INTERNATIONAL MONETARY FUND

IMF Country Report No. 19/107

COLOMBIA

SELECTED ISSUES

April 2019

This Selected Issues paper on Colombia was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on April 8, 2019.

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Price: $18.00 per printed copy

International Monetary Fund
Washington, D.C.

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April 8, 2019

Approved By
Western Hemisphere Department

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AN EVALUATION OF THE 2018 FINANCING LAW

Notwithstanding numerous tax reforms, Colombia collects relatively low revenues—notably, from both personal income taxes and VAT. With a view to raise tax revenues in a growth-friendly way and to finance key expenditures within the fiscal framework, the authorities changed the tax code through a Financing Law. This paper examines the impact of the Financing Law on both tax revenues and the economy. The analysis finds that the Law may boost medium-term growth by around 0.2 percent of GDP, but it may lead to future tax revenue shortfalls starting in 2020.

A. Introduction

1. Colombia passed a Financing Law (FL) in December 2018 to raise revenues toward meeting key spending needs under the fiscal rule and to improve the competitiveness of the economy. Colombia's fiscal rule calls for reducing the central government structural deficit to 1.0 percent of GDP in 2022. This implies a tight budgetary envelope starting in 2019 for key public investment and social spending. Although there is scope to raise tax revenue—standing at 13.6 percent of GDP (in 2016) in Colombia compared to 17.7 percent on average for regional peers—this has proven to be challenging.[1]

2. This paper assesses the main tax measures introduced by the law and their dynamic impact on tax revenue through macroeconomic transmission channels. The FL is expected to yield additional revenues in 2019, especially from higher rates on personal income tax (PIT) and dividends, re-introducing a wealth tax, expanding the VAT on beer and soft drinks, and taxing real estate sales. From 2020 onwards, however, reducing the tax burden on corporations—mainly through lower corporate income tax (CIT) rates, an input credit for VAT on capital goods, and crediting municipal taxes—is expected to result in net revenue losses in these areas. To assess the macroeconomic impact, including on the budget, of these measures, the IMF's Global Integrated Monetary and Fiscal Model (GIMF) model is used. GIMF simulations show that: i) the direct growth impact of tax measures will boost GDP growth by 0.2 over ten years in the model, ii) growth comes from higher investment due to the reduction in the corporate tax burden and iii) cuts in government spending will be required to plug an increasing revenue gap.

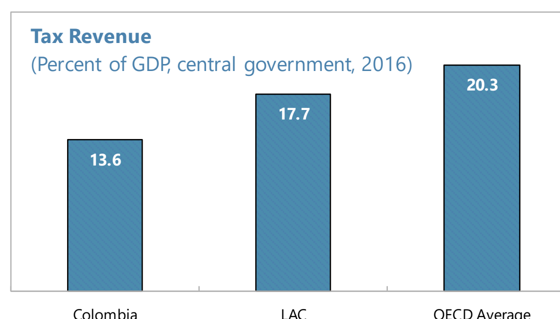
B. Overview of the Colombian Tax System

3. Colombia's tax system has been subject to multiple structural reforms in the last six years. Reforms were adopted in 2012, 2014, 2016 and now with the FL in 2018. Each reform has improved some aspects of the tax system, for example, reducing the taxation on labor (cutting social security contributions which weighted heavily against improving formal employment), increasing

[1] A Financing Law is *not* the same as a tax reform. Under an FL, both changes to government spending and tax policy are made, including tax administration measures. Additionally, the 2018 FL worked within the expenditure envelope approved by Congress as part of its annual budget negotiations. It sought to preserve the headline deficits embodied in the 2018 Medium Term Fiscal Framework.

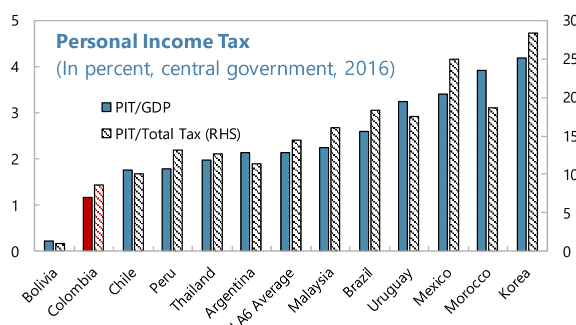
income tax progressivity and strengthening indirect taxes (raising VAT rates and excises), modernizing international taxation and introducing anti-abuse measures.

4. However, the tax system continues to have shortcomings, including a narrow tax base and preferential regimes. It has a narrow base both in VAT and PIT and many beneficial regimes in CIT. The tax on financial transactions, the presumptive tax, the wealth tax and the national consumption tax are examples of additional taxes that Colombia has introduced to protect tax revenues. This makes for a complex tax system that nonetheless yields modest revenue.

