



PERU

SELECTED ISSUES

June 2017

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PERU

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Approved By
**Western Hemisphere
Department**

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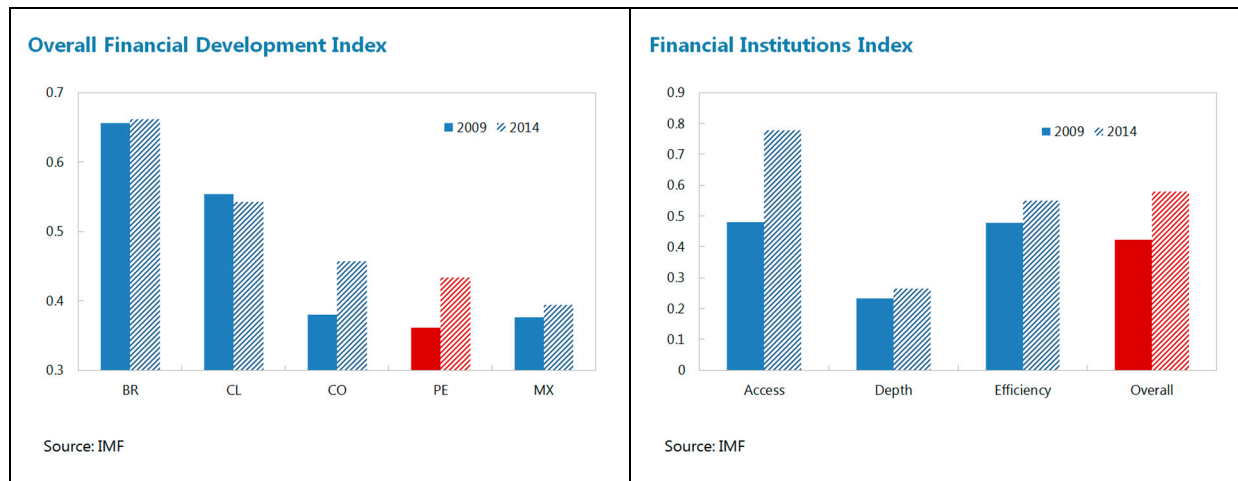
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FINANCIAL DEEPENING IN PERU—DO REGIONAL CHARACTERISTICS MATTER?¹

This chapter presents an overview of the financial deepening achievements and challenges in Peru. It focuses on informality as a barrier to greater financial deepening, and the associated links with branch penetration and usage of financial services in the different regions of the country.

A. Introduction

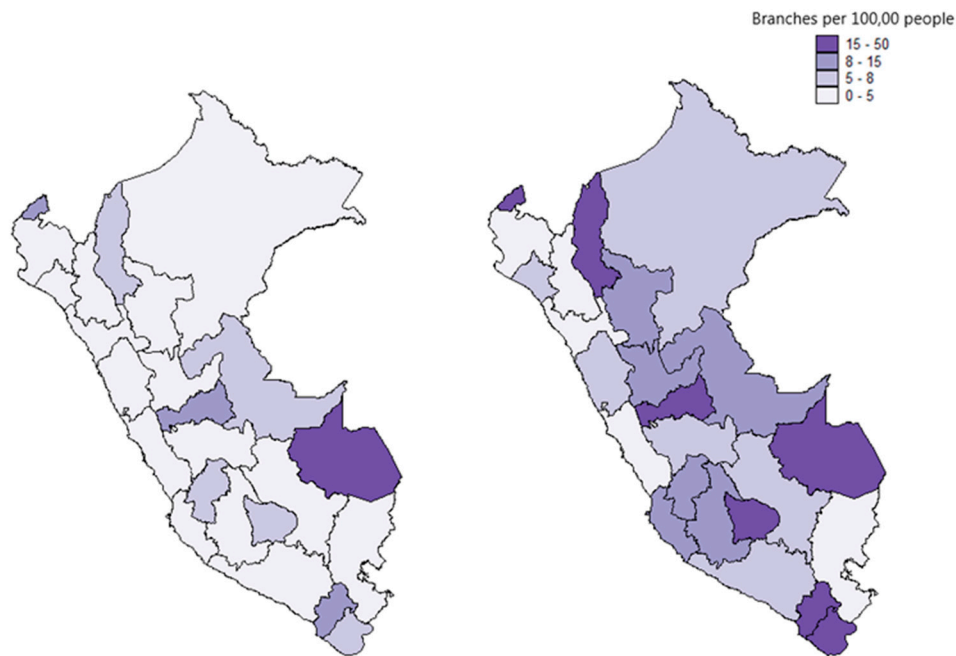
1. Peru has recorded remarkable rates of GDP growth in the past decades, and this has been accompanied by progress in financial development. Real GDP growth has averaged 5.7 percent in the last decade, as the economy went through a period of macroeconomic and financial stability. Accompanying this was progress in financial development, as the Peruvian financial system recovered from the financial turmoil of the late 1980s. The Financial Development Index (Sahay et al, 2015), measured in 2009 and 2014 shows an improvement for Peru. A large contribution to Peru's improvement in this index is from improved access to financial institutions (Chart). This can be seen in the increase in the penetration of financial institution branches (banks and non-banks) over the past ten years, across most regions in Peru, controlling for population size (Chart). The number of financial institution branches per 100,000 adults alone in the country have increased from 3.17 in 2005 to 13.71 in 2015.



¹ Prepared by Yen Mooi (MCM) and Adrian Robles (WHD). We would like to thank Ravi Balakrishnan and Pedro Rodriguez (both WHD), Martin Cihak, Jennifer Moyo (both MCM), Deniz Igan and Maria Soledad Martinez Peria (both RES), for early discussions and ideas. We benefitted from discussions with Felipe Vasquez and Miguel Arce from Pagos Digitales Peruano; and are grateful to Lucia Romero, Manuel Luy (both SBS), and Jose Robles Franco (INEI) for providing data.

