

STRATEGY FOR GLOBAL ASSET AND LIABILITY MANAGEMENT

2021 - 2024

MINISTER OF ECONOMY AND FINANCE

Waldo Mendoza Bellido

VICE MINISTER OF TREASURY

Betty Armida Sotelo Bazán

ACTING GENERAL DIRECTOR OF PUBLIC TREASURY

Guadalupe Mercedes Pizarro Matos

ACTING DIRECTOR OF FINANCIAL PLANNING AND STRATEGY

Eduardo Alfonso Olavegoya Hurtado

TECHNICAL TEAM

Álvaro Contreras Mellado Yoselyn Granda Vizcarra Malcolm Stewart Robles María Bedoya Palomino Rodolfo Gálvez Quispe Carlos Japay Robles

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INFORMATION

Investor Relations Office

Phone: (511) 311-5930 extension 2871

E-mail: investor@mef.gob.pe

Website: http://www.mef.gob.pe (English version)

General Directorate of Public Treasury

Phone (511) 311-5930 extension 2802 Jr. Junín 319, piso 8° Lima 1 – Perú Website: http://www.mef.gob.pe

Translation by Cecilia Torres Quintana

Message from the Minister of Economy and Finance

The world economy is facing one of the most severe crises in the history of mankind because of the rapid spread of the coronavirus disease 2019 (COVID-19), which has plunged the economy into a period of deep economic recession. To respond to this, Governments have boosted the development of numerous plans to reactivate the economy in order to mitigate the pernicious effects of this pandemic. In addition, high-risk aversion in financial markets has affected growth and investment expectations.

With respect to the implementation of economic programs promoted by fiscal and monetary authorities, domestic market, trade and investment have been successfully redirected. The International Monetary Fund estimates a recovery of the global GDP growth rate by 5.4% in 2021 despite that a 4.9% contraction is expected for the end of 2020. This recovery would be around 3.6% for Latin America in 2021, following a fall by 9.4% in 2020.

In this regard, the Peruvian economy has shown macroeconomic strength, developing one of the most ambitious economic programs, which amounts for around 20% of GDP, destined for a gradual recovery of the economy. The *Reactiva Peru* program, the Fund for Entrepreneurial Support for Micro and Small-Sized Enterprises (Mype, in Spanish) and a fund for the agricultural sector have boosted the economic reactivation, which has led to a GDP growth forecast of 10% in 2021, despite the contraction in growth at the end of 2020.

The current and unusual state-of-affairs calls for an appropriate management of the public resources to support the fiscal position of the country. Accordingly, the Strategy for Global Asset and Liability Management is by itself the instrument for decision-making on financial administration under a responsible management of the assets and liabilities of the Non-Financial Public Sector. The Treasury, with a comprehensive vision of the financial asset and liability management and in its role as the regulatory entity of public indebtedness and treasury, has the firm intention of promoting the efficient use of public funds through a responsible management of the public debt.

This commitment made by the Treasury lies on the guidelines that govern and guarantee the institutional nature of its financial policy that is aimed at improving its management standards and reaching the levels of the best international practices. Following this, the Strategy has set some challenges and actions in order to maintain the efficient management of the public debt and the efficient use of the public resources, and they will guide the actions of the Treasury in this current situation.

Finally, the solid macroeconomic fundamentals of Peru have allowed to respond vigorously to the onslaught of the pandemic. The challenges posed by this moment are internalized in this Strategy. It will allow for a wise management of the public funds in order to finance the budget and honor the obligations made by the country.

Waldo Mendoza Bellido Minister of Economy and Finance of Peru

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EXECUTIVE SUMMARY

The General Directorate of the Public Treasury (DGTP, in Spanish), with a comprehensive vision of the financial asset and liability management and in its role as the governing entity of public indebtedness and treasury, has been updating the Strategy for Global Asset and Liability Management annually. Not only is its aim to guide the financial asset and liability management of the Non-Financial Public Sector (NFPS, in Spanish) entities, but also to provide the economic agents with relevant information on the actions taken by the Treasury and its perspectives, as well as information on the public debt securities market.

In this vein, there has been an outstanding management of the gross public debt of the Non-Financial Public Sector. Over the last years, this has contributed to reducing the vulnerability of the public finances and to strengthening the investors' confidence on the solid macroeconomic fundamentals of the country. Changes in the gross public debt composition such as a high increase of the sol-denominated fixed rate debt and an amortization profile with a lower concentration of payments for the next years are some of the key factors that have been highlighted by the main credit rating agencies. They have maintained Peru's investment grade ratings since 2013. The quantitative results of the last four years provide an insight on the evolution of the NFPS gross public debt and the financial assets through different monitoring indicators.

The situation in which the current edition of the Strategy for Global Asset and Liability Management (EGIAP, in Spanish) is being updated is marked by the coronavirus (COVID-19) pandemic. This caused a shock in the financial markets and in the world economy, anticipating a strong recession in 2020. Its scope and persistence have been uncertain until mid-April. A lockdown, emergency health measures, domestic and foreign market that were closed to contain the pandemic resulted in a significant fall of the indicators of the economic activity locally and internationally in the first and second quarter of the year. Parallelly, governments were adopting a set of monetary and fiscal measures for a gradual recovery of the economy.

On the domestic front, the COVID-19 evidenced structural deficiencies of different segments of the economy; in particular, the education and health sectors. The Government was prompted to implement an emergency economic plan. Its cost would be around 20% of GDP, which has exceptionally demanded for more resources from the Treasury and, consequently, the use of public savings such as that from the Fiscal Stabilization Fund (FSF) and the contingent debt lines, among others. This greater fiscal effort implied the exceptional and temporary suspension of fiscal regulations for 2020 and 2021, meanwhile the 2021-2024 Multiannual Macroeconomic Framework (2021-2024 MMF), published in the official daily newspaper *El Peruano* on August 28, 2020, forecast that the fiscal deficit would increase up to 10.7% of GDP in 2020.

Furthermore, the EGIAP succinctly outlines some of the risks seen in the three main groups (market, credit and liquidity), starting with the annual evolution of the position of the financial assets and liabilities of the NFPS from 2016 to September 30, 2020. Regarding the financial assets, a gradual decrease up to S/ 108.07 billion was recorded in September 2020, representing a fall of 8.9% compared to the balance of the financial assets in December 2016 (S/ 118.59 billion) and -10.2% in comparison to the balance in December 2019 (S/ 120.29 billion). This fall is the result of an increased Public Sector budget, a lower output growth and a larger fiscal deficit. The Central Government

concentrates 92.5% of the financial assets: by assets, 76.4% is cash and cash equivalents while the soles represent 75.5% of the overall portfolio. Metrics such as duration modified duration and average life having values below the unit, in the period of analysis, show a concentration of assets on a short-term basis and capitalization that is proportional to the conservative profile of the Treasury. The VaR of the assets in foreign currency for a one-year horizon at 95% of confidence is S/ 1.95 billion, while the CVaR is S/2.86 billion. Likewise, the Reserve Bank of Peru (BCRP, in Spanish) concentrates 52% of the financial assets of the NFPS, being the bigger counterpart of the public assets.

