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SELECTED ISSUES

March 9, 2020

Approved By
Western Hemisphere Department

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FISCAL POLICY IN PANAMA: BACKGROUND, CHALLENGES AND POLICY OPTIONS[1]

A. Background

1.   Fiscal policy remains the main instrument for economic management in Panama. As a fully dollarized economy with an open capital account, no central bank, no independent monetary policy and little use of macroprudential tools, fiscal policy is de facto the only macroeconomic stabilization tool available. At the same time, fiscal policy is restricted by a fiscal rule, the Social Fiscal Responsibility Law (SFRL), anchored at an indicative target of net debt to GDP ratio of 40 percent which is operationalized through a limit on the deficit of the non-financial public sector (NFPS). While the rule introduced in 2009 has supported fiscal discipline and reduced debt, it can be prone to unintended pro-cyclicality of fiscal policy.

2.   The 2019 shortfall in fiscal revenue poses challenges to a government which collects already little revenue relative to other emerging economies. Tax revenue amounted to 9½ percent of GDP on average between 2014 and 2018, significantly lower than the average for Central America and Latin America peers, at 15 percent and 17½ percent, respectively. In 2019, tax revenue plummeted to 8.2 percent of GDP following the economic slowdown, but also for structural reasons as some of the most dynamic sectors face lower tax burdens. Although non–tax revenue makes up for some of the low tax efforts (Table 3), it also declined. Only the canal contributions (toll fees and dividends) continued to grow, reaching 2.6 percent of GDP, and this is due to the expansion of the Panama Canal in 2016.

Figure 1. Panama: Higher Deficit Increased Public Debt

Source: National authorities, IMF staff calculations.
1/Fiscal impulse is calculated as the change in the cyclically-adjusted primary balance of the NFPS; positive means fiscal loosening.

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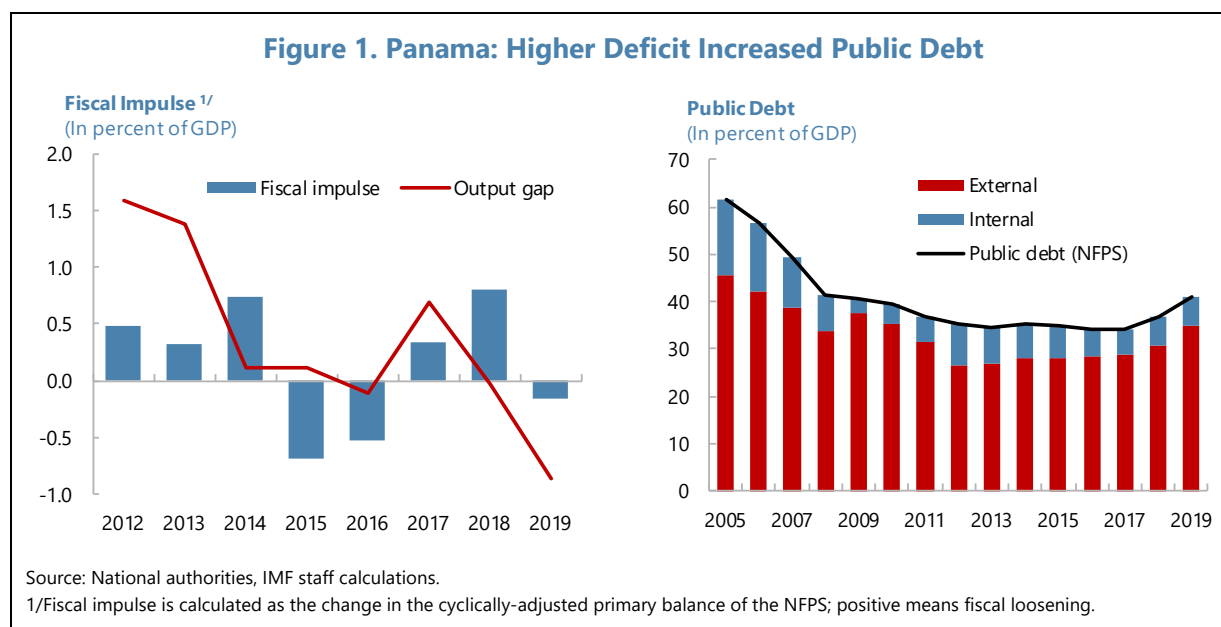
[1] Prepared by Julia Faltermeier (WHD).

3.   Despite the unexpected deterioration of the fiscal position in 2019, the authorities stabilized the deficit at 3.1 percent of GDP in 2019. To avoid an abrupt tightening, the authorities amended the SFRL in October 2019 establishing new ceilings for the deficit of the NFPS.[2] Although the revision would have permitted a deficit of up to 3.5 percent of GDP, the authorities managed to stay below the ceiling. The law foresees a gradual tightening starting from a deficit of 2.75 percent of GDP in 2020, 2.5 percent in 2021 and 2.0 percent from 2022 onwards.

Comparison of Tax Rates [1]			
	CIT	PIT	VAT
Central America	30	30	13
Latin America	25	33	16
OECD	24	40	19
Panama	**25**	**25**	**7**
Singapore	17	20	7
Hong Kong	17	15	0

Source: Global KPMG Tax Rates Database (GKTR)

1/ Average for CA, LAC and OECD comparators; latest available (mostly 2015).

4.   The fiscal framework has been key to entrenching fiscal discipline and maintaining debt sustainability. The overall deficit of the non-financial public sector (NPFS) averaged 2½ percent of GDP during the last 5 years. At times, the rule led the authorities to prioritize fiscal prudence over economic stabilization, leading to unintended pro–cyclicality of fiscal policy. For example, the fiscal stance in 2019 ended broadly neutral despite a significant negative output gap and the modification of the deficit ceiling. But fiscal prudence has also helped to keep debt levels at historical lows. Since the introduction of the rule in 2009 until 2018, gross debt of the NFPS remained well below 40 percent of GDP. To prevent losing the fiscal track record built over the last decade in light of the frequent revisions to the rule and the latest increase of gross debt to 40.8 percent of GDP in 2019, the fiscal framework needs to be strengthened further.

5.   Despite recent fiscal deficits, Panama continues to enjoy access to international capitals markets at record-low spreads. Since attaining investment grade status in 2010, Panama has tapped international capital markets at relatively low costs. Sovereign spreads (EMBIG of 114 basis points in December 2019) are among the lowest in Latin America, supported by strong economic fundamentals and the solid fiscal framework. In April 2019, the authorities issued US$1.0 billion Treasury Notes under Panamanian law linked to Euroclear giving access to international buyers which achieved a spread of 140 basis points at a 7-year maturity. Most recently (end-November 2019), the authorities issued US$1.3 billion in Global Bonds at historically low rates, a 2030 bond and a 2053 bond at spreads of only 105 and 135 basis points relative to the respective U.S. instruments. However, a revision to negative outlook in February 2020 by Fitch Ratings citing downside risks amid rising public debt highlights the importance of fiscal prudence.

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[2] The previous administration modified and simplified the SFRL in October 2018, simplified the rule and set the NFPS deficit at 2 percent of GDP in 2018-19, 1¾ percent in 2020-21, and 1½ percent of GDP after 2021, with the target over the medium-term broadly in line with the limit under the previous law. Congress also approved an adjustment of the accrual rules for the accumulation of savings into Panama's Sovereign Wealth Fund (FAP), specifically to saving half of the excess Canal contribution (over the threshold of 2½ percent of GDP) to the budget.

Figure 2. Panama: Composition of Tax Revenue and Expenditure

Expenditure 1/
(In percent of GDP)

Revenue 2/
(In percent of GDP)

Sources: National Authorities and IMF staff calculations.
1/ Covers the Non-financial Public Sector following the national definition, accrued spending is staff's adjustment to account for accrual of previously unrecorded expenditure.
2/ Data refer to the Central Government.

B.   Revenue Measures

6.   Low tax revenue limits space for financing development. Panama reached high-income status in 2018 (according to the World Bank) but economic development also requires that other socio-economic indicators improve. Public finances play a central role in ensuring the availability of sufficient financial flows to invest in continued development – such as infrastructure, health and education - and to foster social inclusion. To permit the state to provide public services appropriate for Panama's income level, revenue levels will have to increase. As levels of non-tax revenue, mainly from the canal, grow at a slower rate than national GDP, the bulk of the additional revenue will need to come from taxes.[3]

7.   Low tax revenue reflects weaknesses in tax policy and administration. The tax system plays an important role in determining the relative attractiveness of Panama for investors. The authorities want to explore tax and customs administration as a first avenue to increase tax revenue due to serious structural weaknesses in this area. Main areas of concern include governance, internal controls (and vulnerabilities to corruption), IT infrastructure, information and risk management, auditing capacity, and the tax compliance program. Some measures, like the electronic invoicing, which is currently being tested in a pilot, are promising, but wider reforms will be needed. These could include a strengthening of the management of large taxpayers, improving customs controls and enforcing tax arrears collection instead of relying on frequent tax amnesties.

8.   Tax policy reform should be considered at some point. If the cyclical recovery together with tax administration reform does not yield sufficient revenue, a comprehensive reform of the tax system should be an option. The last reform was done in 2009–14. A previous IMF study found that the efforts improved the progressivity of the tax system, but nonetheless fell short of their

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[3] The Canal transfers to the central government are expected to decline as a percent of GDP as the Panamanian economy is projected to grow at a faster rate than world trade.

objectives.[4] Future reforms should rely on a mix of curbed tax exemptions (especially VAT, CIT), increased compliance with tax obligations (especially for VAT, CIT, PIT) and possibly some increases in tax rates (including VAT and environmental taxes).

Table 1. Panama: Tax Expenditure

| Country | Year | Total | VAT | Income taxes | | | | Tax expenditure |
				CIT	PIT	C+P	Others	% of tax revenue
Bolivia	2015	1.5	1.2	0.1	0.0	0.1	0.2	6.9
Argentina	2019	2.3	1.2	0.3	0.1	0.4	0.7	10.2
Peru	2017	2.2	1.7	0.2	0.1	0.3	0.2	15.6
Paraguay	2014	1.9	1.4	0.2	0.1	0.4	0.2	14.8
El Salvador	2014	2.8	1.6	…	…	1.2	0.0	17.4
Brazil	2016	4.2	0.4	0.7	0.2	0.9	2.9	17.6
Mexico	2017	3.2	1.4	0.5	1.0	1.5	0.3	21.3
Guatemala	2016	2.3	1.4	…	…	0.0	0.9	21.7
Chile	2016	4.2	0.6	…	…	3.5	0.0	22.2
Uruguay	2017	6.3	3.0	1.4	0.5	1.9	1.4	33.2
Honduras	2016	6.2	3.3	2.0	0.4	2.4	0.5	33.5
Panama	**2016**	**3.6**	**2.3**	**1.3**	**…**	**1.3**	**0.0**	**34.3**
Costa Rica	2016	5.3	2.9	…	…	0.0	2.5	33.6
Ecuador	2017	4.7	2.3	1.3	0.7	2.0	0.4	34.5
Nicaragua	2014	5.6	4.5	0.8	…	0.8	0.3	32.9
Dominican Rep.	2017	6.4	3.0	0.7	0.1	0.8	2.6	46.7
Average		**3.9**	**2.0**	**0.8**	**0.3**	**1.1**	**0.8**	**24.8**

Source: Country tax administrations and Ministries of Finance.

9. **Tax expenditure is relatively high compared to the region.** In 2016, tax expenditure accounted for around 3.6 percent of GDP or about ⅓ of total tax revenue collection. The share of revenue is above the regional average of ¼. VAT accounted for most of the tax expenditure. Reviewing and streamlining the system of tax exemptions will help tax administration by simplifying collection, curb tax expenditures that are inadequately targeted and help to reverse the downward trend in revenue even without raising tax rates.

10. **Revenue from VAT is one of the lowest in Latin America and the Caribbean (LAC).** Panama raised on average 2.5 percent of GDP through VAT receipts in the past five years while the averages for LAC and OECD economies are 6.3 and 6.7 percent of GDP respectively. The low revenue stems from a combination of low rates, many exemptions and evasion. The OECD estimates that Panama only collects 62 percent of the VAT's potential revenue.[5] Staff estimates that measures to limit VAT tax expenditure and the inclusion of services provided from abroad in the tax base could increase revenue by about ½ percent of GDP.

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[4] Vtyurina (2013), "Panama: Taking Stock of a Decade of Tax Reforms", IMF, Selected Issues Paper 2013,

[5] Potential VAT revenue is estimated by applying the generalized VAT tax rate on final consumption.

11.   Corporate tax rates are on par with LAC and advanced economy counterparts but are among the lowest in Central America. The tax system is based on a territorial principle, rates are relatively low, and exemptions and incentives are widespread (granted under a variety of schemes). Compared to Singapore with a similar business model, however, CIT tax rates in Panama are higher. Nevertheless, Singapore reached tax revenues of 14.1 percent of GDP in 2017, well above Panama's 9.4 percent of GDP. A cost-benefit analysis can reveal if tax incentives achieve the desired outcomes. Moreover, regular checks need to ensure that firms comply with the conditions of exemptions.

12.   Reviewing environmental tax rates can yield additional revenue while helping Panama to reach its climate commitments. For example, the selling price of gasoline and diesel in Panama is lower than the region. A gradual increase in taxes on the consumption of petrol would give households and firms time to adapt and incentivize the investment in energy-efficient machinery and vehicles. Moreover, environmental taxes should be combined with social spending that limits the negative impact on the consumption of petrol for poorer households.

Policy Options

- Upgrade governance, institutional capacity and human capital of the tax and customs administration to increase revenue collection

- Strengthen compliance with tax obligations

- Re-establish a Large Taxpayer Unit to better manage large taxpayers

- Improve provision of public services, transparency and accountability to strengthen citizens' willingness to pay taxes.

- Undertake a cost-benefit analysis of tax exemptions and incentives.

- Review tax rates, especially for VAT and environmental taxes.

13.   The fiscal contribution of the new copper mine will be small. The government granted the concessions to Minera Panama through a special legislation, Law No. 9 of 1997, which was declared unconstitutional by the supreme court in late 2018. The uncertainty relating to the legality of the large copper mine's contract is still unresolved, but production has started as planned in mid-2019. However, given that copper production will become a significant contributor to the economy, it will be important to eliminate the uncertainty by reaching an agreement on this issue.[6] A survey documented in Mitchell (2009) suggests that tax considerations are key to attracting and retaining

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[6] Under the special contract with the government, Minera Panama must pay 2 percent royalty on the "Negotiable Gross Production", defined as the gross amount received from the sale (of concentrates) after deduction of all smelting costs, penalties, transportation costs, insurances and other costs incurred in their transfer from the mine to the smelter. Also applied are a land rental tax of US$3.00 per hectare per year for the total concession area (less than US$41 thousand a year), and a corporate income tax of 25 percent on taxable earnings, with exemption for the period during which the Company has outstanding debt relating to the construction and development of the project (see NI 43-101 Technical Report 2019).

investors. At the same time, tax rates in
Panama are low by international standards.
An estimate based on the IMF's framework
for Fiscal Analysis of Resource Industries
(FARI) suggests that the Average Effective
Tax Rate (AETR) is 26 percent and falls to
2 percent once tax credits and tax holidays
are considered.[7] With this, Panama's fiscal
regime for copper mining is relatively
generous among other copper-producing
countries.

Selected Mineral Taxation Features of Leading Copper Producers			
	CIT (%)	Royalty (%)	Special allowances/contracts
US	35-47	various	Yes
Brazil	34	2	Yes
DRC	30-40	2	Yes
Australia	30	2.5-5	Yes
Mexico	30	7.5	Yes
Peru	28	various	Yes
South Africa	28	0.5-7	No
China	25	various	Yes
Indonesia	25	4	Yes
Panama	**25**	**2**	**Yes**
Chile	24	5-14	No
Russia	15.5-20	8	No

Source: PWC "Compare mining taxes data tool".

Policy Options

- Take action to remove the uncertainty created by the nullified Law No. 9.

- Develop technical and administrative capacity to understand the complexity of the mining sector
  and be able to supervise, monitor and tax the sector.

C. Expenditure Measures

**14.   Despite fiscal consolidation, the government needs to maintain resources for public
investment and social spending.** In 2018, current primary spending (driven by wages and transfers
and subsidies), accounted for 66 percent of total expenditure of the central government, up
10 percentage points from 5 years ago, as the share of capital spending went down to 34 from
44 percent, due to the deceleration of public infrastructure projects.[8] Roughly 2/3 of the higher
wage bill is explained by higher public sector wages, including the increase in teacher salaries
agreed in 2014.[9] The share of interest expense has been roughly stable. As low levels of revenue
combined with the deficit ceiling limit expenditure growth, expenditure should be rebalanced to
give sufficient space in the budget for public investment and social spending.

**15.   Strengthening the public financial management system can help to reduce current
expenditure.** The uncovering of unrecorded arrears linked to unrecorded spending as well as delays
in the payment of subsidies highlight the need to improve budget and expenditure controls.
Moreover, timely payments to suppliers can reduce procurement costs.

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[7] The Average Effective Tax Rate (AETR) or "government take" is defined as the ratio of cumulative government
revenue to the project's pre-tax net cumulative cash flows.

[8] Capital expenditure by the central government does not include investments of the Panama Canal Authority for the
canal expansion in 2016.

[9] The agreement foresaw an increase in monthly teachers' salaries by US$900 in three rounds. The first two increases
doubled teacher salaries in six years. The third increase of US$300 was announced in December 2019 and will be
applied in 2020. With a median monthly salary of around US$1,200, schoolteacher is one of the highest paid
occupations in 2019, well above the median salary of US$700.

Figure 3. Panama: Efficiency of Education Spending is Low Compared to the Region

Teachers and Outcome, Primary [1]
(Latest value available)

Teachers and Outcome, Secondary [1]
(Latest value available)

Sources: IMF Expenditure Assessment Tool (EAT)
1/ Dash lines are the average of LAC. Latest available data for Panama corresponds to 2017
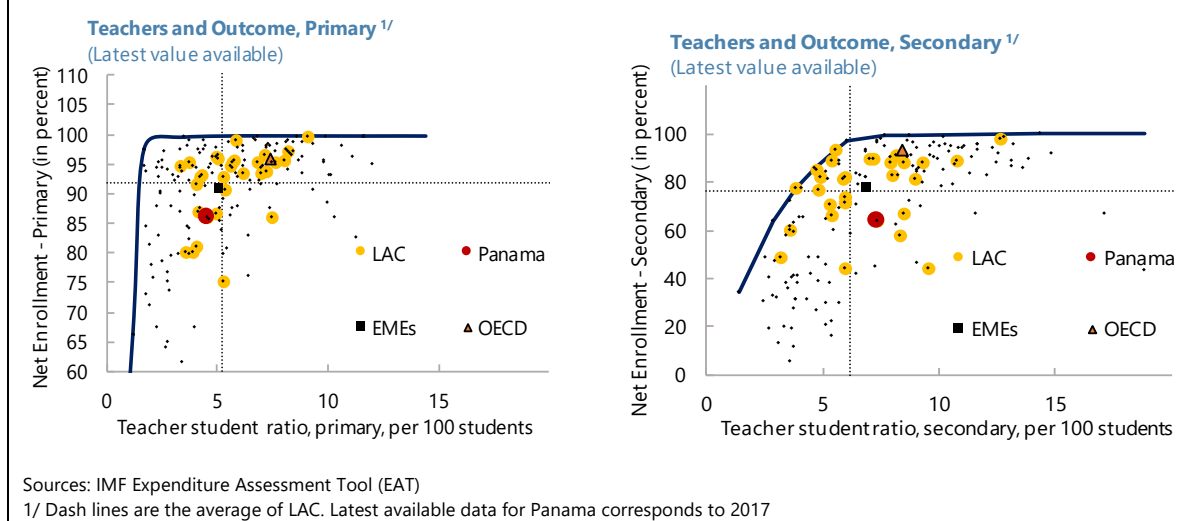
16.   The effectiveness of social and investment spending needs to be improved. Even without significant increases in spending, greater effectiveness can improve outcomes. To achieve this, project selection for investment spending and effective execution need to be strengthened. Social spending is often not sufficiently targeted at the most vulnerable population. For example, in 2019 the government spent around US$218 million (0.3 percent of GDP) on the electricity subsidy introduced in 2009 to prevent price increases for 99 percent of consumers instead of targeting the measures to more vulnerable members of society.

Composition of Central Government Spending

Sources: National Authorities and IMF staff calculations.
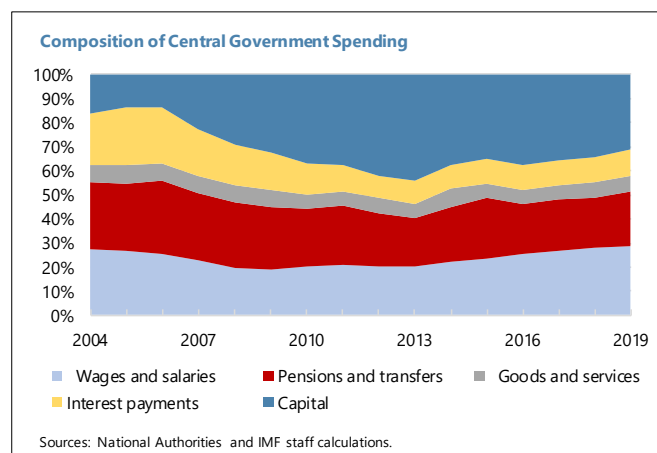
17.   A new law for private-public partnerships (PPP) was introduced in 2019. The new administration hopes to leverage additional financing for public infrastructure projects from the private sector. While some ideas have been collected, no concrete projects have been discussed so far. PPPs can be useful to access private sector expertise and efficiency, but they also come with risks. The selection process needs to be transparent, with clear rules on the accounting for risks as well as the monitoring of the execution of the projects.

Energy Subsidies by Product [1]
(In percent of GDP, latest value available)

Sources: IMF FAD Expenditure Assessment Tool (EAT), IMF Energy Subsidy estimates.
1/ Daslines are the median for countries in the region. Latest available for Panama corresponds to 2017.
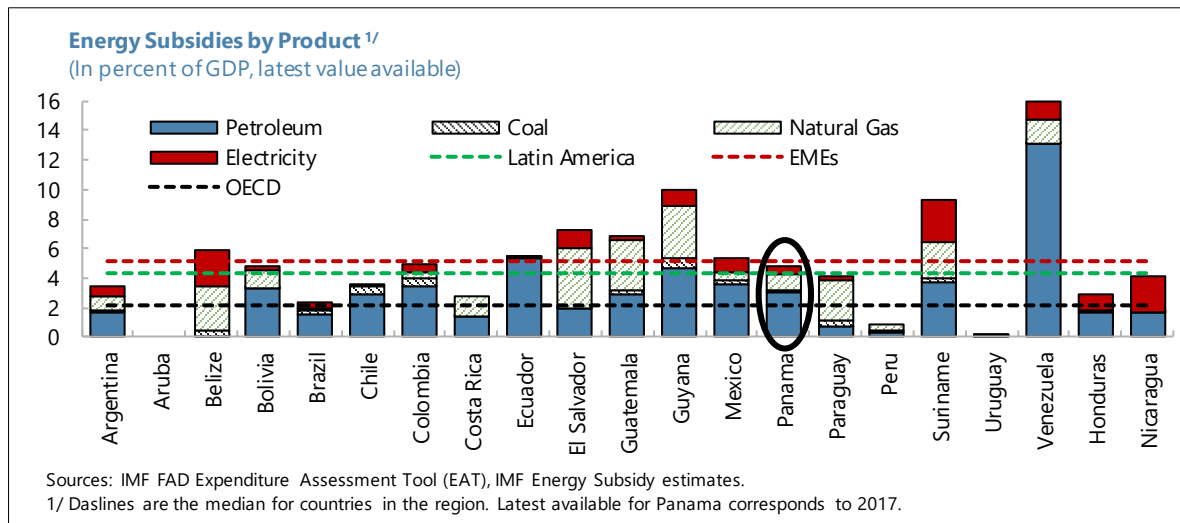
Policy Options

• Undertake an expenditure review (e.g. PIMA for infrastructure governance).

• Strengthen budget and expenditure control.

• Provide rationale for transfers and subsidies and ensure adequate targeting and effectiveness

• Slow down wage growth to create room for social spending and strengthen link between pay and productivity.

D.   Strengthening of the Fiscal Framework

18.   The accumulation of fiscal buffers could help to reduce unintended pro-cyclicality of the fiscal policy under the SFRL. Over the medium term, as the debt to GDP ratio falls and taking advantage of the expected sustained period of low global interest rates, this will gradually lower the average interest rate of the public debt portfolio, interest payments as a percent of GDP are expected to decrease. Instead of widening the primary balance, the government could save this additional space

Fiscal Buffers
(In percent of potential GDP)

Sources: IMF staff calculations

as fiscal buffers under a self-imposed "*shadow fiscal rule*". This space could be used for fiscal stimulus in cyclical downturns while always keeping the deficit within the ceiling. In practice, this would mean a fiscal policy that maintains the
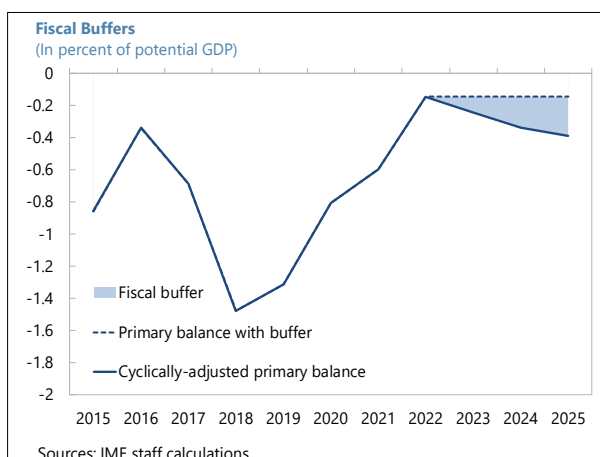
primary balance of the NFPS at -0.15 percent of GDP after 2022. By 2025, under the baseline scenario the fiscal buffer could reach a ¼ percent of GDP and will continue to grow. However, since the shadow fiscal rule would not override the SFRL, its successful implementation requires political commitment and effective communication of the rule to the public.

19.   Early appointment of the members of the fiscal council can enhance transparency and credibility of fiscal policy. The recent amendments to simplify the fiscal framework and make it more transparent and the approval of the law creating an independent Fiscal Council (FC) are encouraging. The FC will comprise three independent professionals, with experience in public finance, or macroeconomics. Members will be appointed by the government on a 7–year term. Supported by a technical secretariat in the Ministry of Economy and Finance, the FC will evaluate macro-fiscal policy, and issue a non-binding opinion, according to the areas of its mandate.[10] Its assessment should include fiscal plans and performance, the evaluation of macroeconomic and budgetary forecasts and the FC should ensure that the medium-term fiscal framework facilitates compliance with the SFRL. The FC is expected to promote public awareness and stimulate debate on macro-fiscal issues. Moreover, as part of its assessment, the FC could estimate the cyclically adjusted deficit to facilitate decision-making on the accumulation or use of fiscal buffers.

Policy Options

- Appoint the members of the Fiscal Council and provide adequate resources.

- Avoid further changes to the SFRL to protect the credibility of the fiscal framework.

- Fortify the accountability framework and enforcement mechanisms for the SFRL.

- Reduce fiscal policy pro–cyclicality, for example by accumulating buffers under a shadow fiscal rule.