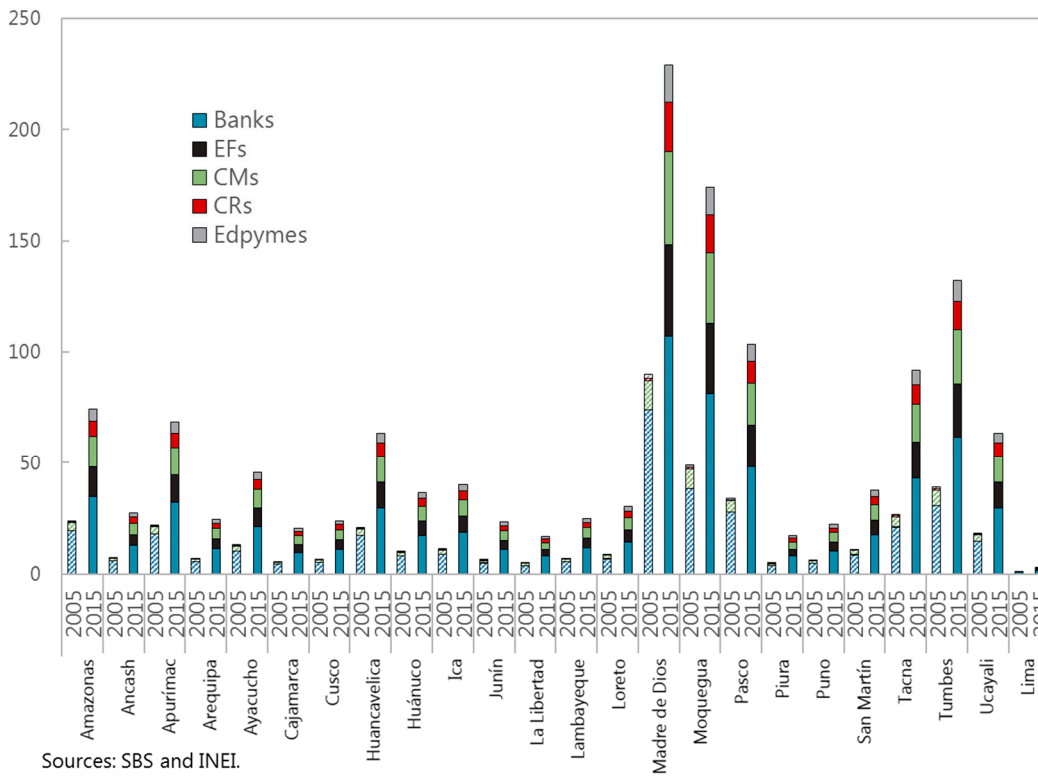
Figure 1. Financial Institution Branches by Type and Region

Number of Branches per 100,000 People by Region
2005 2015



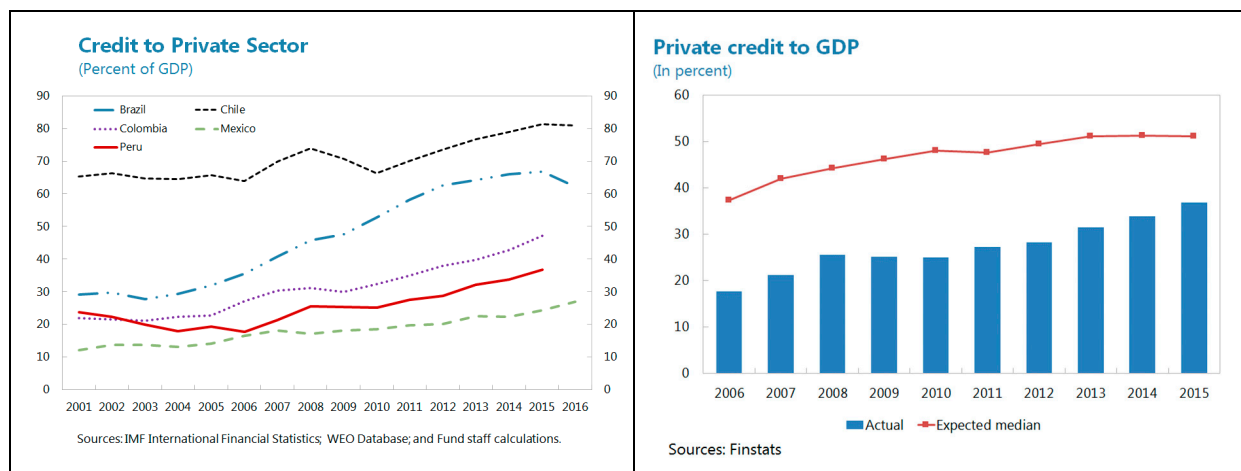
Sources: SBS and INEI.

Number of Branches per 100,000 People

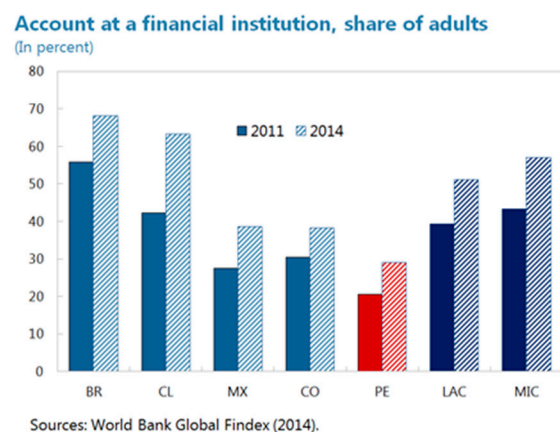


Sources: SBS and INEI.

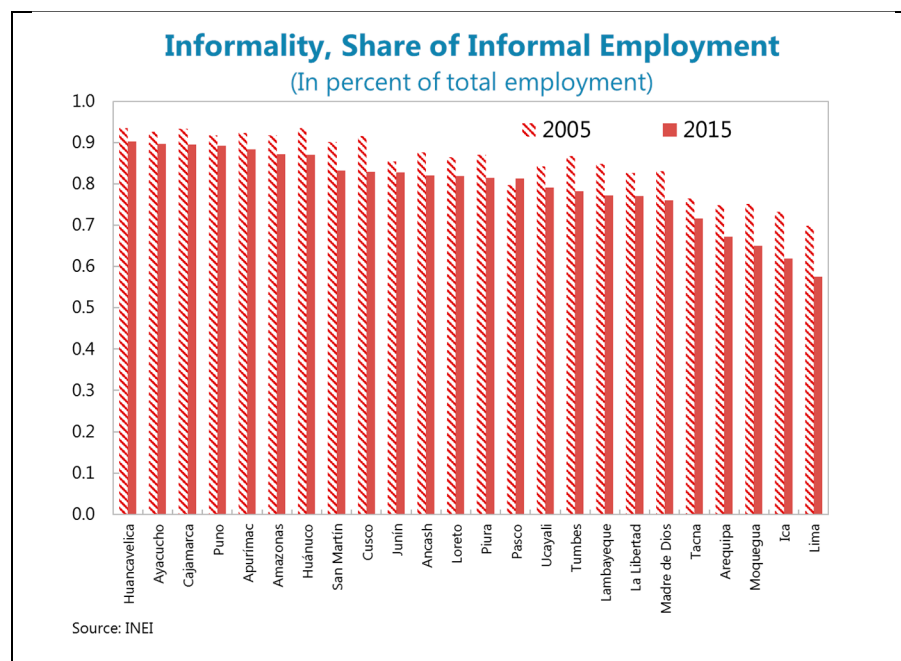
2. While substantial progress has been made on various indicators of financial deepening, Peru lags regional and income peers in several respects. Peru's overall financial development index is modest, and its stage of financial depth does not fully align with domestic fundamentals. For example, private credit to GDP at around 40 percent of GDP is one of the lowest in the region (Chart), and below the expected level for a country at Peru's income and population (Chart). Studies also show that Peru has a negative gap in the depth and efficiency of financial institutions, which could be due to weak frameworks for obtaining or seizing collateral (IMF 2015).