Regarding the financial liabilities, they have followed an upward trend over the period of analysis, which has evidenced higher debt to meet fiscal requirements to respond to a lower growth in output, and therefore a decrease in public revenues. In this light, on September 30, 2020, the gross public debt attained S/ 217.05 billion (a 48.7% increase) compared to December 2016 when attained S/ 145.98 billion; while in December 2019, it amounted for S/ 192.73 billion (a 12.6% increase). By origin, securities in circulation represented 84.3%; from this, sovereign bonds were 56.5% of the total. By jurisdiction, domestic liabilities amounted for 58.2%, while 58.2% are agreed in soles and 86.7% are agreed at fixed rate. For the period 2021-2024, the concentration is situated around 19%, which means a lower risk of refinancing, thus the average life indicator is the one that best reflects this position situated at 11.4 years. On September 30, 2020, the average weighted yield of the securities issued in soles by the Treasury that are equivalent attained 4.1%, lower than the previous years. In the meantime, the VaR for a one-year horizon, at 95% confidence of the interest rate fluctuations and the debt service foreign exchange rate in foreign currency reached S/ 861.2 million and S/ 7.29 billion, respectively. For the liquidity risk, it is worthwhile noticing the sustained development of the secondary securities market of the public debt. Its trading volume has grown around 2.7 times over the period of analysis, while the coverage ratio increased 2.6 times. In this vein, the bid-ask spread also reduced, reflecting investors' confidence in the securities in local currency issued by the Treasury.

The evolution of the net debt has followed an upward trend over the period of analysis, going from S/27.38 billion in 2016 to S/ 108.96 billion in September 2020 in line with a rise of the gross public debt of the NFPS. Moreover, when assessing cumulative liquidity gaps by time buckets, this analysis is positive up to the third year; it is the first year the one that concentrated the highest amount, S/ 47.83 billion (capital + interests) approximately. The VaR for the NFPS net position in foreign currency for a one-year horizon, at 95% confidence, is S/ 4.87 billion, while the CVaR is S/ 7.36 billion.

The following guidelines must endure through time to guarantee the institutional nature of the financial policy that is aimed at guiding the gross public debt management of the NFPS and the treasury following the best international practices. These guidelines are reaffirmed in this edition of the EGIAP:

- a. Strengthening the public debt securities market in soles considering an appropriate maturity profile.
- b. Financial planning in line with the multiannual public debt based on an optimal balance-sheet composition.
- c. Promotion of an efficient use of the public funds through fungibility and the prioritization when using financing sources.

- d. Maintenance of liquidity reserves, credit lines and contingent lines or the exploration of other financial instruments to respond to the financial instability.
- e. Capitalization of public funds and reduction of their liquidity cost.
- f. Identification of fiscal risks and assessment of alternatives to mitigate their effects on the public finances.
- g. Strengthening of automated payment mechanisms and of the availability of timely financial information that is both comprehensive and reliable.

Because of its financial nature, the treatment given to public debt differs from other financing sources managed by the Treasury. Therefore, monitoring through different indicators is of particular importance to the public finances and it is not only crucial for the fiscal policy, but also for the decisions made by the economic agents that take part in the public debt securities market. Thus, the EGIAP includes the quantitative analysis through these indicators that monitor the gross financial public debt of the NFPS that would be incurred at the end of 2024. For this, it has been taking into consideration the current economic and financial context and building scenarios that make changes to it, while also including some debt management operations that help modify its composition in terms of currency and interest rates and an efficient management of its maturity profile. The results of this analysis can be seen in the following table:

Estimated Projections for Indicators of the NFPS Gross Debt at the End of 2024

Indicator	December	Scenarios			
The state of	2020 1_/	Baseline	Optimistic	Pessimistic	
Percentage of soles in the gross debt	59.9%	71.8%	75.4%	65.3%	
Percentage of nominal fixed rate debt in the gross balance	88.1%	91.1%	91.9%	87.4%	
Percentage of domestic debt in the gross balance	58.4%	70.7%	74.0%	64.7%	
Average-term-to-maturity (years)	11.2	11.2	11.7	10.6	
Average-term-to-reprice (years)	10.8	11.0	11.5	10.0	
Accumulated amortization for the following 12 months 2_/	1.0%	3.1%	2.6%	3.2%	
Percentage of the financing flow in local currency 3_/	50.6%	84.0%	86.2%	78.0%	

Source: DGTP - MEF

- 1_/ Calculation of the preliminary figure is based on the September 2020 database to which the effect of the operations to be carried out on December 2020 and the net debt (disbursement minus amortizations) are added for the last quarter of the year.
- 2_/ Indicator that calculates the most immediate pressure on payments.
- 3_/ Includes the financing of debt management operations.

Challenges and actions are the cornerstone of the EGIAP. They are adapting to the objectives that the Treasury is seeking to achieve, i.e. the improvement of its management standards toward the best international practices. According to this, and considering the demands of the moment, the following challenges and actions have been set to:

- a. Strengthen the liquidity management and the Treasury.
- b. Continue working on the modernization of the Treasury.
- c. Achieve a coordinated financial planning in order to structure the public budget.
- Strengthen the public debt management.
- e. Improve the global management of the fiscal risks.

Finally, the new 2021 schedule on the Treasury Securities Regular Auction Program is included. By means of this, the Ministry of Economy and Finance (MEF, in Spanish) is strengthening the transparency of the public debt securities market.

INTRODUCTION

The year 2020 has been marked by a worldwide event that has precedents that can be compared to the ones that took place a century ago. Since the end of 2019, the COVID-19 has been spreading rapidly and has had a negative impact on all sectors of the economic activity across the country, raising the need for taking actions in the fiscal and monetary policies in order to reactivate the economy. Nevertheless, the strength of the Peruvian economy, which has been enhanced over the last two decades, has made it possible the implementation of an ambitious economic reactivation program to face this adverse situation.

The current state of affairs represents an opportunity to implement the guidelines and the strategic actions, outlined in the EGIAP, in order to promote and guide a responsible and sustainable management of the public finances accordingly, allowing the country to meet its commitments.

In this regard, there is a rise in the number of indicators that monitors the financial risks that will allow the management of resources administered by the Treasury. The aim of this is to have increased technical support for making decisions on the financial asset and liability management.

The current edition of the EGIAP involves challenges and strategic actions that will contribute to strengthening the liquidity and treasury management through financial planning that is consistent with the public budget, as well as the efficient management of the public debt and the monitoring and mitigation of fiscal risks, including those associated with programs for the economic reactivation.

The EGIAP is divided into four sections and three appendices. The first section outlines the current situation that has marked the year 2020, as well as the prospects and financing needs for the next four years. The second section indicates the scope of application of the guidelines and actions of the Strategy in relation to the financial asset and liability management.

The third section assesses the exposure of risks associated with financial instruments and net positions of the NFPS. The last section introduces the implementation of the Strategy by setting challenges and strategic actions that are to be translated into quantitative and qualitative objectives of a strategic asset and liability management for the country. Likewise, the quantitative part of the gross public debt of the NFPS until the end of 2024 will be analyzed by using scenarios presenting behavioral assumptions on the macroeconomic variables, the new debt composition and debt management operations, among others. This analysis is reflected in the several indicators that monitor the gross public debt of the NFPS.

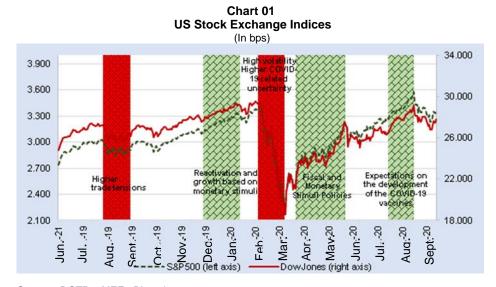
Finally, three appendices contain the schedule on the 2021 Treasury securities regular auctions; the monitoring of the position and risks of the financial instruments; and the evolution of the NFPS public debt, respectively.