20.   Fiscal reporting and transparency continue to be hampered by the use of turnkey projects and the limited coverage of the national NFPS definition. While there is room to improve the quality and timeliness of fiscal accounts, the use of turnkey contracts, which is unusual given Panama's income and also in comparison with the rest of the region, complicates fiscal statistical reporting. Under this model, contractors are responsible for obtaining project financing and expenditures are recognized in the fiscal accounts only when payment is made upon completion of work. In effect, it permits the separation of the timing of construction, the recognition of the corresponding liability, and the recording of expenditure in the public accounts. The deferred recognition of capital expenditure undermines the transparency of fiscal commitments and accurate assessment of fiscal policy. Moreover, it is not clear why the model continues to be used given the government's ample market access at favorable conditions. Another issue is the institutional

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[10] If the government does not adopt the FC's advice it has to issue an explanation for not doing so.

coverage of the non–financial public sector, which is limited in scope[11], and as such assessing the true fiscal position is a challenge[12]. While the public enterprises outside the definition of NFPS have strong fundamentals and strong credit ratings, the authorities could be assessing the fiscal risks. Efforts are ongoing by CAPTAC to assist with some of these issues.

Policy Options

- Adopt best practices on accounting methods.

- Review and phase out the use of turnkey contracts.

- Prepare consolidated accounts of the NFPS according to international standards (GFSM 2014).

21.   Analysis and management of fiscal risks. Better analysis of fiscal risks to which Panama is exposed can help ensure a solid fiscal position. Sources of fiscal risks in Panama include unfunded pension liabilities, turnkey projects, contingent liabilities of public companies, extreme weather events (El Nino) and the sizable financial sector. An actuarial assessment of the public pension system suggests that, without parametric reforms, the system is projected to deplete its reserves by 2035 (See IMF Country Report No. 16/337).[13] A comprehensive assessment of all contingent liabilities of the consolidated public sector is therefore needed to ensure adequate support for fiscal policy's exclusive stabilization role in the absence of monetary and macroprudential policies.

Policy Options

- Enhance capacity to analyze and mitigate fiscal risks.

- Prepare and regularly publish a fiscal risks report.

- Reforms the public pension system.

E.   Concluding Remarks

22.   Panama stands at a crossroad between taking the leap to become an advanced economy or getting stuck in the middle-income trap. While Panama crossed the World Bank's high-income threshold in terms of GDP in 2018 following its exceptional growth in the last decades, socio-economic indicators that set apart advanced economies have not kept up with the economic

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[11] According to national definition, three public enterprises are not part of the NFPS. They include the Tocumen International Airport, ETESA (an electricity distribution company), and ENA (the National Highway company). The accounts of the Panama Canal are also not consolidated with the government accounts.

[12] The authorities are mandated by law to report deferred payment schemes (e.g. turnkey projects) in the budget, which has been a challenge in practice.

[13] This estimate treats the reserves of the two publicly managed defined benefit subsystems in a consolidated manner. The old system (System Exclusivamente Beneficio Definido) has dwindling contributions. Its reserves are estimated to deplete by 2027 and subsequently start generating fiscal pressures.

pace. Fiscal policy is at the heart of the needed improvement in the delivery of public services and investment. Overcoming the challenges posed by low revenue and demands for higher standards of public services in an environment of slowing growth will be crucial in determining Panama's path in the next decade.

23.   The beginning of a new administration provides a window of opportunity to initiate and implement ambitious reforms. This note takes stock of fiscal issues in Panama and proposes policy options. The new administration's fiscal agenda should feature a comprehensive reform of tax and customs administrations, a review of tax incentives and exemptions and consider steps towards a broader tax policy reform. A review of the existing framework for mineral taxation should be done to ensure adequate tax revenue in future projects, while encouraging investment and maintaining international competitiveness. Important progress in administration reform will be critical to creating fiscal space to finance productive investment and social spending. Efforts to further strengthen the fiscal framework with the appointment of the members of the Fiscal Council should continue going forward. Panama should adopt best practice fiscal accounting and reporting methods. A comprehensive assessment and management of fiscal risks is necessary to create buffers and safeguard public finances given fiscal policy's exclusive stabilization role.

Table 2. Panama: Central Government Fiscal Operations, 2015–19
(In percent of GDP)

	2015	2016	2017	2018	Est. 2019
Revenues and grants	**13.4**	**13.3**	**13.9**	**13.8**	**12.5**
Current revenue	13.2	13.3	13.9	13.8	12.5
Taxes	9.3	9.7	9.2	9.2	8.2
Direct taxes	4.8	5.1	4.9	5.1	4.4
Income tax	4.3	4.6	4.4	4.6	4.0
Tax on wealth	0.5	0.5	0.5	0.5	0.4
Indirect taxes	4.5	4.6	4.3	4.1	3.8
Import tax	0.7	0.6	0.6	0.5	0.5
ITBMS	2.4	2.6	2.5	2.3	2.2
Petroleum products	0.4	0.5	0.4	0.4	0.4
Other tax on domestic transactions	0.9	0.9	0.8	0.8	0.8
Nontax revenue	3.9	3.6	4.7	4.6	4.3
Dividends	1.6	1.5	2.3	2.3	2.2
Of which: Panama Canal Authority	1.1	1.2	1.9	1.8	1.8
Panama Canal Authority: fees per ton [1]	0.7	0.7	0.7	0.8	0.8
Transfers from decentralized agencies	0.5	0.5	0.5	0.5	0.4
Other	1.1	0.9	1.2	1.0	0.9
Capital revenue	0.1	0.1	0.1	0.0	0.0
Grants	0.0	0.0	0.0	0.0	0.0
Total expenditure	**17.4**	**17.5**	**17.5**	**17.5**	**16.7**
Current	11.1	10.7	10.9	10.9	11.5
Wages and salaries	4.0	4.3	4.6	4.7	4.8
Goods and services	1.4	1.3	1.3	1.2	1.2
Current expenditure of CSS	0.7	0.5	0.6	0.6	0.7
Transfers to public and private entities	3.2	2.8	2.7	2.7	3.0
Interest	1.7	1.7	1.7	1.8	1.9
Domestic	0.3	0.3	0.4	0.3	0.4
External	1.4	1.4	1.4	1.4	1.5
Capital	6.0	6.5	6.1	5.7	5.2
Accrued spending [2]	0.3	0.3	0.4	0.8	0.0
Savings [3]	2.2	2.6	3.0	2.9	1.0
Overall balance [4]	**-4.1**	**-4.1**	**-3.6**	**-3.6**	**-4.1**

Sources: Comptroller General; Ministry of Economy and Finance; and IMF staff calculations.

1/ Includes public service fees.

2/ Staff adjustment to account for the accrual of previously unrecorded expenditure for 2015-18.

3/ Current revenues and grants less current expenditure.

4/ For 2015 - 2017, includes spending allowed under Article 34 of Law 38 of 2012.

Table 3. Panama: Non-financial Public Sector Fiscal Operations, 2015–19

	2015	2016	2017	2018	Est. 2019
Revenues	**19.7**	**20.1**	**20.0**	**19.7**	**18.3**
Current revenue	19.6	20.1	20.0	19.7	18.3
Tax revenue	9.3	9.7	9.2	9.2	8.2
Nontax revenue	3.7	3.4	4.5	4.4	4.1
o/w: Panama Canal fees and dividends	1.8	1.8	2.6	2.6	2.6
Social security agency	5.6	5.8	5.7	5.6	5.5
Public enterprises' operating balance	0.2	0.1	0.0	0.0	0.0
Other [2/]	0.7	1.0	0.5	0.5	0.4
Capital revenue	0.1	0.0	0.0	0.0	0.0
Grants	0.0	0.0	0.0	0.0	0.0
Expenditure	**22.1**	**22.1**	**22.2**	**22.9**	**21.4**
Current primary expenditure	13.6	13.5	13.6	13.7	14.2
Central government [3/]	8.1	7.9	8.0	8.0	8.3
Rest of the general government	5.5	5.6	5.6	5.6	5.9
Social security agency	5.0	5.1	5.2	5.2	5.4
Decentralized agencies	0.4	0.4	0.4	0.4	0.4
Interest	1.7	1.7	1.7	1.8	1.9
Capital	6.6	6.7	6.5	6.3	5.3
Accrued spending [4/]	0.2	0.2	0.3	1.2	0.0
Overall balance [5/]	**-2.4**	**-2.0**	**-2.2**	**-3.2**	**-3.1**

Sources: Comptroller General; Ministry of Economy and Finance; and IMF staff calculations.
1/ Official presentation excludes the operations of the ACP as it is not part of the NFPS.
2/ Includes the balances of the nonconsolidated public sector and revenue of the decentralized agencies.
3/ Different from Table 3 as it excludes the transfers to other agencies.
4/ Staff adjustment to account for the accrual of previously unrecorded expenditure for 2015-18.
5/ For 2015 - 2017, includes spending allowed under Article 34 of Law 38 of 2012.

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AML/CFT ISSUES IN PANAMA: BACKGROUND AND POLICIES[1]

The Panamanian authorities made a high-level political commitment to work with the FATF and GAFILAT to address the shortcomings identified in their evaluation reports and enhance financial integrity by improving the country's AML/CFT regime. While significant progress towards greater compliance with FATF recommendations has been achieved, the FATF identified important deficiencies in Panama's AML/CFT regime that remain to be addressed. Due to these deficiencies, the FATF placed Panama on their grey list (International Cooperation Review Group, ICRG, monitoring) of jurisdictions with strategic deficiencies to combat money laundering and terrorist financing following their June 2019 plenary.

A.   Background

1.   Panama is vulnerable to money laundering (ML) from a number of sources including drug trafficking and other predicate crimes committed abroad such as fraud, financial and tax crimes. It is a country with an open, dollarized economy which, as a regional and international financial and corporate services center, offers a wide range of offshore financial and commercial services. The Panamanian financial platform has been under scrutiny for some time, with the criticism intensified following the inclusion of Panama in the grey list of the FATF in June 2014[2], and the document leak related to the Mossack-Fonseca scandal in April 2016.

2.   The authorities made a high-level commitment to enhance Panama's financial integrity and strengthen its AML/CFT regime. Panama conducted a national ML/TF risk assessment in 2016 to identify potential threats, vulnerabilities, and consequences. The results of the risk assessment were used to prepare the 2017 national AML/CFT strategy, supported by IMF technical assistance, the *National Strategy to Combat Money Laundering, Terrorism Financing and Weapons of Mass Destruction Proliferation.* The authorities closely cooperate with the Financial Action Task Force of Latin America (GAFILAT) and other relevant international supervisory bodies.[3]

3.   While no specific cases of terrorist financing (FT) have been identified to date, the FATF assesses Panama as vulnerable to FT risks. The country is a key transit hub which attracts a fair share of migratory flows.[4] Panama's proximity to Colombia heightens FT concerns amid the

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[1] Prepared by Marina Rousset (WHD) in close collaboration with Francisco Figueroa (LEG).

[2] Panama was removed from the grey list in February 2016.

[3] Panama served as vice-president of GAFILAT in 2017 and assumed the GAFILAT presidency in 2018. Panama's financial intelligence unit, Financial Analysis Unit Panama (UAF), is a member of the Egmont Group, which is a united body of 164 Financial Intelligence Units providing a platform for the secure exchange of expertise and financial intelligence to combat money laundering and terrorist financing (ML/TF) in accordance with global AML/CFT standards.

[4] According to the UN Refugee Agency, in 2017 more than 8,000 migrants entered Panama illegally.

recent reactivation of FARC and resurgence of armed conflict in that area. To this end, Panama's 2017 national strategy recognizes its vulnerability to terrorism financing without the proper safeguards. For example, the Colon Free Trade Zone (FTZ) is the second largest in the world and may be exposed to the passage of weapons or dual-use goods in the absence of appropriate regulations and surveillance mechanisms. The preliminary conclusions of the risk assessment update, which is currently underway jointly with the World Bank, show FT risks shifting from "low" to "medium" in Panama, especially in the corporate sector, as transactions of medium and small companies operating in the FTZ lack adequate onsite supervision.

B.   Recent Developments

4.   **Panama was placed on the FATF's grey list for monitoring by the ICRG after the June 2019 plenary[5].** Due to lack of compliance on 9 out of the 11 immediate outcomes on effectiveness (details discussed below), the FATF designated Panama as a "jurisdiction with strategic deficiencies", placing it under ICRG monitoring until major deficiencies are resolved and reassessed. In response, the Panamanian authorities adopted an action plan that made commitments to:

- Strengthen their understanding of the national and sectoral ML/TF risks and improve national policies to mitigate these risks;

- Proactively take action to identify unlicensed money remitters, and ensure effective, proportionate, and dissuasive sanctions again AML/CFT violations;

- Ensure adequate verification and update of beneficial ownership information, establish an effective mechanism to monitor the activities of offshore entities, assess existing risks of misuse of legal arrangements to define and implement specific measures to prevent the misuse of nominee shareholders and directors, and ensure timely access to adequate and accurate beneficial ownership information;

- Ensure effective use of its Financial Intelligence Unit (FIU) for ML investigations, demonstrating their ability to investigate and prosecute ML involving foreign tax crimes and to provide constructive and timely international cooperation with such offences.

5.   **Exiting the FATF grey list is macro-critical for Panama.** In the absence of policy action, corresponding bank relationships risk being severed, which in turn would dry up foreign credit and limit domestic lending, squeezing bank margins and increasing credit risk. This would inevitably dampen economic activity, with potentially long-lasting negative effects. In addition, the reputational damage that the new administration may sustain if exiting the grey list protracts beyond the targeted dates (after the February or June 2021 FATF plenary, as communicated in the press) can undermine its capacity for reform and weaken its political influence.

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[5] The FATF grey list includes 18 jurisdictions. Besides Panama, grey-listed countries are Albania, the Bahamas, Barbados, Botswana, Cambodia, Ghana, Iceland, Jamaica, Mauritius, Mongolia, Myanmar, Nicaragua, Pakistan, Syria, Uganda, Yemen and Zimbabwe. Two countries – Democratic People's Republic of Korea and Iran – are classified as "high-risk jurisdictions" and appear on the FATF's "blacklist."

6.   Panama continues to make progress on technical compliance with the FATF recommendations.[6] GAFILAT's latest mutual evaluation report (MER)[7] noted Panama's progress to improve its technical compliance by: (i) addressing the deficiencies of technical compliance identified in 2017; and (ii) implementing new requirements where the FATF recommendations have changed. The MER recognized the authorities' continued progress in addressing outstanding AML/CFT deficiencies and concluded that four FATF recommendations can be rerated from "Partially Compliant" to "Compliant", and seven more recommendations demonstrated "improvement of the technical compliance" albeit without rerating.

Figure 1. Panama: Reporting of Suspicious Activity and FATF Compliance

Sources: Panama's Financial Intelligence Unit, and the Financial Action Task Force of Latin America (GAFILAT).
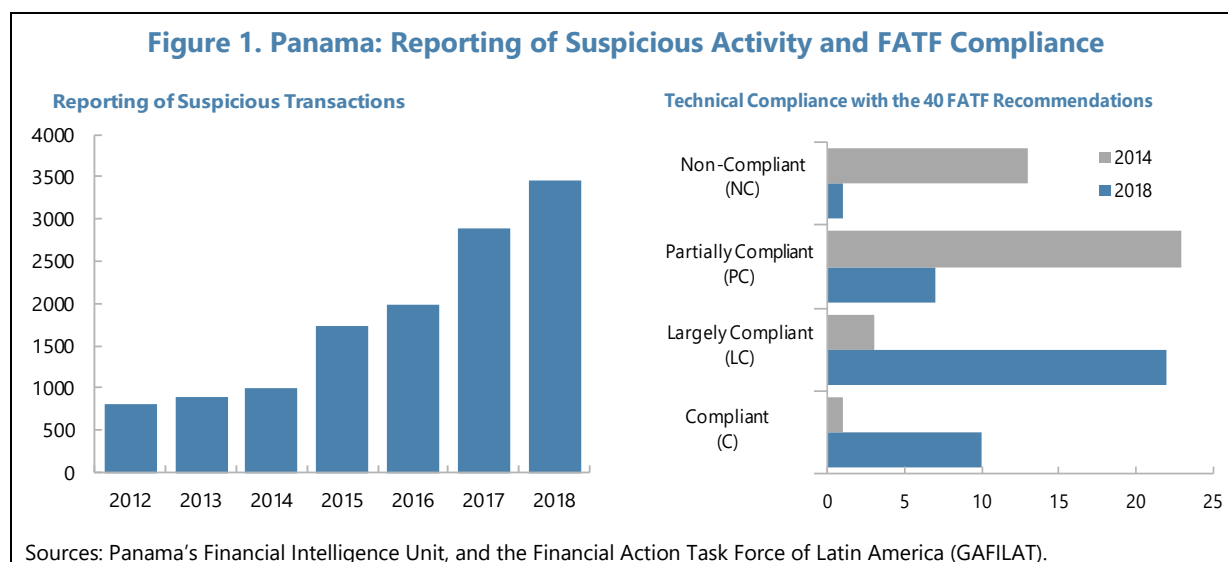
7.   Committed to exit the FATF grey list by 2021, Panama made significant steps to improve its legal framework in 2019 and 2020. In chronological order, these include:

- *Enacting Law 70 criminalizing tax evasion and the laundering of tax evasion proceeds* by adding it to the Criminal Code and modifying the Tax Code (on January 31, 2019). This implies that when the tax office has information that in a calendar year an amount of US$300,000 or above has been evaded, the Tributary Administrative Court can be notified with the appropriate evidence to file a criminal case through the prosecutor's office. Tax evasion is punishable with a prison sentence of between two and five years, as well as a financial penalty of between two and ten times the amount evaded.

- *Passing resolution 002-2019 imposing greater controls on financial transactions* by strengthening due diligence to detect fiscal crimes (on April 11, 2019). The document, issued by the Superintendence of Banks of Panama, regulates rules on customer profiles, resident agent profiles, and suspicious operations for banks and other fiduciaries.

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[6] For granular stocktaking of Panama's progress towards FATF compliance since 2013, see SIP on Financial Integrity in Panama (IMF Country Report No. 19/12), published in November 2018.

[7] GAFILAT placed Panama under enhanced follow-up based on the findings of its mutual evaluation report (MER) published in December 2017. Findings cited here are based on the Enhanced Follow-up Report of Panama, published in January 2019 (http://www.fatf-gafi.org/media/fatf/documents/reports/fur/GAFILAT-1st-FUR-Panama.pdf).

- **_Launching a new anonymous platform to report incidents of money laundering_** (on May 16, 2019). Panama's Financial Analysis Unit (UAF), jointly with Crime Stoppers (a community-based crime-reporting program), created an online platform designed to anonymously report information about who, when, how and where citizens suspect of laundering money. The platform gained traction with the public, generating 43 reports of suspicious activity to date.

- **_Passing an amendment to the tax evasion legislature_** (Law 87 of October 2019 modifying article 288-J of the Criminal Code) which introduces criminal punishment for repeat tax offenders. The amendment is aimed at corporations and other legal entities and grants exemptions from jail time only if the defrauded amount is returned during the investigation phase and if it does not exceed US$300,000.

- **_Signing a statement of intent with France, creating a working group to cooperate on fiscal and financial transparency and AML/CFT measures_** (on November 28, 2019). Specifically, the agreement focuses on the adoption of more efficient mechanisms for the exchange of fiscal information between the two countries.[8]

- **_Introducing criminal penalties for unlicensed money remitters_** (Law 123 passed on December 31, 2019), including imprisonment from 5 to 8 years.

- **_Creating the Superintendence of Non-Financial Entities_** (Law 124 passed on January 7, 2020). The law elevates the previous _intendance_ to _superintendence_ status. It was created to strengthen the supervision of non-financial businesses and professions (most notably, FTZs, lawyers, construction and real estate companies). This autonomous agency also conducts training and onsite inspections of relevant entities in the nonfinancial sector.

- **_Suspending delinquent corporations from public registry_** (via Executive Decree 905 of September 20, 2019). In January 2020, 381,000 legal entities were reportedly suspended from the public registry of Panama (out of a total of 776,000 registered companies) for failing to pay their fees for three consecutive years or not having a resident agent and will be permanently dissolved if their status is not33 regularized within 90 days.

- **_Approving the creation of a s3ingle registry for beneficial owners_** (Law 169 passed on February 20, 2020) to enhance the transparency and traceability of the ultimate beneficiary ownership data for legal entities established in Panama.

- **_Proposing a law requiring resident agents to obtain and maintain financial statements of companies established in Panama but operating abroad_**, and to submit these accounting records to the fiscal authorities upon request (more precisely, modifying Law 52 of 2016). The Ministry of Economy and Finance acknowledged in a statement on January 8, 2020 that although agreements have been signed to exchange such financial information in the past, in practice no such data are provided. The amendment aims to enforce record-sharing and enhance tax transparency.

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[8] Despite the intensified policy dialogue, France communicated its decision to keep Panama on its list of 13 "tax havens" in January 2020.

- ***Establishing an AML unit within the customs administration*** (forthcoming in 2020) staffed with compliance officers trained to perform due diligence on suspicious transactions. To further reduce ML risk, the customs administration plans to move away from cash payments to digital transactions for enhanced traceability.

- ***Adopting blockchain technology to enhance transaction reporting for goods passing through the Colon FTZ*** (forthcoming in 2020) thus reducing FT risk. This effort is spearheaded by the customs administration.

C.   Policy Priorities

8.   To address the strategic deficiencies underscored by the FATF's June decision, the authorities need to work coordinately to quickly and effectively tackle the four pillars of their action plan. On the strategic front, designing and implementing a formal communication strategy should be a key priority for the authorities in order to: (i) ensure that the authorities' commitment to expediently address the FATF's areas of concern is widely acknowledged, (ii) continuously update GAFILAT and all relevant parties of changes to the AML/CFT national strategy or the legal framework in a timely manner, and (iii) appraise the domestic agents of any applicable changes. Since GAFILAT is the relevant regional authority which makes country-level assessments and subsequently informs the FATF—the international standard setter on AML/CFT—efficiently liaising with GAFILAT is of utmost importance going forward. On the technical front, creating a taskforce and a roadmap for the undertaking of necessary reforms is urgent, with necessary assistance available to the authorities from experts in the field, including at the IMF.

9.   While Panama's AML/CFT regime has demonstrated much improvement in technical compliance with FATF recommendations over the years, GAFILAT's assessment of its effectiveness remains relatively low. GAFILAT assessed Panama's effectiveness, particularly in preventing the misuse of foreign and domestic legal entities incorporated in Panama, to be lacking. According to GAFILAT's MER published in January 2018, the FTZ, real estate and banking are the most vulnerable to money laundering as sizable financial inflows are channeled to Panama through these sectors. The 2018 assessment shows that Panama's AML/CFT framework is only effective (or "substantial") in two areas (preventive measures and financial sanctions related to terrorism financing and proliferation financing). In all other areas, GAFILAT deemed Panama's effectiveness to be insufficient ("moderate" or "low"). This covers Panama's understanding of risk, international compliance, supervision, preventive measures, transparency of legal persons and legal arrangements, financial intelligence, money laundering investigations and prosecution, confiscation, and terrorism financing investigations and prosecution.

10.   Some of the deficiencies in Panama's AML/CFT regime will take time to address, although efforts to do so are underway. Urgent policy action in these areas needs to be undertaken in order to exit the grey list by 2021, as announced by the authorities, as well as to comply with the international standard, following FATF's recommendations. Specifically, priorities include:

- ***Strengthening customer due diligence (CDD) obligations of resident agents.*** The passing of a comprehensive AML Law 23 in 2015, which clarifies CDD obligations of resident agents, obviates the need for the 2011 special Law 2 which is less strict on CDD requirements. Amending Law 2 (for which the proposal has been put forth by the authorities but not yet approved) would remove the legal ambiguity and subject all reporting entities in Panama, including resident agents, to abide by Law 23.

- ***Demonstrating the ability to criminalize tax evasion*** which first needs to be operationalized either though providing disclosures that proper taxes are filed and paid, or supplying copies of tax returns to relevant financial institutions – whichever option is acceptable to the authorities and approved by GAFILAT. Subsequently, should cases of tax evasion be identified, Panama's judicial system needs to demonstrate its ability to competently investigate and prosecute such cases. Given that this law is new, the judicial system and other institutions need to develop the capacity to do so within a relatively tight timeline.

- ***Enhancing data transparency on beneficial ownership, building on Law 169.*** Panama faces significant challenges ensuring the timely availability of accurate beneficial owner information of domestically incorporated entities. Concerns over misuse of corporate vehicles led the FATF to strengthen its standards on transparency, but Panama's current regulation falls short of these standards (in fact, *Transparency and beneficial ownership of legal persons* is the only FATF recommendation where Panama scored as "Noncompliant" in the latest evaluation). Specifically, only the information on beneficial owners that control 25 percent or more of an entity were required to be kept by law. Furthermore, ownership information was difficult to obtain when a resident agent had lost contact with a corporate entity, and when entities lacked physical presence in Panama. Under the new law, resident agents are required to provide beneficial ownership information for all legal entities registered in Panama. In order to pass the compliance threshold, the authorities need to demonstrate that the ownership registry is fully operational and adequately collects the required information.

- ***Dissolving or regularizing the large number of dormant entities.*** Most of the dormant corporate vehicles cut off relationships with the resident agent and ceased paying their yearly license fee. While corporate inactivity in itself is not illegal, provided all accrued fines are paid, Panama's large share of dormant companies poses risks to the transparency of ownership information for CDD purposes. The recent action to remove 381,000 dormant entities from the public registry is a decisive and encouraging step in the records cleanup process.

- ***Improving AML/CFT statistics.*** Given the fragmented nature of AML/CFT oversight and enforcement in Panama, relevant data are not always shared in a timely manner among agencies and with third parties. While the national strategy and the UAF aim to streamline and enhance relevant information sharing, statistical data quality remains of concern. The recently created roundtables (*mesas de trabajo*) for AML/CFT cross-agency cooperation aim to make information sharing timelier and more accurate.

D. Conclusions

11.   The newly-formed government needs to prioritize strengthening Panama's AML/CFT regime and enhancing its financial integrity to maintain competitiveness. Building on the momentum of recent legal initiatives to enhance the AML/CFT regime, Panama's authorities should prioritize addressing the remaining shortfalls of the legal framework, particularly in light of the FATF grey listing. In the short run, this requires urgent action to address the FATF's recommendations outlined in the June 2019 action plan.

12.   In addition to tighter technical compliance with the FATF recommendations, the authorities need to focus on enhancing the effective implementation of their legal framework and the accompanying communication strategy. Addressing deficiencies in the effectiveness of the AML/CFT regime will be challenging and more time-consuming than technical compliance, as it requires capacity building, enhanced inter-agency coordination, continuous education of reporting agencies and the public at large, as well as international cooperation. Improving these and other aspects of the AML/CFT regime will help the authorities meet their financial integrity objectives and boost Panama's standing in the international arena.

13.   Recent initiatives—legislative actions and other reforms—demonstrate that the new administration is committed to exit the FATF watchlist as promptly as possible. The authorities appear very cognizant of the reputational damage Panama stands to incur should the FATF grey listing protract. In addition to quickly scaling up regulatory measures, they are working on improving cross-agency coordination and information sharing as well as building capacity and public awareness to have better control over financial transactions and the passage of goods through the country.