3. Gaps also remain particularly in the financial inclusion of households. Peru has a large negative gap for household financial inclusion with respect to domestic fundamentals (Dabla-Norris et al, 2015). Despite a large expansion of access to financial institutions through branches, which helped to increase account ownership of individuals from 20 percent of total adults in 2011 to 30 percent in 2015, Peru lags comparators (Chart). This also suggests that to serve large segments of the population, existing infrastructure is not sufficient (Rojas-Suarez, 2016).



4. An important feature of the Peruvian economy is informality. Peru had an informality ratio of 73.2 percent in 2015, with large variations across regions. While informality remains high, it has declined across all regions in the last decade, though the magnitude of this decline differed across the regions. Informality is frequently linked with persistent poverty, labor market inefficiencies and lower productivity. Informality also imposes costs on formal firms, which creates disincentives for formalization. A study by Morón et al (2015) finds that greater financial deepening has a positive effect on the formalization of Peruvian firms.



B. Empirical Analysis

5. The analysis examines the relationship between informality and other regional characteristics with financial access and usage across the different regions in Peru. The question of interest is whether regional characteristics, in particular the level of informality, matter for branch penetration as well as depth of financial services (measured by deposits and credit) in the different regions of Peru. Previous studies, for example Vanroose (2016), found that Peruvian microfinance institutions (MFIs) increase presence in districts with higher levels of development, and seem to follow a principally commercial strategy. The paper also found that districts that already had banks have a higher probability of MFI presence.

6. A new dataset was constructed, combining regional data from the *Instituto Nacional de Estadística y Informática* (INEI) and financial institution data from the *Superintendencia de Banca, Seguros y AFP* (SBS). The dataset contains annual data from 2004 to 2015 for two major categories of financial institutions (banks and non-banks) in 24 regions of Peru (excluding Callao).² Financial institution data include branches, deposits and credit for each financial institution in each region, as well as institution-level measures such as profitability and size.

7. Financial access was proxied by branch penetration in each region, and usage by credit and deposits. We used the Poisson model to estimate the relationship between financial access (measured by branches per 100,000 people for each financial institution) and regional characteristics.³ We based our methodology on similar work by Anastasi et al (2006) on

² The non-banks included in the sample are *Cajas Municipales*, *Cajas Rurales*, *Empresas Financieras* and *Edpymes*. Data does not include correspondent banking agents.

³ The Poisson model was used because the dependent variable of branches per 100,000 is a count variable.

Argentina, and Beck and Martinez Peria (2008) on Mexico. These papers were interested in outreach indicators at a disaggregated level in the country of analysis, and used explanatory variables based on the angle of interest. In our study, we were interested in the role of informality by using the lagged variable of the informality ratio, which is the percentage of informal employment in total employment. Other regional characteristics controlled for were inflation (natural logarithm of the inflation index); and lagged values of financial depth (proxied by the ratio of credit to GDP) and GDP growth. Time-variant institution-specific characteristics such as size (natural log of assets) and profitability (return on assets) were also added as controls, as well as a measure for concentration of each sector (the Herfindahl-Hirschman index, or HHI). The HHI was measured for two categories: banks and non-banks, as these two groups likely do not compete for the same kind of business. For usage, the natural log of credit and deposits were used as dependent variables, with regressors being the lagged values of informality, financial depth, GDP growth; contemporaneous measures of inflation and population; and the institutional controls of profitability and size, as well as the HHI. Standard errors were clustered at the regional level. Generally, the regression specifications can be written as:

$$Y_{k,i,t} = \beta_0 + \beta_1 X_{k,t} + \beta_2 Z_{i,t} + \beta_3 W_{k,i,t}$$

where k represents regions and i financial institutions. Thus, X are regional variables, Z financial institution variables, and W variables that take into account the region and the financial institution (e.g. HHI for banks and non-banks in the region).

8. Informality was negatively associated with branch penetration for both banks and non-banks, but for usage only for banks (Table 1 in Appendix). These results suggest that informality matters when financial institutions decide whether to enter – this applies to both banks and nonbanks. Once they are present in a region, however, they serve different clientele. Informality was a negative and significant coefficient only for banks in both cases of deposits and credit. High levels of informality could be linked to a stronger preference for cash transactions, which would affect both banks and non-banks. Higher informality could also contribute to the lack of proper documentation to fulfill know-your-customer requirements at financial institutions, and this is a bigger barrier for banks which require more documentation compared to non-banks. Non-banks use different methods to evaluate the capacity of their borrowers, such as using scoring methods that involve both quantitative and qualitative factors. Their borrowers tend to be microenterprises or small entrepreneurs, who have income streams from various sources (both formal and informal).

9. The lack of financial literacy and low income levels are also related reasons. GDP per capita, the poverty rate and the illiteracy rate were highly correlated with informality (negative correlation for GDP per capita and positive for poverty and illiteracy), and can be viewed as proxies for informality. They were used as instruments for informality in IV-GMM specifications as robustness checks, and the main results did not change (Table 2 in Appendix). In a 2013 survey conducted by the Center for Financial Inclusion, the lack of financial literacy in Peru was cited as a major obstacle to financial inclusion. The survey also cites the high cost of service delivery in the most remote, poor, and excluded areas, which are also areas with higher levels of informality.

10. Other characteristics like concentration mattered differently for banks and non-banks. For banks, concentration seemed to matter only in branch penetration, and was negative and significant. Taken together with the high margins in the industry, this could be suggestive of a lack of competition. For non-banks, the concentration variable was positive and significant for usage, suggesting that scale effects could be at play. For both banks and non-banks, financial depth of the region was negative and significant for branch penetration, while positive and significant for usage. One explanation for former could be that this reflects the entry strategies of financial institutions, where entry is higher in markets that are less tapped. Financial depth of the region is associated with higher credit and deposits extended and collected by the financial institutions, perhaps signifying more comfort and ease of usage, which begets more usage.