GENERAL FRAMEWORK

In 2019, the economic downturn in the United States, China and the Eurozone was partly due to the negative effects of the trade tensions on investment decisions, the manufacturing industry and the exports. Financial conditions that were more favorable were seen around the world as a result of the US-China phase one trade deal signed at the end of 2019, as well as a low uncertainty about the Brexit. Consequently, growth prospects for the advanced economies and for the countries in the region were enhanced for 2020. Nevertheless, these projections did not include the spreading of the COVID-19 that emerged in China at the end of 2019, an outbreak that was finally labelled a pandemic. The impact of this pandemic caused a shock in the financial markets and in the world economy turning into a widespread recession that was not impacted similarly on all countries and sectors in 2020, a major hit since the 1929 Great Depression and a far more intense recession than the one of the 2007-2008 financial crisis.1

World Economic Situation 1.1

At the end of the first quarter of 2020, high volatility in the international financial markets was observed as a result of the uncertainty caused by a fast global spread of the virus. This meant a significant and generalized increase of the risk aversion, which led to larger losses in the financial markets, reversing the upward trend of the main stock market capitalization indices since February 2020.



Source: DGTP - MEF - Bloomberg.

Since April 2020, the trend has changed due to the unprecedented measures adopted by the monetary and fiscal authorities. These measures have led to a gradual recovery of the economy since June, additionally to the expectation of producing a vaccine to get control over the virus, allowing for an economic reactivation through investment, spending and consumption.

¹ IMFI - https://www.imf.org/es/Publications/WEO/Issues/2020/09/30/world-economic-outlook-october-2020

Among the monetary measures adopted to reduce the adverse effects produced by the COVID-19 lockdown, central banks bought assets —allowing for a greater demand for bonds and the fall in the interest rate— in order to boost liquidity and reduce the high volatility in the financial markets. They opened liquidity lines and diminished the monetary policy rates more than twice. On average, interest rates have been lowered within 250 to 150 bps from March to September 2020.2 The Federal Reserve (Fed) reduced its interest rate to a historic low to a range of 0.0% to 0.25%.

(In % and bps) 1.92% 1.69% 1.55% 1.45% 1.58% 1.46% 0.69% 0.47% 0.28% 0.16% 0.13% 0.08% 0.08% 0.10% 0.10% 0.12% 0 -138 -143-145 -145 -123 1M 2M 6M 1Y 2Y 3Y 5Y 7Y 10Y 30Y Change as of 12/31/2019 (bps) - 12/31/2019 — 09/30/2020

Chart 02 **US Treasury Bonds Yield Curve**

Source: DGTP - MEF - Bloomberg.

With respect to growth expectations for 2020, the main international organizations expected growth to decrease due to the serious distortions among the supply and the domestic demand, trade and finances. In this regard, the International Monetary Fund (IMF)³ indicated that the world GDP would shrink 4.4% at the end of 2020 and it would increase in 5.2% in 2021, and Latin America was expected to fall by 8.1% and to increase in 3.6% in 2021.

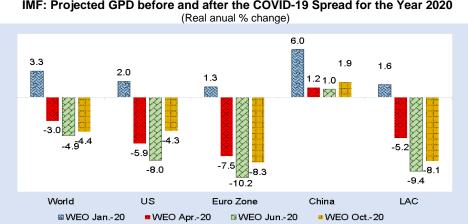


Chart 03 IMF: Projected GPD before and after the COVID-19 Spread for the Year 2020

Source: DGTP - MEF - FMI

10 - 40

² Central Banks of the United Kingdom (-65bps), China (-30bps), the US. (-150bps), Brazil (-250bps), Mexico (-300bps), Peru (-200bps), Colombia (-250bps) and Chile (-125bps).

IMF - World Economic Outlook Update, October 2020

1.2 **Local Economic Situation**

As happened in most of the world economies, prevention and containment measures taken by the Government (lockdown) in order to respond to the COVID-19 health emergency have had a significant impact on the economic activity, which shrank by 17.3% in the first guarter of 2020 and slowed down by 9.82% in August. To respond to this, the Government implemented a four-phased plan to reactivate the economic activities, starting with the first phase at the end of the second quarter. The following phases have been being mainly implemented since the second half of 2020. Thus, the 2021-2024 MMF expects that the economy would grow by -12.0% at the end of 2020. Growth would attain 10% as a result of an effective reactivation of the economy; for the 2022-2024 period, this economic growth would be back to 4.5% on average, a level similar to the one recorded before the crisis.

Furthermore, the sovereign fixed income in soles has been more dynamic in the third quarter than in the first quarter of 2020. It is worth noticing that higher risks were taken in the financial markets from June to September 2020, which means lower returns from Treasury securities in soles and dollars.



Source: MEF-DGTP and Bloomberg

Additionally, the reduction of the BCRP reference rate to 0.25% in 200 bps from March to April (historical low) has impacted similarly on a short-end of the curve that felt by 111 bps, on average, from March to June and by 54 bps from December 2019 and September 2020. On the global bond side, they saw corrections in dollars in line with a reduced country risk premium that remains as one of the lowest in the region.

1.3 Fiscal Indicators for Peru and Reference Countries

Peru has a history of a responsible and prudent management of the fiscal and monetary policy that allows for solid macroeconomic fundamentals, and now the country is considered one of the strongest economies in fiscal terms in the region. Consequently, despite the current situation, a lower-than-expected economic growth and the projections of a deterioration of the fiscal indicators for 2020, the credit ratings and the stable outlooks assigned to Peru⁴ by the main credit rating agencies remained

On the 2020 annual revision for Peru, Fitch Ratings affirmed the long-term sovereign rating in foreign currency at BBB/ stable and it revised the credit rating in local currency from A- to BBB+/stable. In December 2020, Fitch affirmed the long-term debt rating at BBB+ in local and foreign currency, and it revised the outlook to negative from stable.

unchanged. It is worth noticing that the macroeconomic strengths of the Peruvian economy have allowed to implement a set of unprecedented measures to respond to the COVID-19 crisis and create conditions for a gradual economic activity.

Table 01
Fiscal Indicators: Peru and Reference Countries for 2020

Indicator	Peru*	Latin America**						
(%)	Peru	Brazil	Chile	Colombia	Mexico			
Public debt (% GDP)	35.4	101.4	32.8	68.2	65.5			
Domestic public debt (% GDP)	21.5	89.6	23.5	39.3	32.1			
LCY Debt (% gross debt)	58.2	94.8	72.7	57.7	76.3			
Debt (% revenues)	200.0	256.0	181.0	204.8	242.6			
Interests (% revenues)	10.2	13.7	4.2	19.8	13.9			
Revenues (% GDP)	17.7	36.9	19.5	24.4	17.7			
Economic result (% PBI)	-10.7	-16.8	-8.7	-9.5	-5.8			
Deposits in the FS in LC (% total deposits in the FS)	67.2	100.0	83.3	100.0	79.8			

Source: MEF, BCRP, SBS, FMI.

1.4 Macro-fiscal Policy Objectives

The COVID-19 economic crisis has exposed the most serious structural weaknesses of the country. Thus, the macro-fiscal objective is to boost the reactivation of the economic activity and to define a strategy that supports both the highest public spending and the chain of payment and provides liquidity to the economy, leading to a higher public investment. In this regard, more fiscal effort has been put by means of an exceptional and temporary suspension of the fiscal rules for 2020 and 2021. The implementation of the Peruvian Economic Plan to respond to the COVID-19 (the biggest plan in the region) is based on this measure, which represents, on average, 20% of GDP. The plan is composed of a set of unprecedented measures and has been divided into two stages:

- a. <u>Containment Measures</u>: They are the ones that respond immediately to health emergency, as well as measures that provide financial support to households (subsidies, withdrawal of the service compensation fund (CTS, in Spanish)) and the exceptional withdrawal of private pension funds (AFP, in Spanish)) and to businesses (subsidies, tax reliefs, payment in installments, among others), which represents 9.2% of GDP.
- b. Economic Reactivation: They are measures that are aimed at reactivating the economy in order to both maintain the chain of payment so that businesses can access to liquidity, and boost a gradual economic reactivation, which represents 10.7% of GDP. Some of these measures are shown on Box N°1:

Moody's affirmed Peru's rating at A3 for both currency and the outlook remained stable in all cases. The 2019 Standard & Poor's rating remained unchanged.

