.3	0.7	0.9	0.9	0.8	0.6	0.4
Of which: government bonds	-0.2	1.4	1.4	1.2	0.3	0.5	0.5	0.5	0.3	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment	0.1	1.4	1.4	5.2	1.5	2.7	3.0	3.0	2.9	2.5
Change in reserve assets	1.3	2.3	4.1	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Errors and omissions	-0.4	-0.6	-0.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:										
Value of exports, f.o.b. (percentage change)	-0.1	2.8	2.1	22.6	13.3	0.6	2.3	3.7	3.8	3.7
Value of imports, f.o.b. (percentage change)	7.2	1.5	-8.1	41.9	18.0	0.1	2.7	3.3	3.4	3.7
Remittances (percentage change)	13.5	13.2	7.9	34.9	0.9	5.4	3.9	3.8	3.7	3.7
Stock of NIR (in millions of U.S. dollars) 1/	11,617	13,769	18,468	20,940	20,940	20,940	20,940	20,940	20,940	20,940
NIR in months of next-year NFGS imports	6.5	8.6	8.0	7.7	7.7	7.5	7.2	7.0	7.0	7.0
NIR in ARA metric under stabilized regime (percent)	119.7	135.8	172.0	174.3	162.0	153.3	144.2	135.7	128.0	121.1
NIR over short-term debt on residual maturity	1.9	2.4	3.6	3.3	3.4	3.2	3.0	2.7	2.5	2.5
Nominal GDP (in billions of U.S. dollars)	73.3	77.2	77.6	86.0	91.3	96.3	103.4	110.6	118.4	126.7

Sources: Bank of Guatemala; Ministry of Finance; and Fund staff estimates and projections.

1/ Includes 2009 SDR allocations of US\$271 million and 2021 SDR allocations of US\$586 million.

Table 4. Guatemala: Monetary Sector Survey

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Projections										
	(In millions of quetzales)										
Bank of Guatemala (BOG)											
Net international reserves 1/	77,690	89,877	106,007	143,938	161,635	167,631	170,775	170,775	170,775	170,775	170,775
(In millions of U.S. dollars) 1/	10,578	11,617	13,769	18,468	20,940	21,277	21,277	21,277	21,277	21,277	21,277
Net domestic assets	-44,095	-51,854	-61,992	-87,695	-98,218	-99,701	-97,730	-92,389	-86,880	-80,980	-74,672
Net claims on nonfinancial public sector	-20,996	-26,794	-28,701	-25,117	-33,867	-29,547	-30,852	-32,124	-33,513	-35,061	-36,700
Central government (CG)	-9,532	-10,633	-8,489	-1,721	-13,499	-7,264	-7,073	-6,903	-6,742	-6,589	-6,435
Rest of nonfinancial public sector	-11,464	-16,160	-20,212	-23,396	-20,367	-22,283	-23,779	-25,221	-26,771	-28,472	-30,265
Bank of Guatemala losses	25,022	25,711	25,493	24,182	25,687	26,687	27,687	28,687	29,687	30,687	31,687
Net credit to banks	-37,082	-38,550	-39,793	-53,373	-59,243	-60,993	-63,662	-66,237	-68,648	-71,066	-73,467
Of which: legal reserves	-39,140	-40,608	-41,851	-55,431	-61,301	-63,051	-65,720	-68,295	-70,706	-73,124	-75,525
Open market operations 2/	-22,745	-19,239	-24,446	-28,619	-24,309	-38,768	-34,041	-28,999	-20,690	-11,823	-2,475
Other assets (net)	11,707	7,018	5,455	-4,769	-6,487	2,919	3,138	6,283	6,283	6,283	6,283
Currency in circulation	33,595	38,023	44,016	56,243	63,417	67,929	73,045	78,386	83,895	89,795	96,103
Banking sector											
Net foreign position	-37,419	-36,272	-35,417	-31,666	-30,536	-31,039	-32,141	-32,839	-33,452	-34,004	-34,481
(in millions of U.S. Dollars)	-5,095	-4,688	-4,600	-4,063	-3,956	-3,940	-4,004	-4,091	-4,168	-4,237	-4,296
Net claims on Bank of Guatemala	56,235	58,668	60,793	78,165	79,580	94,010	92,654	90,935	86,272	81,140	75,581
Legal reserves	39,140	40,608	41,851	55,431	61,301	63,051	65,720	68,295	70,706	73,124	75,525
BOG securities	19,146	20,111	20,993	24,786	20,330	33,010	28,985	24,692	17,617	10,067	2,108
Liabilities to BOG	-2,051	-2,051	-2,051	-2,051	-2,051	-2,051	-2,051	-2,051	-2,051	-2,051	-2,051
Net domestic assets	203,446	219,425	237,162	258,420	291,049	301,531	330,674	360,972	394,909	431,266	470,131
Net credit to the NFPS	10,331	19,189	23,673	33,456	38,084	38,437	42,453	46,961	52,185	57,453	63,560
Official capital and reserves	-6,283	-6,732	-7,802	-8,130	-8,701	-9,377	-9,877	-10,404	-10,921	-11,469	-12,065
Credit to the private sector	189,043	202,221	212,195	225,715	254,439	271,877	291,452	312,437	334,932	359,047	384,899
Other items net	10,355	4,748	9,096	7,379	7,227	594	6,646	11,977	18,713	26,235	33,736
Medium and long-term foreign liabilities	1,591	1,658	1,919	1,888	2,095	2,244	2,413	2,589	2,771	2,966	3,175
Liabilities to private sector	220,671	240,164	260,619	303,032	337,998	362,258	388,775	416,479	444,957	475,435	508,056
Demand deposits	71,601	75,347	81,343	102,310	112,538	120,545	129,624	139,102	148,877	159,348	170,541
Time and savings deposits, and Securities	123,583	137,747	150,000	169,230	188,286	201,682	216,872	232,730	249,085	266,603	285,330
Capital and reserves (private banks)	22,215	24,400	26,506	28,487	32,208	34,711	36,559	38,510	40,426	42,453	44,659
Net foreign assets	40,270	53,605	70,590	112,273	131,099	136,591	138,635	137,937	137,323	136,771	136,294
(In millions of U.S. dollars)	5,483	6,928	9,169	14,405	16,984	17,337	17,273	17,186	17,109	17,040	16,981
Net domestic assets	212,314	223,570	233,192	245,884	267,445	290,520	319,879	353,380	387,731	424,394	463,515
Net claims on nonfinancial public sector	-10,665	-7,605	-5,028	8,340	4,218	8,890	11,601	14,838	18,672	22,392	26,860
Bank of Guatemala losses	25,022	25,711	25,493	24,182	25,687	26,687	27,687	28,687	29,687	30,687	31,687
Credit to private sector	189,043	202,221	212,195	225,715	254,439	271,877	291,452	312,437	334,932	359,047	384,899
Other assets (net)	8,915	3,243	532	-12,353	-16,898	-16,935	-10,861	-2,581	4,439	12,268	20,068
Medium and long-term foreign liabilities	1,591	1,658	1,919	1,888	2,095	2,244	2,413	2,589	2,771	2,966	3,175
Liabilities to the private sector	250,994	275,517	301,864	356,269	396,450	424,868	456,101	488,727	522,283	558,199	596,634
Of which: Money	105,196	113,370	125,358	158,553	175,955	188,474	202,669	217,488	232,772	249,143	266,644
Of which: Quasi-money	123,583	137,747	150,000	169,230	188,286	201,682	216,872	232,730	249,085	266,603	285,330
Memorandum items:											
	(Percent change)										
Currency in circulation	14.3	13.2	15.8	27.8	12.8	7.1	7.5	7.3	7.0	7.0	7.0
M2	8.4	9.4	9.6	18.9	11.6	7.1	7.5	7.3	7.0	7.0	7.0
Credit to private sector	3.8	7.0	4.9	6.4	12.7	6.9	7.2	7.2	7.2	7.2	7.2
	(In percent of GDP)										
Currency in circulation	6.4	6.9	7.4	9.4	9.5	9.5	9.5	9.5	9.5	9.5	9.5
M2	44.1	46.0	46.8	55.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5
Net credit of the banking sector to the CG	2.0	3.5	4.0	5.6	5.7	5.4	5.5	5.7	5.9	6.1	6.3
Credit to private sector	35.9	36.7	35.7	37.7	38.3	38.2	38.0	38.0	38.1	38.1	38.2
	(In percent of bank liabilities to the private sector)										
Banks' liquid assets	45.0	46.8	46.2	49.6	47.8	49.1	46.6	44.4	42.0	39.5	37.3
Demand deposits	32.4	31.4	31.2	33.8	33.3	33.3	33.3	33.4	33.5	33.5	33.6
Time and savings deposits	56.0	57.4	57.6	55.8	55.7	55.7	55.8	55.9	56.0	56.1	56.2
Capital and reserves (private banks)	10.1	10.2	10.2	9.4	9.5	9.6	9.4	9.2	9.1	8.9	8.8

Sources: Bank of Guatemala; and Fund staff estimates and projections.

1/ Excludes foreign currency liabilities of the central bank to financial institutions.

2/ Includes open market placements with the private sector (financial and nonfinancial).

Table 5. Guatemala: Financial Soundness Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
On-shore banks												
Reserves as a percentage of Deposits, in NC	14.6	14.6	14.5	14.5	14.6	14.5	14.8	15.0	14.9	14.9	14.9	14.7
Reserves as a percentage of Deposits, in FC	18.6	16.2	16.8	20.8	17.1	15.9	16.7	16.3	16.2	15.9	15.8	15.9
Short-term liquidity	20.3	21.6	21.6	21.9	20.7	18.9	20.5	21.2	20.6	19.0	21.2	0.2
Liquid asset to total asset ratio	28.4	29.0	27.5	28.1	28.8	26.9	27.7	28.4	29.6	29.3	32.7	0.0
Liquidity ratio	24.5	24.2	23.6	24.5	25.5	24.5	25.1	25.7	27.0	27.1	30.6	0.0
Regulatory capital to risk-weighted assets	15.2	15.3	14.7	14.8	14.6	14.1	13.8	14.7	14.8	15.5	16.1	17.3
Nonperforming loans to total gross loans	2.1	1.6	1.3	1.2	1.3	1.4	2.1	2.3	2.2	2.2	1.8	0.0
Provisions to non-performing loans	115.3	126.2	143.4	157.6	151.9	138.4	120.4	119.6	123.4	135.9	197.4	2.1
Cash to total deposits	20.3	21.6	21.6	21.9	20.7	18.9	20.5	21.2	20.6	19.0	21.2	0.2
Return on assets	1.7	1.7	1.6	1.5	1.5	1.5	1.6	1.7	1.6	1.7	1.5	1.9
Return on equity	16.3	18.5	17.2	16.0	16.6	16.3	16.9	17.8	16.7	17.9	16.1	19.9
Foreign currency-denominated loans to total loans	30.2	34.0	35.2	36.7	38.5	39.9	39.0	38.6	39.2	36.8	36.1	35.2
Foreign currency-denominated liabilities to total liabilities	24.6	27.5	28.6	30.3	31.1	30.8	29.8	29.1	29.5	27.7	26.4	26.4
Off-shore banks												
Statutory capital to risk-weighted assets	18.5	16.2	16.8	15.8	15.6	14.5	14.8	15.3	15.2	17.4	20.0	34.6
Nonperforming loans to total gross loans	2.1	1.7	1.2	0.8	0.9	1.2	1.2	1.7	2.1	2.2	2.1	1.7
Provisions to non-performing loans	110.7	143.0	172.4	229.4	178.4	148.8	138.3	114.9	116.8	135.9	149.4	207.6
Return on assets	1.4	1.8	1.8	1.4	1.5	1.2	1.5	1.6	1.4	1.7	1.2	1.9
Return on equity	12.6	16.0	15.6	12.8	13.8	12.0	14.9	15.3	16.9	17.9	12.1	19.9
Total assets off-shore banks to total assets on-shore banks	14.3	12.7	12.2	11.7	10.7	9.6	9.1	8.0	7.8	7.0	6.4	3.7

Source: Superintendency of Banks.