C. Recent Financial Inclusion Initiatives in Peru

11. Authorities have financial inclusion on the developmental agenda. Peru is a signatory to the Maya Declaration, which was launched in 2011 and is a commitment platform towards financial inclusion goals.⁴ The authorities launched the National Financial Inclusion strategy in July 2015, which sets targets to increase the access to financial institutions accounts to 50 percent of adults by 2018, and 75 percent by 2021. The regulatory environment is also favorable—the Global Microscope Survey (2014) ranks Peru top amongst 55 countries for having a favorable and fostering environment for financial inclusion. Amongst the advances in regulation supportive of financial inclusion is a law on electronic money, passed in 2013.

12. The private sector, through a novel partnership, launched a fully interoperable mobile money platform in 2015.⁵ This platform was enabled by the passing of the electronic money law. In February 2016, an e-money product was rolled out (*Billetera Móvil*, or BiM), which enables users to conduct transactions through their mobile phones. Users can cash-in/out, transfer money to others, check account balances, and top-up mobile airtime. The platform works on relatively low-tech feature phones and has a simple interface. Users register with their national ID and mobile phone number.

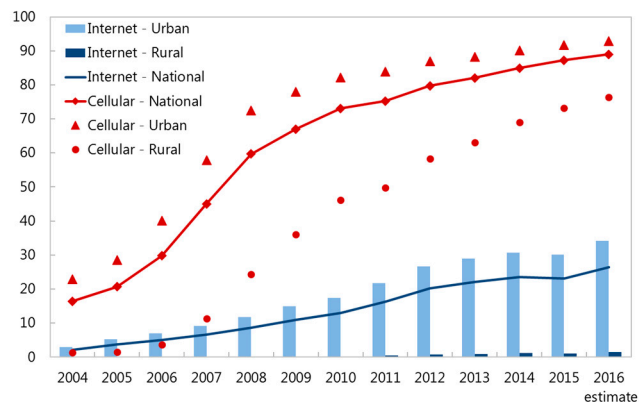
13. Once current operational challenges are resolved, the digital platform could be expanded. When the BiM network has gained sufficient momentum in usage and has a reliable network of agents—registrations are promising so far at 300,000 as of February 2017, but actual usage is low—it could be used for government social protection transfers such as subsidies, or pension payments. In time, the platform could also be used to offer savings and microloans—transaction data could be used to generate credit scores and price microcredit risk.

⁴ The Maya Declaration is a commitment platform for members of the Alliance for Financial Inclusion, which is a network of policymakers in financial inclusion policy and regulation.

⁵ This platform is run by a private company Pagos Digitales Peruano (PDP), which is the initiative of a partnership between more than 30 financial institutions and the major telecommunications companies in Peru.

14. Exploiting mobile payment technology is useful, as Peru's rate of mobile penetration is very high even in the rural areas. Initiatives such as BiM are attempting to use mobile technology to open new channels of service for the underserved population. For financial institutions, it is an alternative to the costlier brick-and-mortar branches. Once users start to gain trust and comfort in using payments services through mobile channels, they could eventually move into other products such as deposits and credit. However, the right incentives have to be in place for all the parties involved, including the financial institutions, agents, and users.

Mobile and internet penetration, share of households
(In percent of total)



Source: INEI

15. Notwithstanding the conducive regulatory environment and active private sector initiatives, several challenges remain. Reaching the population in geographically remote and poor areas is difficult. Further government efforts could focus on:

- Reducing informality, for example through labor market regulations (see forthcoming Working Paper by Munkacsi, Roch, and Rodriguez). In this regard, the Social Protection Commission is preparing recommendations on increasing formalization in the economy.
- Improving literacy and financial education. Financial literacy programs should start early (e.g. through school curricula) and could be targeted and tailored to the needs and uses of the population (e.g. those in rural and informal areas might use different products and services, or have different concerns related to using financial services). The SBS has been working with the Ministry of Education to train secondary school teachers, and has a financial education portal on its website with programs targeted towards different groups (children, teachers, adults). The central bank holds talks related to monetary policy and the economy for university and technical students. In the private sector, there have been initiatives in extending financial literacy programs in local languages to the rural communities. Notwithstanding these efforts, a coordinated national program involving major public and private sector stakeholders could be useful.
- Better-utilizing the vast branch network of the state-owned Banco de la Nacion, which has the largest branch network in the country. Banco de la Nacion has a wide reach and branches in remote areas where they are sometimes the sole financial services provider. The coverage is currently 66 percent of districts in Peru, with a goal of reaching full coverage by 2021.
- Examining the impact of concentration on competition.

Appendix

Table 1. Regression Results

Poisson: Branches per 100,000				Pooled OLS: Ln(institutional deposits)			
	All	Banks	Non-banks		All	Banks	Non-banks
L.Informal Ratio	-3.948*** (1.16)	-4.042*** (1.15)	-3.819** (1.20)	L.Informal Ratio	-3.306* (1.59)	-6.765*** (1.40)	-2.18 (2.22)
L.Credit over GDP	-0.056*** (0.01)	-0.057*** (0.01)	-0.055*** (0.01)	HHI Regional	0.765 (2.64)		
L.Real GDP Growth	0.001 (0.12)	-0.07 (0.10)	-0.183 (0.11)	L.Deposits over GDP	0.046** (0.01)	0.042** (0.01)	0.040* (0.02)
Ln(Inflation)	0.22 (1.46)	-0.481 (1.06)	2.511 (1.37)	L.Real GDP Growth	0.114 (0.08)	0.046 (0.09)	0.089 (0.12)
HHI Regional	-10.299* (4.99)			Ln(Inflation)	-3.601*** (0.44)	-3.612*** (0.70)	-1.905* (0.91)
Profitability	4.107*** (0.42)	3.008*** (0.54)	5.699*** (0.45)	Ln(Population)	0.659*** (0.10)	1.078*** (0.12)	0.394* (0.15)
Size	0.464*** (0.01)	0.502*** (0.01)	0.557*** (0.04)	Profitability	-4.993 (4.17)	-7.265 (5.31)	8.174 (5.40)
HHI Bank Regional		-28.082*** (8.01)		Size	0.660*** (0.05)	1.167*** (0.04)	0.195 (0.17)
HHI Non-bank Regional			0.881 (0.81)	HHI Bank Regional		8.174 (8.76)	
Constant	0.359 (7.83)	7.666 (6.47)	-13.673* (6.25)	HHI Non-bank Regional			1.037** (0.37)
Chi2	36048.045	34168.104	14276.144	Constant	21.751*** (3.04)	13.719* (5.22)	19.947*** (3.94)
Observations	9502	2812	6594	R2	0.457	0.761	0.217
				Observations	3,313	1,689	1,528