^(*) Data estimated for Peru for December 2020 correspond to the data published in the 2021-2024 MMF and they are shown at the NFPS level and the current revenues, as well as at the Central Government level.

^(**) Information on Latin America reference countries concerning public debt and economic result are taken from the General Government level, and they are data that come from the WEO of October 2020. Further data are taken from the information that is currently available from the central banks of each country. Additional information comes from estimates of sovereign risk indicators as of June 2020 that have been provided by S&P Global Ratings.

The Legislative Decree N° 1457 approves the exceptional and temporary suspension of the fiscal rules for the NFPS for the 2020 and 2021 fiscal years, among other provisions.

Box № 1 Main Measures Adopted to Reactivate the Economy

- ✓ Creation of the Program for National Government Guarantees for the Continuation of the Payment Chain, (REACTIVA PERÚ) to ensure the financing of the replacement of working capital funds of businesses, which must make payments and meet short-term obligations with workers and suppliers of goods and services. This is made through a scheme that grants National Government guarantees to credits in domestic currency, placed by Financial Sector Companies (Legislative Decree N°1455). The amount of this program amounts for S/ 60.00 billion (around 8.7% of GDP).
- ✓ Creation of the Program for National Government Guarantees to Financial Sector Companies to grant guarantees to credits of the financial system companies with the aim of providing them with extraordinary liquidity (Legislative Decree N°1508). The amount of this program accounts for S/ 7.00 billion (around 1,0% of GDP)
- ✓ Creation of the Business Support Fund to Small and Medium Enterprises (FAE-MYPE in Spanish) with the aim of providing guarantees to credits for working capital granted to the MYPES, as well as restructuring and refinancing of their debts (Emergency Decree N°029-2020). The amount of this program accounts for S/ 800.0 million (around 0.07% of GDP).
- ✓ Creation of the Program for National Government Guarantees for Business Agricultural Financing (FAE-AGRO in Spanish) to provide guarantee to credits for working capital of farmers who carry out family farming as stated by the Law N°30355 to guarantee the 2020-2021 agricultural campaign success, as well as the supply of food nationwide (Emergency Decree N°082-2020). The amount of this program amounts for S/ 2.00 billion (around 0.3% of GDP)
 - Additionally, in the view of a fall in collection and the new financial requirements due to the pandemic, the Treasury promoted a set of measures aimed at centralizing funds to respond to the new expenditures and guarantee the necessary funds to implement the budget. These measures are as follows:
- ✓ Approval of extraordinary and temporary measures to ensure financing during the 2020 Fiscal Year for expenditure requirements to prevent and contain the COVID-19, as well as the economic reactivation and the expenditure coverage foreseen in the Budget of the Public Sector for the 2020 Fiscal Year. They have been affected by the fall in collection due to the COVID-19 (Emergency Decree N°051-2020).
- ✓ Transfer of the resources available in the Funds and Account Deposits to the Treasury that are established or contained in an express law that have uncommitted resources, including resources from funds and account deposits under the condition of intangibles in order to finance COVID-19 health emergency spending (Article 19 of the Emergency Decree N°033-2020).
- ✓ To authorize the Treasury to use resources from the financing source named Resources Directly Collected from the public entities of the Executive Power (balances of the 2019 balance-sheet and revenues collected in 2020 that are not incorporated into the budget) to allocate them for the financing of COVID-19 health emergency spending (Article 27 of the Emergency Decree N°033-2020).

1.5 NFPS Financial Requirements

The financial requirement of the NFPS during the period this Strategy is in force are the ones that are published in the 2021-2024 MMF. An increased projection of the fiscal deficit in 10.7% of GDP for 2020 is explained by higher non-financial current

expenditure and lower fiscal revenues.⁶ Once the pandemic is under control and the dynamism of the economic activity comes back, the fiscal deficit is expected to reduce to 6.2% of GDP for 2021. The process of fiscal consolidation for a gradual convergence from 1.5% of GDP in 2025 to 1.0% of GDP in 2026 will start in 2022.

Table 02 **NFPS Financial Requirements** (In Million S/)

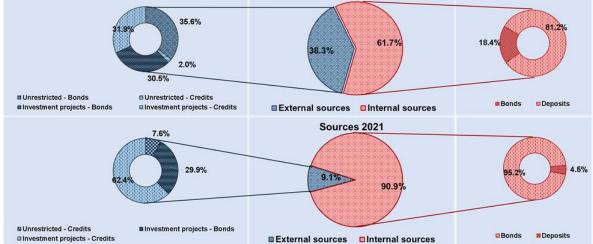
Year	Deficit	% of GDP	Amortizations	% of GDP	Total	% of GDP
2020	74,230	10.7	1,823	0.3	76,053	11.0
2021	47,466	6.2	2,393	0.3	49,858	6.5
2022	27,342	3.3	4,902	0.6	32,244	3.9
2023	22,945	2.6	6,614	0.8	29,559	3.4
2024	17,814	1.9	12,232*	1.3	30,045	3.2

Source: 2021-2024 MMF - MEF

(*) The BS12AGO2024 matures for S/ 6,739 million and the VAC 13OCT2024, for S/ 1,358 million.

The 2021-2024 MMF forecasts the financial needs of the NFPS to be S/ 49.86 billion for 2021, lower in 34,4% than the ones expected for 2020. The following chart shows that the external financing will decrease in 84.4% as this financing is expected to come mainly from the issuance of securities in soles in the domestic securities market.

Chart 05 Financing Sources 2020 vs. Financing Sources 2021 Sources 2020 35.6%



Source: DGTP - 2021-2024 MMF- MEF

SCOPE OF ACTION

All guidelines and actions set out in this document are accepted and taken into consideration for the financial asset and liability management by all entities and institutional units that are part of the NFPS, provided that the compliance of the constitutional or legal mandate to which they are subject is not affected.

According to the 2021-2024 MMF, a real fiscal revenue fall of 21.4% is forecast for 2020 due to a decline in economic activity, the less favorable international environment that cut export prices and the implementation of tax relief measures.

An integral management of the financial assets and liabilities is defined as the set of techniques and procedures that ensures proper and timely decision-making on financial investment, indebtedness and treasury management as a whole. The use of financial information that is comprehensive, timely and reliable is required for this purpose.

In this regard, the MEF has unified the monthly registration of public funds and public debt in one database that centralizes information on financial assets and liabilities, under standardized criteria, and it must be of mandatory compliance by all NFPS public entities.

III. RISKS OF THE ASSETS AND LIABILITIES OF THE NFPS

The analysis of the risks of the financial assets and liabilities included in the NFPS financial balance sheet is based on the three main risk groups that define them: market risk, credit risk and liquidity risk.

As of September 2020, the position of the financial assets and liabilities of the NFPS is shown on the following chart:

(In Billion S/) 126.931 126.352 Assets Liabilities 81.76 77 438 75.629 54 212 4 015 575 1 589 11 646 9.998 626 1.612 96 109 546 Soles **Dollars** Euros Others Soles **Dollars Euros** Others Source: DGTP - MEF

Chart 06
Summary of the NFPS Financial Assets and Liabilities as of September 30, 2020

3.1 Analysis of the Financial Assets Risks⁷

The position of the NFPS financial assets has shown a gradual decline to 8.9% (from S/ 118.59 billion in 2016 to S/ 108.07 billion in September 2020) over the last 4 years. This is explained by an increase of the Public Budget, lower growing production and a higher fiscal deficit. Notably, the public funds managed by the Treasury went down from 71.9% in 2016 to 62.4% in 2019; following this, a raise has been seen from 2018 primarily due to the use of the Fiscal Stabilization Fund (FEF, in Spanish). The year 2020 was special, and again the position reduced up to 60.3% as of September 2020.8 Moreover, on the currency side, it is seen a rise in the assets in soles up to 75.7% because of the conversion into domestic currency of the FSF and of the resources that come from the international issuance carried out in April. Concerning the

The financial asset data has been taken from the Module of Financial Instruments (MIF, in Spanish).