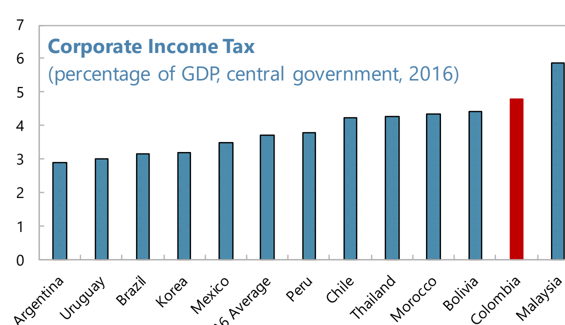


Sources: OECD Database and IMF staff calculations.
Note: Colombia data is estimated by IMF staff.

5. Colombia collects relatively modest revenues from PIT compared to others but has placed a heavy tax burden on its corporations. Studies have shown that the effective PIT rate for the top income decile of households is below 15 percent (Hanni and others, 2015). On the other hand, Colombia traditionally has collected significantly more CIT revenues than the OECD average, with statutory rates above 40 percent in the recent past.[2] Also, it has traditionally not allowed crediting VAT paid on capital goods.



Sources: OECD Database and IMF staff calculations.
Note: Colombia data is estimated by IMF staff.

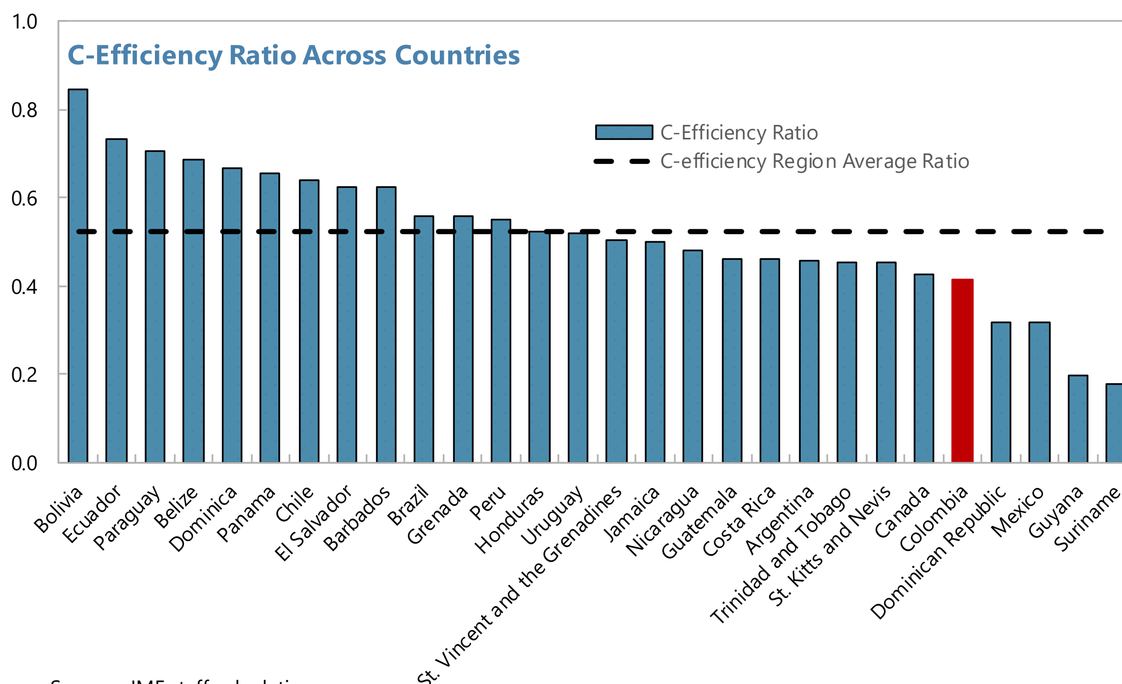


Sources: OECD Database and IMF staff calculations.
Note: Colombia data is estimated by IMF staff.

6. At the same time, VAT efficiency is relatively low. The IMF revenue-gap analysis methodology shows that there is a sizeable VAT gap in Colombia. This results from both compliance and policy gaps.[3] The resulting "c-efficiency" estimate is below the regional average. The policy gap directly reflects the many exempt, zero-rated and lower-rated goods in VAT in Colombia.

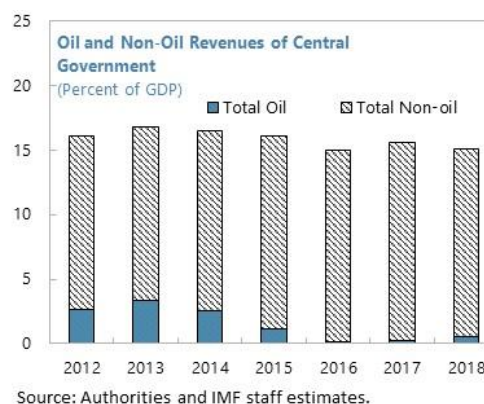
[2] These rates include CREE taxes (Impuesto sobre la renta para la equidad).