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TOWARDS A MORE RESILIENT FINANCIAL SECTOR[1]

Panama is a small and fully dollarized economy that positions itself as an international banking center of Latin America. The resilience of its banks (which hold assets double the size of its GDP), is critical for domestic macroeconomic stability. Conservative banking and improvements in supervision and regulation have helped Panamanian banks to remain sound. However, increasing complexity and concentration in Panama's banking system call for strengthening the regulatory framework to further safeguard financial stability. This paper suggests policy options to make the financial sector more resilient. First, it provides an overview of the financial system and recent trends, summarizes financial stability oversight and the prudential framework, analyzes the implementation of Basel III standards, and proposes steps to improve financial oversight and update the macroprudential toolkit. Second, it advocates the introduction of an effective financial safety net and upgrading the bank resolution framework. Third, it advises advancing regulatory framework reforms and coordination, and creating a regulatory sandbox for the growing fintech industry.

A.   Overview of the Financial System and Recent Trends

1.   Panama's financial center is twice its economy size and vital in the region, but smaller and less sophisticated than other major financial hubs[2]. As of November 2019, it hosted 79 banks[3], which hold more than 90 percent of the system's assets, the rest is held by insurance, reinsurance, securities companies, and pension funds, and financial cooperatives and other entities. The 46 onshore banks, operating with a general license, form the domestic banking system: they amount to 86 percent of the entire banking center's assets, holding 87 percent of the deposits and 88 percent of the credit portfolio. Although almost two-thirds of onshore banks are foreign-owned, only one-third of the system assets and one-fifth of the system credit is received by the non-residents. General license banks can perform both internal and external operations. Of the 33 offshore banks, 22 hold an

Size of the financial system (2019)	Billion USD	Share of the total assets (%)	Share of GDP (%)
1. Banks, insurance and securities	**130.5**	**94.6**	**194.3**
a) Banks, of which:	125.0	90.7	186.2
onshore banks	107.9	78.3	160.8
offshore banks	17.0	12.4	25.4
b) Insurance and reinsurance	3.2	2.3	4.8
c) Securities companies and pension funds	2.3	1.7	3.4
2. Other participants	**7.4**	**5.4**	**11.0**
a) Cooperatives	2.2	1.6	3.2
b) Other financial entities	5.2	3.8	7.8
3. Total assets	**137.9**	**100.0**	**205.3**

Sources: Superintendency of Banks and IMF staff calculations.

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[1] Prepared by Olga Bespalova (WHD).

[2] The foreign liabilities of the financial system are about 1/10 of Bahamas, 1/20 of Hong Kong SAR and Singapore, and 1/40 of the Cayman Islands.

[3] See Table A1.2 (Annex) for the details on the structure of the international banking center.

international license (IL), which can conduct business only with non-residents except for very limited interbank operations, and 11 have representative license (RL) - they cannot engage in any banking operations, focusing only on promotion activities. Offshore banks rely on external funding, almost all of which (97 percent) comes from the non-financial private sector (and only 3 percent from banks). Their assets include loans to non-residents (50 percent), interbank deposits abroad (28 percent), and foreign securities (22 percent). Thus, their impact on the domestic economy is virtually null; see SIP (2017).

2.   Panama's banking center continues to consolidate, especially among foreign-owned banks, leading to higher concentration and systemic risks. Since January 2014, the number of banks declined from 91 to 79[4]. The onshore system lost four banks: there were seven exits (four acquisitions by incumbent banks, one voluntary liquidation, one forced liquidation, one reorganization), and three new entries. The count of the offshore banks declined by eight: the number of IL-banks declined by five (driven by four voluntary liquidations, one forced liquidation, one sale, and one new entrant), and the number of RL-banks decreased by three (due to seven voluntary exits with only four entrees). As many experts have predicted, this trend may continue, as smaller banks with lower profits and higher NPLs, may not be able to

	Onshore system			Offshore banks			Banking
	Foreign	Panamanian	Total	IL	RL	Total	Center
Jan. 2014	31	19	50	27	14	41	91
Nov. 2019	29	17	46	22	11	33	79
Entries	2	1	3	1	4	5	8
Exits, of which	4	3	7	6	7	13	20
- voluntary liquidation	1	0	1	4	7	11	12
- forced liquidation	1	0	1	1	0	1	2
- mergers and acquisitions	2	2	4	0	0	0	4
- sale with liquidation	0	0	0	1	0	1	1
- reorganisation	0	1	1	0	0	0	1
Net change	-2	-2	-4	-5	-3	-8	-12

Sources: Superintendency of Banks and IMF staff calculations.

cope with increasing operational costs (due to more stringent AML/CFT regulations and implementation of Basel III standards), and therefore may choose to be acquired by larger peers or exit the industry[5]. As a result, large and medium banks grow further, increasing concentration in the banking system. In 2019, seven largest onshore banks were holding about 65 percent of the total banking system's assets (up from 62 percent in 2015).

3.   Panama's financial center, which contributes around 7 percent of GDP every year, is critical for macroeconomic stability. Reliance on conservative banking practices[6] and high balance sheet buffers may not be enough to mitigate increasing systemic risks. This paper suggests policy options to improve financial stability oversight and prudential, develop financial sector safety nets and improve bank resolution framework, and advance regulatory framework and coordination.

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[4] See Table A1.1 (Annex) for details on the structure of the International Banking Center.

[5] In February 2020, Banco Aliado absorbed Banco Panama (both domestic GL-banks). In December 2019, one license was cancelled (Bank G&T Continental (Panama), S.A.) and one RL-bank (Bank Julius Baer & Co. ltd., Switzerland) initiated its voluntary liquidation.

[6] Banks' lending portfolio constitutes 2/3 of total assets, with 80 percent of liabilities coming from deposits. Activities related to trading derivatives, structured-products or foreign exchange are limited. Banks invest in tradeable securities, of which about 2/5 are corporate bonds and 3/5 public sector bonds.

B. Improve Financial Stability Oversight and Prudential Framework

Financial Stability Oversight

4.   The Superintendency of Banks of Panama (SBP) has developed a broad regulatory framework to ensure compliance with international standards and best practices, increased transparency of the system, and strengthened systemic risk oversight. It covers the classification of assets, capital adequacy, market risk, corporate governance, external auditors, mergers/acquisitions, and prevention of the misuse of financial services for money laundering (ML) and financing of terrorism (FT)[7], among others. Since 2002, the SBP increased its transparency by reporting all the statistics of international assets and liabilities to the Bank of International Settlements (BIS) in Basel (although Panama is not a BIS member). Publications of the annual Financial Stability Report (FSR) and monthly updates also contribute to higher transparency. The systemic risk oversight includes monitoring the financial stability map (FSM) and critical risk factors, identification and analysis of the domestic systemically important banks (D-SIBs), and implementation of risk-based supervision and stress testing.

5.   The SBP uses an FSM to track risk developments in the banking system (see chart). It measures five types of risks, proxied by quarterly indicators. Deviation of the variables along each dimension from the baseline (2010-15) determines the risk score from 1 (the least risk) to 9 (the highest risk). The latest FSM shows that in 2019 credit risks declined compared to 2017. The SBP could further enhance the FSM by extending the number of risk indicators in line with Cervantes at al. (2014), as well as by including results of the stress tests – see Table A1.4 (Annex) for the list of currently used and proposed additional indicators.

Financial Stability Map
(Domestic banking system)

Sources: Superintendency of Banks and IMF staff calculations.
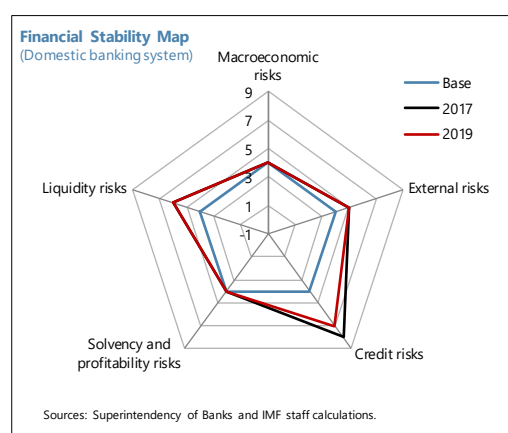
6.   The SBP also monitors systemic risks using a version of an international rating system CAMELS, which could be enhanced further. The analysis is conducted for groups of banks, ranked by their assets size. The indicators used in the analysis include (but not limited to) capital adequacy (share of tier 1 capital to total capital and capital adequacy ratio), asset quality (coverage of NPLs by provisions and growth of NPLs[8]), management income, earnings (ROA), liquidity, financial strength, credit risk, market risk, etc. To rank the banks' performance as strong, satisfactory, less than satisfactory, deficient, or critically deficient, the SBP would need to develop a scale to map the indicators into ratings (see Table A1.3 in Annex for a sample).

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[7] Rules 5-2015 and 10-2015 establish due diligence procedures for customer and interbank regulations, including the know-your-customer (KYC) requirement for banks, trusts, and other financial entities. Rule 6-2016 aims to prevent ML and FT that may arise from cross-border correspondent banking relationships. Rules 9-2015 and 12-2015 set punitive administrative proceedings for potential violations of the ML/FT prevention.

[8] In this exercise, the SBP defines NPLs as all past-due loans late by at least 30 days.

7.   The SBP has identified nine D-SIBs, ranking three as presenting the highest systemic risks, four - medium, and two others are the least systemic. The methodology used by the SBP builds on the Basel recommendations and considers banks' license type, and a number of indicators on the banks size relative to GDP, substitutability, interconnection, inter-jurisdictional activity, and complexity. The SBP ranks the D-SIBs ranks, weighting each indicator by its importance and then sorts all the banks in three buckets as those presenting the highest, medium, and least systemic risks. To fully align with Basel recommendations, the SBP needs to (i) publish the methodology it uses to identify the D-SIBs; (ii) make the list of D-SIBs and their ranking public and update them at least annually; and (iii) implement the higher loss absorbency (HLA) requirement (in percent of the RWA, to be met with the tier I capital) differentiated by the risk bucket. Also, given a large difference in the size of the nine D-SIBs (their assets range from 6 to 25 percent of GDP), the SBP may consider using a more granular ranking scale (e.g., with five buckets)[9].

8.   Stress tests consider the impact of macroeconomic shocks to the banking sector on asset quality and bank capital adequacy. The SBP conducts stress-tests to credit portfolio and capital adequacy using a regression and balance sheet approach, developed with the Fund technical assistance (TA). Such tests consider baseline, moderate, and severe scenarios, and are applied both to the whole banking system and to the individual banks/groups of banks. Results show that banks would remain adequate even in the event of severe macroeconomic and interest rate shocks. The SBP could enhance stress-tests through: (i) considering more extreme shocks (e.g., with a prolonged recovery), potential cross-border bank failures or a distress in the financial groups; (ii) developing top-down liquidity stress-tests; and (iii) implementing the bottom-up internal capital adequacy assessment process (ICAAP), requiring banks to do independent stress-tests of credit and market risks, which would be compared to the top-down stress test by SBP.

9.   The SBP carefully monitors indebtedness of households and firms, and pays increasing attention to the real estate market. From 2014 to 2019, the composition of private credit has changed: household indebtedness to banks rose from 35 to 42 percent of GDP, while the loan obligations of firms declined from 42 to 40 percent of GDP. Such a rise in household debt, although still low compared to financial centers (e.g., 54.2 percent of GDP in Singapore and 72.2 percent of GDP in Hong Kong SAR), requires vigilant monitoring. The recently raised threshold for preferential loans and the high demand for low-price housing stimulated preferential mortgage credit, leading to the increasing debt among low-income households, which could potentially raise credit risks. Due to the prolonged weaknesses in the construction and anecdotes of a relative oversupply in a high-price segment of the real estate market, the SBP began monitoring the price index of new housing (VNPI) and monthly index of construction activity (IMACO). The VNPI uses the data collected by a private third-party provider (*La Galería Inmobiliaria*[10]). In 2018 the aggregate index of house prices continued to grow, although at lower rates. The IMACO index shows that the construction sector is shrinking. Thus, it is critical to monitor loan exposure to the construction sector, which could shrink further and deteriorate in quality.

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[9] For example, Hong Kong Monetary Authority set the HLA surcharge of 1-3.5 percent, gradually phased-in 2016-19.

[10] It uses monthly surveys to monitor detailed information about new homes for sale from the moment it is first offered for sale until the last unit is sold. Residential prices for Panama are also available at www.numbeo.com

Figure 1. Panama: Monitoring of the Housing Prices and Construction Activity

Variation in the Price Index of New Housing (VNPI)
(In percent)

Index of the Monthly Construction Activity
(In percent)

IMACO (quarterly)
IMACO_MA (quarterly)

Sources: Superintendency of Banks and IMF staff calculations.
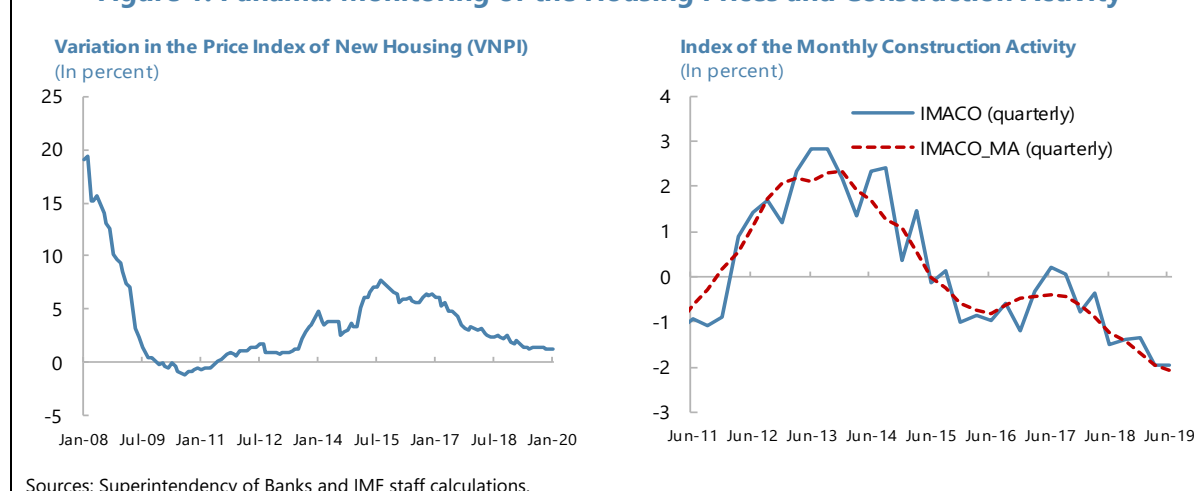
Adoption of the Basel Committee on Banking Supervision (BCBS) Standards

10.   The authorities made significant progress in aligning the SBP's regulatory practices with the Basel Core Principles (BCPs). Panama has received several evaluations of their regulatory framework (in 2001, 2007 and 2011). In 2011, it was fully compliant on 17 of 25 principles, compared to only 9 in 2001 (see chart). Higher compliance scores reflect enhanced off-site, consolidated, and cross-border supervision, and improved analysis of the investment and licensing criteria, among other. Law 2-2008 enhanced the

Compliance with BCPs

■ Compliant
■ Largely compliant
■ Materially non-compliant

Sources: Based on formal assessments by the IMF.

SBP' powers by putting in place a more flexible and comprehensive bank resolution process, extending its supervisory authority to the holding company and affiliates of supervised groups and making more explicit that its authority includes the definition the group's perimeter and the identification of affiliates and related entities.
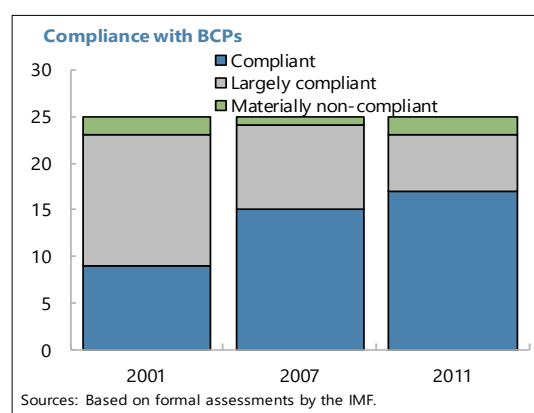
11.   Panama made progress on several fronts since the 2011 assessment. Thus, it adopted capital requirements on operational risk, updated its capital adequacy framework, and addressed most deficiencies found in the 2011 assessment in newly introduced regulations. However, some issues identified in 2011 are still unresolved: (i) lack of regulation on the interest rate in the banking book (the SBP is ready to adopt in 2020); (ii) lack of guidance on transfer risk; (iii) dependence of the superintendent' term on the political cycle. The Basel standards evolve, and the SBP is adopting new regulations to catch up. The BCP list is changing and now includes 29 criteria, but the assessment based on the latest metrics is not available. For example, rules 5-2015 and 8-2019 have updated regulations on the corporate governance, but the assessment of this principle is not available.

12.   Basel III requires banks to have higher levels of capitalization and liquidity, allowing proportional implementation of new standards by the emerging markets. While new rules strengthen banks' capacity to absorb losses, they may have a negative macroeconomic impact through the interest rate channel, as banks would pass higher operating costs to their clients. For example, the OECD estimated that implementation of Basel III could increase lending costs on average by 15 basis points due to an adoption of the updated minimum capital requirement and by 50 basis points after adoption of the capital conservation buffer (CCoB)[11].

13.   Panama is the first Central American country to embrace Basel III standards on capital and liquidity. Panama partially adopted Basel III regulations on capital adequacy (*Basel Core Principle 16*)[12]. *Rules 1-2015* and *13-2015*, which were gradually phased in by January 2019, increased the ***minimum capital requirement*** (to 4.5, 6, and 8 percent of RWA for the common Tier I capital, Tier I capital, and total capital, respectively), and limited the ***leverage ratio*** at 3 percent. However, current capital adequacy regulations do not include either the CCoB buffer (2.5 percent of common equity) or a countercyclical buffer (CCyB). In Basel III, adoption of the former is required, while implementation of the latter is at the authorities' discretion.

14.   To bring its capital regulations closer to Basel standards, the SBP should consider adoption of the CCoB for all banks and HLA capital surcharge for D-SIBs. The SBP already included adoption of the CCoB in its strategic plan. The SBP is considering adoption of a capital surcharge for the D-SIBs. Analysis shows that D-SIBs would be able to absorb a further additional capital buffer of 2.5 percent of RWA, however, this assessment does not consider the potential impact of capital charges for market and operational risk, and does not take into account parallel introduction of the CCoB. In future, the SBP could consider feasibility for the adoption of the CCyB[13].

Table 1. Panama: Capital Adequacy Ratios in Percent of Risk-Weighted Assets (RWA)			
	Minimum requirements [1/]		Desired levels
Type of capital	Without buffers	With 2.5 percent in capital conservation buffer	With 0-2.5 percent in countercyclical buffer
Common equity	4.5	7	7-9.5
Total tier 1	6	8.5	8.5-11.0
Total	8	10.5	10.5-13

Sources: BIS and IMF staff calculations.
1/ Banks must constrain dividend distributions if these ratios are not met.

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[11] Slovik, P. and B. Cournède (2011) estimated that in advanced economies such an increase in the interest rates could lower growth by 0.05-0.15 percentage points per annum.

[12] The Banking Law (article 7) required banks to have a minimum of 4 and 8 percent of RWA in Tier I and total capital.

[13] All the BIS members and Norway have already adopted the CCyB regulations. However, most of them have set zero requirements. Hong Kong SAR has 2 percent CCyB requirement.

15.   SBP advanced in revising its regulations to Basel III standards on the risk coverage.

- *Credit and counterparty risk (BCP 17).* *Rule 4-2013* established specific and dynamic provisioning on credit, and set rules to assess collateral value. Dynamic provisioning, which is governed by a macroprudential motive and established on the normal portfolio, has countercyclical capacity, but is not equivalent to the countercyclical capital buffer[14]. *Rules 3-2016 and 8-2016* established the risk weights for the different segments of banks' credit portfolio, in line with the latest standards of Basel III. Thus, mortgage loans had a relevant change concerning the previous weights as with consumer loans (cars, individuals) depending on their maturity. These rules also determine how to evaluate collateral of different categories.

- *Market risk (BCP 22).* *Rule 11-2017* established typology of different derivative contracts and good practices in their management, and requirements of normalized capital according to the nature of the derivative, term and underlying. *Rule 3-2018* created capital requirements for the financial instruments (bonds, securities, shares, forwards, swaps, options) registered in the trading book, and established restrictions on moving instruments between the books.

- *Operational risk (BCP 25).* *Rule 11-2018* established capital requirements on operational risk and established standards for the operational risk management framework, including prudent policies and processes to identify, assess, evaluate, monitor, report and control or mitigate operational risk on a timely basis.

- *Country risk (BCP 21).* *Rule 7-2018* prescribed the methodology to assess country risk and sets provisions on country risk management, which depend on the country risk classification set within this standard. Yet, there are no guidance or provisions established on the transfer risk.

Table 2. Panama: Implementation of the Main Elements of the Basel III Package in Panama		
Element of Framework	**Implementation**	**SBP Rules**
Capital Adequacy	Common tier 1/RWA>4.5 percent of RWA	1-2015
	Total tier 1 capital /RWA>6 percent	
	(Tier 1 + Tier 2 capital)/RWA >8 percent	
Capital conservation buffer	Common equity/RWA= 2.5 percent	Planned for 2020-2021
Countercyclical capital buffer	Common equity/RWA = 0-2.5 percent	N/A
Leverage ratio	Common tier 1 / total exposure to the non-RWA in and off-balance sheet>3	1-2015
Risk coverage	Credit risk, including counterparty credit risk	4-2013, 3-2016, 8-2016
	Market risk	11-2017, 3-2018
	Country risk	7-2018
	Operational risk	4-2018
Capital surcharge for D-SIBs	Capital surcharge for D-SIBs	Considered
Liquidity Coverage Ratio (LCR)	High quality liquid assets / Net cash outflows in 30-day period >=1	Gradually adopted
Net Stable Funding Ratio (NSFR)	Amount of stable funding (ASF) / required amount of stable funding (RSF) >=1	Need to consider
Source: BIS, Superintendency of Banks		

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[14] See Wezel T. et al (2012).

16.   Panama advanced on the adoption of Basel III liquidity[15] **standards by gradually phasing in the Liquidity Coverage Ratio (LCR)**[16]**, but it still has not considered the Net Stable Funding Ratio (NSFR).** *Rules 2-2018 and 4-2018* improve the system's ability to react to short-term liquidity risks by setting a minimum LCR, defining the early warning indicators of the liquidity distress, and requiring banks to change the treasury management and forecast inflows and outflows. The LCR is determined as a ratio of high-quality liquid assets to the 30-day total net cash outflow. LCR will be applicable at a rate of 50–100 percent, as determined individually for each bank, after a gradual phasing-in. This is different from the Basel, which requires that once LCR is fully phased-in, it applies to all banks at a rate of 100 percent. The Basel III package also includes the NSFR that aims to reduce funding risks at the medium-term horizon, the authorities should consider the feasibility of introducing the NFSR in the future, once the LCR is fully rolled-in (planned by the end of 2022).

Prudential Framework

17.   The SBP uses a framework of macroprudential and microprudencial policies to fulfill its mandate by the Banking Law (Law 52-2008) to ensure the soundness and efficiency of the banking system. The *microprudential* supervision focuses on the soundness of each banking institution using a risk-based supervision approach, with both on-site and off-site examinations. The *macroprudential* supervision aims to establish the rules aimed at the prevention and mitigation of the systemic risk[17] and increase resilience of the banking system. To enhance early detection of the vulnerabilities, it is necessary to enable forward-looking assessment of risk profile of each institution.

18.   In its macroprudential toolkit, Panama has two broad-based measures and two sector-specific measures. Broad-based tools include the ***limit on the leverage ratio***, and ***dynamic provisioning,*** as set out in *rule 4-2013*, which should be within 1.25–2.5 percent of RWA corresponding to the normal loan portfolio, and cannot be lower than in the previous quarter, unless due to the conversion of dynamic into specific provisions.[18] The former restricts banks from excessive risk-taking by capping the growth of the RWA, thus preventing procyclical deleveraging of banks that could impact negatively on the broader financial system and the economy. The latter

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[15] Articles 73–78 of the Banking law establish general liquidity requirements, including the 35 percent ceiling on the minimum liquidity requirement, and definition of the liquid assets.

[16] Introduction of the LCR is parallel with the legal liquidity index (established by *rule 4-2008*), which sets 30 percent minimum requirement on liquid assets specified in the rules (including cash and certain debt securities) as a share of qualifying deposits (it covers 186 days horizon).

[17] Systemic risk is defined here as the risk of disruptions in the provision of key financial services that can have serious consequences for the real economy. It is related to the interconnectedness of financial institutions and markets, common exposures to economic variables, and procyclical behaviors (IMF, FSB, BIS, 2011).

[18] The amount of dynamic provisions (DPR) is calculated as: $DPR(t) = \alpha L(t) + \beta \max\{\Delta L(t), 0\} - SP(t)$, where $\alpha = 1.50$ percent, $\beta = 5.00$ percent, $L(t)$ = RWA for loans classified under the normal category, and $SP(t)$ = variation in the balance of specific reserves. The DPR is a capital account that is paid or credited to the retained earnings account. The credited balance of the dynamic reserve is part of regulatory capital but cannot be included in the calculation of capital to meet the regulatory minimum of 8 percent (i.e., banks need to maintain the DPR above it).

reduces procyclicality of banks' provisions and earnings, and thus their probability of default (see Torsten, 2012); it is efficient in the long-term but does not necessarily help to address short-term vulnerabilities. **Sector specific measures** include capital requirements, determined by the risk weights, set by the type of loan, loan-to-value ratio (LTV), and features of collateral (see by *rule 3-2016*[19]).

19.   The macroprudential toolkit in Panama could be extended through the more flexible use of leverage ratio, dynamic provisioning requirement, and risk weights. For example, stricter leverage ratio, higher dynamic provisioning could contain credit boom and decrease vulnerabilities due to market correction. Higher risk weights for certain types of loans could contain credit in the riskier sectors.

20.   In addition, the authorities could consider adoption of new macroprudential tools:

- **Setting maximum LTV.** Higher limits on LTV will lead to larger down payments and limit leverage of borrowers. In the past, while dealing with the impact of the Global Financial Crisis (GFC), Panamanian banks effectively limited the loan-to-value ratios and set high presale requirements, which helped to contain exposure to construction and protect balance sheets. However, such measures were taken by banks as self-insurance, without the policy set by the SBP[20].

- **Setting maximum debt-to-income (DTI) or debt-service-to-income (DSTI) ratios.** To include these instruments in its toolkit, the SBP has to begin requiring banks to periodically update data about income of the borrowers and report the DTI and/or DSTI ratios. Once it has regularly updated DTI and DSTI ratios, the SBP can set prudential limits and conditions to trigger them. For example, Hong Kong SAR and Singapore have used such instruments to influence market and price developments, occasionally adjusting limits as market dynamics change.[21] Note, that the existing practice of automatic payroll deductions for household credit effectively limits debt service to 50 percent of households' income, putting a ceiling on the DSTI. However, if the authorities find that optimal DSTI below 50 percent on household debt is justified, they could apply the DSTI or a corresponding limit on the DTI ratio.

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[19] For example, risk weights for the personal, mortgage, and corporate loans are set as follows: 35 percent on mortgage for main home if LTV<80 percent with the appraisal completed in the last 3 years; 50 percent on mortgage for main home if 80<LTV<100 percent with appraisal within 10 years or if LTV<80 percent with appraisal older than 3 years; 50 percent on mortgage for second home if LTV≤80 percent with appraisal within 5 years; 50 percent on other loans (personal or corporate) with commercial real estate pledges if LTV≤ 60 percent (or with residential property pledges if LTV≤70%) with appraisal within 3 years; 100 percent on other mortgages not listed above.

[20] To implement LTV, the SBP would have to require banks to submit data on the market value of the real estate.