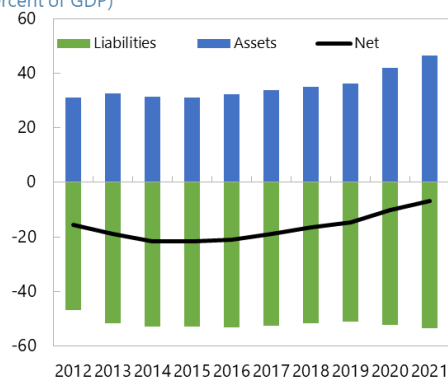
Annex I. External Sector Assessment

Overall Assessment: The external position of Guatemala in 2021 was stronger than the level implied by fundamentals and desirable policies. The current account (CA) surplus declined in 2021 to close to pre-pandemic levels as historically high remittances were more than offset by a substantial increase in imports. The net international investment position (NIIP) remained low despite significant investment needs. The real effective exchange rate remained stable, and reserves continued their accumulating trend of recent years.

Potential Policy Responses: Guatemala's CA gap is significantly explained by policy gaps, mainly by lower than desirable fiscal deficit and health expenditure. Further strengthening of the fiscal framework could help maintain fiscal sustainability while providing space to increase health expenditure and other social and development needs. Fostering the business environment, strengthening governance and anti-corruption reforms, improving security situation, and addressing infrastructure and social gaps would boost investment, decrease migration and remittance inflows, and narrow the CA gap.

Foreign Assets and Liabilities: Position and Trajectory

International Investment Position
(Percent of GDP)



Source: Banguat and staff calculations.

Background. The deficit in the Net International Investment Position (NIIP) maintained its declining trend in 2021, having fallen from 22 percent of GDP in 2015 to 7 percent in 2021.¹ This trend reflects growing external assets (mainly other investment assets) which have increased from 19 percent of GDP in 2015 to 47 percent in 2021. External liabilities have remained stable in recent years, between 50-55 percent of GDP, due to limited public borrowing and weak capacity to attract foreign capital.

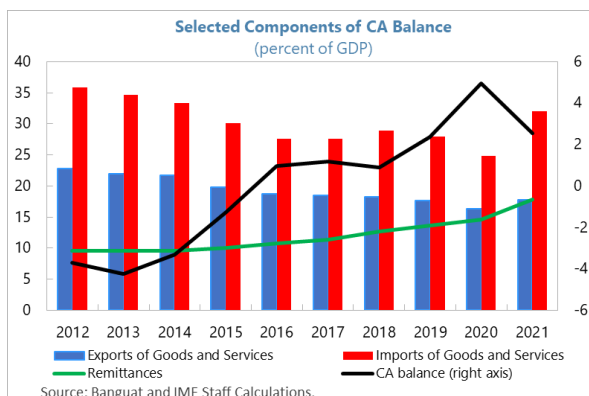
The US\$ 2.2 billion sale of Tigo Guatemala contributed to an increase in external liabilities from US\$41 to US\$46 billion between 2020 and 2021 but remaining practically unchanged as a share of GDP. FDI remained the largest component of external liabilities in 2021 accounting for 40 percent of the total. Portfolio investment accounted for 18 percent and other investments for 29 percent. Public external debt comprised around 25 percent of external liabilities in 2021 or around 15 percent of GDP.

Assessment. The current NIIP projected path does not imply risks to external sustainability or a need for a CA adjustment. In fact, without a structural take off in FDI or public sector external borrowing, the NIIP is projected to increase towards balance, unusual for a country with significant investment needs.

2021 (% GDP)	NIIP: -6.9	Gross Assets: - 46.6	Debt Assets: n.a.	Gross Liab.: -53.4	Debt Liab.: -33.5
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Current Account

Background. The CA surplus declined in 2021 to close to pre-pandemic levels. The CA balance declined from 5.5 percent in 2020 to 2.5 percent in 2021, as a remarkable increase in remittances was more than offset by a substantial increase in imports. Remittances broke historical records in 2021 reaching 17.8



percent GDP, exceeding 2019 (14 percent) and 2020 (15 percent) levels. But this increase in remittances also fueled a substantial increase in imports that was supplemented by a major rebound in fuel imports (reflecting higher international prices). As a result, imports of goods and services reached 32 percent of GDP in 2021, considerably higher than in 2019 (28 percent of GDP). Exports of goods and services returned to pre-pandemic levels of 18 percent of GDP, despite continued depressed tourism receipts

as goods exports extended their 2020 dynamism, notably in textiles, manufacturing, and coffee exports.

Going forward, remittances are expected to moderate as the effect of the U.S. stimulus fades out. However, they are likely to remain above pre-Covid levels because the implementation of the U.S. infrastructure bill should boost construction, a sector that heavily employs Central American immigrants. After an oil price related surge in fuel imports in 2022, total imports should decline in line with the projected downward correction in oil prices and remittances. Exports are also projected to decline as a share of GDP due to a switch back in world demand from manufacturing goods (which Guatemala exports intensively) to services.

Assessment. The external balance assessment (EBA) methodology suggests that the external position in 2021 was stronger than the level consistent with fundamentals and desirable medium-term policies. This assessment constitutes a change relative to the “substantially stronger” assessment in 2020 due to the following factors:

- (1) The much lower actual CA surplus in 2021 (from 5.5 in 2020 to 2.5 in 2021);
- (2) A higher remittance adjustor, reflecting the unusually high remittance outturn in 2021;
- (3) A higher CA norm and higher elasticity, both of which are largely due to changes in the underlying EBA model, although the same upward adjustment to the CA norm was made to reflect the negative impact of Guatemala’s structural bottlenecks (such as a weak business environment and security conditions) on investment.

The change in the gap is approximately the same as the change in the adjusted CA). As was the case last year, several adjustors were added to the EBA CA model to account for the temporary impact of the Covid-19 pandemic. The pandemic resulted in a significant increase in the acquisition of medical goods, a switch away from household consumption of services, and a fall in tourism revenues. The extent to which these shocks took place in Guatemala determines the magnitude and sign of these adjustors.

An additional adjustor is added to capture the important impact of higher remittances because of the pandemic on the current account. Using a module in the EBA-Lite methodology that accounts for the temporary increase in remittances, this adjustor is estimated at 1.2 percent of GDP. Oil prices rebounded from last year’s exceptionally low levels and therefore no related adjustor is added this year. Overall, the impact of all Covid-19 adjustors results in an increase in the CA of 0.2 percent of GDP. Model estimates of the cyclically adjusted CA, the CA norm, and the CA gap; and identified policy gaps are presented in Table I.1.

Table I.1. Guatemala: EBA estimates for 2020 and 2021

		2020 1/	CA model
<i>EBA CA methodology</i>		<i>Percent of GDP (except REER Gap)</i>	
CA-Actual	(A)	5.5	2.5
Cyclical contributions /2	(B)	-0.3	-0.2
COVID-19 Adjustments	(C)	0.7	-0.6
<i>of which:</i> Tourism		-0.4	-0.5
Transport			-0.8
Household consumption			-0.3
Medical goods			-0.3
Remittances		0.2	1.2
Oil adjustor		0.9	
Adjusted CA	(D = A-B-C)	5.1	3.3
CA Norm /2	(E)	-4.0 +/- 1.2	-2.3
Adjustments to the norm /3	(F)	-2.0	-2.0
Adjusted CA norm	(G = E-F)	-2.0 +/- 1.2	-0.3
CA gap	(H = D - G)	7.1 +/- 1.2	3.6
Contribution of identified policy gaps /2/4		2.0	1.9
Elasticity /2	(J)	0.12	0.22
REER Gap (percent) /5	(K=H/J)	[-69,-49]	-16.3

Source: IMF staff estimates.

1/ Data featured in the previous Article IV consultation in 2021.

2/ Estimates from the EBA CA model. The standard error of the CA norm is 0.6 percent of GDP.

3/ Adjustment to the norm upward reflects the negative impact of Guatemala's security conditions on investment which is not captured by the EBA CA model.

4/ Of which, 1.3 percent owes to lower fiscal deficit, 0.5 percent owes to lower health spending, and 0.1 percent higher credit than desirable policies.

5/ "-" indicates undervaluation

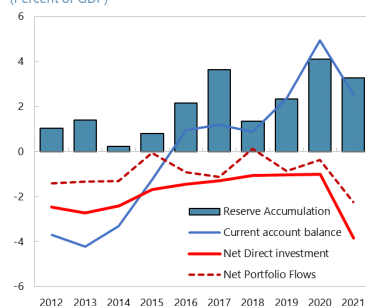
Real Exchange Rate

Background. The real effective exchange rate (REER) was broadly stable in 2021. The quetzal remained stable most of the year with only a 1.2 percent year-on-year depreciation relative to the US dollar. The real effective exchange rate similarly remained stable depreciating only by 0.6 percent, as a 2.6 percent appreciation in the nominal rate was more than offset by the 3.1 percent in inflation. Largely supported by robust remittances inflows in the last decade, the REER has experienced a steady appreciation of around 40 percent cumulatively since 2010.

Assessment. The external balance assessment (EBA) CA methodology suggests that the REER is below the level implied by fundamentals although considerably less so than in 2020. Under the assumption that the estimated CA gap will be closed by an adjustment in the trade balance, the EBA model implies a REER undervaluation of 16 percent.²

Capital and Financial Accounts: Flows and Policy Measures

Selected Items of the Balance of Payments
(Percent of GDP)



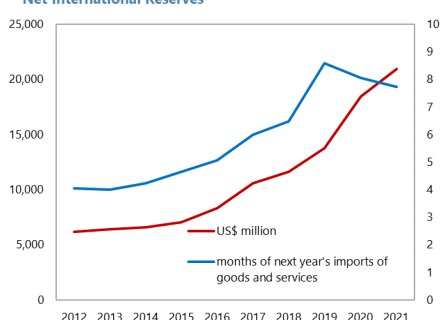
Source: Banguat, Staff calculations.

Background. FDI grew substantially after its 2020 decline. Reaching 3.3 US\$ billion in 2021 (3.9 percent of GDP), FDI inflows were four times higher than in 2020 (US\$ 796 million). This largely reflected a US\$2.2 billion acquisition by Millicom International Cellular (a Luxembourg-based company) of 45 percent of the equity of Tigo Guatemala (a telecommunications company).³ Other FDI inflows were about 1.5 percent of GDP, similar to their 2019 level but considerably below the 2010-15 average (2.4 percent of GDP). Portfolio investment flows of 2.2 percent of GDP, mainly related to government bond sales, were much higher than in previous years.

Assessment. There are no significant macroeconomic risks from capital flows, especially given their relatively low level. The solid fiscal stance and low public debt level implies that the largely government bond-related portfolio investment flows do not carry important risk.

FX Intervention and Reserves Level

Net International Reserves



1/ Source: Banguat, Staff calculations.

Background. Reserves continued to increase in line with the still significant current account surplus and reflecting also the increased SDR allocation. Net international reserves (NIR) increased by US\$2.5 billion in 2021 reaching US\$20.9 billion in 2020. Reserve accumulation was lower than the US\$3.7 billion accumulated in 2020 despite the increased SDR allocation of US\$ 586 million in August 2021 and in line with the lower current account surplus relative to 2020.

Guatemala substantially accumulated reserves since the mid-2010s largely because of a significant increase in remittances from the United States.⁴ The de facto exchange rate arrangement of Guatemala is classified as a stabilized arrangement.

Assessment. End-2021 reserves are 174 percent of the IMF's metric for Assessing Reserve Adequacy (ARA metric) for countries with stabilized exchange rates like Guatemala. Reserves continue being above other traditional metrics and cover more than 7.7 months of next year's goods and services imports, 43 percent of broad money, and 334 percent of short-term external debt. In 2021, FX intervention has been asymmetric towards accumulation of foreign exchange, as has been the case in recent years.

¹ The August 2021 increased SDR allocation (equivalent to US\$ 586 million) does not affect NIIP as it is accounted as it equally increases assets and liabilities.

² The EBA REER Level and Index model indicates that REER was overvalued by about 34 and 15 percent, respectively, in 2021. However, both models had an unusually poor fit for Guatemala. Because Guatemala is not included in the EBA REER index model, the model's estimate relies on imputed values for the missing data, such as country fixed effect. Therefore, staff assessment is based on the EBA CA model instead.

³ As a result, Millicom now owns 100 percent interest in Tigo Guatemala.