Pooled OLS: Ln(institutional credit)			
	All	Banks	Non-banks
L.Informal Ratio	-2.437*** (0.53)	-5.986*** (0.73)	-0.852 (0.86)
HHI Regional	-0.673 (1.42)		
L.Credit over GDP	0.026*** (0.00)	0.033** (0.01)	0.024** (0.01)
L.Real GDP Growth	0.172** (0.06)	0.180* (0.07)	0.119 (0.08)
Ln(Inflation)	-3.104*** (0.33)	-3.203*** (0.53)	-4.057*** (0.49)
Ln(Population)	0.615*** (0.05)	1.086*** (0.09)	0.365*** (0.08)
Profitability	2.548* (1.07)	10.103* (3.88)	0.795 (0.73)
Size	0.538*** (0.05)	0.935*** (0.03)	0.737*** (0.03)
HHI Bank Regional		-2.477 (7.39)	
HHI Non-bank Regional			1.144*** (0.25)
Constant	21.630*** (1.58)	17.470*** (3.83)	22.810*** (2.27)
R2	0.402	0.627	0.384
Observations	4,162	1,704	2,362

Table 2. Robustness Checks Results

IV Poisson GMM: Branches per 100,000				IV GMM: Ln(institutional deposits)			
	All	Banks	Non-banks		All	Banks	Non-banks
L.Informal Ratio	-3.556** (1.26)	-3.501** (1.26)	-3.586** (1.28)	L.Informal Ratio	-4.283** (1.41)	-8.124*** (1.56)	-3.592 (1.84)
HHI Regional	-6.298 (4.39)			HHI Regional	-2.902 (2.27)		
Credit over GDP	-0.049*** (0.01)	-0.048*** (0.01)	-0.050*** (0.01)	L.Deposits over GDP	0.036** (0.01)	0.027* (0.01)	0.032* (0.01)
L.Real GDP Growth	-1.359 (0.89)	-1.508* (0.72)	-1.305 (1.03)	L.Real GDP Growth	-0.929 (0.53)	-0.867 (0.60)	-1.405 (0.72)
Ln(Inflation)	-0.634 (1.53)	-1.634 (1.32)	1.205 (1.46)	Ln(Inflation)	-3.739*** (0.64)	-3.868*** (1.09)	-1.709 (0.94)
Profitability	6.423*** (0.24)	4.021*** (0.60)	7.697*** (0.23)	Ln(Population)	0.758*** (0.10)	1.171*** (0.14)	0.492*** (0.13)
Size	0.426*** 0.00	0.467*** 0.00	0.493*** (0.02)	Profitability	-3.273 (4.43)	-0.656 (5.96)	6.814 (6.12)
HHI Bank Regional		-27.687** (9.92)		Size	0.662*** (0.05)	1.118*** (0.04)	0.217 (0.16)
HHI Non-bank Regional			0.54 (0.62)	HHI Bank Regional		6.468 (8.08)	
Constant	3.807 (7.85)	12.973 (8.42)	-6.887 (6.60)	HHI Non-bank Regional			1.069** (0.40)
Overid test (p)	0.2734	0.2561	0.2764	Constant	23.731*** (3.47)	17.128* (6.98)	19.801*** (4.02)
Observations	7100	2112	4892	R2	0.449	0.742	0.234
				Observations	2641	1302	1243
IV GMM: Ln(institutional credit)							
	All	Banks	Non-banks				
L.Informal Ratio	-2.575*** (0.40)	-6.742*** (0.68)	-0.434 (0.48)				
HHI Regional	-2.061 (1.46)						
L.Credit over GDP	0.025*** 0.00	0.029** (0.01)	0.026*** 0.00				
L.Real GDP Growth	-0.162 (0.28)	-0.267 (0.49)	-0.383 (0.30)				
Ln(Inflation)	-3.026*** (0.41)	-3.197*** (0.71)	-3.414*** (0.53)				
Ln(Population)	0.625*** (0.05)	1.062*** (0.09)	0.394*** (0.06)				
Profitability	2.487* (1.07)	6.26 (5.34)	(0.29) (0.69)				
Size	0.554*** (0.04)	0.965*** (0.03)	0.802*** (0.03)				
HHI Bank Regional		-3.318 (6.56)					
HHI Non-bank Regional			0.985*** (0.21)				
Constant	21.397*** (1.89)	17.969*** (4.21)	18.513*** (2.49)				
R2	0.383	0.603	0.414				
Observations	3356	1305	1955				

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IMPLEMENTING A MEDIUM-TERM BUDGET FRAMEWORK IN PERU (MTBF)¹

This chapter presents the ongoing reform in Peru to implement a Medium-Term Budget Framework (MTBF) based on three-year rolling expenditure ceilings. Similar international experience is presented with different options. The chapter argues that an MTBF can improve consistency between the annual budget and the macro-fiscal aggregates, and enhance budget credibility. The chapter also argues that the 2018 budget should be a transition exercise for the MTBF. The latter will need to be monitored ex-ante and ex-post during the 2018 budget preparation and execution phases to ensure quality of the projections, credibility of the ceilings, and consistency with the macro-fiscal projections and fiscal rules.

A. Introduction

1. The government of Peru has implemented a broad Public Financial Management (PFM) reform agenda in recent years. On the macro-fiscal side, this agenda focuses on enhancing transparency and credibility. Fiscal rules were adopted in 1999 as part of the fiscal responsibility law, then amended later in 2013 and 2016; fiscal reporting was extended to include a medium-term fiscal framework (in Peru called Marco Macroeconómico Multianual, MMM) and a report on contingent liabilities; and the independent fiscal council was set up in 2015. The latter is already providing independent macro-fiscal analysis on the government's projections and compliance with the fiscal rules.

2. The current government is advancing the PFM agenda even further, seeking to improve fiscal discipline and planning through a MTBF. The implementation of the MTBF started gradually in January 2017. It is intended to help order the annual budget preparation, avoiding a historic incrementalism in expenditures while keeping consistency with the limits under the fiscal rules (nominal deficit, debt and general government expenditure growth ceilings).