[3] The methodology is based on Hutton, E (2017). "The Revenue Administration - GAP Analysis Program: Model and Methodology for Value-Added Tax Gap Estimation". This methodology seeks to estimate the difference between potential tax revenue of the underlying economic tax base and actual revenue. This gap is further decomposed in terms of noncompliance and the impact of policy choices. The former is computed as the difference of potential (VAT) collections to actual VAT collections whereas the latter is a function of exempted, zero and lower rated goods.



Sources: IMF staff calculations.

7. Consequently, the central government has struggled to replace lost oil-related revenue since 2014. In the wake of lower oil prices, oil revenue losses for the central government were estimated around 3 percent of GDP relative to 2013. Despite subsequent tax reforms such revenues have not been fully replaced. In October 2018, the current administration tried to broaden the base of the VAT and PIT, in line with past staff advice. However, a version of the law with relatively marginal changes to the VAT and to the PIT base was ultimately passed. The 2018 financing law also addressed the heavy tax burden faced by corporates and included measures to introduce greater income tax progressivity.



Source: Authorities and IMF staff estimates.

C. Scoring of Static Revenue Impact of the 2018 Financing Law

8. The Financing Law should have a positive effect on tax revenue in 2019. In the first year of the FL, when many of the measures do not yet affect the budget's cash flow, revenue increases by about 0.7 percent of GDP (or Col$7.1 billion, see Table 1). The drivers of higher tax revenues in 2019 are the introduction of higher PIT marginal rates, a new excise on real estate sales and the 'normalization' tax (representing together 65 percent of the additional tax revenue).[4]

[4] A voluntary disclosure of undeclared past income is subject to a low one-off tax (see Box 1).

Table 1. Expected Revenues from the Financing Law, 2019–22

(Percent of 2018 GDP)

Tax	Measure	2019	2020	2021	2022
VAT	Expansion to entire commercial chain for beer and soft drinks	0.09	0.10	0.11	0.12
Excises (INC)	Sale of real estate above 26.800 UVT (2%)	0.17	0.19	0.20	0.22
PIT and other taxes on individuals	Merger of PIT schedule and new top marginal rates (35%, 37%, 39%)	0.19	0.21	0.23	0.24
	Wealth tax (1% for net assets above COP 5 bl)	0.08	0.09	0.09	0.00
	Flat rate on dividend (15% residents)	0.05	0.05	0.05	0.06
CIT and other taxes on legal persons	Reduction of of CIT rates (2020: 32%, 2021: 31%, 2022: 30%)	0.00	0.00	-0.13	-0.27
	VAT credit against CIT for adquisiion of capital goods (100%)	0.00	-0.63	-0.68	-0.73
	Gradual elimination of presumptive income tax (2019 -20: 1,5%, 2021: 0%)	0.00	-0.14	-0.15	-0.27
	Credit for ICA against CIT (2019-2021: 50%, 2022: 100%)	0.00	-0.16	-0.18	-0.20
	Final withholding on distribution of dividends (non-residents: 7,5%)	0.04	0.04	0.04	0.05
	Suplementary rate on financial sector (2019: 4%, 2020 y 2021: 3%)	0.00	0.03	0.02	0.02
DIAN	Normalization 2019	0.10	0	0	0
Revenue from FL - static effects (COP)		**7,130**	**-2,218**	**-3,768**	**-7,500**
Revenue as a % of 2018 GDP		**0.73**	**-0.23**	**-0.39**	**-0.77**

9. **Beginning in 2020, total revenues are projected to fall as a share of GDP due to lower effective tax burdens on businesses.** The main factor is the tax credit for the VAT on capital goods, which costs about 90 percent of all the revenue raising measures in the FL. In 2021, the reduction in CIT rates compounds the revenue losses, leading to a net loss of revenue of 0.4 percent of GDP on a static basis. The complete elimination of the presumptive tax in 2022 raises net revenue losses to 0.8 percent of GDP in that year. The following year the full cost of the credit for the Industry, Commerce and Service (ICA) municipal tax against the CIT takes effect, which may cost an additional 0.2 percent of GDP (see Section D). Overall, static losses to net revenues could be larger in the

longer term due to tax benefits granted through new special regimes, but those losses are difficult to quantify. The positive GDP growth effect on revenues would have to be sizeable to offset these static revenue losses. This is analyzed in Section E.

D. Discussion of Tax Policy Changes in the 2018 Financing Law

10. The 2018 Financing Law improves and upgrades many technical aspects of the tax system but also adopts several measures that raise some issues. The improvements in tax administration and the revamp of the tax regime for small taxpayers are welcome features in the FL, but these measures will mature in the longer-term. The system will be slightly more progressive as well, due to higher top PIT marginal rates and reintroduction of the wealth tax. Competitiveness should improve as the tax burden on corporates was lowered. However, the FL grants new and potentially expensive preferential regimes for businesses. Overall, the FL creates some uncertainty for medium-term tax revenues for the central government. The text below discusses the main changes to corporate taxation, PIT, VAT and wealth taxes and Box 1 provides details of other tax changes in the law.