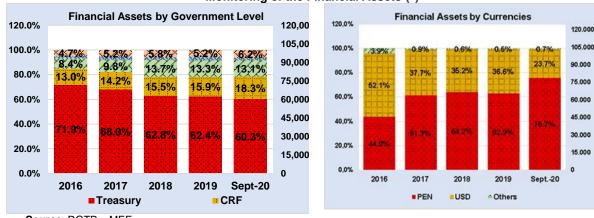
This relative increase includes the rearrangement of the drop of the subnational governments' revenues in particular, as well as resources from the issuance of global bonds carried out in April 2020.





composition by interest rate, it remains at a fixed rate of 88.4% on average. The appendix 2 shows these positions in more detail.

Chart 07 Monitoring of the Financial Assets (*)



Source: DGTP - MEF

(*) The position of the financial assets in millions of soles per year is as follows: 2016 2018 Set-20 2017 2019 115,316 118, 597 110,559 120,287 108,072

3.1.1 Market Risk

The financial assets are mainly **concentrated** in the shortest-term time buckets, which is a reflection of a conservative Treasury's management and the need for immediate liquidity in the view of financial requirements such as the ones that come from the current COVID-19 health emergency. This asset composition is observed in the duration metrics, modified duration metrics and average life. Their values in the periods of analysis are below the unit (see details in Appendix 2).

Chart 08 Composition by Maturity Date as of September 2020 - Central Government



Source: DGTP - MEF

Likewise, the Treasury is managing its assets by prioritizing capital preservation. In this regard, its alternatives for capitalization are limited to term deposits at the BCRP and the financial sector (by means of auctions of their temporary liquidity surplus). In September 2020, a sharp drop of interest rates, as well as a decline of the monetary policy rate to respond to the COVID-19 are observed.

Chart 09
Capitalization of the Financial Assets (*)





Source: DGTP - MEF

(*) This analysis includes the Central Government Coverage.

Furthermore, the **Value at Risk** (VaR)⁹ or maximum loss of the NFPS assets in foreign currency, in a one-year horizon, at 95% of confidence is S/ 1.96 billion (1.8% of the total assets). Similarly, the **Conditional Value at Risk** (CVaR) or the expected loss given that the maximum loss of the VaR has been exceeded, considering the same horizon and confidence level, is S/ 2.86 billion (2.6% of the total assets). The VaR and CVaR amounts have decreased compared to the levels recorded in previous years¹⁰, which is due to a reduced position denominated in dollars.

3.1.2 Credit Risk

The main counterpart is the BCRP that concentrates 51.7% of the NFPS total assets because of the resources that are centralized in the Unique Treasury's Account (CUT, in Spanish) and the FSF balances that were incorporated in the CUT, following currency conversion operations.

Table 03
Risk Indicators for the Main Counterparts as of September 2020

Credit Entity	Balance in	% NFPS	Counterpart				
Credit Entity	Miilion S/	/0 NFF3	Credit Rating		% Liability	% Equity	
BCRP	55,840	52%	-,-	-,-	-,-	-,-	
BN	7,835	7%	-,-	-,-	-,-	-,-	
IBK	4,943	5%	FITCH	BBB	11%	82%	
Scotiabank	4,080	4%	S&P	BBB+	6%	41%	
BCP	3,537	3%	FITCH	BBB+	3%	19%	
BBVA	2,496	2%	FITCH	BBB+	3%	27%	
BanBif	1,230	1%	FITCH	BBB	9%	101%	
Others	28,110	26%	-,-	-,-	-,-	-,-	
TOTAL	108,072	100%	-,-	-,-	-,-	-,-	

Source: DGTP - Bloomberg

In connection with the previous table, the Government generally makes **counterpart public fund investments**, which are deposited mostly in the BCRP, meaning a limited diversification of the assets.

⁹ Daily data on a 4-year historic period were used for both the VaR and the CVaR.

The VaR and the CVaR amounts are S/ 2. 99 billion and S/ 5. 052 billion for 2018 and S/ 3.36 billion and S/ 5. 30 billion for 2019.





Table 04 **Concentration of Assets by Counterparts**

By Currencies	Dec16	Dec17	Dec18	Dec19	Sept20
Total NFPS (in million soles)	118,597	110,561	115,326	120,287	108,072
Government	77.7%	75.2%	62.4%	63.1%	68.1%
Banks	13.4%	14.8%	24.1%	23.8%	17.9%
Investment Entities	3.9%	4.8%	6.2%	6.2%	7.6%
Non-financial Entities	3.8%	4.0%	4.9%	4.9%	5.7%
Other Credit Entities	1.3%	1.2%	2.3%	2.0%	0.7%

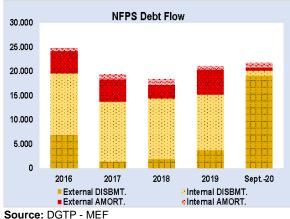
Source: DGTP - MEF

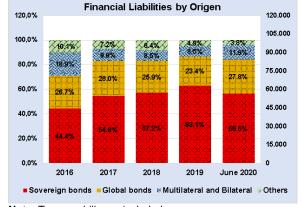
3.2 Analysis of the Financial Liability Risks

Regarding the NFPS financial liabilities, it is worth noticing the constant positive change of the composition concerning financing sources (higher sovereign bond issuances), currencies (domestic currency positioning), interest rates (better predictability of fixed rate flows by component), controlled debt service (low pressure on payment in the middle years), among others. These changes lead, in particular, to an improved management of the market risk and refinancing.

Over the last four years, funding in order to meet the Government's financial requirements came mostly from the public debt securities market in local currency. which means that this market did not only become stronger, but there were significant advances in changing the public debt composition, specifically mitigating the market risk relative to the foreign exchange rates.

Evolution of the NFPS Debt Flow and the Position by Origin¹¹





Note: Treasury bills are not included

Note: Treasury bills are included.

The same trend is seen in the sovereign bond **position** in soles, and the increase is reflected on the local currency participation from 53.9% in 2016 to 58.2% as of September 2020¹² (see Appendix N° 2 for more detail). The replacement of traditional financing sources (multilateral and bilateral financing sources) in great extent with

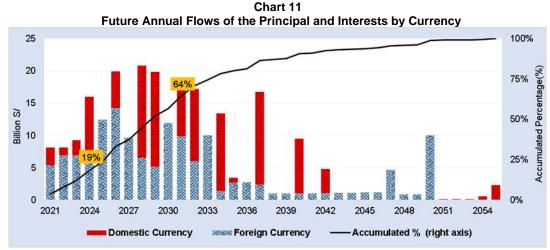
The financial liability position in millions of soles per year is as follows: 2018 2019 Set-20 217,047 145,976 160,780 178,292 192,729

As of December 2019, this indicator attained to 65.9%. The fall of 58.2% is mainly explained by the issuance of global bonds for US\$ 3.00 billion and by a higher participation of credits in foreign currency.

financing that comes from the public debt securities market (from 71.1% in 2016 to 84.3% as of September 2020) is also noteworthy.