3. The Fiscal Affairs Department (FAD) is providing technical assistance to implement the MTBF. The MTBF is envisaged to define three-year ceilings for each budget line and for each ministry and regional government. The roll-out to the municipalities will take place in a second stage.²

4. This chapter is organized as follows. Section B describes the MTBF, its justification, and international experience. Section C presents its implementation in Peru, and Section D concludes.

¹ Prepared by Virginia Alonso Albarran, FAD.

² FAD has also worked with the authorities in other initiatives. In particular, in 2015 it conducted a Fiscal Transparency Evaluation (FTE) for Peru. The FTE recommendations focused on improving budget preparation, macro-fiscal forecasting, fiscal and accounting reporting, and management of fiscal risks. The report is available at <http://www.imf.org/external/np/fad/trans/>

B. International Experience on Implementing Medium-Term Budget Frameworks

Concepts and Process

5. An MTBF is usually defined as a set of institutional arrangements for prioritizing, managing and presenting revenue and expenditure in a multi-year perspective. In the budget planning cycle, it comes after the medium-term fiscal framework (MTFF) is prepared, and it serves as the basis of the annual budget formulation.

6. The MTFF is the multiannual macroeconomic scenario that presents the fiscal forecast of the aggregate expenditures, revenues, and financing. It explains how the fiscal targets will be met, the economic policy measures envisaged during the period, and analyzes different macroeconomic and risk scenarios. It can calculate the fiscal space for new measures given the fiscal targets and the revenue forecast compared with baseline expenditure. The fiscal space can be allocated to new measures after computing a reserve margin for fiscal risks and other calculation errors.

7. Based on that, the MTBF sets the multiannual expenditure ceilings by budget lines.³ The top-down approach considers the aggregate restriction given by the fiscal targets before setting the ceilings. At the same time, the MTBF applies a bottom-up approach by taking into consideration the budget plans proposed by the sectors and government priorities. These plans must be consistent with the aggregate ceilings and observe the fiscal rules. Thus, both approaches reinforce each other in an iteration process to reach consistency.

8. The last step is the preparation of the annual budget, that is coincidental in terms of the overall ceilings with the first year of the MTBF. The budget usually contains more detailed expenditures following the specific rules set by the budget law of each country.

Justification

9. Countries that successfully introduced the MTBF aim at three basic purposes: to reinforce fiscal discipline, facilitate a more strategic allocation of expenditure, and encourage a more efficient inter-temporal planning (Harris, et. al., 2013; Brumby and Hemming, 2013).

10. Fiscal discipline is reinforced by constraining budget appropriation and execution in future years to levels consistent with the Government's medium-term fiscal objectives. The total expenditure that allows compliance with the fiscal rules or targets is a restriction to the annual budgets defined by the MTBF.

³ Budget lines are economic categories of expenditure such as wages, investments, and interest, and/or administrative units such as ministries and government agencies.

11. A more strategic allocation of expenditure is implemented by abstracting from the immediate pressures that impinge upon the annual budget process. In this regard, a prioritization effort is desirable from the government to guide the multiannual expenditure allocation.

12. More efficient inter-temporal planning is facilitated as line ministries count on more predictable resources. At the macro level, it is especially important for policies with a long-term impact on the revenue and expenditure side, such as on pensions and long-term investment decisions. The MTBF improves fiscal transparency through better planning, and information communicated among stakeholders such as costing of policies and underlying assumptions.

International Experience

13. Experiences with MTBFs are multiple and there is no one-size-fits-all model.

Countries chose their options influenced by their legal and institutional arrangements. For example, the MTBFs can be more or less comprehensive depending on the coverage of the expenditure ceilings that the government wants to control (public sector, central government, or only some ministries or sectors), the level of expenditure subject to ceilings (by program or more aggregated expenditure), and the binding degree of the ceilings (most are usually more binding on the first year and less in subsequent years) and the process of ceilings update (annual, biannual, etc.).

14. The ceilings update is one of the features attracting more attention. The MTBF includes different degrees of binding expenditure decisions over a horizon of three to four years. Even with fixed ceilings and under limited conditions, the annual ceilings have a degree of flexibility to accommodate changes in the macroeconomic scenario, ex-post deviations from fiscal rules, accounting reclassifications, authorized carry-overs, new measures and new government priorities. Some experiences in this regard are illustrated in the text table. The main options are:

- *Rolling ceilings and indicative estimates:* Australia and Canada follow this approach with multiannual ceilings that are rolling over adding a year to the forecast, and with annual updates.
- *Rolling estimates within a fixed total expenditure ceiling:* Sweden has a fixed total expenditure ceiling per the fiscal rule, and indicative estimates for more disaggregated expenditure. An annual buffer that increases in time is maintained to avoid breaching the total ceiling.
- *Fixed and binding:* France (biannual) and the United Kingdom. The binding degree is higher in the first year and at total and ministry levels but diminishes through the coming years for more disaggregated programs.

Binding Degree of the Ceilings and Conditions to Update in EU Countries		
Level of strictness		Member State
1	Ceilings/targets are not expected to be changed whatever the circumstances (unless a new government comes to power or the division of tasks among government levels is changed).	Sweden, Finland
2	Ceilings/targets can only be increased provided that sources of funding of the additional expenditure are identified ex-ante.	Denmark, Netherlands
3	Ceilings/targets can be adjusted in response to changes in a number of specific parameters defined by legislation or other public procedural documents (e.g. changes in pensions, unemployment benefits, etc.) and such changes need to be explained publicly.	Austria, Ireland, Latvia
4	Ceilings/targets can be changed in a number of situations foreseen by legislation or other public procedural documents (e.g. substantial change in macroeconomic forecasts, new government in power, extraordinary circumstances, etc.) and such changes need to be explained publicly.	Belgium, Bulgaria, Cyprus, Greece, Hungary, Italy, Malta, Poland, Romania
5	Ceilings/targets can be changed at the discretion of the government but changes need to be explained and reputational cost is involved.	Czech Republic, Estonia, Spain, France, Lithuania, Luxembourg, Portugal, United Kingdom
6	Ceilings/targets can be changed at the discretion of the government without any public explanation.	Germany, Croatia, Slovenia, Slovakia

Source: DG ECFIN Fiscal Governance Database

15. Tailoring the framework to country needs and traditions is key. Some countries have in principle a similar model but with variations in the implementation. For instance, France and UK have binding ceilings. However, France tends to revise more often, setting three-year aggregate ceilings, and binding for two years at the ministry or sector level with the third year being indicative. At the program level, however, the first year is binding and the two subsequent years are indicative. Also in France, the Ministry of Finance tends to centralize control, whereas in the UK more importance is given to making ministries more accountable to deliver the targets.