[21] See Wong et al. (2011) on LTV as a macro-prudential tool.

C. Develop Financial Sector Safety Nets and Improve Bank Resolution

Emergency Liquidity Assistance

21.   Banks are a key source of liquidity in Panama's fully dollarized monetary system without a central bank—is vulnerable to potential a sudden stop of capital inflows. Interbank deposits abroad are about 3 times larger than interbank deposits parked domestically, since many foreign banks hold their liquid assets in their parent banks. The National Bank of Panama (BNP), which acts as a fiscal agent of the government, also holds sizable reserves abroad. The GFC crisis showed that under stress, the interbank markets can freeze due to high holdings of the banks' liquidity abroad in foreign banks, segmentation of the interbank markets (foreign banks would not lend to small Panamanian banks), and insufficient collateral, constraining transactions. A similar situation could arise with a dry-up of international liquidity caused by a problem in the U.S. or other advanced economies, loss of the correspondent banking relationships (the risk of which is higher for smaller banks) due to country's inclusion in the "grey" AML-CFT or tax haven lists, or another instance of government arrears on the preferential mortgage interest rate[22].

22.   The financial stimulus program (FSP) to provide liquidity to the system was created in 2009, with limited success.[23] The FSP aimed to provide liquidity to the system for US$1.1 billion. The funds came from the BNP (US$400 million), the Andean Development Corporation (US$210 million), and the Inter-American Development Bank (US$500 million). The funds were to be managed by BNP through a trust that would extend loans to financial institutions, which would, in turn, were required to offer credit using standard criteria. BLADEX assessed the creditworthiness of applying financial institutions. However, banks did not draw much into these resources, mainly because their liquidity remained ample, the conditions of access to the FSP resources were not favorable due to relatively high borrowing cost and collateral requirements, and they had negative perception against the "red tape".

23.   To strengthen stability of the banking sector, the authorities are considering the creation the National Liquidity Fund that could provide short-term liquidity to the system. There were public discussions that at the beginning, the fund would be small (perhaps US$500 million), and available only to the non-systemic, solvent banks with general license. It would operate as a discount window and be held in the BNP, which, as fiscal agent, maintains the country's payment system, keeps government deposits, and extends public credit. However, it would require legal changes to give the BNP the right to claim the funds back in case of bankruptcy. Thus, the fund's creation could require changes to institutional arrangements and the judicial powers of the regulatory agencies.

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[22] In July 2019, new government uncovered unrecorded debt to the banks on the preferential interest rate, which reportedly created shortage of liquidity in the system; these arrears were paid in December 2019.

[23] Panama Announces $1.1 billion Economic Stimulus Plan. Latin American Herald Tribune. http://www.laht.com/article.asp?ArticleId=326173&CategoryId=14088

Deposit Insurance Scheme

24.   So far, Panama has managed resolution of failing banks well, without disruption of the system, but an explicit deposit insurance scheme (DIS) would further strengthen the banking center. Article 167 of the Banking Law establishes that in case of liquidation, new deposits obtained during the reorganization and deposits lower than US$ 10,000 have the first and second priority, which ensures the stability of the deposit base and benefits the interest of small savers. Depositors of the failed banks lose access to their funds during the bank resolution process, which may be lengthy in Panama due to shortcomings in the framework as discussed in the next section. According to the International Association of Deposit Insurers, Panama is only one of 26 countries worldwide without an DIS. Most recently, Costa Rica established a Deposit Guarantee Fund for both public and private banks, which was a requirement to join the OECD.

25.   There are several modalities in design of the DIS. The legislators should choose the deposit base from which to assess the DIS premium (e.g., from all deposits, or only on insured deposits, or only on deposits in a particular sector such as households); coverage also of foreign and inter-bank deposits; existence and size of co-insurance; structure of premiums (flat rate or risk-adjusted graduated rate) and their size (in the international practice, from 0.05 to 1.85 percent); whether membership is voluntary or compulsory; the source of funding and administration (private, public, or joint); and whether the DIS would play a role in the resolution process[24]. In Panama, consideration should be given to a DIS funded by banks, who pay risk-adjusted premiums—such scheme limits excessive risk-taking by banks (see Urrutia, 1989). Government could consider providing initial funds for the DIS, which would start operating as an autonomous agent once premiums accumulated to a sufficient amount[25]. Main functions of such fund would be to collect premiums, invest the funds' assets, pay insured deposits, and, participate in the crisis management.

Features of Deposit Insurance Worldwide
(Proportion of countries, in percent)

Legend:
- Risk-adjusted premiums
- Permanently funded scheme
- Foreign currency deposits covered
- Payment per depositor
- Compulsory membership
- Interbank deposits covered

Sources: Demirguc-Kunt, Asli et al (2005).
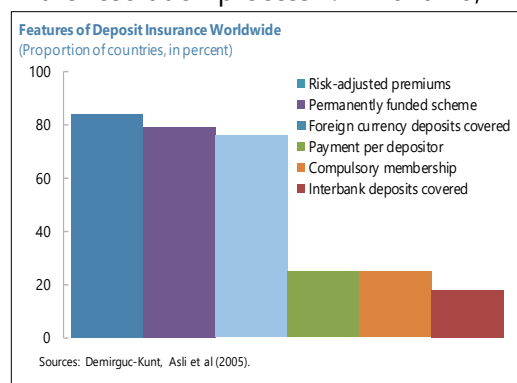
Bank Resolution Framework

26.   There is significant room to improve Panama's bank resolution framework[26]. As it stands, the framework does not clarify objectives, triggers for intervention, and types of corrective measures; lacks the choice of robust resolution tools; and limits the SBP' resolution powers[27]. The new Bank Resolution Law could help to address these issues. In particular, the new law could:

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[24] The IADI (2014) suggests that an effective DIS would include such features as sound public backstop, participation in crisis management coordination arrangements/exchange of confidential information, and legal protection for staff.

[25] For example, at a rate 0.5 percent, during the first 10 years the DIS would gather only 5 percent of the deposit base (not adjusted for inflation).

[26] An effective bank resolution framework should help to maintain financial stability providing continuity of the bank's critical functions, restoring the viability of the bank or at least some of its parts, protecting the creditors and public funds, and minimizing the costs of the process and destruction of value.

[27] The rights of shareholders are not suspended at any stage of the process.

- ***Clearly define objectives and triggers for the intervention, and types of corrective measures to deal with non-compliance and/or financial distress.*** Having a list of the qualitative and quantitative indicators could help to justify the SBP's decision to intervene and prevent potential legal disputes regarding the bank resolution process. The list should be open-ended, flexible and forward-looking, so that an action can be taken in case of a breach that has not been previously recognized, and the corrective measures should be proportional to the breach.

- ***Provide a "menu" of the robust resolution tools***, e.g., a modified framework for mergers, a transfer of assets and liabilities tool, bridge bank tool, and forced recapitalization tool.

- ***Give the SBP powers to assume control if the banks in resolution and establish a sanctioning regime.*** Currently, the SBP has no tools to neutralize unfit shareholders, whose influence can jeopardize sound management practices of the bank (e.g., suspension of their voting rights, order to sell shares, etc.). A "sanctioning committee" could be established as a special collegial decision-making body to deal with the non-compliance of regulatory standards and financial distress.

These amendments can help to shorten the resolution process, protecting the value of assets and claimants' funds, and make it more efficient, preventing potential legal disputes about the outcome of resolutions, especially in cases with unfit shareholders, whose influence can jeopardize sound management practices of the bank.

D. Enhance Regulatory Framework and Coordination

Roles within the Financial Coordination Council

27.   Currently, the Financial Coordination Council (FCC) is a collegial body that aims to facilitate information exchange and discuss newly planned regulations[28], but it is not authorized to make decisions or set system-wide policies. The FCC[29], established by Law 67-2011, coordinates actions of the financial sector supervisors through bi-monthly meetings. Its Board, chaired by the Superintendent of Banks, includes five full members and two associate members[30]. The Superintendencies of Banks, Securities Markets, and Insurance and Reinsurance also serve in each other Boards of Directors, therefore enhancing policy coordination. There are several options to enhance the role of the FCC. First, the FCC could move towards a more centralized supervisory

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[28] Over 2014-18, the FCC discussed such topics as consolidated results of the financial system, risk-based and coordinated supervision, bank resolution, AML/CFT regulations and GAFILAT assessment, negotiations of free-trade agreements, and draft MOU between the CCF members.

[29] Resolution 1-2012 approves internal regulation of the FCC (see *Gaceta Oficial* 27086 on July 26, 2012).

[30] The former include the superintendents of Securities Markets and Insurance/Reinsurance, the executive directors of the Panamanian Autonomous Institute of Cooperatives and the Pension Savings and Capitalization System of Public Servants, and the National Director of Financial Companies of the Ministry of Commerce and Industry (which oversees financial, leasing, remittance companies, and pawn shops). The latter include the directors of the Financial Analysis Unit and the Technical Accounting Board, they have a right to participate and speak but not to vote.

structure (as, for example, the Financial Policy Committee in the United Kingdom). Second, mandate of the FCC could be expanded with powers to facilitate inter-agency exchange of information for purposes of the crisis management and resolution; supervise and assess systemic risks under hypothetical scenarios; develop coordinated plans for crisis preparedness, management, and resolution activities in good times; and set macroprudential policies.
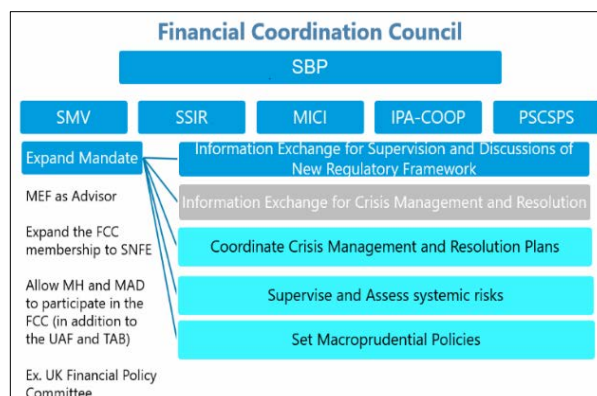
28.   The Ministry of Economy and Finance (MEF) should increase its role in the current crisis management and resolution framework. Currently, MEF does not participate in the FCC and does not have an assigned role in providing a public financial backstop to facilitate resolution. Bringing in MEF on Board of the FCC and clearly defining its role in providing a public financial backstop to facilitate resolution[31].

29.   Panama has made progress in consolidated supervision. Panama participates in the regional coordination bodies—Association of Supervisors of Banks in Americas (ASBA), and the Central American Council of Superintendents of Banks, Insurers, and other Financial Institutions - aiming to enhance the monitoring of systemic risks and secure regional financial stability. The SBP coordinates closely with other banking supervisors within the region. Rules 7-2014 and 2-2016 set standards for the consolidated supervision of banking groups. To mitigate structural systemic and interconnectedness risks, rules 6-2009, 5-2013, and 5-2016 restrict risk concentration for economic and banking groups and related parties, limiting large exposures for banks by 25 percent of consolidated capital for a single counterparty.

Regulations for a More Modern and Inclusive Financial System

30.   Panama's comparative advantages, such as high-speed internet[32], a significant number of internet users, low taxes, and lack of sectoral regulations, attract diverse fintech start-ups. It already participates in the international online payment systems, cryptocurrency trade[33]), and

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[31] Another potential full FCC member could be the Superintendency of the Non-Financial Entities (SNFE). The Ministry of Housing and the Ministry of Agricultural Development could become associate members. These two ministries oversee two non-deposit taking public development banks, lending to the low-income population —the National Mortgage Bank (BHN), and the Agricultural Development Bank. The BHN, in its turn, supervises savings and credit associations. See Dehesa (2006) for details on public banks in Panama.

[32] Seven submarine fiber optic cables passing through Panama, connect it with the Electrical Interconnection System of the Central American Countries (Siepac) and the Central American Telecommunications Network (RedCA).

[33] Large trader of bitcoin futures and options *Derbit* announced its move from Netherlands to Panama in 2020.

hosts initial coin offerings (ICO) by the blockchain operators and cryptocurrency traders. Some local banks have begun to capitalize on the fintech potential to reduce costs, increase efficiency and competition, and broaden access to the financial sector for the underserved population, and rolled out mobile wallet apps[34]. Local banks reportedly cooperate with fintech start-ups and facilitate the trade of digital currencies. The PanaFintech Association, established in 2017, promotes communication between the main actors of the fintech ecosystem (regulators, entrepreneurs, technical talent, universities, financial sector) and participates in the regional body—the Ibero-America Fintech Alliance.

31.   The growing fintech industry in Panama calls for policies to digitalize economy, strengthen cybersecurity and create a regulatory sandbox. The [Bali Fintech Agenda,](#) supported by the IMF, encouraged its members to embrace new opportunities, while being vigilant of the risks. To realize its Strategy for the Development of the Information and Communication Technologies, Panama began to update its IT systems and roll out new digital platforms. In 2018, Panama moved up to the 66th place in the United Nations [E-government Development Index](#) (compared to the 114th rank in 2016). However, in the [Global Cybersecurity Index](#) (GCI) Panama fell to 97th from 62nd place in 2018 compared to 2017. Thus, Panama needs to advance its cybersecurity framework[35] and implement the best practices (e.g., Uruguay ranks the 3rd in the Americas after the USA and Canada in the GCI). A regulatory sandbox for the fintech could help Panama to stimulate growth of the industry while containing potential risks. In 2018, the authorities prepared a draft Bill for the Modernization of the International Financial System of Panama, but it was not finalized[36]. Today, the government prioritizes developing a sandbox using the best international practices.

32.   Creation of a regulatory sandbox for fintech should take into account the latest recommendations on the subject from relevant supervisory bodies. For example, [IMF (2020): Institutional Arrangements for Fintech Regulation and Supervision](#) discusses what fintech developments mean for the financial sector supervisors. The [IMF (2019): Regulation of Crypto-Assets](#) argues that effective regulation of financial services promotes long-term economic stability and minimizes the social costs and negative externalities from financial instability, and the same underlying principles are applicable to the regulation of crypto assets[37].

33.   Recent fintech legislation of Latin American countries provides good examples. For example, Mexico enacted a comprehensive fintech law and complementary regulations, which take full effect in 2020. Brazil issued regulation on the crowdfunding and peer-to-peer lending, and created a special congressional commission which is working on a broader law. Colombia and

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[34] E-wallets allow opening a simplified digital savings account, which can be used to pay online and in shops with quick response (QR) codes, and transfer money between cell phones.

[35] Panama ratified the Budapest Convention on Cybercrime of the European Council in 2014.

[36] It aimed to define functions and regulation of the specialized financial entities (with powers to open and manage payment accounts, transfers, remittances, and issuance of e- money, and set their regulation) and collective financing centers or crowdfunding platforms; and to clarify regulation of the ICO by the SSM.

[37] The U.S. Securities and Exchange Commission published a warning against initial exchange offerings. The Financial Services Agency of Japan proposed draft bill to impose stricter leverage limit on crypto-currency traders.

Argentina have set norms for crowdfunding, while warning investors against cryptocurrencies. The Chilean commission on financial market has issued a white paper to set regulatory parameters for the industry, focus on crowdfunding, roboadvisory services, and payment systems. The banking regulator in Peru has issued strategy on crowdfunding and payment systems.

E. Conclusions: Key Recommendations

34.   The authorities should consider taking action to strengthen the regulatory framework to safeguard financial stability and make the system more resilient, in particular:

- **Strengthen financial stability oversight**: (i) inform the risk monitoring by a larger number of indicators, including from the results of stress tests; (ii) enhance stress-testing by considering more severe shocks, including those with a prolonged recovery, cross-border, and financial group failures; implement the ICAAP to complement the top-down stress tests.

- **Align regulations more closely with the Basel III package:** (i) adopt and gradually phase in CCoB (2.5 percent of RWA for common tier 1 equity) for all banks; (ii) formalize regulation for the D-SIBs, including publication of the methodology to identify D-SIBs, and introduce the HLA capital surcharge for the D-SIBs; (iii) consider introduction of the CCyB for all banks and implementation of the NFSR after a careful analysis.

- **Use macroprudential policy more actively** through the more flexible use of parameters in the existing tools (leverage ratio, dynamic provisioning requirement, or risk weights) and adoption of additional measures, e.g. the direct limits on the LTV, DTI and DSTI ratios.

- **Develop a tighter financial safety net** by establishing emergency liquidity assistance and the deposit insurance scheme and **improve the bank resolution framework**.

- **Enhance regulatory framework and coordination:** (i) extend mandate of the FCC and strengthen its structure by expanding its membership; (ii) enhance role of MEF in the current coordination, crisis management and resolution framework; and (iii) adopt the regulatory sandbox for fintech.

Annex 1. Recent Developments

Table A1.1. Panama: Entries and Exits in Panama International Banking Center

Year	Actions	Name of bank	License	Country	Dates of operation	Comment
				Onshore Banks with General License (GL)		
2014	Exit	Bank Leumi Le-Israel, B.M	GL	Israel	Oct. 1982 - Aug. 2014	VL [1]
2014	Entry	Canal Bank S.A. (BMF)	GL	Panama	Since Oct. 2014	New license
2014	Merge	Banco BAC de Panamá, S. A	GL	Colombia	May 1983 - Nov. 2014	Merged with BAC International Bank, Inc.
2015	Merge	Produbank (Panamá), S.A.	GL	Ecuador	Apr. 2006 - Jun. 2015	Acquisition by St. Georges Bank & Company, Inc.
2016	Exit	Banco Universal, S.A.	GL	Panama	Dec. 1994 - Aug. 2016	Reorganization, shares transfer (70 percent) to Canal Bank S. A.
2016	Exit	Balboa Bank & Trust Corp	GL	Panama	May 2019 - Aug. 2018	Seizure of control, reorganization and sale to Corporación BCT, S.A. (Costa Rica)
2019	Exit	Banco Panameño de la Vivienda, S.A.	GL	Panama	Apr. 1981 - May 2019	Acquisition by Global Bank
2016	Entry	Bi-Bank, S.A.	GL	Guatemala	Since Jan. 2016	New entry
2017	Entry	Atlas Bank (Panamá), S.A.	GL	UAE	Since Oct. 2017	New entry
				Offshore Banks with International License (IL)		
2014	Exit	ES Bank (Panamá), S.A.	IL	Portugal	Mar. 2002 - Jun. 2014	Forced liquidation
2016	Entry	BPR BANK, S.A.	IL	Dom. Rep.	Since Jun. 2016	New entry
2016	Exit	Scotiabank Perú, S.A.A.	IL	Peru	Sep. 2006 - Dec. 2016	VL, res. 188-2015
2018	Exit	BSI Bank (Panamá), S.A.	IL	Switzerland	Feb. 2014 - Mar. 2018	VL, res. 122-2017
2018	Exit	Banco Corficolombiana (Panamá), S.A.	IL	Colombia	Dec. 204 - Oct. 2018	VL, res. 46-2018
2019	Exit	Banco Santander (Panamá), S.A.	IL	Spain	Aug. 1973-Dec. 2018	VL, res. 240-2017
2019	Exit	International Union Bank, S.A.	IL	Venezuela	Nov. 1981-Aug. 2019	Sale and license cancellation (res. 80-2018, 181-2019)
				Offshore Banks with Representative License (RL)		
2014	Entry	Banco Etcheverría, S.A.	RL	Spain	Since Aug. 2014	New entry
2014	Entry	SAXO BANK (PANAMÁ), S.A.	RL	Denmark	Since Nov. 2014	New entry
2015	Entry	Bank of Saint Lucia International Ltd.	RL	Saint Lucia	Since Aug. 2015	New entry
2015	Entry	UBS SWITZERLAND AG	RL	Switzerland	Since Dec. 2015	New entry
2016	Exit	Mizrahi Tefahot Bank, Ltd	RL	Israel	Dec. 2008-May 2016	VL, res. 10-2016
2016	Exit	SAXO BANK (PANAMÁ), S.A.	RL	Denmark	Nov. 2014 - Dec. 2016	VL, res. 199-2016
2017	Exit	Bank Hapoalim B.M.	RL	Israel	Jan.1982 - Apr. 2017	VL, res 012-2017
2017	Exit	Credit Suisse	RL	Switzerland	Dec. 2015 - Apr. 2017	VL, res 21-2017
2017	Exit	Banco de la Provincia de Buenos Aires	RL	Argentina	Jan 1982-Nov.2017	VL, res 202-2016
2019	Exit	Banco Do Brasil, S.A.	RL	Brasil	Sep. 1973-Apr. 19	VL, res 163-2018

Sources: Superintendency of Banks of Panama and IMF staff calculations.
[1] VL stands for "voluntary liquidation"

Table A1.2. Panama: Structure of the International Banking Center

		2015			2017			2019		
		Onshor	Offshor	Total	Onshor	Offshor	Total	Onshor	Offshor	Total
Number of banks		48	45	93	49	38	87	45	33	78
Total assets		98.5	20.0	118.5	101.4	18.3	119.7	107.9	17.0	125.0
Deposits	*Total*	71.3	12.5	83.8	73.0	11.2	84.3	76.5	11.6	88.1
	Intern	48.9	0.1	49.0	52.4	0.0	52.4	55.7	0.1	55.8
	Extern	22.4	12.4	34.9	20.6	11.2	31.8	20.8	11.4	32.2
Credit portfolio net of	*Total*	61.6	10.8	72.4	65.3	10.0	75.4	68.3	7.8	76.1
	Intern	44.7	0.0	44.7	50.9	0.0	50.9	54.0	0.0	54.0
	Extern	16.9	10.8	27.7	14.4	10.0	24.4	14.3	7.8	22.1
Equity capital		9.9	2.4	12.3	11.6	2.7	14.3	12.6	3.2	15.9

Sources: Superintendency of Banks of Panama and IMF staff calculations.

Table A1.3. Panama: Sample Rating Base of CAMEL Components

Components	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5
Capital adequacy (CAR)	>=12	9-11.99	8-8.99	7-7.99	<=6.99
Asset quality NPLR	<=1.5	1.51-2.5	2.6-3.5	3.6-5.5	>=5.6
Management efficiency (NER)	40-49.99	50-59.99	60-69.99	70-75	>=75
ROA	>=1	0.9-0.8	0.35-0.7	0.25-0.34	<=0.24
ROE	>=22	17-21.99	10-16.99	7-9.99	<=6.99
Liquidity ratio 1	<=55	56-62.99	63-68.99	69-74.99	>=75
Liquidity ratio 2	>=50	45-49.99	38-44.99	33-37.99	<=32

Source: Khaled A. Zedan and Ghassan Daas (2017).

Text Box A1.4. Panama: SBP Methodology for the Financial Stability Map

Dimension	Indicators Used	Additional Indicators for Consideration
Macro-economic risks	GDP growth	Output gap, inflation rate, unemployment rate, public debt to GDP; primary balance to GDP; sovereign EMBIG spreads; IMAE
External risks	Current account; ratio of exports to imports	Current account balance to GDP; gross foreign assets of banking sector to GDP; volatility index (VIX); gross FDI inflows as a share of GDP; change in FDI as share of GDP
Credit risks	Local loan portfolio at risk[1] as a share of total local portfolio; growth of local loan portfolio	Percentage deviation from the trend for the domestic credit from banks, domestic credit from non-banks, and house prices; percentage change in the bank domestic credit to GDP
Solvency and profitability risks	Difference between ratio of interest income to income generating assets and ratio of interest expense to expense generating liabilities[2]; capital adequacy index; return to equity (ROE)	Tier 1 capital to RWA; results from stress tests
Liquidity risks	Ratios of local loan portfolio to local deposits, deposits (excluding related parties) to liquid assets, and interbank funds to liquid assets[3]	Private domestic credit to private domestic deposits; liquid assets to short-term liabilities; LCR; results from stress tests

Source: Superintendency of Banks of Panama.
1/ Portfolio at risk includes loans classified in categories special mention, subnormal, doubtful and unrecoverable.
2/ Income generating assets include deposits in banks, loans and investments. Expense generating liabilities include deposits and obligations.
3/ Liquid assets include cash and cash equivalent, interbank deposits, and negotiable investments available for sale.

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MACROPRUDENTIAL POLICY IN PANAMA: IMPLICATIONS FOR THE REAL ESTATE MARKET[1]

A. Introduction

1.   Residential real estate prices have been rising in Panama City, against the backdrop of strong economic growth and interests from foreign buyers. Anecdotal evidence and private sector surveys feature a continued increase in property prices in Panama's capital city during the first half of 2019, despite a brief moderation during the same period in 2018. At the same time, commercial banks' residential mortgage lending grew by an average annual rate of 11.7 percent over the last 7 years. As a result, household indebtedness is on the rise. In Panama City, households' exposure to mortgage debt accounted for around 96 percent of income in mid-2019 compared to 69.6 percent of income in 2012.[2]

2.   This note presents an analysis of the residential real estate market—with focus on Panama City—and its implications for macroprudential policies. The evolution of real estate prices is of particular interest to policy makers but assessing the sustainability of property prices is a challenging task given the difficulty in assessing *ex ante* the presence of property price "bubbles" (i.e., a prolonged rapid growth in prices followed by a sudden crash). This paper addresses the following questions:

- How have residential property prices, mortgage lending, and household debt evolved in recent years?

- Are residential real estate prices showing signs of "overheating"?

- Have there been changes in bank mortgage lending practices?

- What macroprudential measures could be used to mitigate property price risks?

3.   A thorough analysis of the housing market in Panama is challenging in view of limited availability of data and time series. At present, formal price indices for nationwide residential and commercial real estates are not available. Consumer and business sentiment indicators which are often used to gauge the private sector outlook on the real estate market, the volume of residential dwellings that provides information on housing supply, and transactions by foreign buyers are also unavailable. To work around these data limitations, this analysis uses the residential property price-to-income ratio in Panama City published by Numbeo based on market surveys as a proxy for residential property prices. In addition, internet search activity extracted from Google Trends is used as a proxy for foreigners' interest in Panama City's real estate. Given these challenges, the caveats

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[1] Prepared by Julian Chow (WHD).

[2] Based on data from Numbeo which defines mortgage as percentage of income as a ratio of the actual monthly cost of the mortgage to take-home family income.

underpinning this analysis must, in particular, be considered to ensure accurate interpretation of the findings. The results presented herein should be interpreted as early signals of possible risks, and as a guide to the areas where further data collection would be useful to support surveillance and further studies.

B.   How Have Property Prices, Mortgage Lending, and Household Debt Evolved Recently?

4.   Residential property prices in Panama City have been rising, precipitated by strong economic growth and interest from foreign buyers. While Panama does not have a formal real estate price index, private sources—such as Numbeo—which derive their data based on market surveys suggest continued optimism in the capital Panama City. For example, the ratios of residential real estate price-to-income and price-to-rent had risen by 52 percent and 34 percent, respectively, from 2012 to 2019, although they appeared relatively low compared to major cities in neighboring countries, based on data from Numbeo data.[3] According to Global Property Guide, foreign buyers were pushing up property prices in Panama, as average dwelling sales price surged by 21 percent from 2015 to 2017 in Panama´s metropolitan area. Major foreign buyers originated from the United States, Europe, Canada, and Latin America. It is worth noting that over the last five years, Panama's economy grew at an average annual rate of 5 percent, more than eight times the average annual growth rate of Latin American countries (at 0.6 percent).[4]

Figure 1. Panama: Household Mortgage Debt Indicators

Panama City: Household Mortgage Debt
(In percent of income)

Panama City: Household Mortgage Debt
(In percentage of income, mid-2019)

Source: Numbeo.