11. A gradual reduction in the CIT rate will lower the relatively high tax burden for corporates. The tax burden on Colombian companies combines a relatively high CIT rate, a presumptive tax and a VAT on capital goods that could not be credited against output-VAT. The FL gradually reduces the CIT rate to 30 percent in 2022 (from current 33 percent), though at a slower pace for the financial sector; eliminates the presumptive tax (also gradually) and allows a direct credit of VAT for capital goods against CIT. Combined, these measures will cost about 1 percent of GDP (See Table 1). The low rate on capital gains (10 percent)—a potential avenue for CIT tax planning—remains unchanged.

12. The change in the VAT regime on capital goods is the most significant measure in the law. Until 2018 taxpayers could only deduct this VAT against the CIT as part of the total cost of capital goods as they were depreciated (except for off-shore oil exploration and development; see Cabrera, 2017), increasing the cost of investment. Changing this regime for a direct credit against the CIT will cost 0.6 percent of GDP. There is a risk, however, that this reform may cost more. Some practitioners believe that the article in the law denying VAT credit—now eliminated—referred to the tax paid for the purchase of 'fixed assets', a concept that could be wider than 'capital goods' (Estatuto Tributario, art. 491). On the other hand, the estimated revenue effect assumes that all companies have enough CIT (or presumptive tax) to pay and hence to credit capital goods VAT against it. If this assumption were not to hold, the effect could be lower, at least in the initial years as the credit is spread over time. A more orthodox approach would have been to allow crediting the input-VAT against its own sales tax. This would have provided greater liquidity to new investors and to businesses with losses, though it would have cost more revenue.

13. Another significant measure is to allow crediting the municipal business tax against the CIT. The ICA tax levies gross income in a range from a fraction of one percent to slightly above it, depending on the municipality and the business activity. The impact on taxpayers differs widely depending on businesses' profitability and some cascading effects. Until 2018 it could be deducted

as a cost from the CIT; the FL allows a 50 percent credit against it, jumping to 100 percent in 2022. While this reduces the tax burden on businesses, it expands the encroachment of the ICA (a distortionary tax) on the CIT, transfers resources from the central government to the richer municipalities(which already have budget surpluses).[5] According to official estimates, this will cost the central government budget 0.4 percent of GDP when it comes into full effect in 2023 (not in Table 1). Currently, the ICA collects nearly COP8 billion, over 0.8 percent of GDP (DIAN), so granting full credit against CIT could be costlier than authorities' estimates. Also, the ICA does not have very clear nexus rules, which makes DIAN's control of this credit even more difficult.

14. Additional preferential tax regimes for corporates have been introduced that could result in significant tax expenditures. Colombia's tax system has various special corporate regimes. For example, the Zona Franca with a 20 percent CIT rate and exemption from contributing parafiscales, represents a significant tax expenditure. Hotels also have benefited from CIT exemptions. The FL adds many new exemptions: qualifying large projects (mega-proyectos), the orange economy (technology and creative businesses) and some agricultural developments that would now benefit from a low 27 percent CIT rate, no presumptive tax and accelerated depreciation in 2 years, among other benefits. Tourism projects will also be exempted. This inclusion of new preferential regimes adds complexity to the tax system. Aside from revenue losses, it burdens DIAN with a collection of new and complex-to-control regimes.[6]

15. For PIT, income schedules were changed, and three marginal rates were added for high income earners, increasing its progressivity. In 2018 there were three main PIT schedules, one for labor income, another for capital and non-labor income and lastly one for dividends. Each had its own exempt segment. This implied that a person with each type of income could add the exempt ranges up to an amount of 2290 UVTs; this is four times Colombia's GDP per capita and represents more than 80 percent of the average annual disposable income of the top decile of households.[7] Merging all schedules into one, so that the exempt range for all income is 1090 UVTs is an important and positive change, which should increase revenue.[8]

- **New marginal rates (35 percent, 37 percent and 39 percent for labor income) for top income earners affect a small number of taxpayers**. DIAN estimates that the top rate will

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[5] This may create an incentive for municipalities to further increase the tax to the extent of the law.

[6] This can affect other sectors of the economy as well (for example, related party transactions). Also, the benefits are not self-applied by companies that comply with a set of pre-established requirements. Instead, taxpayers have to request authorization from a government agency (different from DIAN or the MoF). For promoting agencies, the incentives may be misaligned, and the process can open the door to discretional administration of tax benefits. Finally, the inclusion of new exemptions may suggest that the measures adopted to reduce the corporate tax burden in the general regime (discussed above) were seen by themselves as not sufficient.

[7] Average annual income for top decile equal Col$7.226 million per month (DANE, ENPH, 2016−17). The UVT for 2017 was Col$31,859.