16. Rolling and indicative ceilings are more common. For instance, in Australia and Canada, the MTBF defines three-year ceilings for budget lines that are binding the first year (annual budget), and the two subsequent years may be updated subject to conditions. Other countries, such as Sweden, have a binding aggregate ceiling according to the fiscal rules adopted in advance; but it has also rolling and indicative ceilings for 27 policies that in sum comply with the aggregate ceiling.

17. The experience shows that rolling frameworks are not purely indicative and that fixed frameworks are not fully binding. The most credible ceilings keep a reserve margin

which facilitates not allocating all the allowed aggregate ceiling to budgetary items. This buffer helps managing deviations without modifying the ceilings. Also, the reserve increases in time in the projection horizon as uncertainty is higher and to accommodate new measures. Sweden is a case in point.

18. There are also various options related to the type of expenditure and ceilings' coverage:

- Aggregate expenditure ceilings are established in Austria, Sweden, Netherlands.
- More detailed allocations are common in France, South Africa, and Australia. The ceilings can be even at the program level but narrowing the scope to the central government for some policies. Also, levels of aggregation can be combined (Sweden) with an overall ceiling and more detailed ceilings by sector, ministry or program.
- It is not so common to include the subnational governments. However, there are some countries with an MTBF at the subnational level, usually with aggregate levels of expenditure (e.g., Spain).

Key Features of Medium-Term Budget Frameworks in Selected Countries ^{1/}						
COUNTRY	NO. OF 1 ST LEVEL PRIORITIZATION UNITS	FIXITY		MEDIUM-TERM PRIORITIZATION DECISION IN GOV'T	PARLIAMETARY STATUS	
		FIXED	INDICATIVE		LEGISLATED	FOR INFO
MINISTERIAL ALLOCATIONS						
United Kingdom	25	✓		✓		✓
Finland	12		✓	✓		✓
FUNCTIONAL/PROGRAM ALLOCATIONS						
Australia	270		✓	✓		✓
Austria	32		✓	✓	✓	
France	35	✓		✓	✓	
Netherlands	20		✓	✓		✓
Sweden	27		✓	✓		✓
ECONOMIC CATEGORIES						
Belgium	13		✓			✓
Japan	5		✓			✓
Mexico	7		✓			✓

1/Even "fixed" may imply annual updates and rolling over processes some years or subject to conditions.
Source: FAD staff.

19. Publication of an MTBF is usually aligned with the budget. It can be fully embedded in the annual budget submission (Canada, Australia, Sweden) or a standalone document published every two/three years concurrently with the budget (France, UK). The legislative involvement for approval or for information is important as a means to elevate the status of the ceilings and how binding they are, and increases government accountability.

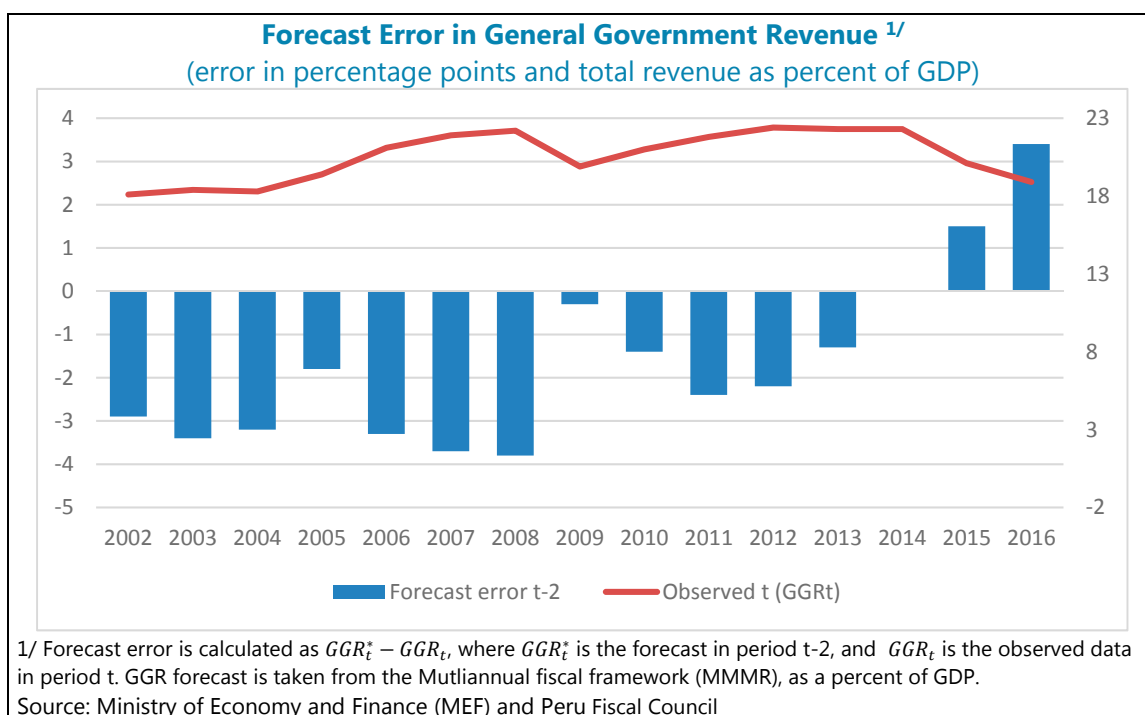
20. Most countries have introduced detailed MTBFs gradually. For instance, in the UK, it was indicative before becoming binding; Australia and France had some years of internal exercises before going public.

C. The Implementation of the MTBF in Peru: Opportunities and Challenges

Motivation of the MTBF in Peru

21. The Ministry of Finance is implementing an MTBF in 2017. In the case of Peru, the MTBF finds its motivation, as in other countries, in reinforcing fiscal discipline, facilitating a more strategic allocation of expenditure in the medium-term, and promoting inter-temporal budget planning. It is intended to replace and improve the existing multi-year budget programming exercise (Plan Multianual del Presupuesto, PMP). The PMP was considered incremental, perceived as a form of expenditure floor by sector, and led to accommodating expenditure demands without strategic medium-term planning in the budget negotiation.