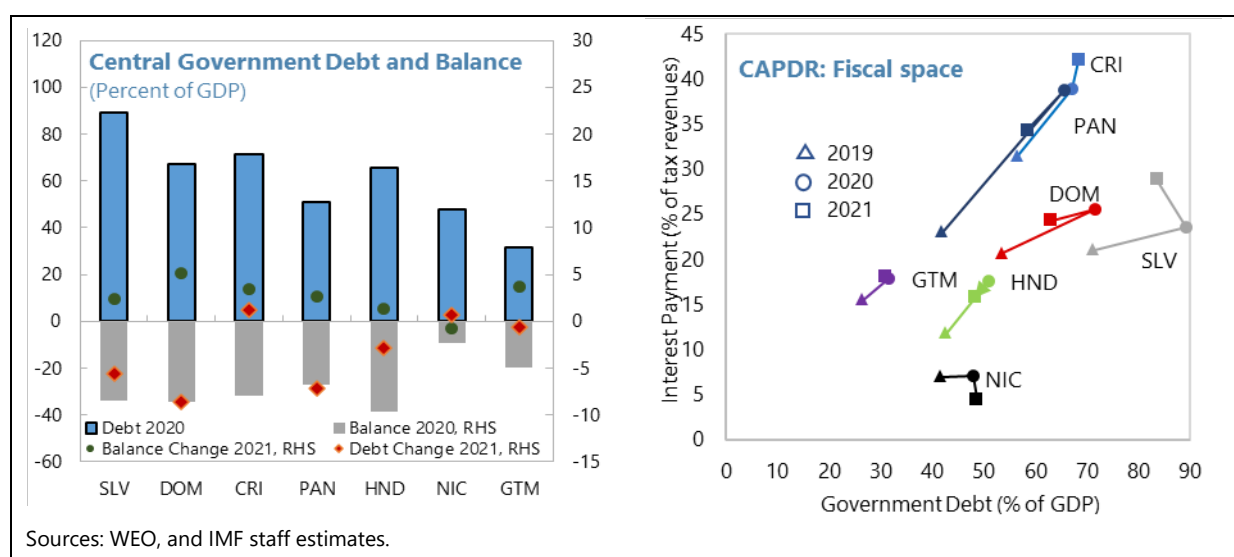
⁴ This increase in remittances from the United States has been the result of a strong acceleration in migration to the United States.

Annex II. Public Debt Sustainability Analysis

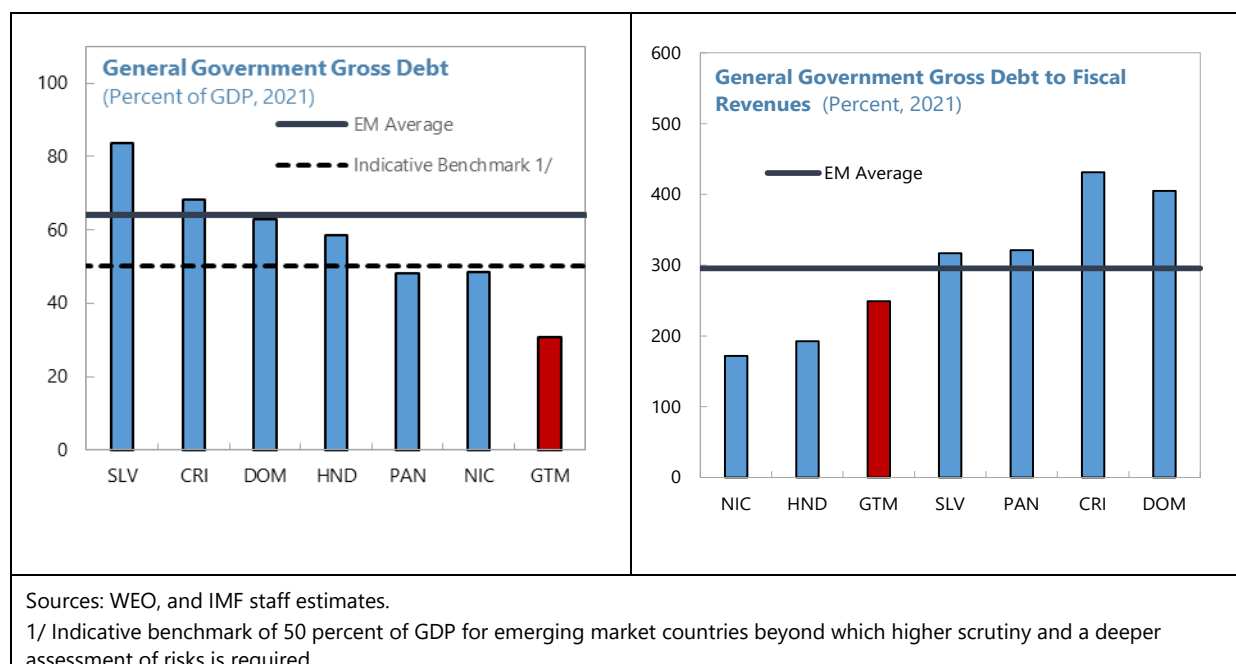
This annex presents an assessment of Guatemala's medium and long-term debt sustainability. Following a 5 pp of GDP increase in 2020 due to the pandemic, debt fell in 2021 in response to the strong recovery and associated primary surplus in 2021. Staff estimate that under current policies, central government debt is sustainable at 30 percent of GDP. The sustainability was also secured under two alternative scenarios. The first one assumes an abrupt tightening of global financial conditions that exceed historical interest rate shocks. The second one considers a higher fiscal deficit of 1.0 percent per year over the projection period to increase public investment and social transfers. The debt path remains robust under both scenarios. Additionally, public debt is resilient to short-term macro shocks.

A. Introduction

1. Prudent fiscal policy and a strong recovery supported a primary balance of 0.6 percent of GDP in 2021, putting debt to GDP on a firmly decreasing path. The government's steadfast policy response in 2020—a fiscal package of 2.3 percent of GDP—was partially reversed in 2021. With total revenues rising to 12.4 percent of GDP in 2021 due to a strong economic recovery and tax administration gains, and total expenditures returning to pre-pandemic levels as pandemic-related measures lapsed, supported a 0.7 percentage point decrease in the public debt to GDP ratio to 30.8 percent. In response, domestic gross financing needs fell from 4.1 percent of GDP in 2020 to 1.2 percent of GDP in 2021. On the external front, MINFIN issued US\$1000 million in Eurobonds at historically low-interest rates while reducing external gross financing needs by 1 percent of GDP in 2021. The emission comprised of US\$500 million at 12-year maturity with a coupon rate of 3.70 percent, and the other a US\$500 million at 20-year maturity with a coupon rate of 4.65 percent.



2. Guatemala maintains the lowest tax burden of the region, partly limiting its debt affordability. At 30.8 percent in 2021, public debt remains below the indicative benchmark of 50 percent of GDP for countries with market access, one of the lowest ratios in the region and across emerging market peers. Its low indebtedness coupled with a track record of prudent economic policies has proved attractive to investors, especially in international markets, as the new Eurobonds issue proved. However, a narrow tax base limits productive spending, and debt carrying capacity offsets these strengths. With relatively low debt levels, as a share of revenues, Guatemala's public debt (around 250 percent) has converged to the average emerging market, reflecting its low tax revenues in global comparison. In 2021, the domestic debt stood at 17.9 percent of GDP, accounting for almost 58 percent of total debt, while external public debt stood at 12.9 percent of GDP.



B. Assessing Debt Dynamics and Fiscal Sustainability

3. The sustainability of the public finances was analyzed under the baseline scenario and two alternative scenarios. The baseline scenario draws upon the 2022 budget setting updated with staff's growth projections and assuming historical expenditure execution levels, which imply an overall deficit of 2.3 percent of GDP and an embedded fiscal impulse of 1.2 percent of GDP. From 2022 to 2027, the baseline assumes an overall fiscal deficit of around 2.0-1.8 percent of GDP—in line with the historical average excluding 2020—and nominal GDP growth converging to 7.0 percent trend (comprising real GDP growth of 3.5 percent, and GDP deflator at 3.5 percent). Due to the inflation outlook and the risk of de-anchoring inflation expectations in the United States and advanced economies, the first alternative scenario is an abrupt tightening of financial conditions. Given the projected path for the FED funds rate and the Guatemala's risk-premium elasticity, we calibrate a scenario where interest rate relative to baseline increase by 350 basis points, larger than historical standards (i.e., the interest rate shock in standard sensitivity analysis) that leads to a 1

percentage point decrease in GDP growth in 2022 and 0.5 p.p. in 2023. The second alternative scenario assumes an increase of 1 percent of GDP in primary spending *per year* over the 5-years projection horizon (or around 10 percent of total revenues), i.e., cumulative 5 percent of GDP higher fiscal deficit over 2023-2027.¹ This increase in primary spending is allocated between public investment (partially reverting recent trend declines, see Text Figure 6) and social transfers by 0.5 percent of GDP per year (see Text Figure 5); or total 2.5 percent of GDP each by 2027. Consistent with the policy recommendation in ¶17, increasing revenue collection or improving spending efficiency would be needed to finance higher expenditures. The increase in the much-needed infrastructure and social programs is assumed to boost GDP growth, i.e., with a spending multiplier of 0.6.²

4. Fiscal position remains sustainable in the medium-term under all three scenarios. In the baseline scenario the debt-to-GDP ratio stabilizes at a level of 30 percent of GDP in 2027 while the debt-to-revenue ratio remains at around 260 percent. In the first alternative scenario, the debt-to-GDP ratio rises slightly in the short term and stabilizes at 31 percent of GDP in 2027 while debt-to-revenue ratio increases to 268 percent. Under the second alternative scenario, the debt ratio stabilizes at 34 percent of GDP, with the debt-to-revenue ratio around 290 percent. Under all three scenarios the debt-to-GDP does not exceed an indicative benchmark for countries with market access at 50 percent.³

5. The sensitivity analysis suggests that Guatemala's debt burden indicators are resilient to short-term macroeconomic shocks. Five sensitivity tests are considered, including a shock to the primary balance, a shock to the real GDP growth, a shock to the real interest rate, a shock to the real exchange rate as well as a shock combining all of the above. The size of each shock was based on the historical standard deviations of the corresponding variables.

- *Real GDP Growth Shock.* GDP growth rate is reduced by 1 standard deviation for 2 consecutive years, dropping growth rate to 1.1 and 1.0 percent in 2023 and 2024, respectively. Decline in growth leads to lower inflation: 3.2 and 3.0 percent in 2023 and 2024, respectively (0.25 percentage points per 1 percentage point decrease in GDP growth).
- *Primary Surplus Shock.* Shock is equivalent 0.6 percent of GDP (half of the 10-year historical standard deviation) in 2023 and 2024. Shock triggers an increase in interest rates of 25 basis

¹ To simplify, assuming 0 interest rate. The size of the shock is the discounted sum of 1 percent of GDP each year over 5 years.

² Estimates are based on simulations of GIMF. It is assumed that the increase in infrastructure and social spending is financed with public debt. The model implies an (on-impact) public investment multiplier of 0.9, while the targeted social transfer multiplier is 0.35. Thus, the average multiplier is 0.6 for a shock of 0.5 percent of GDP on each expenditure component. Annex V focus on a transitory public investment shock using both statistical methods and simulation of GIMF.

³ The DSA template incorporates two additional standard scenarios (Figure II.2). First, a constant primary balance of -0.6 percent of GDP as projected in 2022; and second, a contingent liability shock, defined as one-time increase in non-interest expenditures equivalent to 10 percent of banking sector assets that leads to a real GDP growth shock, lower inflation and higher interest rate.

points for every percentage point of GDP worsening in the primary balance.

- *Interest Rate Shock.* Interest rate increases by 260 basis points respect to the baseline (difference between average real interest rate level over projection and maximum real historical level).
- *Real Exchange Rate Shock.* Shock translates to a nominal exchange rate depreciation of 7 percent; pass-through to inflation with an elasticity of 0.25.