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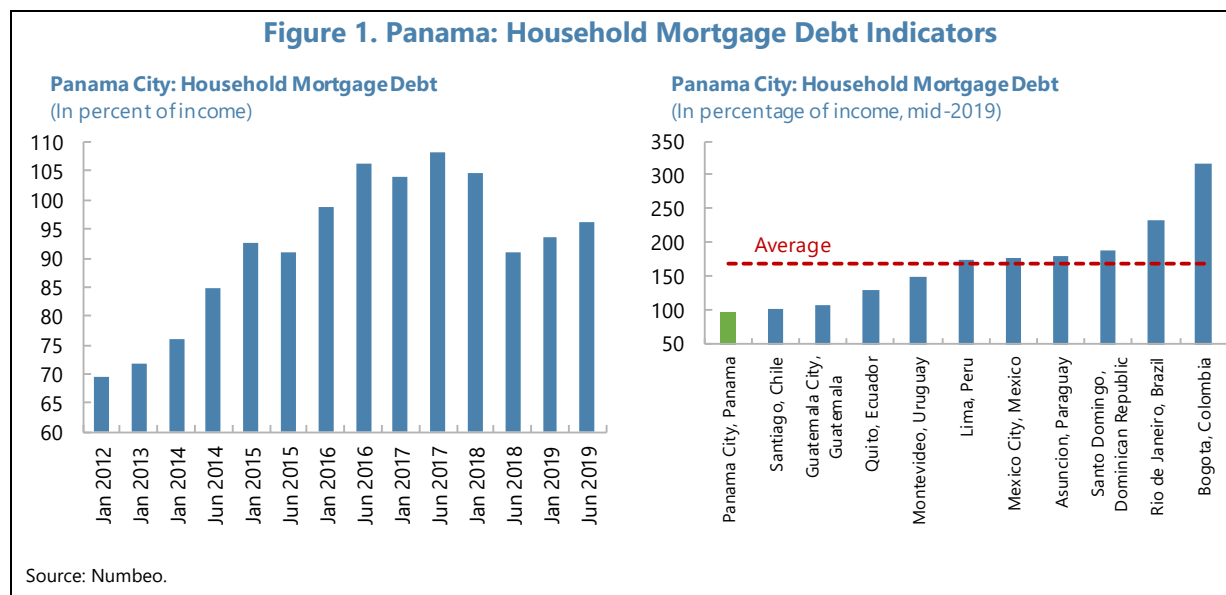
[3] Numbeo defines price to income ratio as the ratio of median apartment prices to median familial disposable income, expressed as years of income (lower is less risky). Price to rent ratio is computed as the average cost of ownership divided by rent (lower values suggest that it is better to buy rather than rent, and *vice versa*).

[4] Latin American countries comprise Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Mexico, Peru and Venezuela.

5.   Strong demand for residential properties had led to an increase in mortgage lending by commercial banks and higher household mortgage debt. In line with the increase in property prices in Panama City, commercial banks' residential mortgage loans grew at an average annual rate of 11.7 percent, from 2012 to 2019. During this period, the share of residential mortgage loans to total loans increased gradually, from 28 percent to 34.5 percent. As a result, household exposure to mortgage debt rose significantly in Panama City, amounting to 96 percent of income in 2019, based on data from Numbeo.[5] While this ratio pales in comparison with neighboring capital cities, it accounts for close to the full amount of disposable income.

Banking Sector: Total Residential Mortgage Loans
(In percent of total loans)

Source: Superintendency of Banks.
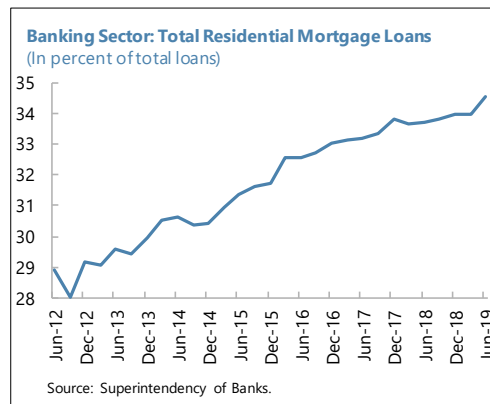
Figure 2. Panama: Real Estate Indicators

Panama City: Real Estate Price to Income Ratio
(2012 to Q2 2019)

Panama City: Real Estate Price to Rent Ratio
(2012 to Q2 2019)

Panama City: Real Estate Price to Income Ratio
(Mid-2019)

Panama City: Real Estate Price to Rent Ratio
(Mid-2019)

Source: Numbeo.

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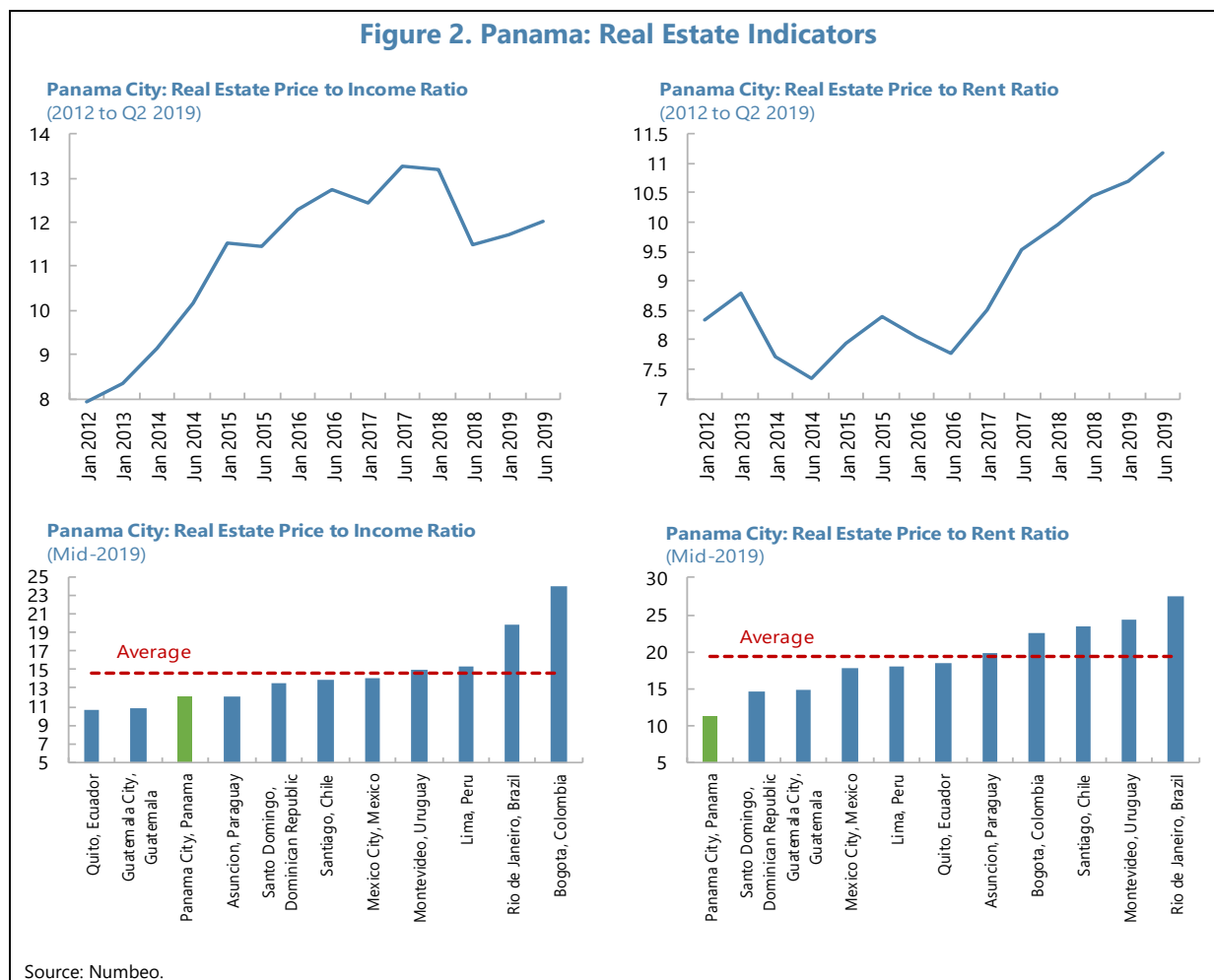
[5] Numbeo defines mortgage-to-income as a ratio of the actual monthly cost of the mortgage to take-home family income.

C.   Are Residential Real Estate Prices Showing Signs of "Overheating"?

6.   It is difficult to know if house prices have deviated significantly from "fundamentals". The definition of "fundamental" is model-specific and thus, the assumptions that underpin the model would need to be taken into consideration in interpreting the results (Annex I). In addition, data limitations are caveats that must be borne in mind:

- *Absence of a publicly available nationwide real estate price index*.[6] The residential property price-to-income ratio computed by Numbeo, based on market surveys, is used as a proxy for the trend in real estate prices. The annual series for this ratio begins in 2011. From 2014 onwards, Numbeo provide semi-annual data.

- *Unavailability of certain real estate market-related indicators*. Panama does not produce statistics on the volume of houses and dwelling, detailed volume of real estate loans, real estate purchases by foreigners (volume and value), and consumer and business sentiment indices which are, among others, important determinants of the demand and supply of housing.

7.   A residential property price model could be derived based on available economic variables and noting the caveats above (Annex II). A baseline predictor for residential property price-to-income ratio in Panama City is constructed using quarterly data from Q4-2013 to Q4-2018. It is used to predict the residential property price-to-income ratio from Q1-2019 to Q2-2019 (out-of-sample) which are then compared with the actual observed ratios.

8.   The results indicate a significant deviation between the actual real estate prices and the predictor in the "out-of-sample" period. Panama City's real estate price-to-income ratio continued to increase stably since from Q2-2018 to Q2-2019, departing from the predictor which suggests a reversal starting from end-2018. From Q1-2019 to Q2-2019, the average difference between the actual and predicted ratios is around 1.5 percentage points, or 2.4 standard deviations. Hypotheses tests based on t-distribution suggest that the deviations between the observed price-

Property Price-to-Income Ratio: Actual vs. Predicted

to-income ratios and the predictor are statistically significantly in Q1-2019 and Q2-2019, at the 5 percent level (Annex II).
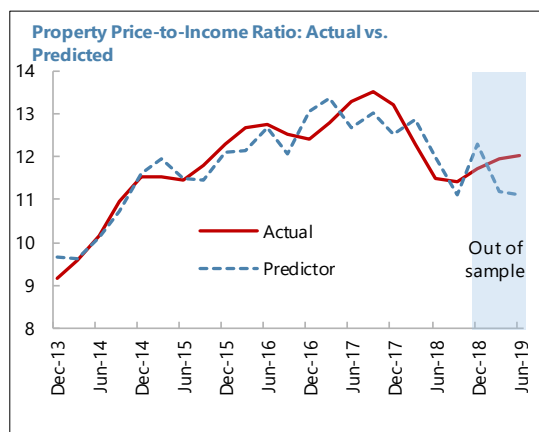
9.   The decline in the predictor in the "out-of-sample" period could be attributable to moderating economic growth and rising financing costs. A decomposition of the explanatory variables suggests that real GDP growth and interest rate jointly explained 56 percent of the

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[6] While the authorities have created a price index of new housing (Indice de Precios de Vivienda Nueva (VNPI)), which includes Panama City and San Miguelito, it is used for internal monitoring and is not publicly available.

variations in the property price-to-income ratio. While economic growth remained resilient, real GDP growth moderated by 1.1 percentage points from Q1-2018 to Q1-2019. During the same period, banks' weighted average lending rate rose 51 basis points. A confluence of these two factors precipitated a decline in the predicted price-to-income ratio, by 2 points, from Q4-2018 to Q1-2019, departing from the observed actual price-to-income ratio which remained on a stable appreciation trajectory, rising by 0.2 points during the period.

Contribution of Explanatory Variables 1/
(In percent)

Source: IMF staff calculations.
1/ Computed based on partial R-squared and assuming that the four variables are the only explanatory variables.

Figure 3. Panama: Economic Growth and Commercial Banks' Lending Rates

Sources: Superintendency of Banks; National Statistics and Censuses Institute (INEC); Haver Analytics.

10.   Continuous surveillance of developments in the real estate market is important. The statistically significant divergence in the structural relationship between the observed price-to-income ratio and the predictor could indicate three possibilities: (i) positive expectations of a future rebound in economic growth and lower mortgage rates[7], underpinning the resilience in housing market; (ii) disequilibrium between current property prices and fundamentals which could potentially lead to a correction in prices in the future; and (iii) "missing variables" in the model. Given that the R-squared of the regression is high, there is a fair chance that possibility (i) or (ii) could occur. If possibility (ii) materializes and residential property prices continue to increase—thus exacerbating the disequilibrium—then a destabilizing "bubble" could build up over time. To mitigate such risks, a prudent approach would be to strengthen the monitoring of developments in the real estate market, household debt and bank lending practices, and at the same time, fortify the macroprudential policy toolkits to stand ready to tighten them when necessary.

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[7] First time buyers of new homes receive preferential mortgage interest rate (two percentage points off the market rate) for residential real estate valued at US$180,000 and below.

11.   It is also important to identify the "missing variables" that could explain the divergence between the two indicators. Unexplained increases in real estate prices may not necessarily be a source of concern if they are driven by expected improvements in economic conditions in the future (i.e., strong growth that leads to higher property prices), lower interest rates, or improved liquidity of the housing market (Annex I). On the contrary, if the increase in prices is related to moral hazard in lending practices, then macroeconomic and financial stability could be at risk. This study should ideally be extended with alternative econometric models that include the following explanatory variables:

- Variations in property taxes.

- Changes in the supply of houses. Useful indicators include construction and residential permits.

- Distribution of income and household debt across different population groups.

- Business and household sentiment.

- Real estate purchases by foreigners (volume and value).

Extending this study would require further efforts by the authorities to collect these data, which would also contribute towards enhancing surveillance.

D.   Have There Been Changes in Bank Mortgage Lending Policies?

12.   Over the last seven years, residential mortgage loans grew at a faster pace compared to total commercial bank loans. From 2012 to 2019, commercial banks' residential mortgage loans grew by an average annual rate of 11.7 percent, higher compared to the average annual rate of total loans, at 9.4 percent. The rapid growth in housing loans led to an increase in the share of commercial banks' residential mortgage loans to total loans from 28.9 percent in 2012 to 34.5 percent in 2019.

Growth in Commercial Banks' Total Loans and Residential Mortgage Loans
(In percent change, y/y)

Source: Superintendency of Banks.
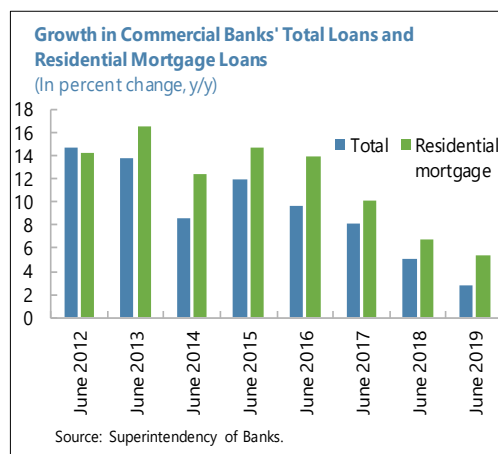
13.   A benchmark for the growth in residential mortgage lending was constructed following the methodology developed in Section C. A predictor was constructed from Q4-2008 to Q4-2018. It was then contrasted with the actual growth of mortgage loans for the period from Q1-2019 to Q2-2019 to ascertain whether there were any structural breaks between the two series (Annex III).

14.   The results indicate that growth in residential mortgage loans was slightly stronger than the predictor in the first half of 2019. Residential mortgage loans grew 5.3 percent (Y/Y) in Q2-2019, slightly higher compared to the predictor, at 3.4 percent (Y/Y). The average divergence between the actual and the predicted mortgage growth rates during the first half of 2019 is 1.8 percentage points,

accounting for around 0.9 standard deviations above
the mean. Hypotheses tests based on t-distribution
suggest that the deviations in Q1-2019 and Q2-2019
are not statistically significantly, at the 5 percent level
(Annex III). This suggests that it is too early to
conclude that banks' lending practices have changed
as more observations would be needed. The
resilience in banks' mortgage lending could be
driven by expectations of a recovery in economic
activities as in the case of the price-to-income ratio
before. The deviation could also possibly reflect
"missing variables". That said, the divergence

Growth in Housing Loans: Actual vs. Predicted
(In percent change, y/y)

particularly in Q2-2019 reinforces the need for continuous monitoring and surveillance of the real
estate market, including banks' underwriting standards, to safeguard financial and macroeconomic
stability.
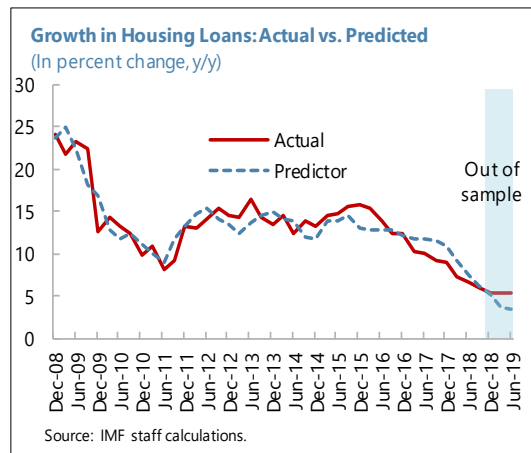
**15.   The predictor showed relatively slower growth rates during the first half of 2019 due
to a moderation in economic growth and higher mortgage rates.** A decomposition of the
explanatory variables suggests that nominal GDP growth (as a proxy for income levels) and
mortgage rates jointly explain 55 percent of the variations in residential mortgage loan growth.
During the first half of 2019, nominal GDP grew by an average 2.8 percent (Y/Y), slower compared to
4.6 percent (Y/Y) during the same period in 2018. Banks' mortgage rate increased to 5.81 percent in
2019, from 5.56 percent in 2018.

**Figure 4. Panama: Contribution of Explanatory Variables and Commercial Banks'
Mortgage Lending Rates**
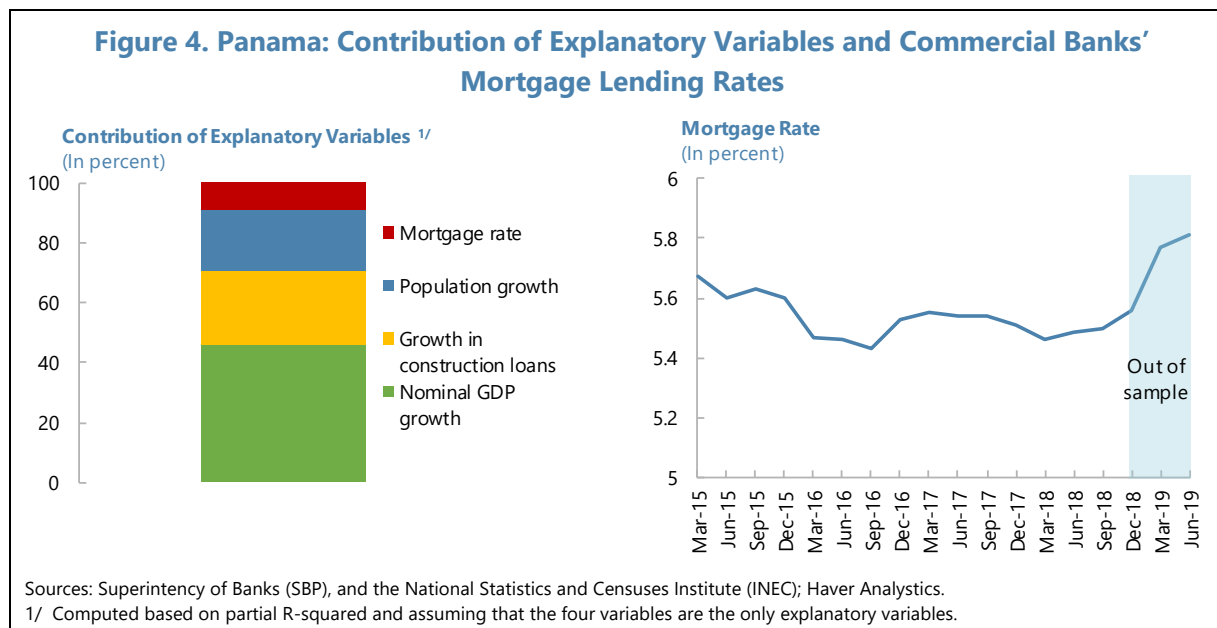
Sources: Superintency of Banks (SBP), and the National Statistics and Censuses Institute (INEC); Haver Analytics.
1/ Computed based on partial R-squared and assuming that the four variables are the only explanatory variables.

E. What Are the Macroprudential Measures to Mitigate Housing Risks?

16.   At present, Panama has put in place various macroprudential policies. The Superintendency of Banks (SBP) implemented dynamic provisions rule (DPR) since June 30, 2014 as part of general rule for provisioning and credit risk management. The DPR is part of regulatory capital but cannot be included in the calculation of capital to meet the regulatory minimum (i.e., banks need to maintain the DPR in addition to regulatory minimum of 8 percent). In addition, capital requirements are imposed on lending to household and corporate sectors.

Box 1. Sectoral Capital Requirements with Effect from July 1, 2016	
Household Sector	**Corporate Sector**
• 35 percent for main home if the loan-to-value (LTV) ratio is less than 80 percent with the appraisal completed in the last 3 years. • 50 percent for main home if the LTV ratio is between 80 and 100 percent, and appraisal conducted within 10 years. • 50 percent for main home if the LTV ratio is less than 80 percent, and appraisal was conducted more than 3 years ago. • 50 percent for mortgages on second homes, provided the LTV ratio is not greater than 80 percent, and the appraisal was conducted within the last 5 years. • 100 percent for all other mortgages.	• 50 percent if pledged by commercial real estate which is used as collateral with an LTV ratio less than 60 percent and an appraisal conducted within the last 3 years; or if pledged by residential properties which are used as collateral with an LTV ratio less than 70 percent and an appraisal conducted within the last 3 years.
Source: IMF Macroprudential Policy Survey	

17.   The macroprudential toolkit could be expanded to include limits on loan-to-value (LTV) ratios, and caps on debt-service-to-income (DSTI) or loan-to-income (LTI) ratios.[8] These measures would complement the existing sectoral capital requirements. Box 2 shows examples of various macroprudential instruments and useful indicators to identify when to tighten the macroprudential measures.

18.   A wide range of indicators should be used to assess the need for policy action, especially the growth of mortgage loans and house prices. These two indicators are core indicators for vulnerabilities in housing markets, since they jointly provide powerful signals of a procyclical build-up of systemic risk.[9] Deviations of house prices from long-term trends have proved useful in predicting financial stress (Borio and Drehmann, 2009); and house price-to-rent and house price-to-income ratio are often used as measures of over- or under-valuation of house prices. In addition, other indicators should be closely monitored, such as: (i) the average and the distribution

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[8] For further details, refer to IMF, 2014a and IMF, 2014b
[9] Research shows these indicators together can predict a crisis as early as two to four years in advance (IMF, 2011a).

of LTV, DSTI, and LTI ratios across new loans over a period and outstanding loans at a given point in time; (ii) the share of foreign currency denominated mortgage loans or interest-only mortgage loans; and (iii) housing price growth by regions and types of properties.

Box 2. Macroprudential Instruments to Mitigate Risks in the Household Sector and Indicators to Identify When to Tighten		
Instruments	**Core Indicators**	**Additional Indicators**
• Broad-based (Capital) tools • Countercyclical capital buffers • Sectoral capital requirements	• Credit/GDP gap	• Growth in credit/GDP • Credit growth • Asset price deviations from long-term trends • Under-pricing of risk in financial markets (low volatility/spreads) • DSTI ratios • Leverage on individual loans or at the asset level • Increasing wholesale funding ratio (noncore funding) • Weakening exports and resulting current account deficits
• Household tools • Limits on LTV ratios • Caps on DSTI or LTI ratios	• Increasing house prices (nominal and real growth) • House price-to-rent and house price-to-disposable income ratio • Household loan growth • Increasing share of household loans to total credit	• Increasing house prices by region and by types of properties • Deteriorating lending standards • High LTV ratio • High LTI ratio • High DSTI ratio • Share of FX loans and interest only loans
Sources: IMF, 2014a and IMF, 2014b		

19.   Sectoral tools should be activated or tightened when multiple indicators point to rising systemic risk. A single signal, or mixed signals from multiple indicators, may not be sufficient for action. For example, strong growth in mortgage loans without house price growth may simply indicate improving housing penetration rather than an increase in risk. Conversely, a sharp increase in house prices, without strong mortgage loan growth, may reflect a shortage of house supply requiring structural policies to improve supply rather than a macroprudential response.

20.   Policymakers should take a gradual approach when tightening or introducing sectoral tools. When several indicators show signs of a gradual build-up of risk in the housing sector, policymakers should first intensify supervisory scrutiny and step up communication. As a next step, less distortionary sectoral capital requirements may be tightened to build additional buffers.[10] Tighter limits on LTV and/or DSTI ratios can follow if these defenses are not expected to meet policy objectives (Figure 5 below provides country examples). LTV and DSTI caps should always be imposed on the flow of new household loans. Otherwise, it would force some existing high LTV or DSTI borrowers to provide more collateral or repay part of their loans, leading to a possible distress.

Figure 5. Panama: Limits on LTV and DSTI Ratios and Number of Countries at Each Range, 2014

Limits on LTV Ratios
(In percent)

Caps on DSTI Ratios
(Number of countries)

Sources: IMF, 2014a and IMF, 2014b

Note: Observed limits on LTV ratios are below 80 percent in more than half of 51 sample countries, and Most countries with caps on DSTI ratios have imposed 40–45 percent as the limit (seven out of 13 countries), and four countries restrict it to be below 35 percent.

21.   As sectoral tools work via a range of transmission channels, combining them can reinforce their effectiveness and mitigate the shortcomings of any single tool. A higher risk weight forces lender to hold extra capital to buffer unexpected losses and restrains credit growth as lending rates increase due to higher funding costs. Limits on LTV ratios cap the size of a mortgage loan relative to the **appraised** value of a house, while caps on DSTI and LTI ratios restrict the size of debt service payments to a fixed share of household incomes. They can complement each other, for example when house prices increase, LTV limits may become less effective but DSTI or LTI caps continue to restrict credit to household income. The DSTI caps also enhance the effectiveness of LTV limits by containing the use of unsecured loans to meet the minimum down payment. In a low interest rate environment, DSTI caps complement LTV limits in containing increases in household leverage, thus help mitigate defaults when interest rates eventually rise. These caps can break the procyclical feedback between credit and house prices, and can also reduce speculative demand by containing expectations of future house prices. DSTI caps work as an automatic stabilizer—becoming more binding when house prices grow faster than disposable income, thereby helping to smooth credit booms (Figure 6).

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[10] See the BCBS consultative document (http://www.bis.org/bcbs/publ/d307.pdf) proposing a range of risk weights (from 25 to 100 percent) driven by LTV and DSTI ratios.