3.2.1 Market Risk

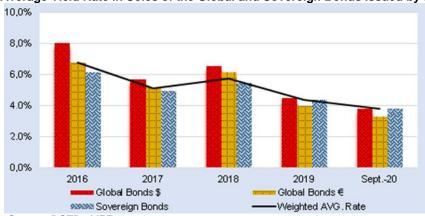
One of the objectives of the management of the NFPS gross public debt is to mitigate the pressure on payments through debt management operations in the middle years. To date, the debt service profile (amortization + interests) for the 2021 - 2024 period represents around 19%. An extension of payment for the country to meet its obligations is seen in the average life indicator with 11.4 years at the end of September 2020.



Source: DGTP - MEF

The weighted average yield in soles of the securities issued by the Treasury obtained at the end of every period of analysis, and, in line with the existing market conditions, have led to more and more favorable opportunities to secure financing from the capital market in order to meet a major part of the financial requirements of the country. This advantageous position of Peru, due to the investment grade the main credit rating agencies has assigned to the country, boosts local and foreign investors' confidence and allows for an improved diversification of its financing sources. It is noticeable the levels of the weighted average yield in soles as of September 2020 (see Chart 12), the ones that are minimum, despite of the COVID-19 economic crisis. In fact, in April 2020, two new 5 and 10-year dollar benchmarks were issued for a total amount of US\$ 3.00 billion to mature in 2026 and 2031, respectively, with interest rates that were both competitive and favorable for the country, amidst a highly volatile environment.

Chart 12
Weighted Average Yield Rate in Soles of the Global and Sovereign Bonds Issued by the Treasury

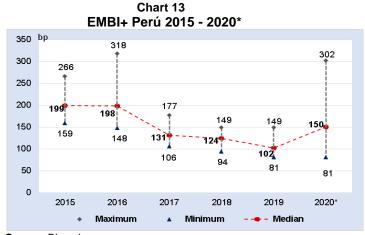


Source: DGTP - MEF

Furthermore, the **Value at Risk** (VaR) of the NFPS gross public debt service has been calculated in the view of interest rate fluctuations¹³ and foreign exchange rates, based on daily information for a 4-year period. The historical VaR calculation for a one-year horizon, at 95% confidence level results in the maximum loss of interest rates in foreign currency of S/ 861.2 million (0.39% of the total service) and S/ 7.29 billion (7.5% of the service) for the foreign exchange VaR.

3.2.2 Credit Risk

The **country risk** for Peru remains in line with its credit ratings, going from a maximum of 318 bps at the beginning of 2016 to a minimum of 81 bps in January 2020, one of the lowest and most stable spread in the region. As of the third quarter of 2020, the EMBI+Peru¹⁴ accumulated a median of 138 bps with a maximum of 302 bps.



Source: Bloomberg

13 This VaR includes the total debt service, discounting the market rates and it assesses the sensitivity of 6-month Libor Rates.

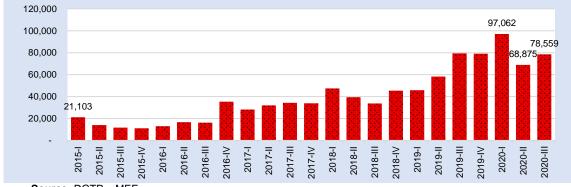
¹⁴ The EMBI+ Peru is measured by the difference in the average yield of the Peruvian sovereign bonds versus the yield of US Treasury bond

* As of October 2020

3.2.3 Liquidity Risk

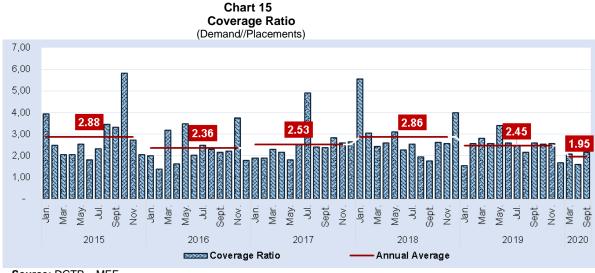
The sovereign bond trading volume in the secondary market has steadily grown, which explains an increase of 3.6 times in the first quarter of 2020 compared to the same period in 2015. Nevertheless, since the second quarter of 2020, trading was affected by the uncertainty resulting from the ongoing situation that made investors be more cautious.

Trading Volume of the Nominal Sovereign Bonds (In Million S/) 120,000



Source: DGTP - MEF

The **coverage ratio**¹⁵ stood around 2.6 times, on average, in the 2015 – 2019 period because of a higher demand for Peruvian financial instruments and an increasing development of the local debt market. Since the last quarter of 2019, however, sovereign bond placements were reduced, resulting in a lower coverage ratio until the third quarter of 2020.



Source: DGTP - MEF

Results of the auction in the first round for quantities demanded and placed are considered.

The bid-ask spread of the Treasury's debt instruments has been lowering due to a higher dynamism in the secondary market and a stronger investors' confidence on the Peruvian securities; nevertheless, the recent developments have reversed the trend, mainly affecting the short-end of the sovereign curve¹⁶.

Chart 16 Secondary Market: Bid-ask Spread (In bps, median) 14 12 10 8 6 BS2040 BS2042 **2019** ■ Sept.2020 **2018**

Source: DGTP -MEF

3.2.4 Further Risks

The relative participation of the **nonresident investors' holding** has grown from 37.6% in December 2016 to 53.9% in September 2020. On the domestic side, the resident investors' holding fell by 16.3% in the period of analysis, thus pension funds were the ones that had a reduced participation by 22.4% for sovereign bond holdings. Nevertheless, banks have had an increased participation in holdings, representing 18% at the end of September 2020.

Table 05 Sovereign Bond Holdership (In Millions of Units)

Institutions	Dec16	Sept20	Change
Total holding (in millions of units)	63,088	121,472	58,384
Pension funds	40.8%	18.4%	-22.4%
Banks	9.4%	18.0%	8.6%
Private funds	0.2%	0.2%	-0.1%
Public funds	4.5%	2.9%	-1.7%
Natural Persons	0.0%	0.0%	0.0%
Others	0.5%	0.9%	0.3%
Insurance companies	6.9%	5.8%	-1.1%
Residents	62.4%	46.1%	-16.3%
Non-residents	37.6%	53.9%	16.3%

The sovereign bond 2020 matured in August. As the maturity date was approaching, its trading level reduced and its bid-askspread widened.

3.3 Analysis of the Financial Asset and Liability Net Position

The NFPS net public debt composition by currency is mainly composed of soles (40.9% as of September 2020) and dollars (47.6% as of September 2020). The level of debt in dollars is explained by the high position of the dollar-denominated liabilities and the lower position of the dollar-denominated assets.

> Table 06 **Monitoring of the Net Debt Position**

By currencies	Dec16	Dec17	Dec18	Dec.19	Sept20
Total NFPS (in million of soles)	27,379	50,219	62,966	72,442	108,975
PEN	96.5%	64.6%	62.4%	70.8%	40.9%
USD	-24.3%	14.6%	19.8%	14.1%	47.6%
EUR	31.8%	19.3%	16.3%	13.7%	10.6%
JPY	-4.4%	1.3%	1.4%	1.2%	0.7%
Others	0.4%	0.2%	0.2%	0.2%	0.2%

Source: DGTP - MEF

3.3.1 Surpluses and Liquidity Gaps

The following chart shows liquidity gaps through time buckets (bars) and cumulative gaps (lines). Only in the first year, a positive liquidity gap is recorded for around S/ 47.83 billion (capital + interests) due, in large extent, to resources from the international issuance for US\$ 3.00 billion carried out in April and by the conversion of resources from the FSF that have been included in the CUT. The cumulative gap for S/ 20.00 billion is positive until the third year. Since the fourth year, however, the cumulative gap has become negative.