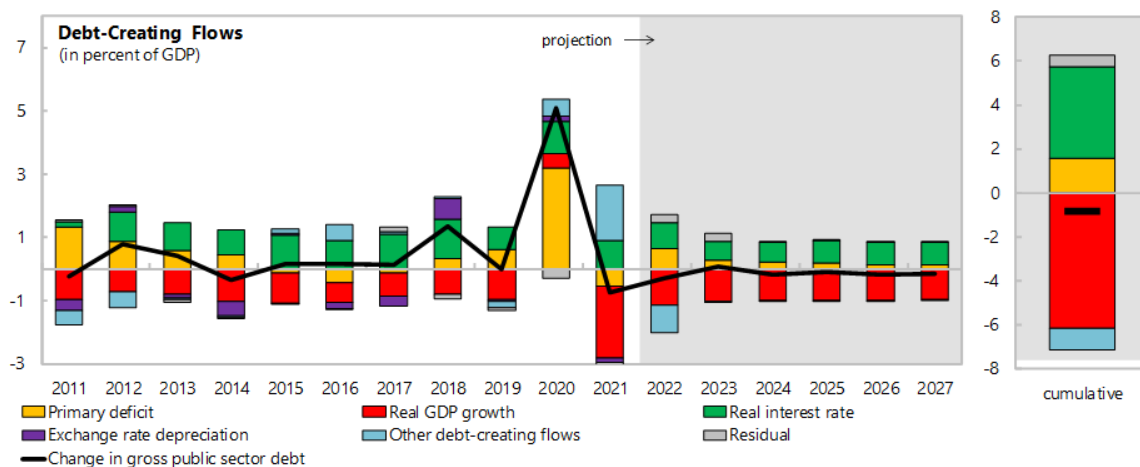
Figure II.1. Guatemala: Public Sector Debt Sustainability Analysis (DSA) – Baseline Scenario

(In percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators 1/										As of December 31, 2021	
	Actual			Projections							
	2011-2019 2/	2020	2021	2022	2023	2024	2025	2026	2027		
Nominal gross public debt	25.1	31.5	30.8	30.5	30.5	30.4	30.3	30.1	29.9	Sovereign Spreads	
										EMBIG (bp) 3/	271
Public gross financing needs	3.2	6.4	2.4	3.6	3.0	3.2	3.1	3.2	3.1	5Y CDS (bp)	
										N/A	
Real GDP growth (in percent)	3.6	-1.8	8.0	4.0	3.6	3.5	3.5	3.5	3.5	Ratings	Foreign Local
Inflation (GDP deflator, in percent)	2.9	2.7	2.8	3.0	3.8	3.6	3.4	3.4	3.4	Moody's	Ba1 Ba1
Nominal GDP growth (in percent)	6.6	0.9	11.0	7.1	7.5	7.3	7.0	7.0	7.0	S&Ps	BB- BB-
Effective interest rate (in percent) 4/	6.6	6.6	6.1	6.0	6.1	6.0	6.0	6.0	6.0	Fitch	BB- BB-

Contribution to Changes in Public Debt

	Actual			Projections						cumulative	debt-stabilizing primary balance 9/
	2011-2019	2020	2021	2022	2023	2024	2025	2026	2027		
Change in gross public sector debt	0.3	5.1	-0.7	-0.3	0.1	-0.2	-0.1	-0.2	-0.2	-0.8	
Identified debt-creating flows	0.3	5.4	-0.3	-0.6	-0.2	-0.2	-0.1	-0.2	-0.2	-1.4	
Primary deficit	0.4	3.2	-0.6	0.6	0.3	0.2	0.2	0.1	0.1	1.6	
Primary (noninterest) revenue and grants	11.5	10.7	12.4	12.3	12.0	11.8	11.6	11.6	11.6	71.0	
Primary (noninterest) expenditure	11.9	13.9	11.8	12.9	12.3	12.0	11.8	11.8	11.8	72.6	
Automatic debt dynamics 5/	0.0	1.6	-1.5	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-2.0	
Interest rate/growth differential 6/	0.0	1.5	-1.4	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-2.0	
Of which: real interest rate	0.9	1.0	0.9	0.8	0.6	0.6	0.7	0.7	0.7	4.2	
Of which: real GDP growth	-0.8	0.5	-2.3	-1.2	-1.0	-1.0	-1.0	-1.0	-1.0	-6.1	
Exchange rate depreciation 7/	-0.1	0.2	-0.1	...	...	...	...	...	...	...
Other identified debt-creating flows	-0.1	0.5	1.8	-0.9	0.0	0.0	0.0	0.0	0.0	-1.0	
Use of deposits	-0.1	0.5	1.8	-0.9	0.0	0.0	0.0	0.0	0.0	-1.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization receipts (+ reduces financing needs)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes 8/	0.0	-0.3	-0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.5	



Source: IMF staff.

1/ Public sector is defined as central government.

2/ Based on available data.

3/ EMBIG.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g)) - g + ae(1+r)] / (1+g+\pi+g\pi)$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi(1+g)$ and the real growth contribution as $-g$.7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

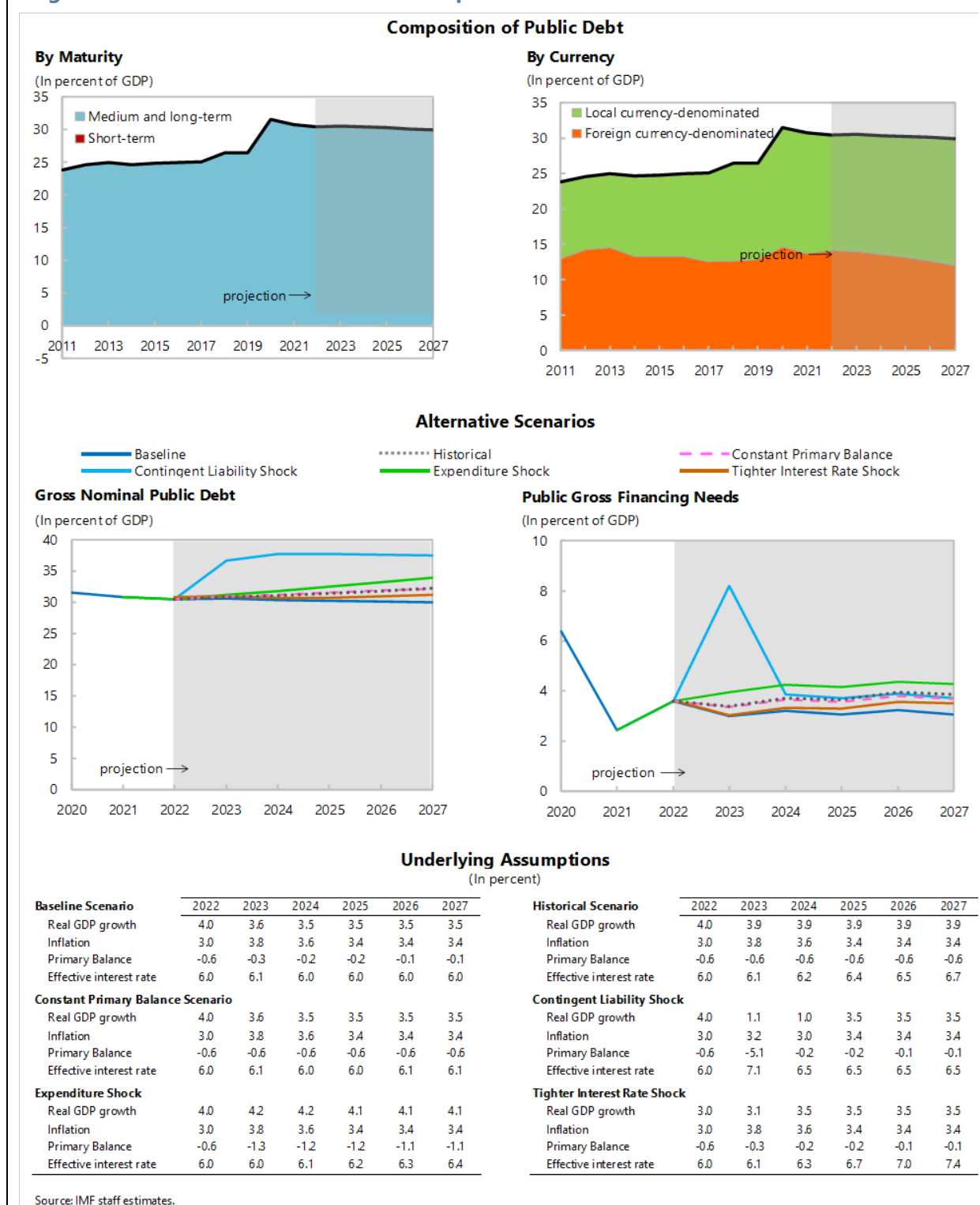
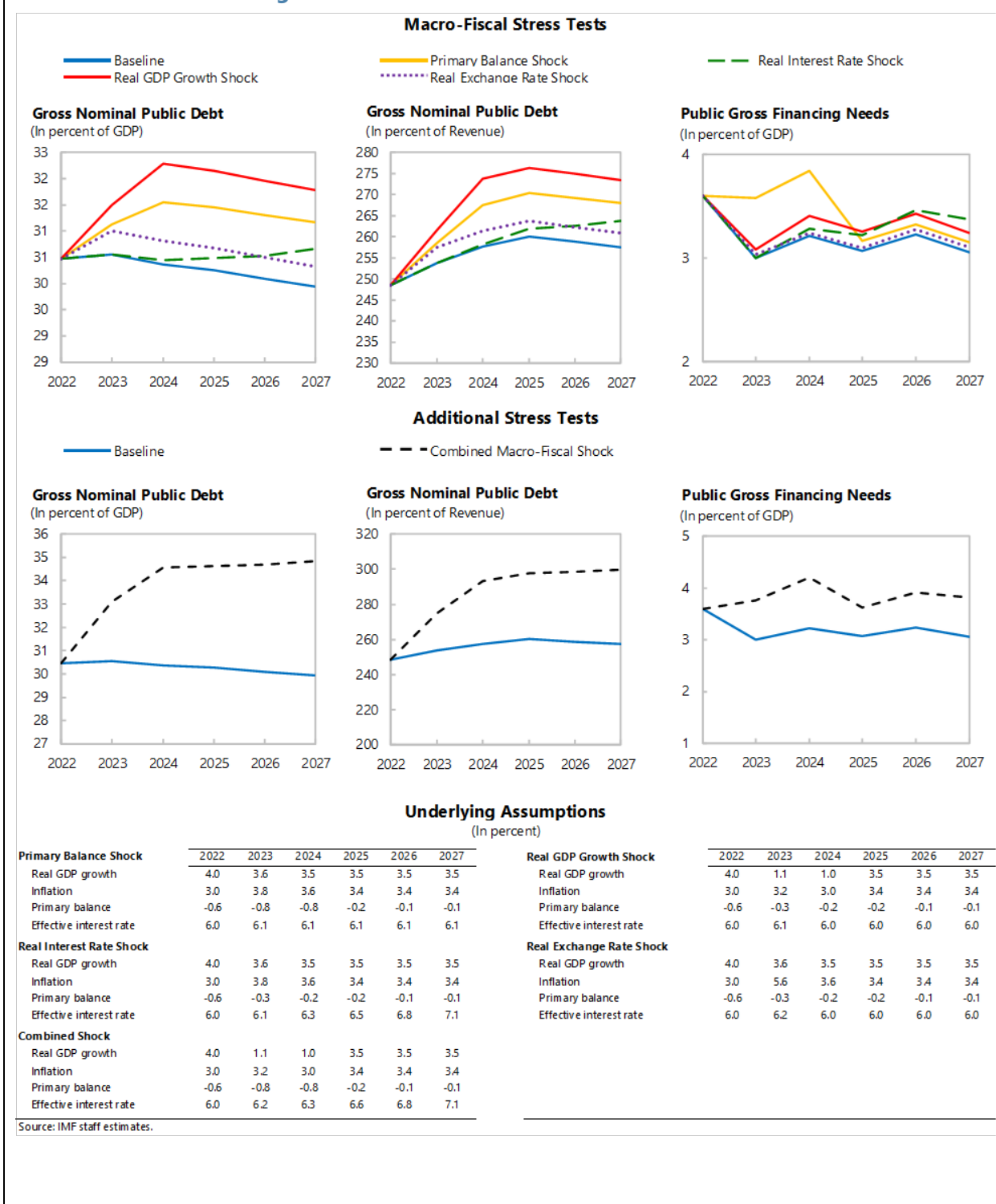
Figure II.2. Guatemala: Public DSA – Composition of Public Debt and Alternative Scenarios

Figure II.3. Guatemala: Public DSA – Stress Test



Annex III. External Debt Sustainability

Table III.1. Guatemala: External Debt Sustainability Framework, 2017-27

(In percent of GDP, unless otherwise indicated)