Figure 6. Panama: Transmission Mechanism of Three Sectoral Macroprudential Instruments

Sources: IMF, 2014a and IMF, 2014b
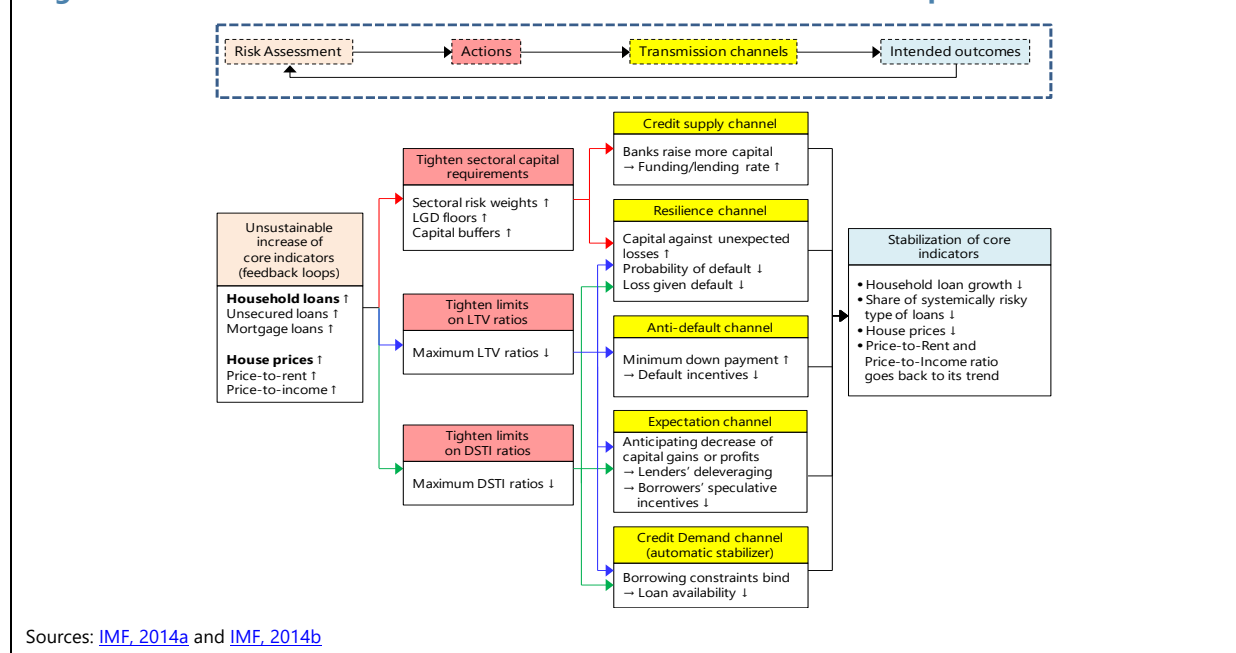
22.   Expanding the regulatory perimeter would contain leakages. An increase in credit by domestic nonbank financial institutions—such as credit cooperatives—may render the sectoral tools ineffective if they are applied only to the domestic banking sector. Policymakers would need to expand the regulatory perimeter to these nonbank financial institutions through inter-agency cooperation.[11]

When to Loosen Macroprudential Policies?

23.   Sectoral tools can be loosened to contain feedback loops between falls in credit and house prices during housing busts. A housing bust can result in a credit crunch that puts further downward pressure on house prices. Strategic default, fire sales and contraction in the supply of credit can create negative externalities beyond the parties involved in financial contracts (IMF, 2011b; Geanakopolos, 2009; and Shleifer and Vishny, 2011).

24.   Indicators that inform the tightening phase could be used for informing decisions to loosen macroprudential policies when they turn in the opposite direction. Fast-moving indicators that could guide such decisions include house transaction volumes and spreads on household loans. A softening housing market alone is not sufficient to justify a loosening of macroprudential measures. Evidence of a systemic stress is vital, such as simultaneous decline in prices and credit, and an increase in non-performing loans or defaults. In such circumstances, loosening macroprudential policies would reduce stress in the housing market.

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[11] In Panama, commercial banks are regulated by the Superintendency of Banks; insurance companies are regulated by the Superintendence of Insurance and Reinsurance; and cooperatives are supervised by the Panamanian Autonomous Institute for Cooperatives.

25.   The loosening of macroprudential policies needs to respect certain prudential minima that could safeguard an appropriate degree of resilience against future shocks. If large additional buffers have been built during the tightening phase, they can be released to avoid a credit crunch without jeopardizing banks. However, the relaxation should not go beyond a "permanent floor", i.e. level considered safe in downturns. Policymakers should also communicate clearly that a tightening can be followed by a relaxation so that market participants do not take an adverse view of the relaxation during downturn (BIS, 2012).

26.   A loosening of these tools can be effective but may have limited effects when it is "pushing on a string." Even if policymakers loosen sectoral instruments, banks may be reluctant to provide credit due to increased risk aversion or capital constraints, and may apply more stringent lending standards than the regulatory thresholds. Potential borrowers may be reluctant to enter the housing market while prices are still falling. Nonetheless, the relaxation would still be useful in containing the spillback from falling prices and credit.

27.   Housing demand and house price growth financed directly by foreigners may thwart the effectiveness of macroprudential tools. In these cases, higher stamp duty or capital gains tax may be useful (e.g. Hong Kong SAR and Singapore).

F. Conclusion and Policy Implications

28.   Residential real estate prices in Panama City and more generally, commercial banks' mortgage lending, appear to be growing at a faster pace compared to their suggested econometric models during the first half of 2019. These results are suggestive of potentially important shifts in the dynamics of property prices, and therefore, should be further investigated. It would be useful to identify the "missing variables" that could explain the relatively stronger residential property price-to-income ratios since early 2019 as unexplained increases in real estate prices might not necessarily be a worrying concern, particularly if the price increase was driven by improved liquidity of the housing market. On the contrary, if the growth in prices were related to heightened moral hazard in lending practices, then risks to financial stability could emerge. This analysis also finds that it is too early to conclude that banks' lending practices have changed although some signs of a departure between mortgage loan growth and the model appeared in Q2 2019.

29.   It would be prudent to treat the findings as early signals of possible risks as well as a guide the areas where further data collection would help support surveillance and additional analysis. The divergences—in Panama City's residential real estate price-to-income ratio and its predictor and in the growth between commercial banks' mortgage loan and its predictor—could indicate early signs of risks. As such, it would be prudent to strengthen the monitoring of the housing market, household debt and bank lending practices. While Panama has put in place various macroprudential policies at present, the country's overall macroprudential framework could be further fortified, including with more effective toolkits that the SBP could deploy, for early intervention, to mitigate risks to macroeconomic and financial stability. If lax underwriting standards are detected, intrusive and tighter prudential supervision, including appropriate enforcement

actions, would be needed. It is also important to for the authorities to establish new data—including formal real property price indices (residential and commercial) and real estate transactions by foreigners (value and volume)—to help enhance surveillance and improve the accuracy of forecasts.

30.   An extension of this study to include commercial real estate prices would strengthen early warning signals. Panama's optimistic economic growth and continued foreigners' interests in the property sector could spill over to the commercial real estate, potentially leading to a property price bubble. Extending this analysis to the commercial real estate would require fresh efforts by the authorities to gather new data, including establishing a commercial property price index. In the same vein, continued efforts by the authorities to monitor and supervise banks, particularly in underwriting standards, would help ensure no lax in the quality of real estate financing.

Annex I. When Do Real Estate Prices Depart from "Fundamentals"?

1.   The question of when and whether real estate prices are disconnected with "fundamentals" is a difficult question to answer.

2.   Any definition of a "fundamental" is model-specific. A simple asset pricing model would define the "fundamental" price of a house as the present discounted value of all future rents that an investor receives (or avoids to pay) from owning the house. Expanding this model, in a hypothetical country where individuals migrate inter-state to search for better jobs, the value attached to the purchase of a house depends on how liquid the housing market is. In such a scenario, liquidity is another determinant of "fundamentals" that influence house prices.

3.   In another version of the pricing model, if house buyers are credit constrained, then house prices might be lower than the present discounted value of rents. In this case, the extent to which credit constraints are present and binding would also constitute a "fundamental" determinant of house prices.

4.   A somewhat more subtle scenario is when moral hazard is present in the market for real estate lending. Moral hazard arises when the government provides "guarantees"—implicit or explicit—to the banking sector. When these "guarantees" are present, the value of real estate would be higher than in the case where there is no guarantee.

5.   This leads to an important caveat: the definition of "fundamental" depends on the choice of a model used and the variables that define the model. House prices may differ from levels predicted using a certain definition of "fundamental", but that same level of prices may be perfectly explained when the definition of "fundamental" is expanded to include one or more variables. Thus, to avoid confusion, this paper uses the expression "predictor" to be consistent with the econometric nature of the analysis instead of "fundamental".

Annex II. Model: Residential Real Estate Price-to-Income

A. Model

1.   Two models are considered, represented by the following equations:

- Model 1(a): $Y_i = \alpha_i + \beta_1 X_{1,i} + \beta_2 X_{2,i} + \beta_3 X_{3,i} + \varepsilon_i$

- Model 1(b): $Y_i = \alpha_i + \beta_1 X_{1,i} + \beta_2 X_{2,i} + \beta_3 X_{3,i} + \beta_4 X_{4,i} + \varepsilon_i$

where:

Y_i =   Residential property price-to-income ratio

$X_{1,i}$ =   Real GDP Growth (in percent, Y/Y)

$X_{2,i}$ =   Population (in thousands)

$X_{3,i}$ =   Interest rate, based on commercial banks' weighted average lending rate (in percent per annum)

$X_{4,i}$ =   Foreigners' interest, based on internet searches using key words "Panama City apartments" and "Panama City houses", based on Google Trends data (in percent change, Y/Y)

α_i =   Constant

ε_i =   Residuals

Variables	Data Sources
Residential Property Price-to-Income Ratio	Numbeo
Real GDP Growth	IMF World Economic Outlook
Population	United Nations (World Population Prospects 2019)
Interest Rate	Superintendency of Banks
Foreigners' Interest	Google Trends

2.   Model 1(a) is derived mainly on fundamental variables. The explanatory variables comprise real GDP growth (proxy for income), population (proxy for demand for housing), and weighted average lending rate (proxy for price of credit).[1] Quarterly data for price-to-income ratio and population are derived using spline interpolation.[2]

3.   Model 1(b) augments Model 1(a) with online internet search activity. This model expands Model 1(a) by including an additional explanatory on internet search activity as a proxy for foreigners' interest in real estate in Panama City, given that data on residential property purchases by foreigners is not available. Specifically, data on online internet searches in the U.S. using

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[1] An alternative specification for the econometric model has also been explored with filtered real GDP growth, using the Hodrick-Prescott (HP) filter to remove short-term fluctuations associated with business cycles. However, the coefficient of this variable is not statistically significant.

[2] The frequency of the source data for price to income ratio and population are semi-annual and annual, respectively.

keywords "Panama City apartments" and "Panama City houses" are extracted from Google Trends, based on Internet Protocol (IP) address in the US.[3] The explanatory variable is derived by computing year-over-year (Y/Y) change for each quarter to remove seasonal effects. Augmenting Model 1(a) with data from internet searches improves the overall fit of the model, in line with recent findings which show that online search queries can be extremely useful when information is fragmented or missing.[4]

Results

4.   The predictor derived from the regression provides a good in-sample fit. The estimated coefficients are all in the expected signs. Increases in real GDP growth and population lead to increasing real estate prices while rising interest rates increases financing costs which reduce the demand for housing—these are all in line with empirical observations. In Model 1(b), increasing foreigners' interest on real estate in Panama City—captured by "Google Trends"—also contributes to higher real estate price-to-income ratios, reinforcing the suggestions that foreign buyers were influencing property prices. Augmenting Model 1(a) with internet search activity also improves the overall fit, as the adjusted R-squared increases from 83 percent to 86 percent. The coefficients of all the explanatory variables are statistically significant. The actual real estate price-to-income ratio and the predictor are cointegrated, and no significant autocorrelation is detected.[5]

Regression Analysis with Panama City Real Estate Price-to-Income Ratio as Dependent Variable [1/]		
	Model 1 (a)	**Model 1(b)**
Interest rate	-3.0601	-3.3704
	(0.69539)	(0.64557)
Real GDP Growth	0.9251	0.9638
	(0.14211)	(0.12989)
Population	0.0133	0.0133
	(0.00137)	(0.00124)
Foreigners' Interest		0.0257
		(0.0118)
Constant	-27.8815	-26.0511
	(5.06804)	(4.66517)
R-squared	0.85507	0.8882
Adjusted R-squared	0.82949	0.8602
Durbin-Watson statistics	1.7190	1.8111
Period	Q4,2013-Q4,2018	Q4,2013-Q4,2018

Source: IMF staff calculations.
Note: Standard errors are in brackets. "Interest rate" refers to weighted aveage bank lending rates, in percent per annum. Foreigners' interest is derived from "Google Trends", computed as quarterly (Y/Y) change in internet searches using keywords "Panama City apartments" and "Panama City houses".
1/ All coefficients are significant at 1%, except for "Foreigners' Interest" which is significant at 5%.

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[3] Google is the largest global internet search engine, with a share of over 90 percent of search activity. The Google Trends data—available since January 2004 on a monthly basis—aggregate individual search queries on G according to terms, time, category and location based on the IP address from which the search is conducted. Stephens-Davidowitz and Varian (2014) provide further details on the construction of the Google Trends data.

See Cevik (2020, forthcoming), Narita and Yin (2018), Carrieré-Swallow and Labbé (2013).

Based on Engel-Granger test for cointegration and Breusch-Godfrey serial correlation LM.oogle according to terms, time, category and location based on the IP address from which the search is conducted. Stephens-Davidowitz and Varian (2014) provide further details on the construction of the Google Trends data.

[4] See Cevik (2020, forthcoming), Narita and Yin (2018), Carrieré-Swallow and Labbé (2013)

[5] Based on Engel-Granger test for cointegration and Breusch-Godfrey serial correlation LM.

B. Hypothesis Test: Are the Observed Price-to-Income Ratios Significantly Different from the Predictor in Q1 2019 and Q2 2019?

	Actual (A)	Predictor (B)	Difference (A)-(B)
12/31/13	9.15	9.48	-0.33
03/31/14	9.58	9.63	-0.04
06/30/14	10.17	10.28	-0.11
09/30/14	10.95	10.73	0.22
12/31/14	11.51	11.42	0.09
03/31/15	11.52	11.65	-0.13
06/30/15	11.45	11.49	-0.04
09/30/15	11.78	11.80	-0.02
12/31/15	12.30	12.40	-0.10
03/31/16	12.67	12.48	0.18
06/30/16	12.74	12.56	0.18
09/30/16	12.52	12.04	0.48
12/31/16	12.42	12.86	-0.44
03/31/17	12.78	13.25	-0.47
06/30/17	13.29	12.88	0.41
09/30/17	13.51	12.81	0.70
12/31/17	13.19	12.67	0.52
03/31/18	12.28	13.00	-0.72
06/30/18	11.48	11.53	-0.05
09/30/18	11.42	11.08	0.34
12/31/18	11.73	12.45	-0.72
03/31/19	11.93	10.49	1.44
06/30/19	12.02	10.49	1.53

Hypothesis:

- H_o: (A)-(B) = 0
- H_1: (A)-(B) ≠ 0

Mean=0.1278; Standard deviation=0.5659; N=23

For Q1 2019:

- Test statistic, Z_i = 2.32071
- Critical value, $t_{crit,i}$ =1.717, based on t-distribution with 5 percent significance level and n=23

Results: Reject H_o since $Z_i > t_{crit,i}$. Therefore, the observed price-to-income ratio is significantly different from the predictor in Q1 2019.

For Q2 2019:

- Test statistic, Z_j = 2.4745
- Critical value, $t_{crit,j}$ =1.717, based on t-distribution with 5 percent significance level and n=23

Results: Reject H_o since $Z_j > t_{crit,j}$. Therefore, the observed price-to-income ratio is significantly different from the predictor in Q2 2019.

Annex III. Model: Growth in Residential Mortgage Lending

A. Model

1.   The model is represented by the following equation:

$$Z_j = \alpha_{j} + \gamma_1 V_{1,j} + \gamma_2 V_{2,j} + \gamma_3 V_{3,j} + \gamma_4 V_{4,j} + \varepsilon_j$$

where:

Z_j	=	Growth in commercial banks' residential mortgage loans (in percent, Y/Y)
$V_{1,j}$	=	Mortgage rate (in percent)
$V_{2,j}$	=	Growth in construction loans (in percent, Y/Y)
$V_{3,j}$	=	Population growth (in percent, Y/Y)
$V_{4,j}$	=	Nominal GDP growth (in percent, Y/Y)
α_j	=	Constant
ε_j	=	Residuals

Variables	Data Sources
Commercial Banks' Residential Mortgage Loans	Superintendency of Banks
Mortgage Rate	Superintendency of Banks
Construction Loan	Superintendency of Banks
Population	United Nations
Nominal GDP	IMF

Results

2.   The predictor derived from the regression provides a good in-sample fit. The model is constructed using four explanatory variables: mortgage rate (as proxy for the cost of mortgage financing); growth in commercial banks' lending to the construction sector (as proxy for expected future real estate volume); population growth (as proxy for demand for housing), and nominal GDP growth (as a proxy for income levels).   The estimated coefficients are all in the expected signs and are statistically significant. Positive growths in lending to the construction sector, population, and nominal GDP lead to an increase in residential mortgage loan growth, in line with empirical findings. Conversely, higher mortgage rates increase financing costs to borrowers, thus reduce the demand for mortgage loans. The observed residential mortgage loan growth and the predictor are cointegrated, based on Engel-Granger test, and no significant autocorrelation is detected.

Regression Analysis with Growth in Commercial Bank's Residential Mortgage Loans (percent change, y/y) as Dependent Variable [1]

	Model 2
Mortgage rate	-2.1697
	(-1.1721)
Nominal GDP Growth(-3)	0.4161
	(-0.0787)
Construction Loan Growth	0.1664
	(-0.05)
Population Growth	58.1337
	(-20.0855)
Constant	-81.9907
	(-30.0053)
R-squared	0.8267
Adjusted R-squared	0.8075
Durbin-Watson statistics	1.7
Period	Q4,2008-Q4,2018

Source: IMF staff calculations.
Note: Standard errors are in brackets.
1/   All coefficients are significant at 1%, except for mortgage rate which is significant at 10%.

B. Hypothesis Test: Are the Observed Growths in Banks' Mortgage Loans Significantly Different from the Predictor in Q1 2019 and Q2 2019?

	Actual (A)	Predictor (B)	Difference (A)-(B)
12/31/08	24.1945	23.7169	0.4776
03/31/09	21.7469	24.9239	-3.1770
06/30/09	23.2296	22.4292	0.8004
09/30/09	22.4664	18.2527	4.2136
12/31/09	12.6349	16.8207	-4.1858
03/31/10	14.3037	12.8940	1.4098
06/30/10	13.2520	11.8510	1.4010
09/30/10	12.4460	12.3930	0.0530
12/31/10	9.8015	11.1452	-1.3436
03/31/11	10.8363	10.0776	0.7587
06/30/11	8.2025	9.0666	-0.8642
09/30/11	9.2615	11.7815	-2.5200
12/31/11	13.3112	13.3233	-0.0121
03/31/12	13.0434	14.7209	-1.6774
06/30/12	14.1647	15.4451	-1.2805
09/30/12	15.4923	14.1887	1.3036
12/31/12	14.6096	13.4421	1.1674
03/31/13	14.3874	12.5026	1.8847
06/30/13	16.4927	13.7215	2.7712
09/30/13	14.3703	14.5602	-0.1900
12/31/13	13.4972	14.9920	-1.4949
03/31/14	14.6463	14.1575	0.4888
06/30/14	12.3592	13.9743	-1.6151
09/30/14	13.8374	11.9943	1.8431
12/31/14	13.3359	11.7283	1.6076
03/31/15	14.4873	13.8951	0.5922
06/30/15	14.6694	13.8239	0.8455
09/30/15	15.6530	14.6087	1.0444
12/31/15	15.7568	13.1367	2.6201
03/31/16	15.4938	12.8705	2.6233
06/30/16	13.9156	12.7923	1.1232
09/30/16	12.4434	12.8423	-0.3989
12/31/16	12.3627	12.1955	0.1673
03/31/17	10.2272	11.8929	-1.6657
06/30/17	10.1764	11.8208	-1.6444
09/30/17	9.1652	11.5811	-2.4159
12/31/17	9.0088	10.9833	-1.9745
03/31/18	7.3460	9.2845	-1.9384
06/30/18	6.7075	7.4872	-0.7796
09/30/18	5.9802	6.2220	-0.2418
12/31/18	5.3499	5.1267	0.2232
03/31/19	5.3996	3.7915	1.6082
06/30/19	5.3107	3.4010	1.9098

Hypothesis:

- H_o: (A)-(B) = 0
- H_1: (A)-(B) $\neq$ 0

Mean= 0.0818; Standard deviation= 1.7762; N=43

For Q1 2019:

- Test statistic, Z_i = 0.8593
- Critical value, $t_{crit,i}$ =1.681, based on t-distribution with 5 percent significance level and n=43

Results: Accept H_o since $Z_i < t_{crit,i}$. Therefore, the observed growth in banks' mortgage loans is not significantly different from the predictor in Q1-2019.

For Q2 2019:

- Test statistic, Z_j = 1.0292
- Critical value, $t_{crit,j}$ =1.681, based on t-distribution with 5 percent significance level and n=43

Results: Accept H_o since $Z_j < t_{crit,j}$. Therefore, the observed growth in banks' mortgage loans is not significantly different from the predictor in Q2-2019.

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STRUCTURAL POLICIES IN PANAMA: BACKGROUND AND POLICY RECOMMENDATIONS[1]

Over the last 25 years, Panama has had the longest and fastest economic expansions in Latin America growing at an average annual rate of 6 percent. To sustain high growth and avoid falling in the "middle-income trap", Panama needs to adopt a structural reform agenda to enhance productivity. Continuously improving the business environment, advancing the quality of education, mitigating institutional vulnerabilities and fostering innovation lie at the heart of increasing labor productivity and closing the gap to advanced economies. Over the medium term, upgrading the infrastructure and creating economic conditions that facilitate the transition into technology-intensive, innovative industries with a high growth potential will be necessary to achieve high-income living standards.

A. Drivers of Growth: High Investment, but Slowing Productivity

1.   Panama needs to maintain high investment rates and boost productivity growth to sustain high economic growth rates. In the last decade, Panama experienced extraordinarily high investment rates. Mainly driven by large projects such as the Panama Canal expansion and the construction of one of the largest copper mines in the world, the additional capital may not have contributed immediately to additional output, leading to negative TFP growth. The delayed impact on output is likely to add to TFP growth in the next few years while investment rates are expected to normalize to below 40 percent of GDP. With moderate population growth, future growth will increasingly rely on improvements in total factor productivity.[2]

Figure 1. Panama: Growth Accounting

Growth Accounting
(In percent)

Contribution to Growth of Factors of Production
(In percent)

	L	HC	K	TFP	Y
1970-1979	1.0	0.4	5.2	-1.8	6.2
1980-1989	1.2	0.5	1.6	0.0	3.3
1990-1999	1.9	0.4	2.9	0.4	5.6
2000-2009	1.7	0.3	2.9	0.7	5.6
2010-2019	0.8	0.2	7.2	-2.0	6.2

Sources: Penn World Table 9.1 and IMF staff calculations.

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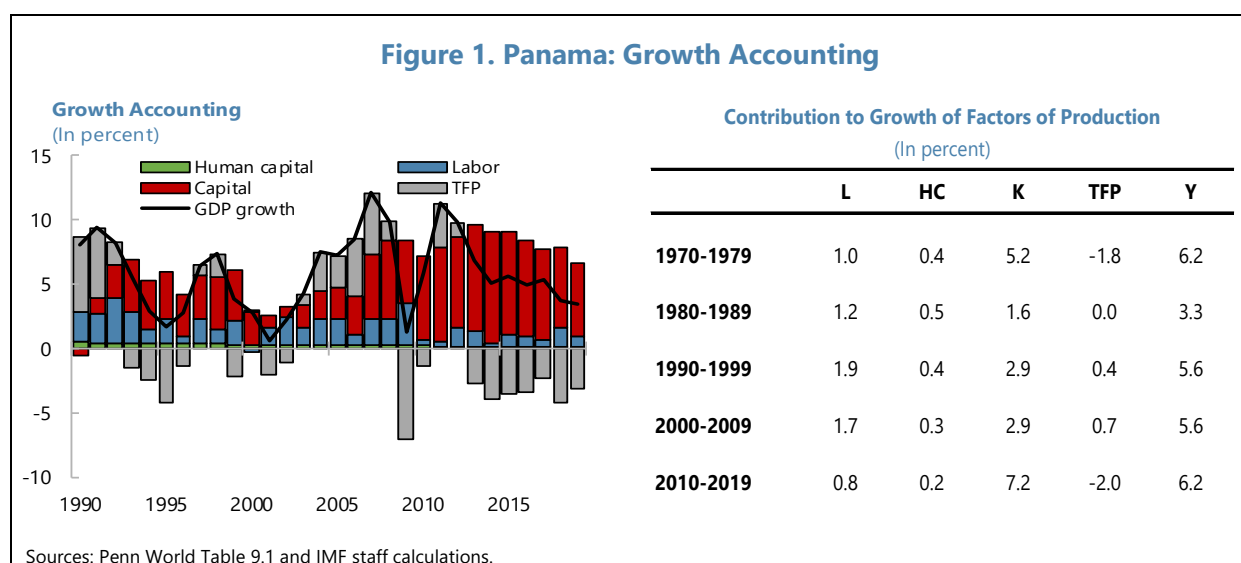
[1] Prepared by Julia Faltermeier (WHD).

[2] See Hadzi-Vaskov (2018). "Is There a Middle-Income Trap? Singular Growth Patterns in Panama". IMF SIP, Washington D.C.

Figure 2. Panama: Labor Allocation Across Sectors

Sources: INEC and IMF staff calculations.
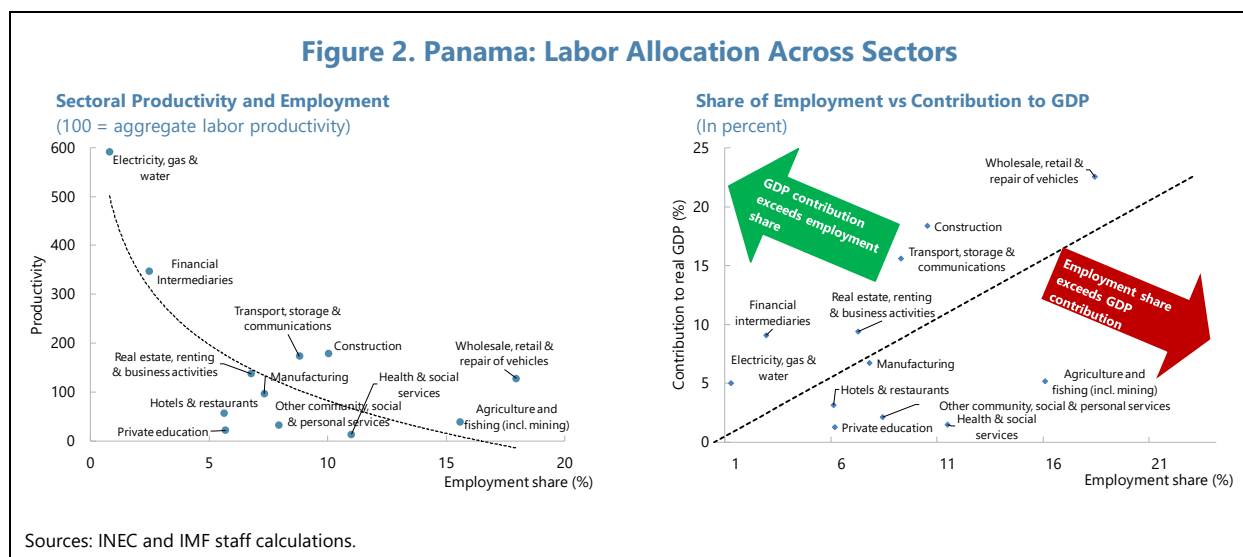
2.   While productivity growth has been exceptionally high in some segments of the economy, relatively unproductive sectors still make up a large share of employment. Labor productivity is especially low in non-tradable sectors, including commerce, hotels and restaurants, education, health, social services, sectors which employ about half of the labor force. Labor productivity growth has been high in construction, electricity, finance and transportation services, suggesting gains from reallocating labor in addition to policies that support productivity growth within sectors.