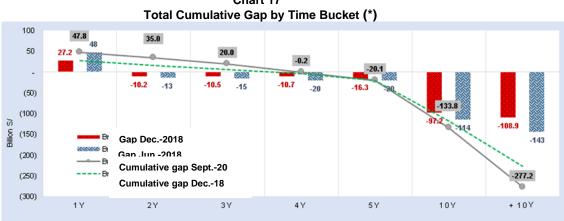


Chart 17

Source: DGTP - MEF

(*) This analysis includes hedging by the Central Government.

3.3.2 Foreign Exchange Risk of the Net Position

The Value at Risk (VaR)¹⁷ or maximum loss for the NFPS net debt position in foreign currency for a one-year horizon, at 95% of confidence level is S/ 4.87

Daily data for a 4-year historical period were used for both the VaR and the CVaR.

billion (4.5% of the total assets). Likewise, the **Conditional Value at Risk** (CVaR) or the expected loss given that the maximum loss obtained by the VaR has been exceeded, based on the same horizon and confidence level, is S/ 7.364 billion (7.0% of the total assets). The results show a significant increase of the VaR and the CVaR compared to the ones at the end of previous years, due to a rise of the liabilities in dollars.¹⁸

IV. THE IMPLEMENTATION OF THE STRATEGY

4.1 Qualitative Objectives for the Asset and Liability Management

The guidelines of the EGIAP initially set out in 2014¹⁹ as financial policies for the asset and liability management constitute the reference framework to manage the assets and liabilities and they must be permanently followed by all NFPS entities to carry out their operations. All these guidelines, which must remain in place to guarantee the financial policy institutionality in order to guide the public debt management and treasury based on the best international practices, were updated in 2018 in accordance with the new General Directorate of Public Treasury's role, strengthening the validity, transparency and predictability of the NFPS financial asset and liability management. These guidelines are as follows:

- a. Strengthening of the public debt securities market in soles through an appropriate maturity profile.
- b. Financial planning consistently with the multiannual public budget expenditure, following an optimal balance-sheet composition.
- c. Promotion of an efficient use of public funds through fungibility and prioritization when using financing sources.
- d. Maintenance of liquidity reserves, contingent credit lines or assessment of other financial instruments to face eventual financial instability.
- e. Capitalization of public funds and reduction of their liquidity cost.
- f. Identification of fiscal risks and assessment of alternatives to mitigate the effect on the public finances.
- g. Strengthening automated payment mechanisms and the availability of timely financial information that is both comprehensive and reliable.

4.2 Quantitative Objectives for Liability Management²⁰

Considering the economic and financial uncertainty due to the spread of COVID-19, analysts agree that it will take time to recover the upward economic trend existing before the COVID-19 outbreak. In the meantime, important interest rates of reference

The amount of the VaR and the CVaR are 2. 16 million and 3. 07 million for 2018; and 1. 79 million and 2. 65 million for 2019.

It includes <u>four basic principles for financial management:</u> (optimization of the relation between risk and yield/cost; centralization of liquidity of flows and balances of funds; comparison of alternatives considering the same basis for comparison and prioritization of the highest possible competition at all levels). <u>Six financial policies for asset and liability management</u>: (deepening of the securities market by increasing public debt in soles; maintenance of liquidity reserves to face instability; capitalization of public funds and reduction of their liquidity cost. As well as reduction of the procyclicality of the external debt to avoid vulnerability; maintenance of a strong financial structure for indirect debt; and assistance to ensure the sustainability of the net public debt). <u>Four tactical guidelines to manage structural risk</u>: (optimization of liquidity risk management; countercyclical position against interest rate risk; diversification of the foreign exchange risk and control of the concentration risk.

As long as some public asset management indicators are being included, which essentially indicates results of the position and some associated risks, this section deals with quantitative liability targets only.

for the world economy will remain at historic lows²¹ and, consequently, short-term rates too. In this regard, the Government's debt cost has not been highly affected in case of its position of record low. Thus, it is possible to analyze, among others, the windows of opportunity to carry out some debt management operations, among them, risk hedging to swap currencies and set the interest rates for a segment of the portfolio flows that is still agreed on foreign currency and at floating rate.²²

Some Scenarios to Quantify the Range of Projections

Three alternative scenarios have been prepared in order to make quantitative projections to be of reference for indebtedness and debt management for the 2021–2024 period. They should include different risk indicators of the NFPS gross public debt. These scenarios assume favorable or unfavorable changes in the macroeconomic variables; the prospective behavior that has an impact on the terms under which the expected financing amounts would be accessed; the direction that the debt policy takes and the possibility to carry out some debt management operations in order to improve the cost-risk ratio of the public debt. The goals set will be subject to the evolution of these variables.

The baseline scenario follows the parameters set in the 2021-2024 MMF and forecasts a strong contraction of the world economic activity in 2020, associated with the spreading of the COVID-19 pandemic that has caused shocks in the supply and the demand. This scenario estimates a reactivation that will not be similar for every country toward the second half of 2020 as a result of a gradual reopen of the sectors, measures to boost the economy (fiscal, monetary and financial) and the recovery of commodity prices. The economic reactivation would be consolidated in 2021. On the domestic side, the economic activity is expected to be in line with a strong contraction of GPD in the first half of 2020 and with a gradual control of the COVID-19 pandemic in the second half of 2020, which would lead to the recovery of the economic activity. In the upcoming years, the economic activity will highly increase in terms to the continuity of the economic activity resumption, great impulse of private expenditures and economic measures aimed at improving the productivity and competitiveness of the country. This scenario considers to meet both the financial requirements that are expected for the period and for the execution of some debt management operations.

Unlike the baseline scenario, the optimistic scenario focuses on a faster-than expected recovery of the growth of trading partners, commodity prices and financial markets. Plans to re-open the countries are considered to continue being implemented and they are expected not to be broadly affected by new virus outbreaks. Likewise, the advanced development of COVID-19 vaccines towards the end of 2020 and their mass production at the beginning of 2021 would improve the prospects for a global growth and the development of the financial markets. On the domestic front, a faster control of the pandemic, full operation of all economic activities from the last quarter of 2020 and a greater external demand are foreseen. Additionally, a substantial recovery of the private investment that does not primarily come from the mining sector will be observed. Under these circumstances, there is a more-than-expected economic growth in this scenario compared to the baseline scenario projections for the 2020-2024 period.

²¹ US. 0.25%; Eurozone 0.0% and Japan -0.10%.

The US dollar is expected to get stronger in the long-term, and consequently, interest rates are also expected to follow the same trend.



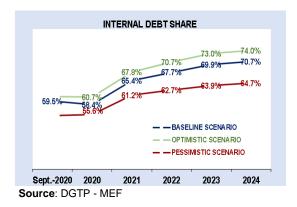
On the contrary, the pessimistic scenario focuses on a higher deterioration and a slow recovery of the world economy in the view of new outbreaks or a sharp rise in the number of COVID-19 infections and, consequently, more fiscal problems in some emerging countries. In this situation, a higher contraction of the service sector, the industrial production and the international trade due to a lower global demand and supply chain disruptions would be expected. Higher uncertainty would lead to a strong volatility in the financial markets and stock market corrections that would have an impact on the commodity prices. Furthermore, US-China trade tension and the probable delay in the development and distribution of COVID-19 vaccines would further exacerbate the performance of the financial markets. On the domestic side, the number of COVID-19 cases is expected to continue rising until 2021, which would limit the recovery of the projected horizon. In this scenario with a higher GDP slowdown and a strong adjustment in commodity prices, fiscal revenues and economic results are falling sharply.

The results of some indicators that monitor the gross debt that would be reached at the end of the coming years are shown in Chart 18. Further details of these results can be found in Appendix 3.