	Actual					Projections							Debt-stabilizing non-interest current account 6/ -2.4
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
Baseline: External debt	34.9	33.4	32.3	31.2	34.9	31.0	31.3	31.0	30.6	30.3	29.9		
Change in external debt	-0.5	-1.5	-1.0	-1.1	3.6	-3.8	0.3	-0.3	-0.4	-0.3	-0.4		
Identified external debt-creating flows (4+8+9)	-5.3	-2.8	-5.0	-6.1	-9.4	-2.2	-2.9	-3.2	-3.2	-3.3	-3.2		
Current account deficit, excluding interest payments	-2.4	-2.2	-3.6	-6.1	-3.5	-0.6	-1.5	-1.8	-1.8	-1.8	-1.7		
Deficit in balance of goods and services	9.1	10.7	10.3	8.5	14.2	16.1	15.0	14.2	13.7	13.2	12.8		
Exports	18.5	18.2	17.6	16.3	17.8	19.5	18.9	18.2	17.7	17.1	16.6		
Imports	27.6	28.9	27.9	24.8	32.0	35.5	33.9	32.5	31.3	30.3	29.4		
Net non-debt creating capital inflows (negative)	-1.3	-1.1	-1.0	-1.0	-3.9	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3		
Automatic debt dynamics 1/	-1.6	0.5	-0.4	1.0	-2.1	-0.4	-0.1	-0.1	-0.2	-0.2	-0.2		
Contribution from nominal interest rate	1.2	1.3	1.3	1.2	1.0	0.9	0.9	0.9	0.9	0.8	0.8		
Contribution from real GDP growth	-1.0	-1.2	-1.3	0.6	-2.2	-1.3	-1.1	-1.0	-1.0	-1.0	-1.0		
Contribution from price and exchange rate changes 2/	-1.8	0.3	-0.4	-0.8	-0.8	...	...	...	...	...	...
Residual, incl. change in gross foreign assets (2-3) 3/	4.8	1.2	4.0	5.0	13.1	-1.6	3.2	2.8	2.9	2.9	2.8		
External debt-to-exports ratio (in percent)	188.5	183.2	183.5	191.0	195.7	159.6	165.6	169.9	173.3	176.7	180.0		
Gross external financing need (in billions of US dollars) 4/	4.5	5.2	4.2	1.8	3.0	6.6	5.6	5.7	6.0	6.7	7.1		
in percent of GDP	6.3	7.1	5.5	2.4	3.5	10-Year	10-Year	7.2	5.8	5.5	5.4	5.7	5.6
Scenario with key variables at their historical averages 5/						31.0	30.9	31.0	31.1	31.3	31.3	-2.7	
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation						
Real GDP growth (in percent)	3.1	3.4	4.0	-1.8	8.0	3.5	2.4	4.0	3.6	3.5	3.5	3.5	
GDP deflator in US dollars (change in percent)	5.2	-1.0	1.2	2.4	2.6	2.6	1.7	2.1	1.8	3.6	3.4	3.4	
Nominal external interest rate (in percent)	3.6	3.8	4.0	3.6	3.5	3.5	0.3	2.9	3.1	3.1	3.0	2.9	
Growth of exports (US dollar terms, in percent)	7.0	0.8	1.8	-6.7	20.8	3.1	7.5	16.0	2.5	3.5	3.7	3.8	
Growth of imports (US dollar terms, in percent)	8.3	7.2	1.7	-10.5	43.0	5.7	14.2	17.9	0.7	2.6	3.3	3.4	
Current account balance, excluding interest payments	2.4	2.2	3.6	6.1	3.5	1.2	3.1	0.6	1.5	1.8	1.8	1.7	
Net non-debt creating capital inflows	1.3	1.1	1.0	1.0	3.9	1.9	0.9	1.3	1.3	1.3	1.3	1.3	

1/ Derived as $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$ times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$ times previous period debt stock. r increases with an appreciating domestic currency ($e > 0$) and rising inflation (based on GDP deflator).

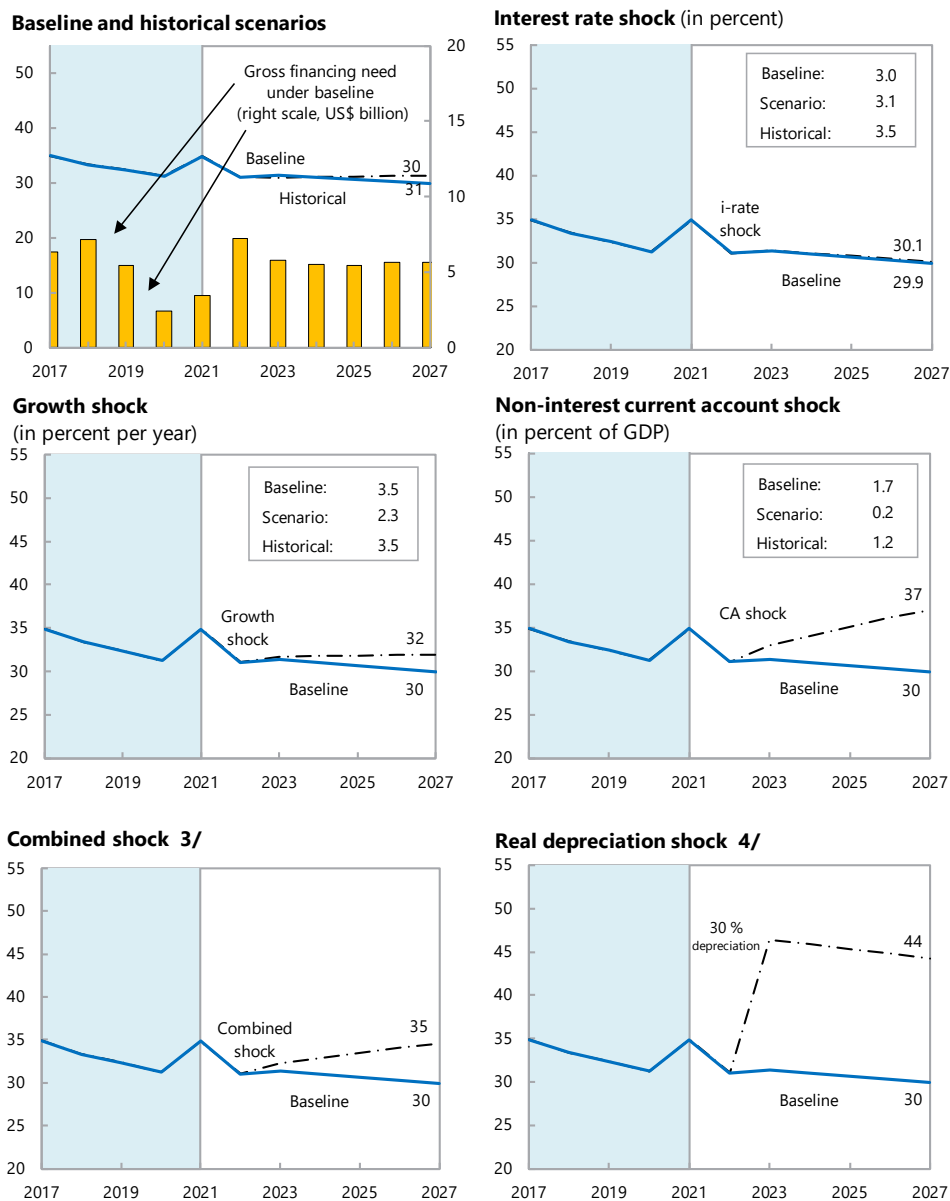
3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure III.1. Guatemala: External Debt Sustainability: Bound Tests ^{1/ 2/}
(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks.

Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.

4/ One-time real depreciation of 30 percent occurs in 2010.

Annex IV. Risk Assessment Matrix¹

Source of Risks	Likelihood/ Impact	Policy Advice
Global		
Russia's invasion of Ukraine leads to escalation of sanctions and other disruptions. Sanctions on Russia are broadened to include oil, gas, and food sectors. Russia is disconnected almost completely from the global financial system and large parts of the trading system. This, combined with Russian countersanctions and secondary sanctions on countries and companies that continue business with Russia, leads to even higher commodity prices, refugee migration, tighter financial conditions, and other adverse spillovers, which particularly affect LICs and commodity-importing EMs.	High likelihood Medium impact	Withdraw monetary policy accommodation if there is contamination onto inflation expectations. Allow the exchange rate to act as a shock absorber. Deploy fiscal buffers to soften the impact on growth and allow the exchange rate to act as a shock absorber.
Rising and volatile food and energy prices. Commodity prices are volatile and trend up amid supply constraints, war in Ukraine, export restrictions, and currency depreciations. This leads to short-run disruptions in the green transition, bouts of price and real sector volatility, food insecurity, social unrest, and acute food and energy crises (especially in EMDEs with lack of fiscal space).	High likelihood Medium impact	Deploy fiscal buffers to soften the impact on growth and allow the exchange rate to act as a shock absorber.
Geopolitical tensions and deglobalization. Intensified geopolitical tensions, security risks, conflicts, and wars cause economic and political disruptions, fragmentation of the international monetary system, production reshoring, a decline in global trade, and lower investor confidence.	High likelihood Medium impact	Deploy fiscal buffers to soften the impact on growth. Allow the exchange rate to absorb the shock.
De-anchoring of inflation expectations in the U.S. and/or advanced European economies. A fast recovery in demand amid a lagging supply-side response leads to a rapid de-anchoring of inflation expectations, which prompts central banks to tighten policies abruptly. The resulting sharp tightening of global financial conditions and spiking risk premia lead to currency depreciations, asset market selloffs, bankruptcies, sovereign defaults, and knock-on effects (e.g., lower commodity prices and possible contagion across EMDEs).	Medium likelihood High impact	Allow the exchange rate to act as a shock absorber; provide targeted liquidity (including the use of reserves) to address disorderly market conditions and support credit to SMEs.
Outbreaks of lethal and highly contagious Covid-19 variants. Rapidly increasing hospitalizations and deaths due to low vaccine protection or vaccine-resistant variants force more social distancing and/or new lockdowns. This results in extended supply chain disruptions and a reassessment of growth prospects, triggering capital outflows, financial tightening, currency depreciations, and debt distress in some EMDEs.	Medium likelihood Medium impact	Use fiscal policy space to delay the consolidation, continue supporting the most vulnerable, limit scarring and bolster the recovery. If necessary, maintain accommodative monetary policy stance while inflation expectations remain anchored. Allow the exchange rate to absorb external shocks and maintain the rules'-based exchange rate system to prevent excessive exchange rate volatility.

¹ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Source of Risks	Likelihood/ Impact	Policy Advice
Global		
Abrupt growth slowdown in China. A combination of extended Covid-19 lockdowns, rising geopolitical tensions, a sharper-than-expected slowdown in the property sector, and/or inadequate policy responses result in a sharp slowdown of economic activity, with spillovers affecting other countries through supply chain disruptions, trade, commodity-price, and financial channels.	Medium likelihood Low impact	Deploy fiscal buffers to soften the impact on growth and maintain monetary policy accommodation provided inflation expectations remain anchored.
Cyberthreats. Cyberattacks on critical physical or digital infrastructure (including digital currency platforms) trigger financial instability or widespread disruptions in socio-economic activities.	Medium likelihood Low impact	Deploy fiscal buffers to soften the impact on growth. Allow the exchange rate to absorb the shock. Provide liquidity and deploy macroprudential measures to support the banking system.
Domestic		
Social discontent and political instability. Persistent increases in poverty and malnutrition, rising food and energy prices, and tensions surrounding the selection of key public officials (Attorney General, Human Rights Attorney, and Comptroller General) could all trigger social discontent, possibly reviving unrest episodes seen in July/August 2021. Growing political instability weakens policy effectiveness and confidence.	Medium likelihood Medium likelihood	Deploy fiscal buffers to scale up conditional cash transfers and nutrition programs. Enhance spending efficiency and transparency to broaden the provision of public services and advance reforms to strengthen governance and tackle corruption. Advance structural reforms to lift potential growth, employment, living standards and improve governance.
Higher frequency and severity of natural disasters. Climate related natural disasters take a deep toll on growth prospects and erode fiscal cushions, and reconstruction costs crowd out scarce resources for health, education, and social spending.	Medium likelihood Medium impact	Supplement risk retention instruments with risk transfer instruments to expand response capacity while preserving fiscal resilience. Prioritize investments for infrastructure resilience.
Shortfalls in mobilizing tax revenue leads to large cuts in public investment and social spending, adversely affecting growth and poverty reduction or lead to relaxation of the fiscal rule and higher public debt.	Medium likelihood Medium impact	Step up efforts to strengthen tax administration focusing on VAT and customs controls. Improve spending efficiency through implementation of structural fiscal reforms.
Deterioration of credit portfolio quality. A large and sudden increase in the policy rate could translate into higher interest rates for existing loans contracted by consumers and companies, which could put pressure on banks' asset quality.	Medium likelihood Low impact	Intensify the monitoring of credit exposures, NPL classification, potential losses, and credit risk management practices.