3.   Slow reallocation of labor among sectors and lack of skilled labor is holding back growth. Structural transformation of the economy and enabling labor to move into the high productivity sectors will be key to sustain growth and reduce inequality. Education to prepare the labor force for high skilled jobs, reducing informality and improving labor mobility can help to facilitate reallocation of workers into more productive and growing sectors. While years of schooling are in line with the regional benchmark, enrollment in secondary education and educational quality need to be improved, including higher education. Initiatives to boost teacher training, reduce dropout rates and better align the curriculum with businesses needs are important to develop a skilled work force. At the same time adult education, on-the-job training and offerings of technical careers can help with upgrading the current labor force.

4.   Continuing to attract investment, secure large infrastructure projects along the Panama Canal and developing tourism will foster growth in the medium-term. The completion of two large investment projects, the expansion of the Panama Canal and the construction of the large copper mine, has been reflected in lower demand for labor and partly accounts for the downturn in construction observed over the last year. Although there are several other large projects still in progress which can absorb part of this freed up labor, like the 3rd metro line, the 4th bridge over the canal and investment in port infrastructure along the canal, construction is unlikely to return to the levels of growth it saw during the boom.

Figure 3. Panama: Competitiveness Indicators Show Some Room for Improvement

GCI Ranking
(Rank, lower ranking = higher relative competitiveness)

Competiveness Score in the Americas Relative to Income
(GCI score, higher= more competitive)

Sources: World Economic Forum and IMF staff calculations.
Note: Dashed line corresponds to ranking under GCI 4.0 which contains changes in methodology relative to previous versions.

5.   Regional disparity in growth is high. Most of the growth has been concentrated in Panama City and Colon, the urban center of Panama. These regions benefit from the proximity to the canal and make up the center of the services-oriented Panamanian economy. However, growth in Colon has slowed with the decline in activity in the Colon Free Zone and will depend on a successful shift in the zone's business model, for example by converting the zone into a hub for e-commerce. To allow rural areas also to participate in the economic expansion, it is important to connect them better to public services and enhance the infrastructure and business environment for agriculture and tourism - sectors which can grow economic activity outside of the urban centers.

6.   Increasing productivity in agriculture could also help to diversify the economy and develop rural areas, decreasing poverty and inequality. Along with non-tradable services, agriculture employs a large share of the population but is relatively inefficient. Instead of subsidies that sustain the status quo, policy should focus on improving efficiency, releasing excess labor for other sectors and achieving higher wages for the remaining agriculture workers. The commercial ties with China open new markets for Panama's agriculture exports such as the recent first shipment of meat products while fostering upgrades of quality and sanitary standards.

B. Growing Capital with a Favorable Business Environment

7.   Panama outperforms the regional peers in different competitiveness indicators, but progress has stagnated recently. Panama's rank dropped from 55 (out of 135 countries) in 2017 to 66 (out of 141 countries) in 2019 according to the Global Competitiveness Index (GCI) of the World Economic Forum. Moreover, the GCI score is lower than would be predicted by Panama's level of income. The ranking highlights the stable macroeconomy, business dynamism and health as strong pillars. However, low ratings for institutions, product and labor markets, skills, Information and Communication Technology (ICT) adoption and innovation capability require policy action.

8.   While the business environment in the special economic zones (SEZ) is highly competitive, the conditions are less favorable for firms outside these areas. Firms in the free zones (around 3500 firms generating over 30,000 jobs, around 1.7 percent of total employment in 2010)[3] benefit from tax incentives and a relatively efficient bureaucracy. For 2010, Hausmann et al. (2016) find wage differences between SEZs and the local labor markets unexplained by worker characteristics which points to firm productivity differences as the main explanation. Outside the SEZ many firms are small, often operate in the informal sector and face a higher administrative burden. For 2010 the Enterprise Survey estimates that around a third of firms have less than 20 employees.[4] Enhancing firm productivity for small and medium enterprises will be crucial for future economic growth to ensure that growth is not limited to special zones. Different competitiveness indicators suggest similar priorities which can be a starting point for the policy agenda.

9.   Business dynamism and depth of financial system are key to Panama's competitiveness, despite weak insolvency framework. The GCI places Panama on rank 77 out of 141 in this category. When it comes to the time it takes to open a business, Panama reaches rank 32, and regarding attitudes towards entrepreneurial risk, the cost of starting a business and growth of innovative companies are all better than the median country. The depth of the financial system with good access to venture capital and credit for SMEs places Panama well-above the regional peers. Ranked as the 46th best country in this pillar, the financial system remains a key competitive strength. This competitive advantage can be leveraged further. However, a low insolvency recovery rate and a weak assessment of the insolvency regulatory framework hold Panama back.

Figure 4. Panama: Global Competitiveness Index

Sources: World Economic Forum and IMF staff calculations.

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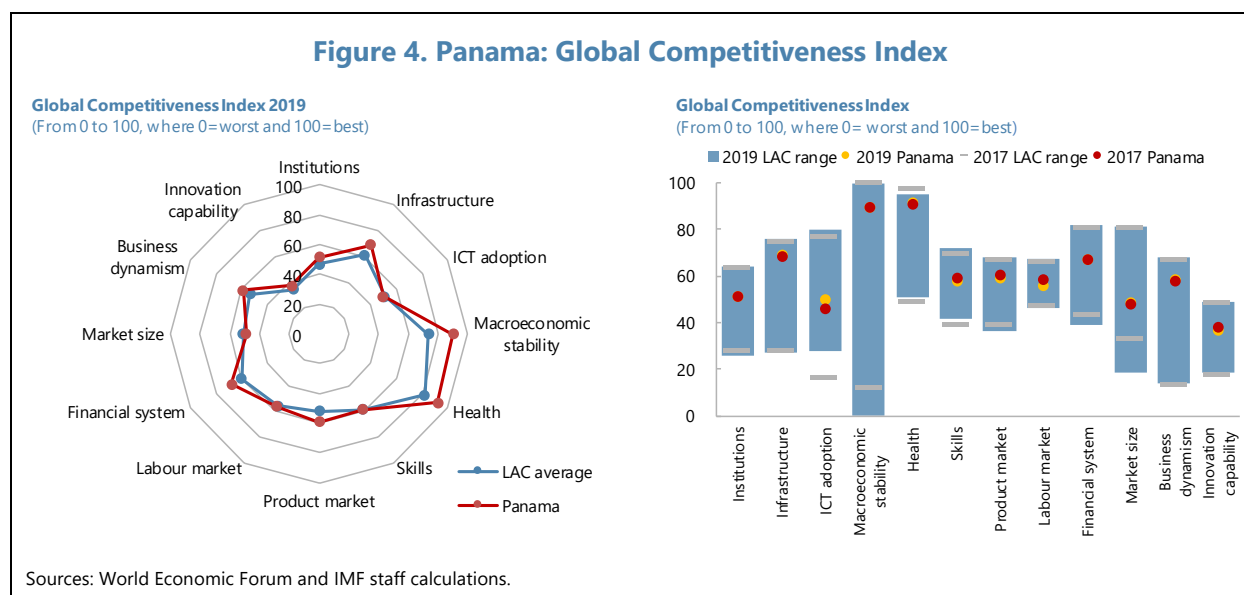
[3] Hausmann, Obach and Santos (2016). "Special Economic Zones in Panama: Technology Spillovers from a Labor Market Perspective.

[4] This duality in the Panamanian economy is not always well reflected in the available statistics. While aggregate indicators often include the whole country, doing business surveys are generally restricted to small to medium-size, 100 percent domestic firms, thus excluding many firms located in the free zones, which would improve the indicator if they were included.

Policy Options

- Reduce red tape, and administrative and compliance cost incurred with formal status of firms.

- Expand use of one-stop shops for business creation and licenses.

- Address deficiencies in the insolvency framework, especially the low insolvency recovery rate.

10.   The openness of the economy gives Panama a high rating in "Product markets", especially due to low barriers to trade. Advances in the negotiation of the trade agreement with China, improvements in sanitary standards and the implementation of the WTO trade facilitation agreement should all contribute positively to sustain the competitiveness of product markets. The main obstacle to competition stems from distortive taxes and subsidies (GCI 107th out of 141 countries), the product of various tax exemptions, subsidies and presence of tax evasion (see chapter 1 for more details). Simplifying the tax code, increasing transparency and better enforcement by the tax and customs administration can address these distortions and improve revenue collection at the same time.

11.   Traditional competitiveness indicators do not account for the tight restrictions on many occupations. Several occupations in Panama can only by exercised by Panamanian nationals and no work authorization will be granted to foreigners, independent of their qualifications. These occupations range from medicine, dentistry, law and some fields of engineering to journalism, sociology, and accounting. While there exists no quantitative estimate of the effect on competitiveness in Panama, these regulations create incentives for rent-seeking and the varying degree of restrictiveness can create distortions across sectors. While traditional indicators highlight the difficulty in hiring foreign labor, the indicators do not capture the effect of restricted occupations in the market for professional services.

Institutions and Governance

12.   The institutional framework needs to be strengthened to avoid the middle-income trap. While GDP growth has moved Panama into a higher income category, the governance framework requires reform to enable sustained growth in the future. The recent UNDP report on Human Development in Panama (2019)[5] emphasizes the importance of institutional reform to address low levels of trust in institutions by citizens as well as weaknesses such as the judicial system and corruption identified by international investors. Similarly, Panama ranks 110th in "Institutional checks and balances "of the GCI.

Corruption Perception Index in the Americas [1]/
(2018, Lower score=more perceived corruption)

Sources: Transparency International and IMF staff calculations.
1/ Includes 90 percent confidence interval for Panama.

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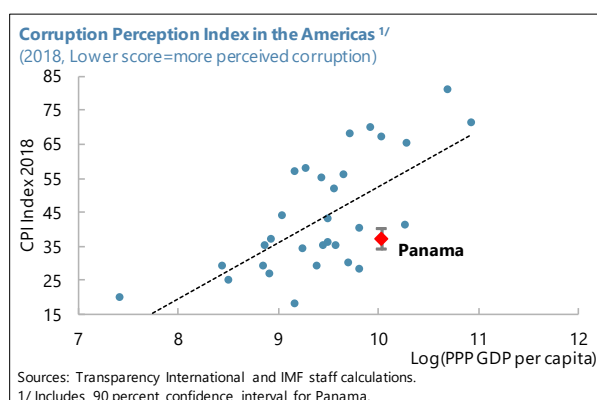
[5] UNDP Informe Nacional de Desarrollo Humano Panama 2019.

13.   The public administration needs to build capacity to become more efficient and meet standards appropriate for a high-income economy. The UNDP report urges the authorities to move to a results-based institutional culture where policy actions are motivated by the impact on citizens. It proposes a number of reforms such as limiting the strong association between state operations and the current government in power that leads to high rotation of government officials and a lack of professionalization of the civil service. It highlights that an adequate adaptation and implementation of laws, directives and incentives would be a first step to increase the citizen's trust in Panama's institutions.

Policy Options

- Professionalization of public administration, including a shift towards results-based objectives.

- Increase transparency and efficiency of public spending, i.e. phase out turnkey project, strengthen accountability of public officials and improve communication (website, data provision to the public, press releases).

14.   Deficiencies in the judicial system generate large costs to businesses and undermine the credibility of Panama's legal framework. Judicial independence is ranked very low (129 out of 141 countries) and is deteriorating. While the last ten years saw some new laws to modernize the judicial system (such as Carrera Judicial Tribunal de Integridad y Transparencia, Código Procesal Penal de Corte Acusatorio), the system is perceived as slow and as lacking accessibility and transparency. Many unaddressed cases, the lack of convictions on corruption and a weak track record on settling disputes (GCI rank 110 out of 141 countries), all demonstrate the need for reform in this area. The new administration started a process for constitutional reform, but there is still no social consensus on some of the content of the reform. Moreover, the avenue for passing the reform is unclear. The reform package was withdrawn from the National Assembly at the end of 2019 and the UNDP will now coordinate the dialogue with civil society to draft the reform. Before the end of this lengthy process, progress should continue with more effective implementation of the already existing institutional framework.

Policy Options

- Increase the budget of the justice administration (currently 1.3 percent of the general budget, 2 percent - 6 percent is the international recommendation by UNDP) to ensure independence of the judicial system and enable it to implement reforms.

- Address shortcomings of the judicial system

- Facilitate access to the many Panamanians that cannot afford the cost of legal assistance.

C.   Increasing Human Capital and the Availability of Skilled Labor

15.   Inflexible wage setting and strong restrictions on hiring and firing practices stifle competition in the labor market and lead to inefficient allocation. When it comes to the link

between pay and productivity and hiring and firing practices, Panama ranks among the lowest 30 countries in the world according to the Global Competitiveness Index. Higher flexibility in the labor market can aid the reallocation of resources to its most productive use. However, emerging vulnerabilities created by a reduction in job security require an adequate social safety net.

16.   **Shortage of skilled labor are an obstacle to many firms.** With the expansion in skill-intensive industries such as logistics and other tradable services, firms in Panama complain about difficulties in finding skilled employees. Deficiencies in the education system as well as restrictions on hiring foreign workers already restrict the expansion of high value-added industries and decisive policy action is needed to prevent a continued drag on productivity and growth in the medium-term.

Policy Options

- Educational reform needs to be a top priority of the government, tackling the low quality of education (teacher training, curriculum) and the low rates of enrollment in secondary education.

- Strengthen higher education and research institutes, for example, through better funding and more research positions.

- As a short-term solution, easing restrictions on foreign workers, especially in sectors with high skilled shortages (maybe also qualified teachers) can alleviate the labor constraints.

D.   Boost Productivity with Higher Innovative Capacity

17.   **Panama's ability to maintain high growth in the future crucially depends on its innovative capacity.** This rests in part on the continued attractiveness to FDI, the expansion into high value-added sectors and a skilled workforce to absorb knowledge spillovers. While the number of trademark applications and survey responses on buyer sophistication show promising levels, Panama lags behind in its quality of research institutions and R&D expenditure. In the past, special economic zones were the main attractor of foreign talent and knowledge-intensive industries. However, spillovers to the local economy appear to be limited, also because of restrictions on the mobility of foreign workers.[6] The new administrations' national strategy to raise investment in science, research and development to 1 percent of GDP by investing US$ 4.3 billion until 2024 is a step in the right direction.

E.   Upgrading Infrastructure

While the existing infrastructure is strong compared to regional peers, Panama needs to upgrade it further to reach high income economy living standards and sustain its productive capacity in the medium term.

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[6] See Hausmann et. Al. (2017)

Water

18.   Potable water supply is an ongoing challenge. Panama ranks 90 out of 140 countries on the reliability of water supply in the GCI, with the score declining since the previous review. It performs slightly better in the exposure to unsafe drinking water (66/140, 10.2 percent of the population). Water access is higher in urban areas than in rural areas, but a large share of the population in the underdeveloped indigenous territories does not have access to piped water. However, reliability of service also varies in urban areas. The National Water and Sewer Agency (IDAAN) has not raised tariffs since 1982 (plus collection rates are low), runs a sizeable operational deficit which increased US$ 80.5 million (0.1 percent of GDP) in 2018, forcing it to focus on emergencies and maintenance rather than improving efficiency. Although reform plans by the authorities exist, more coordinated action will be required to improve the water infrastructure.

19.   Climate change heightens the need for further investment in water supply and water management systems. Panama is one of the countries with the highest precipitation in the world, but it's largest commercial asset – the Panama Canal – is also a large user of fresh water along with a growing population. Climate change appears to have increased the volatility of rainfall, posing a challenge to maintain water levels sufficiently high during the dry season, especially during *El Niño* periods, and avoid flooding in the rain season. Currently, 55 percent of the population receives their water from eight water treatment plants that draw water from the canal's principal reservoirs: the two lakes Gatun and Alajuela. They store water to guarantee enough supply during dry periods, and release excess water to the sea to prevent flooding during the rainy season. As demonstrated by the cargo limitations imposed by the ACP in 2019 due to low water levels, the current capacity of the lakes is becoming insufficient to smooth out fluctuations in precipitation.

Policy Options

*   Amplify fresh-water reservoirs The ACP is currently evaluating several options to enlarge its water reservoirs, including three options to construct a third water reservoir to fresh water resources at a larger distance from the canal. Other possibilities include desalination of sea water or increasing the capacity of the existing reservoirs. These projects are still in the evaluation phase, but the ACP is well-aware of the future challenges related to water management faced by the canal.

*   Improve efficiency of water system Panama loses an estimated 40 to 48 percent of fresh water in the distribution system due to leakages and lack of investment in water infrastructure. At the same time, fresh water is basically free and there are hardly incentives to avoid waste of fresh water. Reforming the structure of water pricing and investing in water management infrastructure to reduce leakages would save a lot of freshwater reducing the need of investing in larger reservoirs.[7]

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[7] Larsen (2019) estimates that reducing leakages to under 1 percent would be equivalent to constructing a new reservoir of the size of Alajuela.

Electricity

20.   Panama's electricity sector can meet the rising demand while continuing to strengthen renewable energy sources. Electricity generation has increased on average 7 percent per year over the last five years. Around 60 percent of electricity is hydroelectric (12.4 percent growth rate), with the rest mostly coming from fuel-oil, non-renewable sources. However, the country has potential to expand solar photovoltaic and wind energy. This puts Panama to a competitive position and in line with reaching its climate goal of obtained 70 percent of the national energy mix from renewables by 2050.[8]

21.   Access to electricity is still unequal. While 91.2 percent of households had access to electricity nation-wide in 2017, this number varies between 98.5 percent in Panama City and only 77.1 percent in the province Darien. In the comarcas Ngäbe Buglé and Guna Yala only 7.5 percent and 3.6 percent respectively received electricity from the distribution companies.[9]

22.   The sector is vulnerable to large fluctuations in precipitation amplified by climate change. Dry seasons and *El Niño* periods drive up the marginal cost of electricity as hydroelectric power generation plummets and thermoelectric power plants are required to help maintain the system voltage. To mitigate this risk, Panama will need to invest in its energy matrix and improve transmission systems linking power plants with areas of high demand. While there has been constant investment in generation capacity, upgrades of the transmission lines proceed at a slower pace.[10]

23.   Panama uses many different tariffs for electricity and cushions price increases with general subsidies. Overall, electricity prices in Panama are slightly higher than the regional average. Basic consumption of less than 100 kWh is cross subsidized from additional payments of consumption exceeding 500kWh. Pensioners, disabled persons, farmers, political parties also benefit from special tariffs. Moreover, the government prevents price increases by using general subsidies which benefit over 90 percent of consumers, households and businesses alike. The latest surge in electricity subsidies originated in wide-spread protests in 2018 which led the government to back track on an increase in electricity prices. In 2019, the government spent US$ 193 million (0.3 percent of GDP) on electricity subsidies and the policy is expected to continue in 2020. Improving the targeting of subsidy or replacing it by social transfers could help to limit the cost and improve the effectiveness of the policy to tackle inequality.

Policy Options

- Phase-out general electricity subsidy to avoid large cost incurred by government and improve targeting to help most vulnerable population, for example through social transfers or continuing subsidies only for low-income consumers/ small businesses.

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[8] National Energy Plan 2015-50. In addition to decarbonization of the energy matrix, the strategy also sets out to (i) provide universal access, (ii) reduce and improve efficiency of energy use and (iii) ensure energy security.

[9] The comarcas have other sources of energy such as solar panels and kerosene.

[10] See the MEF report on the electricity (2017) sector for a detailed analysis.

- Continue with investment in transmission lines (e.g. 4th transmission line).

- Tackle challenges created by climate change – diversify renewable energy matrix and improve water management.

- Reduce dependence on generators to mitigate effect of high oil prices and phase out non-renewable energy sources.

Cost of Getting Electricity
(Percent of income per capita)

Price of Electricity
(US cents per KWh)

Source: Doing Business 2020, World Bank.
Cost of getting electricity is defined as cost required to complete procedures to obtain an electricity connection. Price of electricity is defined as price based on monthly bill for commercial warehouse in Doing Business study.
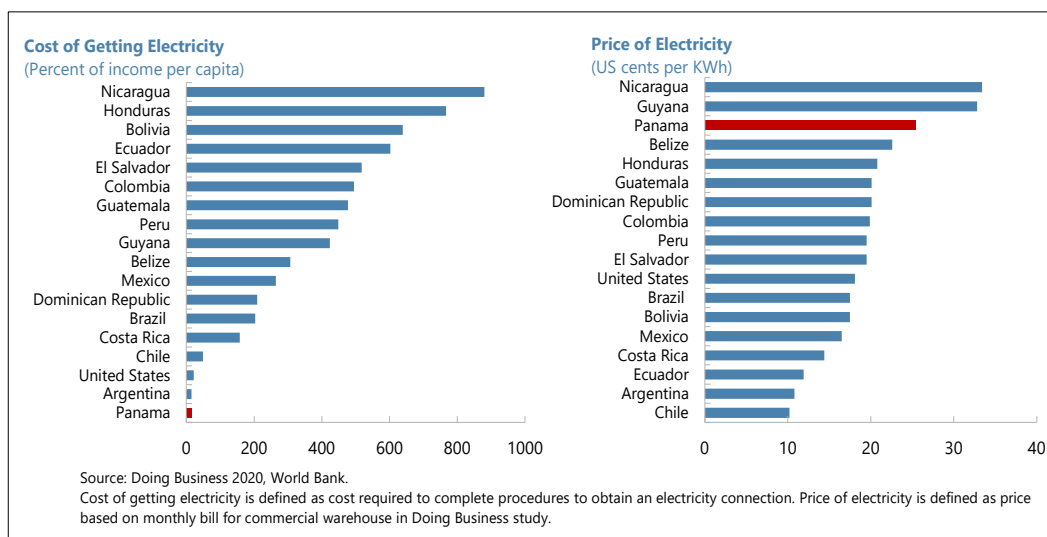
Transportation

24.   With several large transportation infrastructure projects in place, Panama is well on track to continue to enhance the competitiveness of its transportation system. The ports and Tocumen airport are among the most competitive in the world, enabling growth in the logistics sector and a major factor in attracting FDI. However, these advances have been concentrated in Panama City and Colon, with the rest of the country still in need of better road access. A particular concern is the "last mile". While highways are relatively developed, more investment is needed in secondary roads. Investments in the regional transportation network would also support growth in tourism and addresses rural poverty.

Information and Communication Technology

Improved access to internet and the spread of financial technology can improve financial inclusion. Despite the developed financial sector, only 46 % of the population had a bank account in 2017, below the average 55 % in Latin America and the Caribbean. Moreover, only 69.1 % of businesses used a current or savings account, compared to 92.9 % in the region. The most common reasons were insufficient funds to open an account (36 %), too expensive financial services (34 %) and distances to the financial institution (18 %) according the Global Findex 2017.[11] Fintech promises to avoid the high cost of infrastructure to reach the rural and indigenous population and to reduce the cost of financial services.

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[11] See MEF, Propuesta para la Estrategia de Inclusion Financiera en Panama (2019).

25.   **Panama should make better use of its proximity to a high-speed international internet connection.** Panama is located close to a digital interconnection of submarine cables and thus has access to higher bandwidth than even most OECD countries. This could make it an attractive location for IT companies but will require further investments in a skilled workforce.

F.   Concluding Remarks

26.   **An ambitious structural reform agenda is needed to ensure sustainable, inclusive growth in the future.** This paper lays out key areas for policy to prevent Panama from falling into the "middle-income trap". By continuously improving the business environment, advancing the quality of education, mitigating institutional vulnerabilities and fostering innovation Panama can close the gap to advanced economies. Investment in infrastructure and climate change preparedness can upgrade and sustain living standards in line with a high-income status economy. Together with Panama's strong foundation as a logistics and transportation hub, creating the right economic conditions can transform Panama into a technology-intensive, innovative economy with sustained growth.

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SOCIAL ISSUES IN PANAMA: BACKGROUND AND POLICIES[1]

While Panama's remarkable growth performance in recent years has been largely pro-poor and contributed to significant reductions in poverty and inequality, the country faces ongoing challenges on the shared prosperity front. Social inequities remain high relative to peers, especially when compared to countries of similar income. The new administration is well placed to redress social imbalances keeping in mind that equity and inclusion are not only socially desirable goals but important conditions to ensure that future economic growth is broad-based and sustainable. Coordinated policies to protect Panama's resources, especially water, are of increasing importance in light of the adverse impacts of climate change on the region.

A.   Background

1.   Panama is a fast-growing high-income country but lags regional peers in human development. Panama has reached a relatively high level of income with per-capita output of US$26,822 in PPP terms in 2019—the highest in Latin America and the Caribbean. It has been the fastest-growing economy in the region over the last two decades and one of the most dynamic economies in the world. However, while its rapid growth accelerated poverty reduction and created economic opportunities, Panama lags the peers in its income group in many aspects of social policy, such as education, health, gender equality and social inclusion. According to the World Bank's Human Capital Index (HCI), which measures the amount of human capital that a child can expect to attain by age 18 given the country's health and education systems, Panama performs on par with countries with much lower per-capita income, such as Nicaragua (per capita PPP GDP of US$5,290), Tajikistan (per capita PPP GDP of US$3,589) and Paraguay (per capita PPP GDP of US$13,584).

Figure 1. Panama: A High-Income Economy that Lags Regional Peers in Human Development

Sources: IMF World Economic Outlook, and World Bank Human Capital Index.

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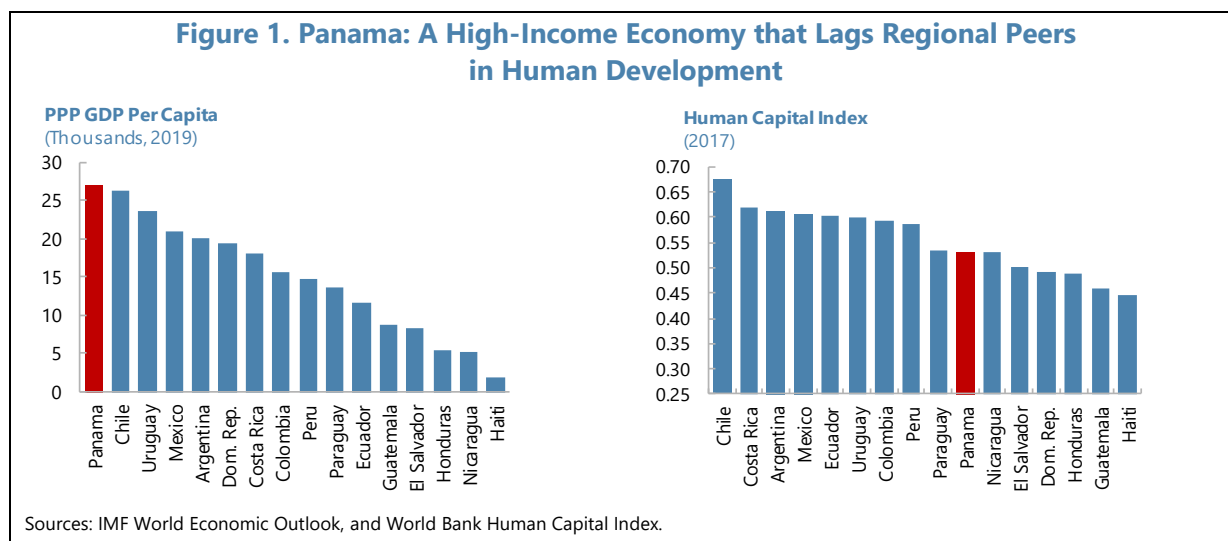
[1] Prepared by Marina Rousset and Paola Aliperti F. Domingues.