[8] For some individuals the tax may decrease, given that the exempt threshold was not the same for every type of income. For example, someone earning 700 UVTS of non-labor income was exempted for the first 600; with the current system all 700 UVTs are exempt.

affect less than 2,000 taxpayers. DIAN's projection is that the combined effect of rate increases and merging schedules will raise 0.2 percent of GDP and make the regime more progressive. With this modest revenue yield, overall revenues from PIT would remain relatively low by regional standards.[9]

- **Exemptions and deductions limit the progressivity of Colombia's PIT.** The exempt segment of 1090 UVTs is high. Moreover, the tax law provides generous deductions, up to 40 percent of taxpayers' income for qualifying expenditures (including voluntary contributions to authorized pension plans, education, qualifying savings account for the purchase of housing), each up to a ceiling set in UVTs, which are also generous (for example, 2,500 UVTs for voluntary contributions to qualifying pension plans alone). This leaves a relatively high percentage of the working population outside the PIT net and erodes the base of those with higher income.

16. A temporary wealth tax is reintroduced. Colombia has had temporary wealth taxes under various forms over the last 20 years, and the FL re-introduces it for another three years (Impuesto al Patrimonio). Some features differ from the previous wealth tax (Impuesto a la Riqueza which expired in 2018): the new tax levies a flat rate of 1 percent on net assets above COP5 billion (approximately US$1.6 million) and excludes housing up to 13,500 UVTs and generally low income dwellings.[10] Additional revenue estimates of 0.1 percent of GDP appear optimistic—double the revenue from the Impuesto a la Riqueza, although the new threshold is five times larger than in 2018. The base has been expanded to include holdings of shares at historic values, which may introduce some uncertainty as to how large this base might be. Finally, there would likely be an incentive to subdivide wealth among family members to remain below the threshold.

17. VAT is now levied on beer and soft drinks throughout the entire value-added chain. DIAN estimates that this measure should generate about 0.1 percent of GDP in additional revenue. However, contrary to common practice, the applicable special consumption tax (INC) is not included in the VAT base. It is also noteworthy that the FL introduces an indirect tax on digital services, following an international trend. The implementation of such a tax still faces many challenges and it was prudent not to attach a specific revenue to it. The FL also corrects various other aspects of the VAT, including a substantial loophole regarding inputs of national origin going into the special development zones (Zonas Francas) and sold back into Colombia. These are all positive steps. Nevertheless, exemptions/exclusions and the special 5 percent rate remain the largest tax expenditure in place.[11]

[9] Generally, income redistribution through income taxes in Latin America is very limited, achieving a reduction of just 2 percent in income inequality. This contrasts markedly with the European Union, whose distribution improves more than 12 percent after income taxes, see OECD (2018).

[10] About 60 percent of all new housing sales are classified as low-income housing (vivienda de interes social—VIS); however, only a third of total housing construction investment goes into VIS, amounting to Col$10 billion in 2018 (source: Camacol).

[11] Marco Fiscal de Mediano Plazo 2018, pp. 490–94.

Box 1. Other Tax Measures in the Financing Law

The presumptive tax will be gradually eliminated and will result in tax revenue losses. Until 2018 a mandated tax base floor of 3.5 percent on net assets existed in Colombia, called the presumptive tax—designed as an anti-abuse measure. However, the tax can weigh heavily on companies that have genuine losses or particularly long start-up periods.[1] It is estimated by DIAN that the full elimination of this tax in 2021 will cost 0.2 percent of GDP, assuming that those who pay today are in a loss position and will have not CIT base. This projection also assumes that the taxpayers that currently pay CIT on a basis just above 3.5 percent of net assets will not reduce their tax in the absence of the presumptive minimum. This might be an optimistic assumption. The revenue impact of the measure could have been softened by allowing firms to credit the tax against future CIT, with a relatively long carry forward period.[2]

The tax on dividends for residents was increased to a flat rate of 15 percent, starting in 2019.[3] Dividends are not subject to the PIT progressive rate schedule; instead they are taxed separately at the shareholder level. The top marginal rate was previously 10 percent at 1000 UVTs or more, with 5 percent and 0 percent rates applied to lower dividend amounts. Withholding on dividends was set at 7.5 percent, creditable against the final tax. Foreign residents are subject to a final withholding of 7.5 percent (before it was 5 percent) or lower depending whether they reside in a country signatory of a double taxation treaty with Colombia. This measure was estimated to raise about 0.1 percent of GDP, although this estimate is uncertain since the higher tax may inhibit (formal) dividend distributions. There is also some uncertainty as to the vintage of the dividend that should be taxed, as distributions may originate from profits corresponding to previous years, even prior to 2017 when the tax was first introduced. Moreover, tax treaties will keep the withholding rate for an important (but unknown) proportion of dividends paid to foreign residents unaltered.

Deemed dividends distributions are not recharacterized in Colombia's tax law. Companies may incur expenditures on behalf of their final shareholders that should be not deductible. Additionally, they should be considered as deemed distributions and subject to withholding and to PIT at the flat 15 percent rate; otherwise, there will be a strong preference for companies (typically through Sociedades Anonimas Simplificadas) to spend on behalf of the shareholder instead of distributing dividends.