Annex V. Public Investment Multiplier in Guatemala

This annex seeks to quantify the public investment multiplier in Guatemala using both statistical and model-based techniques. It finds that the public investment multiplier in Guatemala, defined as the impact of a temporary 1 percent increase in real public investment to GDP, is between 0.4 and 0.8 on impact and between 1.0 and 1.3 percent after three years. Additionally, public investment is found to crowd-in private investment.

A. Estimates from Statistical Methods

1. Impulse response functions are used to quantify the multiplier. More specifically, using the Jordá (2005) projection framework, public investment is ordered first in a Cholesky decomposition (as in Blanchard and Perotti, 2002). To refine the estimates, following Ramey (2016), real public, real GDP and real private investment are normalized by “potential real GDP” (estimated by fitting log real GDP to a quadratic trend as in Gordon-Kreen). Annual data from 1960 to 2019 from IMF Investment and Capital Stock Dataset is used to estimate public investment multipliers and spillover effects on private investment.¹

2. The multiplier on GDP is calculated as the integral under the impulse response of GDP and private investment divided by the integral of the impulse response of public investment. The equation used to estimate the cumulative multipliers for each variable z at each horizon h is a one-step IV method given by:

$$\sum_{i=0}^h z_{t+i} = \alpha_h + \beta_h \sum_{i=0}^h g_{t+i} + \theta_h(L)\gamma_{t-1} + \epsilon_{t+h}$$

where the dependent variable is the sum of transformed real GDP (real investment), z_{t+i} , from t to $t+h$, and the government shock is the sum of public investment. We use the Blanchard-Perotti identified shock, g_{t+i} , as the instrument for the sum of public investment spending, identified as the portion of real public investment not predicted by one-year lag in real GDP, real private investment, real interest rate in the US and the real internal rate of return in Guatemala. The term $\theta_h(L)\gamma_{t-1}$ represents a series of control variables,² while α_h is a time fixed effect. The coefficient β_h is the cumulative multiplier of z at horizon $t+h$. The results are shown in Figure 1.

¹ Public investment is defined as General government investment (gross fixed capital formation), in billions of constant 2017 international dollars. Other data are sourced from World Development Indicators and Penn World Tables.

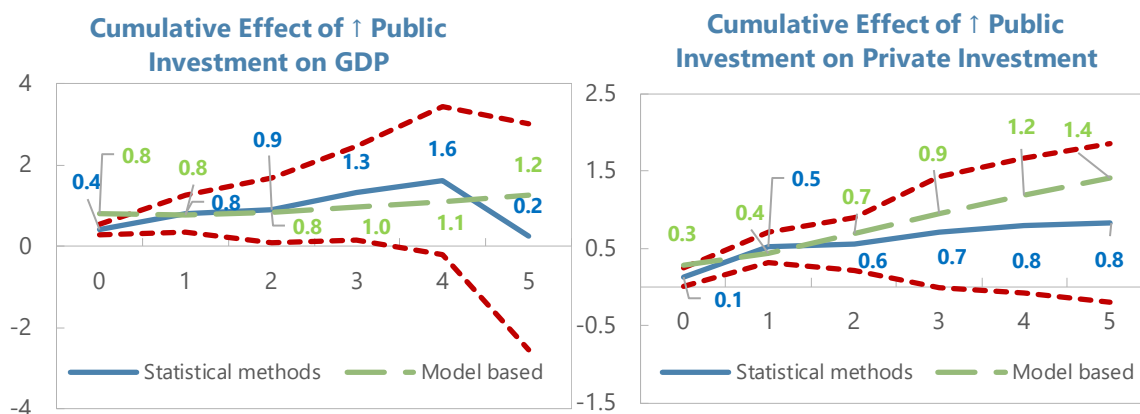
² To control for serial autocorrelation 2 period lags of (transformed) real GDP, real private investment, and the public investment shock, are included, to control for international financial conditions the 2-period lag of the real interest rate in the US is used and Guatemala’s real internal rate of return is used to control for time-varying investment opportunities.

B. Estimates from Model-Based Techniques

3. To cross-check the statistical results, the Global Integrated Monetary and Fiscal (GIMF) model is used. GIMF is a multi-region, forward-looking, dynamic stochastic general equilibrium (DSGE) model with optimizing behavior by households and firms, and full intertemporal stock-flow accounting. Frictions in the form of sticky prices and wages, real adjustment costs, liquidity-constrained households, along with finite-planning horizons of households, provide a role for monetary and fiscal policy in economic stabilization. The GIMF model is calibrated for Guatemala, and we consider the impact of a 1 percent of GDP increase in public-sector investment that is financed by an increase in lump-sum taxes without raising public debt. The results are shown in Figure 1.

4. A temporary increase in public investment raises GDP and private investment. GDP increases between 0.4 and 0.8 on impact, with the larger immediate effect in the case of GIMF, but slightly stronger effects in the medium term based on statistical methods. Despite this discrepancy, the results are not statistically different across both techniques.

Figure V.1. Guatemala: Multiplier Estimates of a 1 Percent of GDP Increase in Public Investment



Note: dashed red lines are 90% confidence bands.

Source: IMF Investment and Capital Stock Dataset, World Development Indicators, Penn World Tables and Staff's estimates. Model based uses the Global Integrated Monetary and Fiscal (GIMF) model.

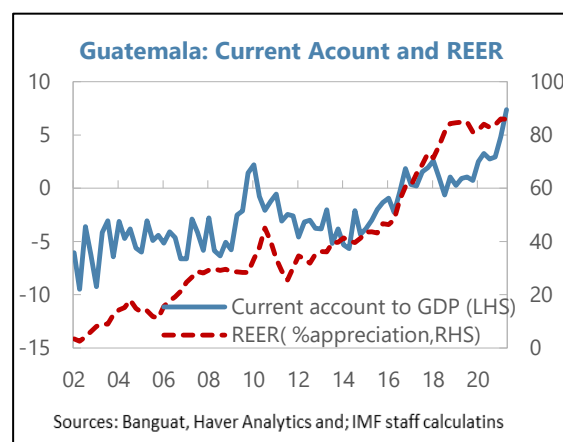
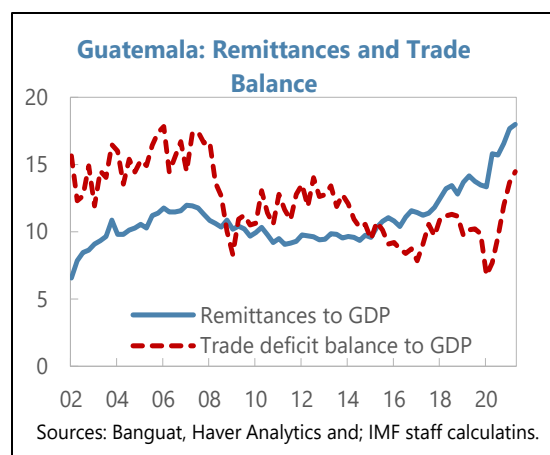
Annex VI. Remittances, the Current Account and Economic Activity in Guatemala

This annex discusses the potential impact of remittances on the economy, focusing on the external sector. The evidence finds no discernible long-run impact of remittances on the real effective exchange rate (REER) and onto imports and exports, or onto private consumption. This annex complements earlier staff results that suggested that remittances have small effects on the trade balance due to small expenditure-switching effects through REER adjustments.

A. Context

1. Remittances have increased significantly in recent years supporting a current account turn around.

There have been two recent episodes associated with the increase in remittances in the last twenty years. At the turn of the century until the global financial crisis (GFC), remittances almost doubled as a share of GDP, supported by the strength of the US labor market, in particular the construction sector. During that time, despite a deterioration of the trade balance, there was an improvement in the current account and an appreciation in the REER. In the aftermath of the GFC, remittances fell while the trade balance and current account improved. As a share of GDP, remittances were relatively constant until 2015 when they began to increase. Meanwhile, the current account began to improve in 2014 following the decline in commodity prices, notably oil, which also supported the improvement in the trade balance. At the same time the real exchange rate continued to appreciate. Since 2016, the improvement in the current account has been driven by the increase in worker's remittances which increased from around ten percent of GDP to around 17 percent by the second half of 2021. Meanwhile, the increase in remittances since 2016 has been accompanied by a deterioration in the trade balance.



2. Economic theory predicts that higher remittances should lead to a deterioration of the trade balance and possibly the current account.

High remittances flows are often correlated with a real exchange rate appreciation, reducing the profitability of the tradable sector and dampening exports, a phenomenon known as Dutch Disease. Purely viewed as an income boost it can increase consumption of tradable and non-tradable goods in the domestic economy, pushing domestic, non-

tradable goods prices, attracting resources towards them and away from the tradable sector and deteriorating the trade balance. It can also lead to an increase in production costs, wages and the real exchange rate of the domestic currency. Increased household income can also lead to greater consumption of imported goods and services. Increased imports along with the deterioration of export competitiveness can also lead to the deterioration of the trade balance and the current account. As predicted by economic theory, the increase in remittances seen since the turn of the century has come in hand with an appreciation of the REER and a persistent trade deficit, but this has not been sufficient to deteriorate the current account balance. This annex explores the reasons for this outcome by looking at macroeconomic aggregates, complementing previous research investigating the impact of remittances on the economy.

B. Results

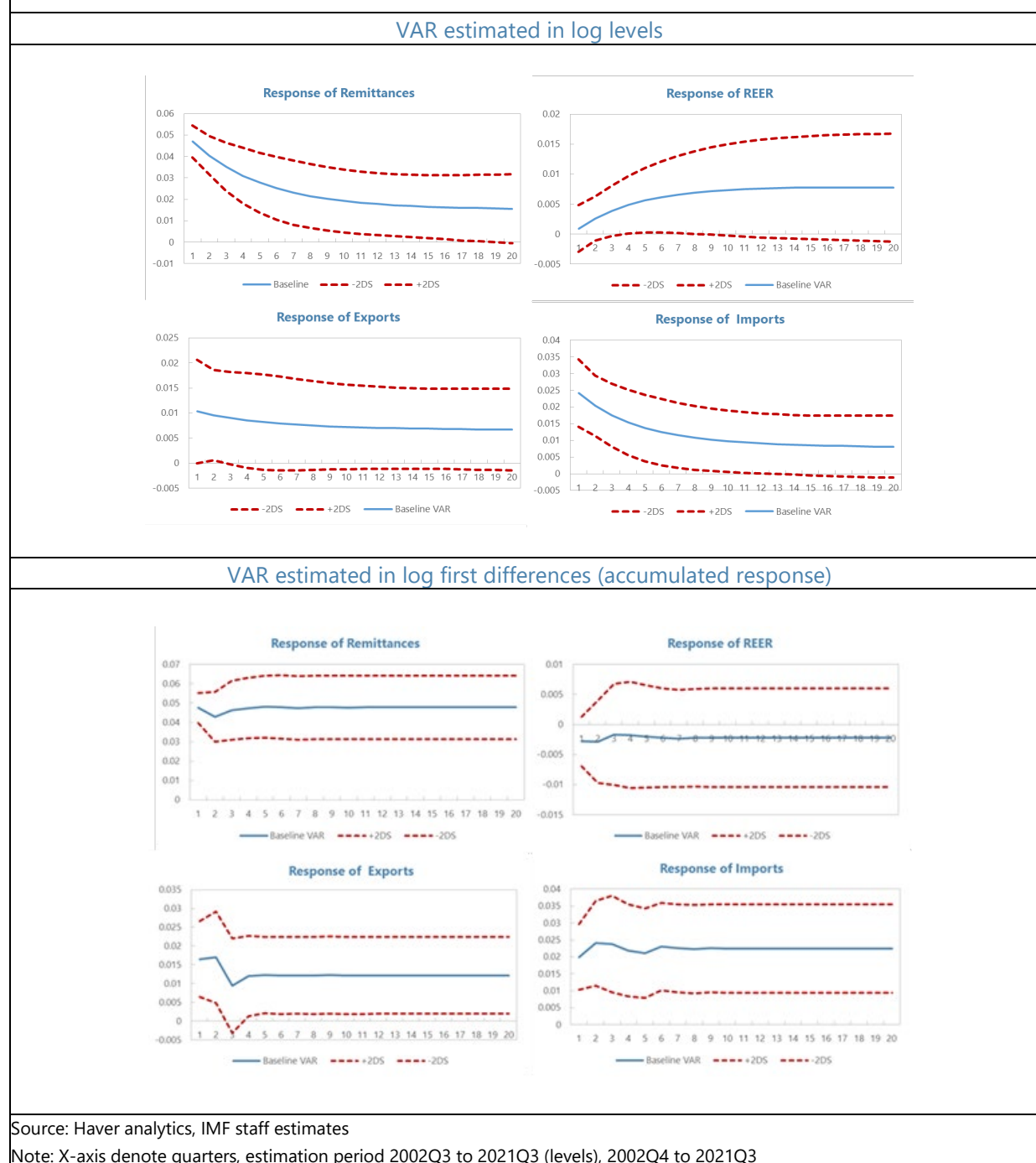
3. Vector autoregression (VAR) analysis is used to evaluate the impact of remittances.