2.   Progress on poverty reduction has been significant in recent years, however important gaps remain. Panama saw a remarkable reduction in poverty headcounts and a rise of the middle class. The extreme poverty rate (as defined by the World Bank) dropped from 12.4

Poverty and Inequality in Panama		1989	2000	2005	2010	2017
Inequality	Gini coefficient	58.9	56.8	53.8	51.6	49.9
Poverty [1]	(2011 PPP, % of population)	50.3	35.5	34.8	21.8	14.1
Extreme poverty [2]	(2011 PPP, % of population)	23.9	12.4	10.0	4.5	2.5
Poverty in Latin America and the Caribbean		1990	1999	2005	2010	2015 [3]
Poverty [1]	(2011 PPP, % of population)	49.3	47.0	40.9	31.1	26.3
Extreme poverty [2]	(2011 PPP, % of population)	14.8	13.5	9.9	6.2	3.9

Source: World Bank Poverty and Equity database.
Note: Dates for poverty data for Panama differ from those of Latin America and the Carribean due to data availability.
1/ Poverty headcount ratio at $5.50 a day.
2/ Poverty headcount ratio at $1.90 a day.
3/ Latest available.

percent in 2000 to 2.5 percent in 2017, while the general poverty rate was slashed from 35.5 percent to 14.1 percent over the same period—both at a much faster pace than elsewhere in the region. Moreover, average income growth of the bottom 40 percent of earners has been faster than that of an average citizen. However, rural poverty remains high and is particularly elevated and persistent in the *comarcas*: territories inhabited by indigenous peoples.

Box 1. President Cortizo's Commitments to Advance Social Policies

- **Poverty and inequality**: El Plan Colmena *"Panama libre de pobreza y desigualdad, la Sexta Frontera"* (the "Beehive" plan) is a social program created by the current administration to fight poverty and inequality in Panama through the empowerment of local governments and technical boards, with help from civil society and Panamanian citizens. This plan aims to improve the lives of more than 777,000 Panamanians living in multidimensional poverty in 300 *corregimientos* (administrative districts) of 63 districts in the country by (i) improving public services (such as healthcare, potable water, sanitation, rural electrification, road infrastructure, education, and housing) and (ii) providing employment to lift people out of poverty. A pilot program was launched in 6 *corregimientos* in the Capira district with technical support from the United Nations Development Program (UNDP) and by the Food and Agriculture Organization of the United Nations.

- **Education and nutrition**: The program *Estudiar sin Hambre* is an initiative put forward by the Cortizo administration with the objective of providing balanced and nourishing meals to students in primary and secondary schools of the 300 poorest *corregimientos* in Panama to develop healthy eating habits and improve learning outcomes. It is also designed to support local farmers by purchasing their products to provide the meals to these students. This program was approved at the end of 2019 and is expected to launch a pilot in 2 schools in the Ngäbe Buglé region and one in San Miguelito. This initiative is being executed by the Ministry of Education in coordination with the National Secretariat for the Food and Nutritional Security Plan.

- **Climate:** The new administration's priorities include mobilizing state and private resources to encourage "climate-friendly" investment, promoting innovation in energy generation, protecting vulnerable communities that face climate-change-related disruptions, promoting access to information and empowering civil society, and facilitating climate action among young people through projects such as the *National Climate Transparency Framework* and the *Youth Academy on Climate Change*.
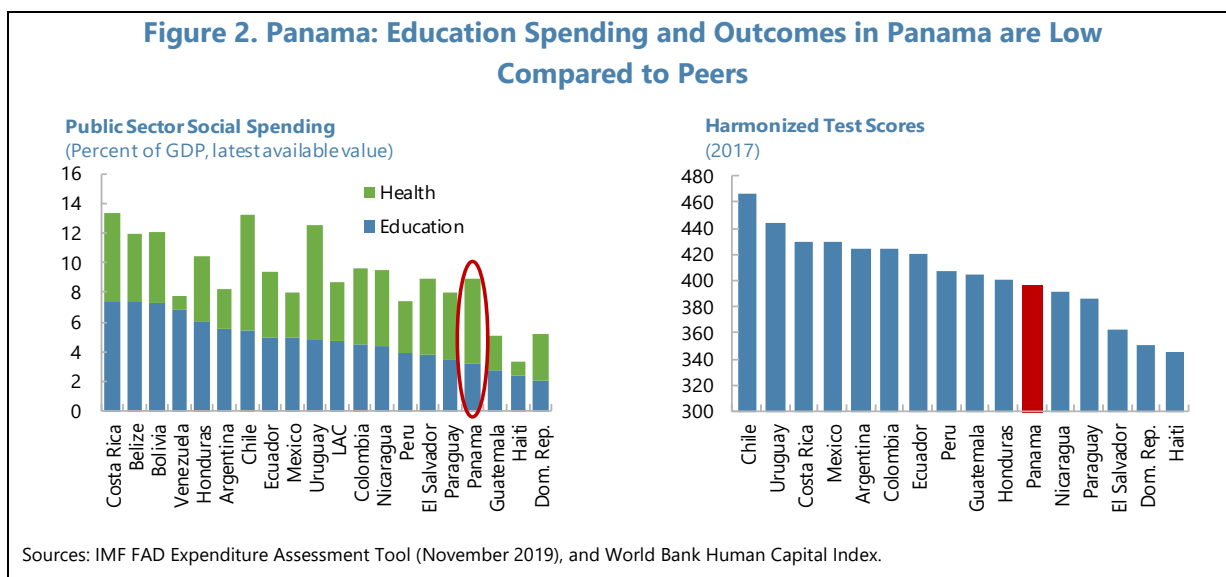

B.   Policy Priorities

Education

3.   The quality of public education is key in improving social mobility and appears to be of particular concern among social outcomes. Total social spending in Panama is low and rather

stable, it decreased from 10 percent of GDP in 2000 to 9 percent of GDP in 2018 and budget allocations to education remain some of the lowest in the region (see also Chapter on Structural Policies). As a result, enrollment rates (mainly in secondary education) and expected years of schooling in Panama lag the poorest countries in the Americas, Nicaragua and Haiti (per capita PPP GDP of US$5,290 and US$1,878, respectively), according to the HCI. Educational outcomes are also poor – Panamanian students underperformed in international education tests[2] relative to other countries, scoring on average only 32 percent above minimal attainment. In the latest 2018 Program for International Student Assessment (PISA), Panama ranked 71 out of 77 countries, demonstrating alarming comprehension deficiency in mathematics, science and reading among 15-year-old students, which was little changed since the 2009 assessment. In the World Bank's latest Enterprise Survey, firm owners and managers identified poorly educated local workers as the third most important obstacle to doing business in Panama.

4.   **Addressing these important shortcomings in education is vital for boosting Panama's long-term competitiveness and growth potential** and will require a multi-year strategy, an investment plan, and some degree of cooperation and support from experts in the field. The strategy may include better aligning academic curricula with the needs of the private sector, expanding training, monitoring and evaluation programs for teachers, offering culturally appropriate education opportunities to the indigenous communities and expanding targeted support programs for poor students (such as *Beca Universal*, see below). Since the HCI captures inequality of opportunity in addition to measuring the disparities in future capital accumulation, Panama's low scores relative to peers point to productivity losses arising from income gaps and constrained social mobility. This implies that in the absence of comprehensive social policy action within-country educational gaps would widen in addition to cross-country gaps.

Figure 2. Panama: Education Spending and Outcomes in Panama are Low Compared to Peers

Sources: IMF FAD Expenditure Assessment Tool (November 2019), and World Bank Human Capital Index.
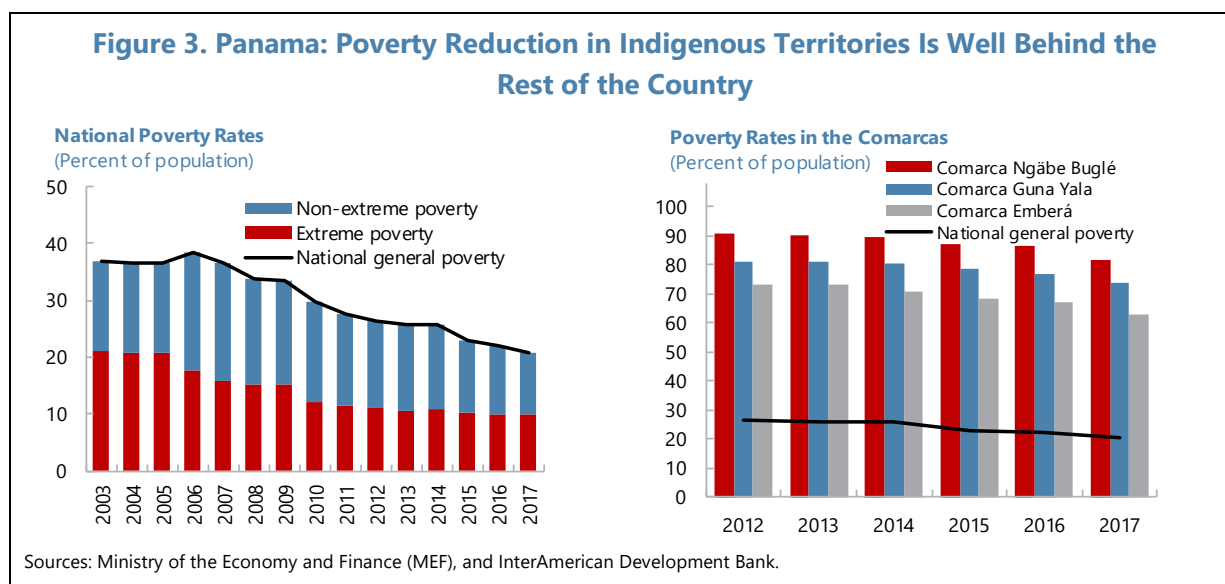
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[2] TIMSS (Trends in International Mathematics and Science Study), PIRLS (Progress in International Reading Literacy Study), PISA (Program for International Student Assessment), PASEC (Program of Analysis of Education Systems), LLECE (Latin American Laboratory for Assessment of the Quality of Education) and EGRA (Early Grade Reading Assessments), whichever applicable.

5.   **Recent initiatives to boost tertiary training are encouraging but their scale is small**. The newly-launched presidential program *Academia Panamá para el Futuro*, jointly supported by the Ministry of Education and the City of Knowledge foundation, signals that the value of quality training programs for talented students is increasingly recognized. It aims to provide enhanced cross-discipline curriculum for best high school pre-graduates, preparing them to enroll in various university programs in Panama and abroad. Outcomes and scalability of the program remain to be assessed – at present, the size of the 2020 cohort is limited to 90 students and the quality of training will need to be evaluated (the program was only launched in November 2019).

C. Poverty in the Comarcas

6.   **Poverty and lack of social services are highest among the indigenous groups, representing 14 percent of Panama's population.** Panamanian authorities have been making efforts to improve the lives of the indigenous population, however income disparities and lack of social inclusion with the rest of the country persist. Strikingly, while the national poverty rate in Panama was 20.7 percent in 2017, the poverty rate in the *comarcas* was 79.6 percent the same year[3]. Indigenous people living in the *comarcas* have the lowest incomes, access to basic services, infrastructure and human capital compared to the general population. According to the World Bank, Panama's indigenous population has the lowest level of electricity coverage in Latin America and the largest gap in terms of access to clean water and sanitation between indigenous and non-indigenous residents.

Figure 3. Panama: Poverty Reduction in Indigenous Territories Is Well Behind the Rest of the Country

Sources: Ministry of the Economy and Finance (MEF), and InterAmerican Development Bank.

7.   **Addressing problems of social inclusion, poverty and income inequality in the *comarcas* requires a multipronged strategy.** Sustainable solutions should be based on: (i) better provision of basic infrastructure and public services in the *comarcas*; (ii) delivery of culturally appropriate economic opportunities (namely, jobs), developed in close cooperation with tribal

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[3] According to the national sources and the Interamerican Development Bank (see Figure 3). These estimates differ methodologically from the World Bank's poverty headcount ratios mentioned in ¶2 for cross-country comparison.

leaders and service providers who are attuned to the cultural specificities of the population; and (iii) a higher degree of inclusion of the indigenous population in national decision-making processes. Implementing the policy plans presented in the *Comprehensive Development Plan for Indigenous Peoples in Panama* – designed by the National Indigenous working group with support from the Panamanian government and UNDP – should provide a starting point that is socially acceptable to all parties as it presents the consensual vision of the goals and priorities of the 12 indigenous congresses on economic development, social development, and legal rights. In addition, it is important to conduct continuous evaluation of the effectiveness and quality of education, social assistance and health programs conducted in the *comarcas* to ensure priorities are being met.
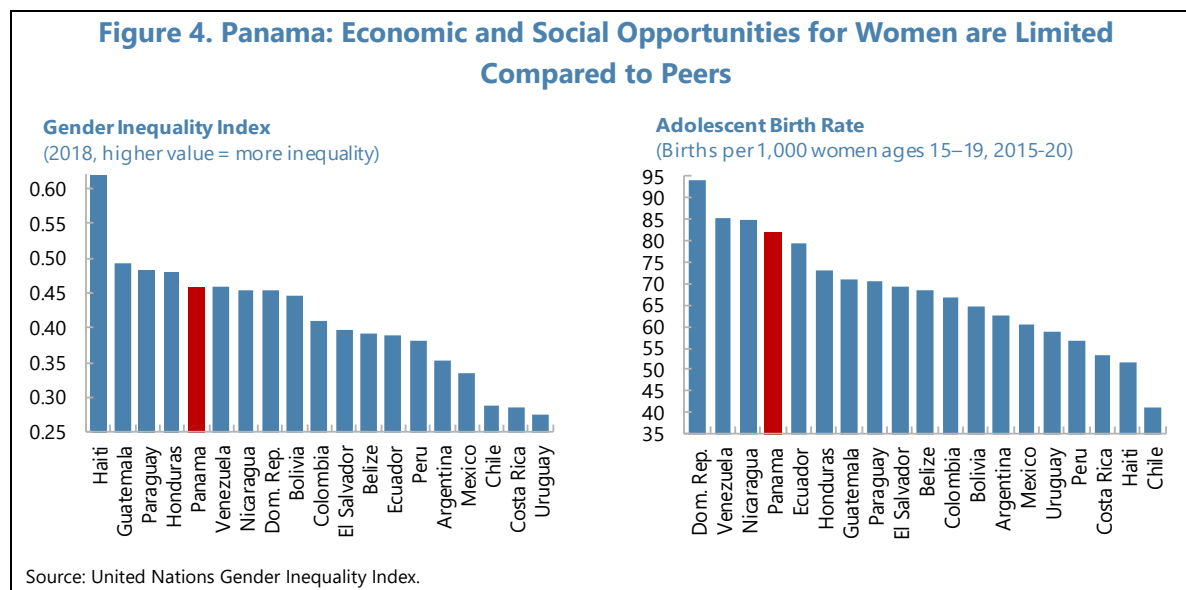
D.   Social Support Programs

8.   **Social protection programs have been an important tool for poverty reduction, but their efficiency needs to be improved.** Panama's social protection system consists of various support programs targeting the most vulnerable. Among them are: (i) *Red de Oportunidades*, a flagship conditional cash transfer program introduced in 2006 to support families in extreme poverty; (ii) *120 a los 65* program (originally *100 a los 70*) in operation since 2009 providing a benefit of US$120 per month to individuals over 65 years of age who do not receive contributory pensions; (iii) *Beca Universal* put in place in 2010 to provide a cash transfer to children for school achievements; and (iv) *Angel Guardian* established in 2012 to provide social assistance to people with severe disabilities in poverty or vulnerable conditions. While these programs, a key fiscal tool for poverty reduction, contributed to improved social outcomes over time, some gaps in coverage, targeting mechanisms and cross-program coordination remain to be addressed by the authorities with assistance from the World Bank and other social partners[4].

E.   Gender Equality

9.   **Gender inequality in Panama is high relative to regional peers and countries with similar income levels.** As in other areas of social development, Panama achieved substantial progress in improving women's lives and opportunities since 2000, such as raising life expectancy through better access to healthcare and sanitation, lowering female unemployment rates, and increasing the number of high-level positions held by women. Despite these improvements, in 2017 Panama ranked 108 out of 160 countries in gender equality—tied with Namibia and Laos—scoring worse than average outcomes for the region, high-income peers and the world overall. Areas of particular concern, according to the United Nations and the World Bank, appear to be a relatively high labor force participation gap (fewer females in the labor force than males, as a share of their respective populations), very high rates of adolescent births, elevated maternal mortality rates compared to peers, and political underrepresentation. In addition, while educational outcomes for girls are higher than for boys – in terms of both attendance and test scores – these outcomes do not translate into higher wages or better access to financial products for women.

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[4] The World Bank and other development partners are currently working with the Ministry of Social Development (MIDES) on updating Panama's conditional cash transfer programs, including through full recertification of beneficiaries to improve targeting and enhance coverage.

Figure 4. Panama: Economic and Social Opportunities for Women are Limited Compared to Peers

Gender Inequality Index
(2018, higher value = more inequality)

Adolescent Birth Rate
(Births per 1,000 women ages 15–19, 2015-20)

Source: United Nations Gender Inequality Index.

10.   Reducing the gender gap requires coordinated actions from the public and private sectors, as well as the public at large. Panama's authorities demonstrated their political commitment to gender equity through the creation in July 2018 of the *Gender Parity Initiative* (GPI),[5] a private-public alliance, and the launch of the *National Council for Gender Parity* in July-October 2018. The GPI's plan is comprised of 12 measures and 59 actions, ranging from promoting job opportunities for young women and women in conditions of greater vulnerability, to the implementation of equal opportunity measures within companies. While this plan is comprehensive and targeted, it will require committed follow-through, political support, some technical assistance, and increased public awareness of gender issues and women's rights. In addition, existing social assistance programs should continue supporting women in poverty, especially those residing in rural and indigenous areas, as they are most vulnerable to poor health outcomes.

11.   Improving socioeconomic opportunities for women also requires legal reform. In the World Bank's *Women, Business and the Law 2020 Index* Panama scored 79.4 (close to the average score for Latin America and the Caribbean)[6], which implies that women in Panama are not on equal legal footing as men (a score of 100 translates into equal legal rights). Specifically, while Panamanian women are awarded the same rights as men in the dimension of economic participation (for example, physical mobility and asset ownership), they fall short in the financial dimension (especially pension and pay, scoring only 50 out of 100 on both). This means that in Panama work of equal

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[5] The GPI is made up of 9 public institutions (Panama's Vice-Presidency and Ministry of Foreign Affairs, the Ministry of Economy and Finance, the Ministry of Labor and Labor Development, National Women's Institute, Small and Medium Enterprise Authority, the Panama Canal Authority, the Superintendent of the Securities Market, National Secretariat of Science and Technology, and National Institute of Vocational Training and Training for Human Development), the leaders of 7 business groups and private companies, 5 economic and social organizations, and 3 IFIs (UNDP, UN Women and ILO), in addition to the IDB – the founding IFI in LAC.

[6] While Panama's score of 79.4 may sound high, it is equal to that of Burkina Faso, Belize and Fiji (in all cases, with per capita PPP GDP less than half that of Panama).

value is under-remunerated for women[7], and that women generally retire with lower pension benefits (for example, due to lower mandatory retirement age[8] or no pension contribution during maternity leave). In addition, Panama's score of 75 on entrepreneurship implies that relative to men, women are more constrained by the regulatory framework when it comes to starting and running a business (including access to financing)[9]. All of these shortfalls can only be addressed by modernizing the legal framework, such as by introducing and enforcing equal-pay legislation, equalizing the mandatory retirement age, establishing pension credits for periods of childcare, and prohibiting gender-based discrimination in access to financial services. The report documents a positive correlation between gender equality and income per capita as well as such development outcomes as larger investment in health and education (both for women themselves and for the next generation) and lower maternal mortality rates, underscoring that equal rights yield long-term economic benefits.

F. Climate Change

12.   Without policy action, adverse effects of climate change will unduly affect the poor. Climate change affects a broad spectrum of economic activities (e.g. agriculture, tourism, energy and transport sectors) and impacts long-term growth and productivity. In addition, it has a direct impact on the population, especially those lacking adaptation resources. Recent cross-country research confirms that "*initial* inequality causes the disadvantaged groups to suffer *disproportionately* from the adverse effects of climate change, resulting in greater *subsequent* inequality" (Islam and Winkel, 2017; authors' italics). In Panama, those facing imminent displacement due to rising seawater levels are often indigenous communities residing on island clusters and along the shoreline (e.g. the Guna people in the Guna Yala region), as well as many residents of the Panama City and Colón metropolitan areas. A committed policy strategy is required to protect Panama's resources, both human and natural.

- *Adaptation policies.* Due to its vulnerability to extreme-weather events[10], a sustainable growth model for Panama must incorporate climate change adaptation policies. The authorities have already demonstrated their high-level commitment to these adaptation strategies by developing

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[7] To reduce the wage gap between men and women, Panama was the first country in the region to join the International Coalition for Salary Equality and to launch the International Coalition for Equal Remuneration in January 2018, promoted by the International Labor Organization (ILO), UN Women and the Organization for Economic Cooperation and Development (OECD).

[8] In Panama, the retirement age for women is 57 years, and that of men is 62 years.

[9] To support female entrepreneurs, Panama introduced the Women Entrepreneurs Platform (*Canal de Empresarias*) at the City of Knowledge in 2015 (co-funded by the IDB) to provide technical support and mentorship to women-led startups and existing SMEs. The low entrepreneurship score however reflects legal, not logistical, deficiencies.

[10] Including intense and protracted rainfalls, windstorms, floods, droughts, wildfires, earthquakes, landslides, tropical cyclones, tsunamis and El Niño-La Niña events, whose combined annual cost is estimated to range between US$ 125 and 150 million (0.36% to 0.42% of GDP), according to the Strategic Government Plan "Panama 2030".

a number of policies,[11] each in collaboration with international agencies with expertise in the field. In addition, the government initiated the creation of a Joint Task Force and a Regional Satellite Visualization and Monitoring System to respond to extreme weather events; the adoption of a National Water Security Plan 2015-50; vulnerable community reallocation programs; and national and regional plans for climate-change resilience of the agricultural sector. Currently, Panama's Ministry of the Environment is preparing its Climate Action Plan 2020-25. However, many of these initiatives remain at the stage of feasibility studies, vulnerability maps and definitions of line of action, with long-term fiscal implications of a resilience-building strategy not yet budgeted and sources of financing not fully identified.
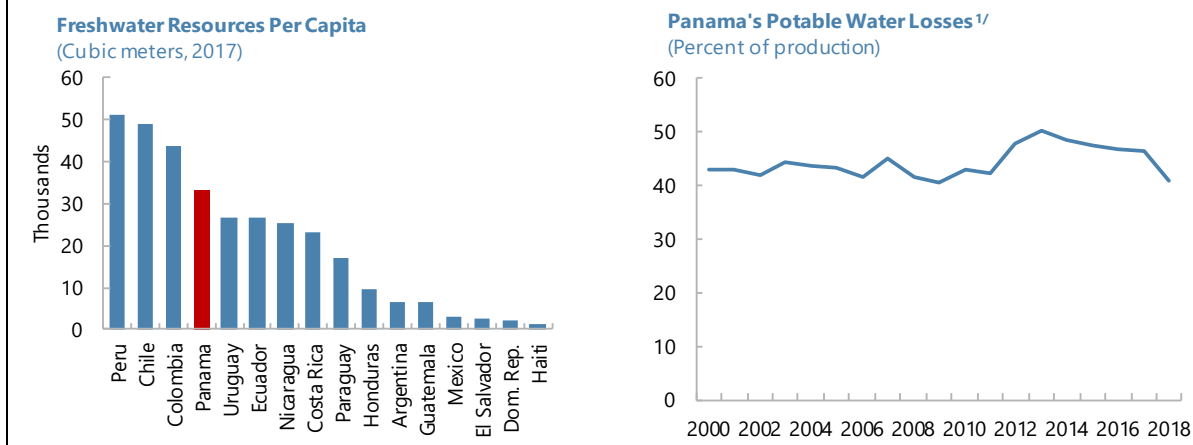
- *Mitigation policies.* Although Panama's per-capita and aggregate contributions to global greenhouse gas emissions are relatively low, adherence to its Doha commitments[12] and climate-change mitigation policies is important. In order to pursue a low-carbon growth model and fulfill its Sustainable Development Goals, Panama must adhere to its commitment to meet the growing electricity demand with mostly renewable energy, capitalizing on its endowment of hydroelectric resources. In addition to "green" energy provision, the country committed to: (i) promote the use of new technologies for improving the efficiency, generation, storage, transmission and distribution of energy; (ii) sustainably manage its forest resources, including through reforestation and agroforestry; and (iii) protect its water resources.

- **Water management.** Despite ample rainfall, fresh water is becoming an increasingly scarce resource in Panama due to a combination of rising demand, volatile rainfall, sizable technical losses and a lack of storage infrastructure. An estimated one-half of drinking water is currently lost before reaching the consumer, while a growing population and expanded Canal operations demand more freshwater resources. While these concerns led the authorities to create the 2015 National Water Plan, further policy action, including urgent upgrades of the water infrastructure and prudent resource management, is crucial to secure water supply—the most fundamental human need—not only to support agricultural needs and sustainable functioning of the Canal, but to protect Panama's population, including its most vulnerable segments (also see Chapter on Structural Policies).

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[11] Including the National Climate Change Policy, along with the National Adaptation Plan, the National Plan for Coastal Erosion Processes, the Integral Plan for Sustainable Urban Mobility, National Energy Plan 2050, National Strategy for Sustainable Livestock, National Forest Strategy 2050, Emission Reduction Plan for the Aviation Sector, and the Panama Resilience Strategy.

[12] Panama ratified the Kyoto Protocol in 1999 and, in 2015, the Doha Amendment on the reduction of greenhouse gas emissions by December 31, 2020. Furthermore, the authorities ratified the Paris Agreement on climate change in 2016 and pledged to ratify the Kigali Amendment to the Montreal Protocol in September 2018.

Figure 5. Panama: Fresh Water Is Becoming Scarce Despite Generous Endowment

Freshwater Resources Per Capita
(Cubic meters, 2017)

Panama's Potable Water Losses 1/
(Percent of production)

Sources: Food and Agriculture Organization, AQUASTAT data; National Public Services Authority (ASEP).
1/ Potable water losses registered by the Institute of National Aqueducts and Sewers (IDAAN). They include physical and commercial losses.

G. Conclusions

13.   The timing for reform is opportune. The incoming administration should capitalize on Panama's existing strengths—such as its stable macroeconomic environment, strong growth and relatively favorable demographics—to address such pressing domestic issues as poor quality of public education; high poverty rates among remote and indigenous populations; inequality of opportunity for disadvantaged gender and ethnicity groups; a wider and more robust social safety net; and the adverse impact of climate change. Doing so in a timely and targeted manner is imperative to: (i) take full advantage of Panama's existing economic potential; and (ii) expand its potential output in the long-to-medium term by raising the social capital and harnessing the full extent of its human resources.

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