The inflation adjustment of the tax base of individuals' interest earnings was eliminated. Colombia's income tax had a significant asymmetry: legal persons paid tax on nominal interest while individuals did on real interest. The FL normalized the tax base to nominal interest. This will mean more revenue for the budget, but it may have a regressive effect as smaller deposits typically yield lower real interest rates which will now be subject to a higher tax burden.

The FL introduces a new excise on the sale of new and used real estate at 2 percent. The tax applies to buildings above (approximately) US$280,000; but it applies to the whole value of the property when above that threshold. The tax does not apply to low income housing developments. The excise replaces a VAT at 5 percent (2018) on new residential housing and it is estimated to increase revenues by 0.1 percent of GDP.

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[1] The tax also applies to individuals, except those registered in the small taxpayers' regime (SIMPLE). Strictly, the tax should only apply to persons with business activities.

[2] In the current framework it is either de CIT or the presumptive tax which apply. However, a company with losses (that pays the presumptive tax) may carry-forward those losses until it is subject to CIT, given a net profit above 3.5 percent of net assets.

[3] This tax should be factored in the computation of the effective tax rate on corporate profits.

Box 1. Other Tax Measures in the Financing Law (concluded)

The main reasons this will raise revenue is that the credit for input-VAT no longer will be claimed and the new tax also includes used buildings.

A one-off "normalization tax" is introduced to provide an incentive to declare income that was not previously taxed, but its effects are uncertain. Under the FL any undeclared income, if declared, would avoid penalties and be subject to a beneficial one-off rate of 13 percent. The revenue that this measure may yield is uncertain, although the projection for the current program (Col$1 billion in 2019) is conservative given past events (tax revenue resulting from normalization scheme in 2017 was Col$1.8 billion). There have been several similar programs in the past, but these have tended to yield little revenues. While the improvement in the exchange of tax information worldwide has increased the possibility that off-shore savings become known to the tax authority of the country of residence, there are also several elements that may dampen its success. Firstly, there might be the well-founded suspicion that this will not be the last normalization program, given past experience. Second, not all bilateral administrative procedures have been put into place to secure full advantage of the exchange of information potential. Third, while the one-off tax rate of 13 percent is quite attractive relative to domestic PIT rates[4], the PIT is not the only relevant comparison tax as wealth and inheritance taxes also matter. Estimating how much revenue this measure will obtain is inevitably speculative.

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[4] Also, a 50 percent discount is granted id the repatriated asset stays in Colombia for two years.

E. The Macroeconomic Effects

18. The full effects of the 2018 Financing Law are assessed using a forward-looking macroeconomic model. In terms of economic growth, the reform entails a trade-off between a negative impact on consumption (through VAT and personal income taxes) and a positive one on investment (through a lower burden on corporates). This trade-off is assessed with a fully-specified dynamic model that incorporates the optimizing behavior of households and firms in response to changes in these taxes. Specifically, the Colombia country block of GIMF[12] is used to assess the dynamic effect of the financing law.

19. The simulations assume that all tax and expenditure measures are fully credible. More specifically, it is assumed that the announcements are permanent in the sense that agents do not believe that they will be reversed or that other measures will be needed to correct the headline deficit beyond the expenditure adjustments. Thus, the simulations likely reflect an upper bound on the possible impact of the Financing Law on the economy.

20. The simulations separately examine the key components of the Financing Law. The first set of simulations (blue lines in Figure 1) show the impact of higher VAT and excise taxes (which largely transmit through household consumption). The red dashed lines add the effects of taxes on personal income, dividends and wealth (which affect household's resources). The black lines then add the effects of lower corporate tax rates and the credit of VAT on capital goods (operating

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[12] See Kumhof and others (2010) and Carton and others (2017) for details about GIMF.

through higher firms' profits). Finally, the green lines show the changes in government spending that ensure that the headline government deficit *is unchanged* relative to *before the passage of the FL*, and that *government debt as a share of GDP is unchanged in the long-run*.[13,14] The green lines therefore present the *full impact* of the Financing Law including all the tax and expenditure measures.

The Analysis Suggests the Following Preliminary Findings

21. Higher taxes on consumption, personal income and wealth have a small positive impact on tax revenues and a small negative impact on activity. Tax revenue measures stemming from the VAT and PIT (red dashed lines and red bars) reduce the level of GDP by 0.3 percent relative to baseline on impact, and by 0.2 percent in the long-run. On the fiscal side, it is assumed that these additional revenues are not used for any purpose other than to reduce the headline deficit: as a result, government debt permanently declines. The hikes in these taxes propagates through the household sector as higher consumer prices and lower (after-tax) disposable income reduces consumption and hence domestic demand.[15] In response to lower demand, firms curtail production and reduce demand for capital and labor which places downward pressure on inflation. The central bank reduces interest rates and the real exchange rate depreciates, dampening some of the decline in domestic demand. Thus, there is an improvement in the trade balance and current account. As a small open economy, Colombia does not affect global interest rates and, as a result, the policy rate eventually returns to its baseline level.