VARs are estimated to capture the dynamic responses of the REER, real imports, real exports and domestic demand in response to a remittances shock. The VARs impose no restrictions other than the ordering of the variables such that remittances are assumed to be exogenous.¹ Because all variables are trending, VARs in levels and growth rates are estimated.² Figure 1 presents the results of estimating a VAR including remittances, REER as well as exports and imports over the period 2002Q3 to 2021Q3.

4. The results point to a weak response of the exchange rate, exports and imports to an increase in remittances. Figure 1 (top panel) shows that in response to an exogenous increase in remittances, both imports and exports increase and the REER appreciates on impact. However, both the responses of exports and the REER are statistically insignificant after one year. Moreover, the response of imports points to an increase which is around $\frac{1}{2}$ of the response in remittances (an increase in remittances of around 4.5 percent results in an increase in imports of around 2.5 percent on impact). In the case of the VAR estimated in first differences (lower panel), an increase in remittances is accompanied by increases in both exports and imports, with no statistically significant impact on the REER. The increase in imports (around 2 percent) is around $\frac{1}{2}$ of the increase in remittances (around 4.5 percent), while the increase in exports is lower and not statistically significant. These results are consistent with those found in IMF Country report 19/168, pointing to insignificant impacts on the REER but small effects on the trade balance.

¹ In the VAR ordering, exports are ordered prior to imports. By ordering imports last, it is assumed that they are impacted by all shocks contemporaneously, whereas exports are not assumed to be affected by import shocks contemporaneously. This ordering assumption captures the observation that exports are more likely to be affected by external factors than imports. Of course, exports could be affected by imports, such that an import shock (e.g. a global value chain disruption) could impact exports. However, this ordering assumption is not crucial for the results since these do not change if imports are ordered first.

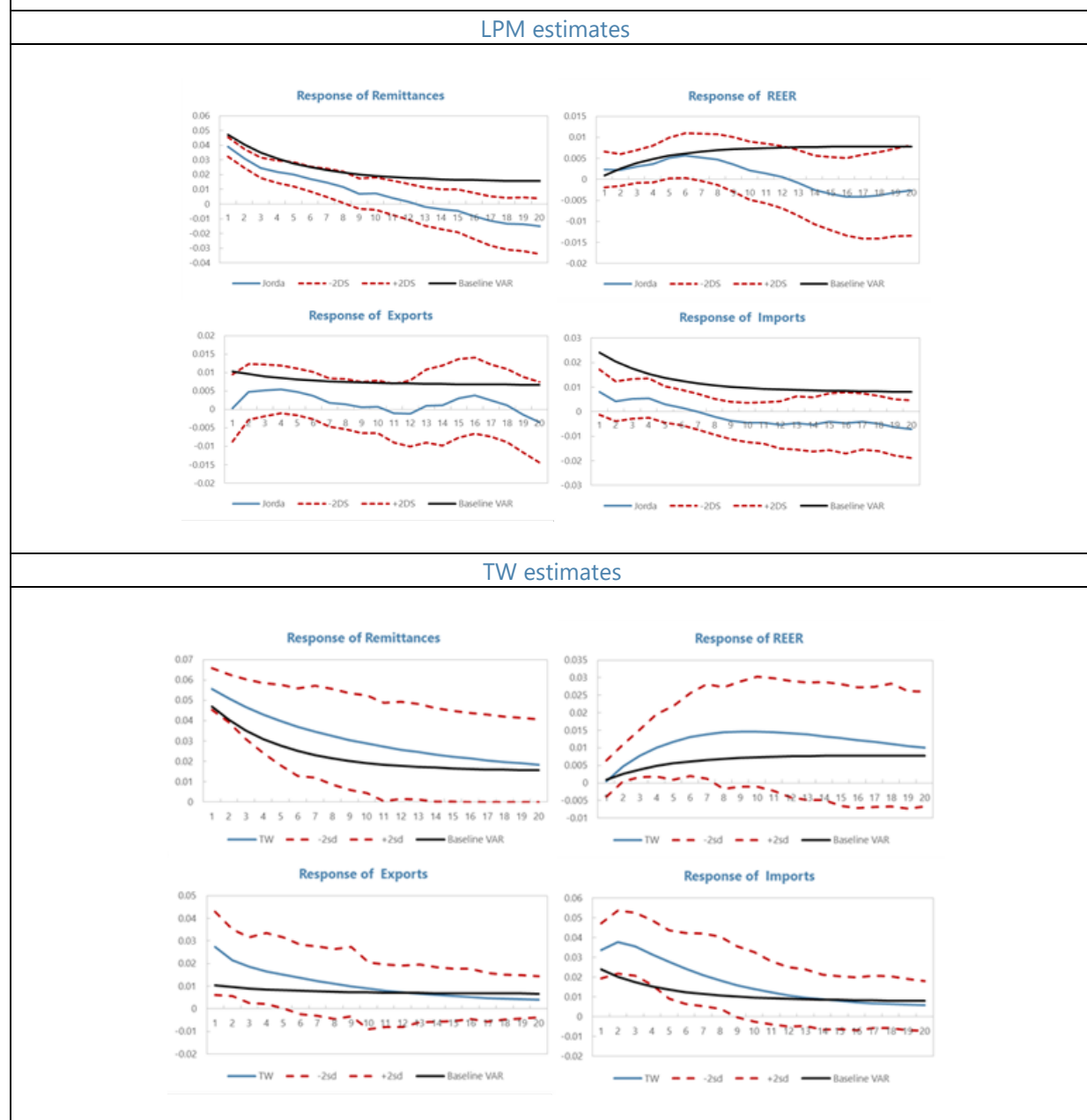
² Unit root tests suggest that remittances, REER, exports, imports, private consumption and GDP have a unit root. After estimating the VAR, we conduct unit root tests for the residuals of the VARs in levels and find that null of stationarity cannot be rejected, implying cointegration of the estimated variables in the VAR.

Figure VI.1. Guatemala: Response of REER, Exports and Imports to Remittances Shock.

5. To evaluate the robustness of these results alternative estimation techniques are considered. The local projection method (LPM) of Jorda (2005) and the VAR of Towbin and Weber (2013) (TW) are used. The responses computed by the LPM (top panel) are in line with the baseline results. The lower panel in Figure 2, compares whether the results fundamentally change the period following the GFC (as in IMF Country report 19/168) by using the methodology proposed by TW.

While the results suggest a slightly stronger responses of the real exchange rate, exports and imports, these are not statistically significant to the baseline results presented in Figure 1. All in all, robust analysis suggests that the baseline results—that is, small impacts on exports and imports on impact but no persistent impact after one year—are robust to alternative estimation methods.

Figure VI.2. Guatemala: Robustness to Baseline Results using Different Estimation Methods

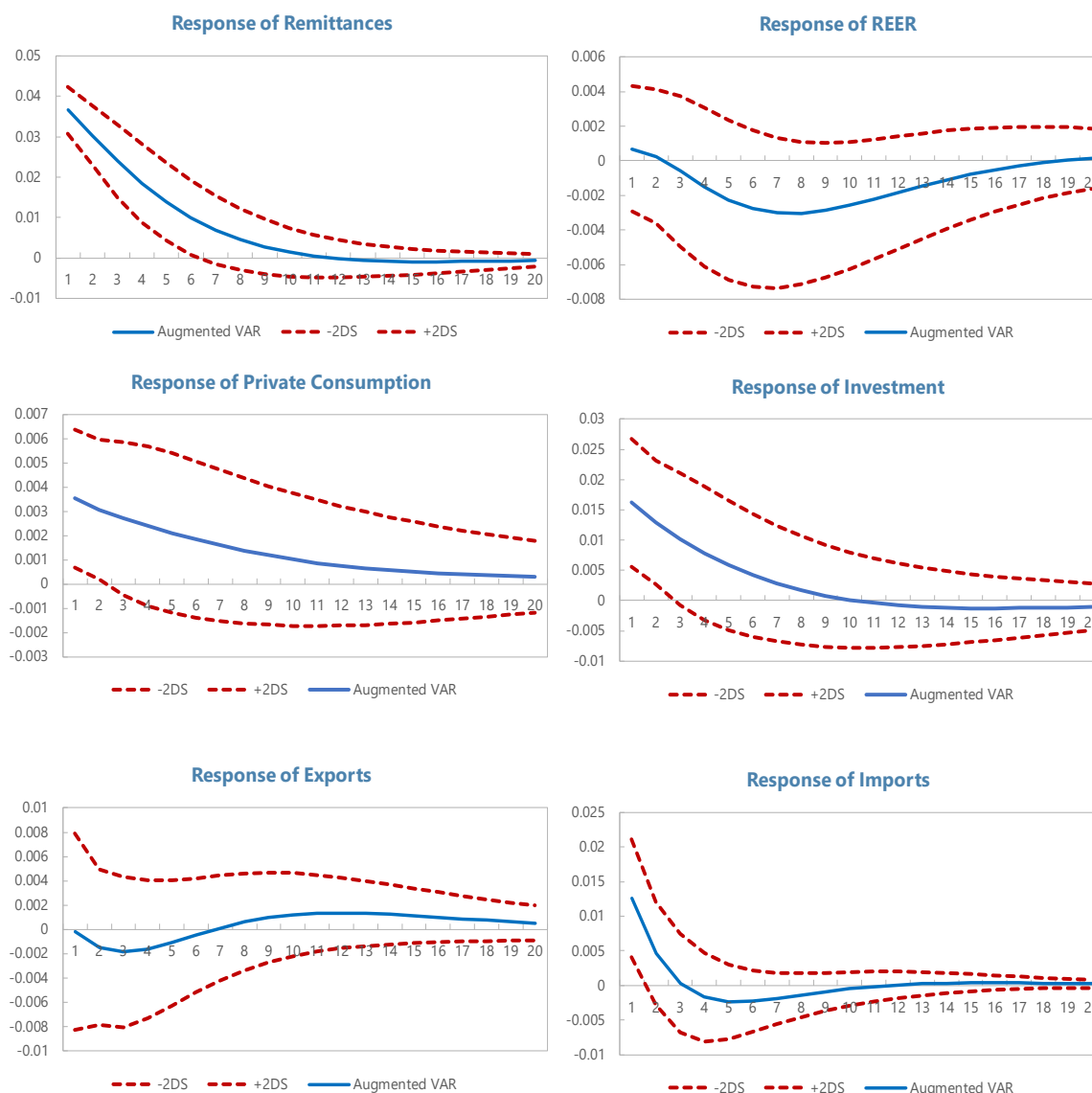


Source: Haver analytics and IMF staff estimates

Note: TW estimates plot whether responses after 2014Q1 are statistically different.

6. A final robustness test examines whether the inclusion of additional variables in the VAR (total private consumption and investment) alters the results. Again, no meaningful difference is found (Figure 1). In line with the response of imports, total consumption and investment respond only marginally to an increase in remittances within the first two quarters after the shock with the results being statistically insignificant thereafter.