22. An MTBF can strengthen fiscal discipline in Peru as strategic planning is essential to meeting the fiscal targets in a context of increasing budget pressures and declining revenues. In an MTBF in Peru, fiscal targets will be operationalized at the budget level through expenditure ceilings by budget lines. The calculation of these ceilings must be consistent with the aggregate expenditure resulting from the MTF and comply with the deficit, expenditure and debt targets. The new nominal deficit target that replaced the structural balance rule will improve the observability of the target and its translation to budget ceilings calculations. However, it also entails a risk of frequent revisions of the MTBF if the cyclical effect is high and expenditures have to be frequently adjusted to keep the deficit on track because of changes in the revenue forecasts. The forecast error has been a concern expressed by the fiscal council for instance (see text figure). In any case, the MTBF should enhance strategic budget planning, and transparency in the annual adjustments will help better understand the expenditure drivers and improve next years' forecasts.



23. Growing expenditure demands coming from public infrastructure plans and more recently reconstruction needs will benefit from a medium-term framework to allocate the resources in an efficient way. The 2015 FTE identified multiannual investment commitments at 20 percent of GDP. The MTBF takes into account future expenditures coming from public investments, expansion of programs, and future commitments under PPPs or other contingent liabilities. Peru is also working on improving the public investment management system. A new entity, Invierte.pe, has been created and the government expects better absorptive capacity for investment. The MTBF takes into account the investment commitments and plans, and the information of expenditure from the sectors, and calculates fiscal space under the aggregate ceilings to allocate further investment decisions in the medium term in a transparent way.

24. Also, the MTBF will benefit and mutually reinforce the program budgeting already in place. The program and performance budgeting process in place will help prioritization at the sectoral level and to justify new expenditure allocations. Expenditure efficiency will be reinforced in the MTBF when combined with performance information and results. Also, the current program disaggregation may help identifying cost drivers of expenditure that will be needed for the baseline calculations.

MTBF Ceilings Definition in Peru

25. The MTBF has been defined at the level of budget lines, with indicative ceilings except for the first year when the ceiling is binding. The first year of the multiannual ceilings is the annual budget and the two consecutive years can be updated during the preparation of the next MTBF as economic circumstances may change. The aggregation of ceilings should be consistent with the expenditure and deficit rules.

26. The ceilings for each budgetary item are calculated as the baseline (no policy change) plus a margin of variation (positive, negative or null) explained by new measures, envisaged but not approved, plus a margin of reserve for contingencies or for future policies. Budgeting the baselines separate from the new measures is a useful exercise to identify a realistic fiscal space without compromising past commitments (such as ongoing investments). Each entity has to inform the budget directorate of the Ministry of Economy and Finance of its demands for increasing expenditure (under the ceiling) and how they justify it with new measures compared to the trend or baseline scenario.

Challenges Ahead

27. Some pre-requisites for a well-functioning MTBF are the following: i) credible annual budgets, ii) prudent medium-term macroeconomic projections, iii) stable medium-term fiscal objectives, and iv) a comprehensive and unified budget process. If these are not met, the ceilings will lose credibility as deviations from the forecast will prompt frequent annual revisions of the ceilings. The current legal system of reserve balances that can be carried-over leads to large differences between the initial, modified, and finally executed budget (see table).

	Actual vs Initial Budget	Actual vs Modified Budget
Central government	-6.1%	-7.4%
Regional governments	28.5%	-8.3%
Local governments	37.3%	-24.4%
Total expenditure	4.3%	-10.7%

Source: Ministry of Finance, Peru

28. Peru has started to work on the necessary conditions for a well-functioning MTBF, although challenges remain. Overall supplemental budgets are a widespread practice, almost from the start of the year, undermining the credibility of the initial budget and future ceilings. Peru is working on better estimating actual expenditures and incorporating future transfers from the beginning in the budget preparation. Unspent balances from one year rolled over into the next one have also played a role. Better estimates of the use of these funds are being promoted in the new MTBF. Finally, revenue earmarking imposes another challenge to the calculations as revenue projections have to be disaggregated to be linked to expenditure ceilings.

29. The MTBF will be embedded in the institutional budget system and a lever to overcome these problems. Gradually, it is expected that better estimates could be done so that better information is included ex ante in the preparation process and in the initial budget approved by the Congress. Then, the difference with the final outturn could be gradually reduced, something crucial for strategic planning. The reserve margins in the ceiling calculation are a useful tool to cope with changing situations within any given year without changing the multiannual ceilings. This is to preserve the credibility of the ceiling while introducing some flexibility.

30. Peru benefits from other PFM institutions that should help increase the effectiveness of an MTBF. Reforms that support the MTBF process are: i) the fiscal rules framework that provides aggregate targets and the MTF, both of which are well embedded in the budget process; ii) the independent fiscal council that enhances the credibility of the projections and monitors consistency with the fiscal rules through its opinions and analyses; and iii) program and performance budgeting that helps in identifying the cost drivers of expenditures, something needed to calculate the ceilings.

31. An implementation calendar has been proposed by the Ministry of Economy and Finance. Some delays were encountered due to the devastating flooding in 2017 and the challenge of how to include emergency expenditure for reconstruction in budget planning. In April, the Ministry of Economy and Finance published a new directive guiding the process for the entities and new instructions were being prepared to communicate the projection methodology.

D. Conclusions: The Way Forward

32. The MTBF preparation process in Peru is following a similar approach to other successful cases. These elements include: assessing the medium-term impact of present decisions, integrating the MTBF with the budget process, reconciling top-down/bottom-up approaches, separating baseline estimates from discussion of new policies, including reserve margins, and setting clear rules and explanations for ceiling updates to preserve the credibility of the projections.

33. It is essential to align the MTBF preparation with fiscal objectives. There is mutual reinforcement between the MTBF and fiscal rules, and it is important to keep consistency in terms of scope and promote a unified budget process. Coordination between the economy and budget departments of the Ministry of Economy and Finance is key in the process, including on the calendars as the budget process needs inputs from the other departments (especially, macro-fiscal projections, investment commitments and the feasible project pipeline, and data on baselines and costs of policies from the other departments).

34. The MTBF can improve consistency between the annual budget and macro-fiscal aggregates, and enhance budget credibility. This was identified as a weakness in the 2015 FTE. The authorities are implementing the MTBF, aiming at a transparent process to set indicative three-year ceilings for expenditures, with a calendar under implementation. This would help to improve fiscal discipline, inform decisions based on costing of policies, and the predictability of the budget process.

35. Peru is well positioned this year to complete a first MTBF together with the 2018 budget. The process is intended to be continuously improved before the final submission of budget documents and finalized during the execution phase. The following year, the process will be updated with improvements identified from the current year.

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