22. Lower corporate taxes and the credit of VAT on capital goods have sizeable effects on activity through investment but reduce tax revenues beginning 2020. The credit of VAT on capital goods reduces the after-tax price of investment, thereby boosting capital accumulation and potential output. Higher potential output raises permanent income and consumption. In the near term, with demand exceeding production and putting pressure on inflation, the monetary authority increases interest rates. In response to stronger domestic demand and real exchange rate appreciation, imports increase and the current account deficit widens. Despite the increase in activity, overall tax revenues are lower relative to the baseline (one percent on impact and around 2½ percent in the long-run) and the government deficit rises by over ½ percent of GDP in the long-run. The deterioration in public finances further accentuates the current account deterioration and results in higher government debt.

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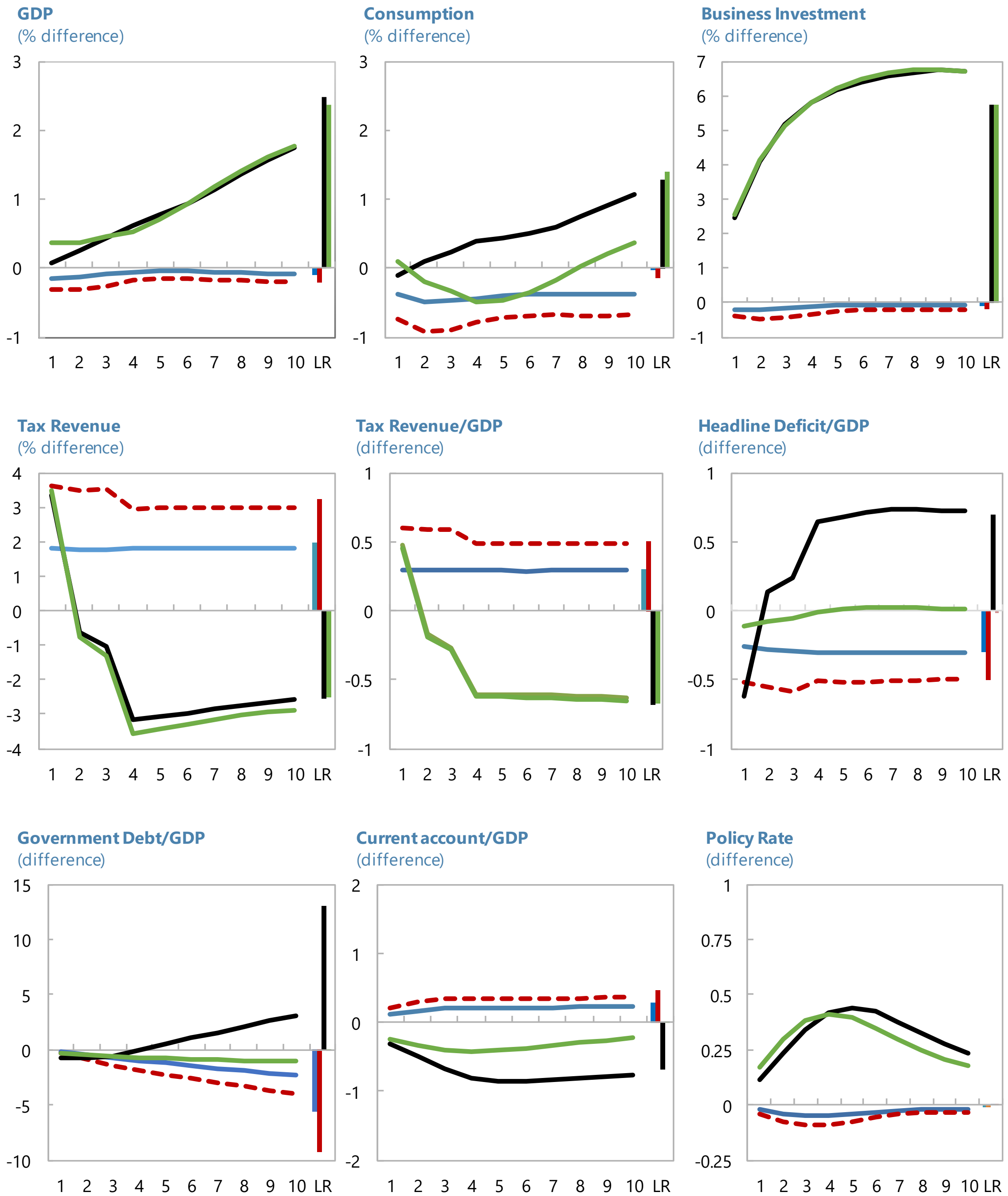
[13] On government spending, the simulations assume that 75 percent of any change is on government investment and the rest on government consumption.

[14] The FL sought to maintain the headline deficits embodied in the 2018 Medium Term Fiscal Framework.