Figure VI.3. Guatemala: Robustness to Baseline Results with Additional Variables



Source: Haver analytics and IMF staff estimates

7. These results are in line with previous estimates. IMF country report 19/168 also found relatively muted import and export responses to remittances. IMF country report 16/282 noted that

around 1/2 of total remittances go to rural areas where food (largely sourced domestically) represents a large share of overall household consumption. IMF country report 18/155, also showed that while households receiving remittances have higher consumption of durable goods (which may have a large import context) than non-remittance receiving households, they also spend more on non-tradeable services such as health and education. Hence, a large share of remittances is spent on goods and services that do not have a large import share, partly explaining the muted response of imports in the results shown earlier.

Annex VII. Capacity Development Integration

This annex note presents the understanding reached between the IMF (technical assistance providers and Guatemala country team) and the Guatemalan authorities on the capacity development (CD) strategy and expected objectives in support of the macroeconomic policy priorities. It defines a set of milestones and outcomes related to the technical assistance (TA) program including actions to be undertaken by authorities to achieve the agreed goals. Key priorities include mobilizing revenues, enhancing the inflation targeting framework, improving fiscal transparency, modernizing financial sector regulations, and strengthening data collection and compilation. To enhance traction of CD recommendations, authorities and the IMF have created a working group steered by BANGUAT's Deputy Governor.

A. Context

1. The COVID-19 came to upend the authorities' plans to tackle long-standing social and infrastructure gaps and improving the business climate. On March 13, two months after becoming President, President Giammattei declared a State of Calamity upending the administration's plans—as detailed in the PLANID—for tackling poverty, security, and migration through a pro-business environment. After successfully navigating the pandemic, the government is now trying to relaunch the economy and the overdue reform agenda.

2. Surveillance priorities. Guatemala is an emerging market economy (EME) whose main policy challenge is to foster medium-term inclusive growth by: (i) raising tax collections and spending efficiency to create fiscal space for infrastructure and social investments; (ii) improving competitiveness through business climate reforms; (iii) fighting corruption and fortifying AML/CFT regulations; (iv) strengthening the financial regulatory framework through a tailored and proportionate adoption of Basel II/III standards; (v) improving data collection and compilation, and (v) enhancing the inflation targeting framework (ITF) through improved FX flexibility and liquidity management. Guatemala's heavy use of CD has sought to address many of these priorities and will continue to play a key role in the Fund's engagement with the authorities.

B. Engagement Strategy

3. Fund's CD engagement with Guatemala. Guatemala has been a recipient of extensive CD focusing on the surveillance priorities noted above. CD provision has gained some traction, but overall, Guatemala's implementation record has been uneven across workstreams. In areas where implementation has been below expectations, this has been primarily due to Congress gridlock preventing regulatory reform and, in some cases, inadequate resources, or poor coordination. More specifically, on tax policy and revenue administration the implementation record under the 2017–20 revenue mobilization trust fund (RMTF) was weaker than expected as the authorities were unable to pass a revenue-enhancing tax reform in Congress, and alongside SAT management's high turnover in recent years which had prevented effective implementation of CD recommendations. On Public Financial Management (PFM), progress in adopting CD recommendations has been slow due to

weak coordination within the public sector. Pending tasks include the incorporation of decentralized institutions into the treasury single account and the strengthening of fiscal risk oversight and governance of public entities. On financial supervision and regulation, the pace of implementation has been slower than envisaged in the 2014 FSAP as the revised Banking and Financial Groups Law has stalled in Congress. On AML/CFT, Congress' approval of the new AML/CFT bill compliant with FATF standards, with support from the IADB, the Fund and the bank supervisor, remains pending. Finally on the statistics front, inadequate funding of the National Statistical Institute (INE) remains a major impediment, while the pandemic led to a postponement of the household survey to 2021, a key input for the construction of the CPI basket.

4. Engagement with other partners remains strong, especially in areas of tax and customs administration. IMF CD providers have and will continue to coordinate with third-party providers to leverage synergies. Examples include (i) coordination meetings with the Minister of Finance, the tax agency and other donors to improve IFIs' accountability of TA on tax administration; and (ii) CAPTAC-DR coordination with the World Customs Organization and other donors to streamline support to regional customs. Staff continue to engage with other CD partners on a regular basis and regularly debriefs donors to ensure consistency of policy advice and synergies in supporting the authorities' plans as well as past Fund recommendations.

5. Authorities' views on ongoing and planned CD and engagement strategy. Authorities note that CD has been well targeted to those critical areas identified in surveillance and they concur on the forward-looking CD strategy set out in Section C. They appreciate the Fund's intensified efforts to overcome political and other obstacles to CD implementation. To overcome these obstacles and improve implementation, authorities and the IMF created a working group steered by BANGUAT's Deputy Governor. On the authorities' side, representatives from Banco de Guatemala, the statistical office (INE), Ministry of Finance (MINFIN) and Tax authority (SAT), and the financial supervisor (SIB) meet with representatives from CAPTAC-DR, IMF technical assistance providers and the IMF country team to discuss implementation status of past CD, redirect resources to priorities as warranted, seek authorities' views on specific means to overcome political obstacles to reform, and forthcoming TA request.¹

C. Capacity Development Priorities

6. The main CD objectives focus on consolidating past achievements and on ensuring that evolving needs and flexibility are met. Past achievements on the ITF front include improvements to the modelling framework and inflation expectation measurement. On tax and custom administration, improvements include strengthening of the legal framework, approval of Strategic Plan to improve compliance and strengthen support functions, start-up of the internal affairs and compliance risk management offices, greater focus on the management of large

¹ The working group met in April 2021 and February 2022 and is scheduled to meet next in September 2022. Going forward, the meetings will be scheduled every six months, ahead of the Spring and Annual meetings (February and September) to facilitate discussion with CD providers and donors during the meetings.

taxpayers and to custom's processes. On financial supervision and AML/CFT efforts, CD support provided important inputs for a draft Banking and Financial Groups Law—aligning legislation to Basel III standards—and the law of AML/CFT—aligning with FATF standards—both of which are pending approval by Congress, as well as improvements to the Stress Testing framework. On the statistics front there has been progress on the production of government statistics (general government) and on the production of a producer price index. The CD program continues to address the surveillance priorities set out in Section A, which, post-COVID have become even more relevant to support a sustainable recovery and medium-term objectives. Amid unprecedented levels of uncertainty, every effort will be made to maintain the flexibility of the CD work program to accommodate emerging needs while addressing surveillance priorities. The key CD workstreams in FY21-23 have and will center on:

- *Revenue administration FAD/CAPTAC-DR.* Support is being directed to: (i) strengthening the large taxpayers' management; (ii) implementing a compliance risk management strategy; (iii) digitalizing core processes and taxpayers' services, and (iv) enhancing SAT's administrative enforcement faculties.
- *PFM FAD/CAPTAC-DR.* This workstream centers on strengthening the medium-term fiscal framework with a focus on increasing efficiency, transparency, accountability, prioritizing public spending while maintaining fiscal sustainability.
- *Monetary and macroprudential policy and central bank operations: enhancing the ITF MCM/CAPTAC-DR.* Support is being directed to (i) building further forecasting capacity to define monetary policy under risk scenarios; (ii) enhancing the monetary operations framework; and (iii) improving communication strategy for improved anchoring of inflation expectations.
- *Financial supervision and regulation LEG/MCM/CAPTAC-DR.* This workstream continues the tailored implementation of the Basel standards, seeks to enhance credit risk management, bolster non-banking sector supervision and provides support for the preparation of the legal framework for e-money.
- *Real sector and government finance statistics STA/CAPTAC-DR.* Support is being channeled to the following areas: (i) updating the CPI basket; (ii) updating the household survey data; (iii) consolidating the government financial statistics analytical framework and increasing public debt coverage data.

Table VII.1. Guatemala: IMF Capacity Development Missions 2020-22

Workstream	Provider	Mission Date
Revenue Administration and Customs		
Air cargo process improvement	CAPTAC-DR/FAD	December 2021
Document systems entry point & participants guide	FAD	November 2021
Trade operators' registry for special procedures	CAPTAC-DR/FAD	October 2021
Customs Anti-fraud strategy	CAPTAC-DR/FAD	October 2021
Strengthen Tax Refund Procedures	FAD	September 2021
Customs Anti-fraud strategy	CAPTAC-DR/FAD	August 2021
Definition of a Customs Digitalization action plan (various missions)	CAPTAC-DR/FAD	March-May 2021
Implementing a new model for controlling special procedures operations	CAPTAC-DR	March 2021
Post clearance audit program	CAPTAC-DR	February 2021
Improving cargo and clearance processes	CAPTAC-DR	November 2020
Design and implement a comprehensive Business Continuity Plan	FAD	June 2020
Strategic Planning	CAPTAC-DR	June 2020
Post Clearance Audit-special procedures	CAPTAC-DR	March 2020
Public Financial Management		
Fiscal Sustainability Model	FAD	January 2022
Budget - Economic Forecasts	CAPTAC-DR	March 2021
Treasury	CAPTAC-DR	March 2021
Budget - Medium Term Fiscal Framework	CAPTAC-DR	February 2021
Treasury	CAPTAC-DR	August 2020
Budget – Financial Programming	CAPTAC-DR	February 2020

Table VII.1. Guatemala: IMF Capacity Development Missions 2020-22 (Concluded)		
Workstream	Provider	Mission Date
Monetary Policy and Central Bank Operations		
Monetary Policy Modeling, Forecasting & Communication	MCM	September 2021
Profitability and Capital Adequacy Assessment	MCM/ CAPTAC-DR	August 2021
Financial Supervision and Regulation		
Stress Testing	MCM	January 2022
Training on e-money	MCM	December 2021
Financial Groups Regulation	CAPTAC-DR	February 2020
Cybersecurity supervision	CAPTAC-DR/MCM	January 2020
Strengthen AML/CFT Risk-based Supervision of Financial and Non-financial institutions	LEG	Ongoing since 2018
Real and Government Statistics		
Public Sector Debt Statistics	STA	October 2021
Government Finance Statistics and Public Sector Debt Statistics	STA	June 2021
National Accounts	CAPTAC-DR	March 2021
Government Finance Statistics and Public Sector Debt Statistics	CAPTAC-DR	February 2021
Data Governance	CAPTAC-DR	February 2021
National Accounts	CAPTAC-DR	November 2020
Training (in-country): Applied Sampling Techniques	CAPTAC-DR	October 2020
e-GDDS	STA	February 2020

Table VII.2. Guatemala: IMF Capacity Development Planned Missions 2022-2023		
Workstream	Provider	Objective
Revenue Administration, Customs and Tax Policy		
Customs Administration	CAPTAC-DR	Strengthened revenue administration management and governance arrangements for customs
Revenue Administration	CAPTAC-DR	Strengthened revenue administration management and governance arrangements for tax authority
International taxation	FAD	Improved tax and non-tax revenue policy in line with international taxes
Public Financial Management		
Medium-Term Fiscal Framework	FAD	Comprehensive, credible, and policy-based budget preparation
Assets and Liabilities Management	FAD	Improved assets and liabilities management
Coverage and Quality of Fiscal Reporting	FAD	Improved coverage and quality of fiscal reporting
Fiscal Risks Management	FAD	Strengthened identification, monitoring, and management of fiscal risks
PFM Hackaton	FAD	Improved budget execution and control
Monetary Policy and Central Bank Operations		
Central Bank Monetary Policy Operations and Balance Sheet	MCM	Enhance the central bank's decision-making capacity and internal organization
Monetary and Macprudential Policies Inflation Targeting	MCM	Adopting a formal inflation targeting regime

Table VII.2. Guatemala: IMF Capacity Development Planned Missions 2022-2023 (Concluded)

Financial Supervision and Regulation		
Banking Supervision & Regulation	MCM	To implement a risk-based supervision (RBS) system and upgrade other supervisory processes,
Insurance Supervision & Regulation	MCM	Develop/strengthen regulation of insurance companies and risk-based supervision capability of the insurance supervisor
Stress Testing	MCM	Strengthen the toolkit for the identification of threats to financial stability and corrective policies
Cybersecurity supervision and regulation	MCM	Develop/strengthen cybersecurity regulations and supervisory frameworks
Financial Supervision and Regulation	MCM	Develop/strengthen cybersecurity regulations and prudential norms
Real and Government Statistics		
Government Finance	STA	Strengthen compilation and dissemination of macroeconomic and financial statistics for decision making according to internationally accepted statistical standards, including developing statistical infrastructure, source data, serviceability and/or metadata
Real Sector - National Accounts	STA	
Real Sector – Prices	STA	