[15] Consumption taxes raise the relative price of consumption and hence lower consumption. Additionally, higher consumer prices result in lower real wages which in turn further reduce disposable income and hence consumption. Labor supply declines in response to lower real wages, though lower consumption dampens such effect. Higher taxes on disposable income lower disposable income and discourage labor supply. Consumption declines.

Figure 1. Macroeconomic Impact of the Financing Law



Source: GIMF simulations.

Note: x-axis denotes years, LR=Long-run/steady-state.

23. Beyond 2019, government expenditure cuts are needed to offset tax revenue losses to meet the fiscal rule's deficit targets. The difference between the green and black lines shows the government's expenditure restraint needed to maintain the pre-reform deficit path. Additional revenues in 2019 result in higher government spending but lower tax revenues from 2020 onwards imply spending cuts. As a result, the level of GDP is higher in 2019 and 2020 relative to the case where there are no changes in expenditure (the black line) but undershoots in 2021–23 following the expenditure cuts. In the long-run, results are similar to the case of no expenditure adjustment, although there are differences in the headline deficit, government debt, current account and domestic consumption. Having discussed the static and dynamic impact of the main tax changes in the FL on revenues and the macroeconomy, we now turn to a more detailed discussion of each individual tax change.

F. Conclusion

24. Despite various reforms in recent years, non-oil tax revenues in Colombia remain comparatively low. Colombia retains a complex tax code and collects relatively low revenues from PIT and VAT relative to regional peers and OECD countries. The complexity of the tax system together with limited resources at the tax authority has led to widespread evasion (OECD, 2015).

25. The financing law sought to address some of these issues in a growth-friendly way. Three higher PIT rates and a wealth tax were introduced to improve progressivity; the corporate tax burden was reduced by lowering CIT rates, crediting against CIT the subnational ICA tax and allowing input credit for VAT on capital goods.

26. The Financing Law should raise tax revenues in 2019 but will likely create shortfalls thereafter. Tax revenues are estimated to increase by 0.7 percent of GDP in 2019 stemming mainly from base changes to VAT and rate changes to PIT, wealth and dividend taxes. A gradual reduction in CIT rates and allowing VAT credits for capital goods and subnational ICA tax will more than offset the revenue gains from other measures and will likely curb tax revenues from 2020 onwards. An additional concern is the number of significant special tax regimes that were adopted, which will further undermine tax revenue as a percentage of GDP.

27. The model-based simulations point to sizeable increases in private investment. The simulations suggest that the Law could boost medium-term growth by around 0.2 percent of GDP but will reduce tax revenues by over ½ percent of GDP in the medium-term. The key channel is through a lower corporate burden through lower CIT and allowing input credit for VAT on capital goods.

28. The dynamic analysis is preliminary and could be refined in several dimensions. As noted earlier, the simulations assumed that the Financing Law is fully credible and that no further changes may be needed. If agents thought that further tax revenue measures, rather than expenditure cuts, would be needed to overcome the projected revenue losses of the Financing Law from 2020 on, the results may be different. For instance, if agents did not believe that the lower tax burden on corporates would be permanent, the impact on investment would we significantly lower,

notably in the long-run. On the other hand, the simulations do not consider potentially important aspects of the Colombian economy such as informality and misallocation. To the extent that the lower tax burden on corporates reduces informality and misallocation, the results could be even larger. Related to this point, the model does not allow for endogenous firm creation. To the extent that the tax reform boosts activity and the tax burden on corporates is lower, more firms may be created, further boosting activity. Another aspect that is not considered by this framework is the potential impact on inequality and poverty.

References

Cabrera, Omar Sebastian, 2017, "El impuesto sobre las ventas en la importación y adquisición de bienes de capital: Un desajuste del sistema tributario colombiano," *Revista del Instituto Colombiano de Derecho Fisca*l (November).

Carton, Benjamin, Emilio Fernández Corugedo, and Benjamin Hunt, 2017, "No Business Taxation Without Model Representation: Adding Corporate Income and Cash Flow Taxes to GIMF," IMF Working Paper No. 17/259 (Washington: International Monetary Fund).

Hanni, Michael, Ricardo Martner, and Andrea Podesta, 2015, "The Redistribute Potential of Taxation in Latin America," CEPAL Review No. 116.

Hutton, Eric, 2017, "The Revenue Administration—Gap Analysis Program: Model and Methodology for Value-Added Tax Gap Estimation," Technical Notes and Manuals (Washington: International Monetary Fund).

Kumhof, Michael, Douglas Laxton, Dirk Muir, and Susanna Mursula, 2010, "The Global Integrated Monetary Fiscal Model (GIMF)—Theoretical Structure," IMF Working Paper No. 10/34 (Washington: International Monetary Fund).

Ministerio de Hacienda y Crédito Público, 2018, *Marco Fiscal de Mediano Plazo* 2018.

OECD, 2015, *Revenue Statistics in Latin America and the Caribbean 1990–2015,* Paris: OECD Publishing.

_____, 2018, *Revenue Statistics in Latin America and the Caribbean 2018,* Paris: OECD Publishing.