Chart 18 Some Indicators of the NFPS Gross Debt







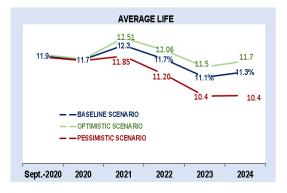


Chart 7 shows the reference projections of diverse risk indicators of the public liability portfolio that are probably expected to be attained at the end of 2024, and in line with the strategy for the NFPS gross public debt that is basically aimed at reducing the exposition to market and refinancing risks.

Table 07
Referred Projections of the NFPS Gross Public Debt Indicators at the end of 2024

Referred 1 rejections of the first of close 1 abile book maleators at the one of 2021						
Indicator	December	Scenarios				
maioatoi	2020 1_/	Baseline	Optimistic	Pessimistic		
Percentage of soles in the gross balance	59.9%	71.8%	75.4%	65.3%		
Percentage of nominal fixed rate debt in the gross balance	88.1%	91.1%	91.9%	87.4%		
Percentage of domestic debt in the gross balance	58.4%	70.7%	74.0%	64.7%		
Average-term-to-maturity (years)	11.2	11.2	11.7	10.6		
Average-term-to-reprice (years)	10.8	11.0	11.5	10.0		
Accumulated Amortizations over the following 12 months 2_/	1.0%	3.1%	2.6%	3.2%		
Percentage of the financing flow in local currency 3_/	50.6%	84.0%	86.2%	78.0%		

Source: DGTP - MEF

- 1_/ Preliminary data calculated considering the database as of September 2020 plus the effect of the operations that would be executed as of December 2020 and the net debt (disbursement minus amortizations) for the 4Q of the year.
- 2_/ Indicator that measures the most immediate pressure on payment.
- 3/ Includes financing of debt management operations.

4.3 Some Progress Towards the Implementation of the Strategy

a. Optimization of the use of public funds:

Within the fungibility framework of the resources in the CUT, some meaningful progress has been made in order to develop procedures and methodologies to set the maximum amount of use, as well as the criteria for management and restitution, based on Sections 16.1 and 16.2 of the Article 16 of the Legislative Decree N°1441. It states that the liquidity management guarantees the necessary availability of the public funds that were collected or perceived in order that authorized entities pay their obligations on time, as established by Law.

Under this regulation, a financial assistance facility for cash was created for cases other than those derive from temporary mismatches²³ to ensure that the Treasury uses liquidity efficiently, minimizing financial spending for debt service. Thus, the use of resources from the CUT was authorized to pay debt service; and it was established, when required, that the Treasury will place sovereign bonds charged to the balances that are still to be placed of the issuances of these securities that have been approved by the Laws on Public Sector Indebtedness in the corresponding fiscal years.

Furthermore, the issuance of extraordinary, economic and financial measures were urgent and necessary to respond to the health emergency and mitigate the adverse effects of the economy due the COVID-19 spreading. That required the timely availability of resources to finance the public spending provisionally to respond to the COVID-19 and to ensure that the expenditures in the Public Sector Budget were met because of a decline in the collection of fiscal revenues due to the adverse macroeconomic situation. The establishment of a facility for an appropriate operation and transfer of these resources was necessary; this being the case, the Emergency Decree N°051-2020 was issued.

Likewise, in 2020 the MEF issued a set of legal instruments²⁴ of a temporary nature that have contributed to centralizing funds that are not included in the CUT yet (e.g. transfer of the balances of funds and balance-sheet balances of the direct collected resources and a gradual centralization in the CUT of revenues collected by local

²³ Article 3 of the Emergency Decree N° 032-2019.

²⁴ Emergency Decree Nº 047 2020; Emergency Decree Nº 029 2020 and Emergency Decree Nº 033 2020.

Governments). This will increase the financial position of the CUT, strengthening the efficient use of the NFPS resources.

b. Modernization of the Treasury

Within the legal framework of the National Systems of Public Indebtedness and Treasury (Legislative Decree N°1437 and N°1441), the Treasury firmly intends to strengthen legal regulations and the optimization of payment managed by public entities. With support from the IMF's technical team, the MEF is making a detailed review of critical payment processes and it is redesigning them to ensure automated processes and the total use of the electronic payment.

Similarly, the definition of the Treasury's procedures through a process-based approach is being made, together with the updating of the Organizational Rule.

c. Implementation of financial planning to structure the public budget

The financial structure of the Multiannual Budget of the Public Sector is a process that is carried out every year to provide timely information for the preparation of this Budget. To date, this process is being redesigned in association with the General Directorates involved. In this regard, some improvement opportunities have been identified in the activities to be carried out with the aim of optimizing timing and speeding up the delivery of the information for the preparation of the Multiannual Budget of the Public Sector.

d. <u>Improvement of the global management of fiscal risks</u>

With the aim of aligning the global management of fiscal risks with the best international practices, the Treasury is now working on being supported by consulting services. Thus, the management of the fiscal risks is intended to reduce fiscal vulnerability effectively.

Furthermore, considering the effort that the countries of the Pacific Alliance are making with support from the World Bank, some studies are being undertaken to have instruments for risk transfers to respond to the occurrence of hydrometereological events. Additionally, the hiring of a renewed insurance for seismic risk is under review.

e. <u>Modernization of the management of fiscal risks to which the NFPS net debt is exposed.</u>

The Treasury hired consulting services in order to strengthen the global financial asset and liability management of the National System of Treasury and the National System of Indebtedness in line with the best international practices. Part of this consulting service was basically aimed at proposing and updating the necessary indicators to monitor the risks to which the composition of financial assets and liabilities are exposed (market, credit and liquidity risks).

Additionally, another component of the consulting service was focused on presenting preliminary methodologies to optimize the asset and liability portfolio based on the best international practices. In this regard, this analysis will be useful to build

methodologies that are in line with the Treasury situation and lead to the preparation of optimal strategies for investment and financing to meet fiscal requirements, considering return/cost and their risks.

4.4 Challenges for the period in force of this Strategy

The Treasury is committed to bringing its management standards to the levels of the best international practices by centralizing its efforts in improving the treasury, planning of revenues and public indebtedness. Consequently, the Treasury gradually prioritizes some challenges and actions to reach that goal. The following are the challenges of this Strategy to:

a. Strengthen the treasury management

The current situation calls for a highly meticulous handling of the treasury management, focused on liquidity that intends to reduce at maximum liquidity gaps, in particular, on a short-term basis. In this light, **treasury management must be strengthened** by implementing all the necessary financial instruments to optimize the use of the public resources.

Furthermore, the Treasury must strengthen the mechanisms that allow for the expansion of alternatives that capitalize the resources it manages by defining the policies and the necessary regulations that lead to an improved management of the public funds for which the Treasury is responsible.

b. Continue modernizing the Treasury

The Treasury is devoted to achieving excellence in the implementation of all the processes supporting its management for both its own operations and those of the other entities that are under its mandate. These processes are being designed and their prospects of application must lead, on a short-term basis, to a modern Treasury that can manage its operations guickly and efficiently

c. Make the financial planning dovetail with the public budget structuring

Resources from public debt that are committed to the public budget structure are not flexible. The one responsible for managing these resources cannot later choose a better financing alternative since there are rigidities in the budgetary and accounting processes that do not allow it. In this regard, it is necessary that the Treasury promotes and manages the changes that are needed for such flexibilization, in conjunction with the General Directorates of Public Budget and Public Accounting, respectively.

d. Strengthen the public debt management

The sudden change of the economic conditions due to the COVID-19 has exacerbated the Government fiscal needs upwards, and the public debt is one of its financing sources. Efforts must be centralized to maintain an appropriate risk management of the portfolio that has been being managed, as an essential factor of the Strategy for foreseeing potential adverse effects of shocks that might jeopardize the stability of public finances. Likewise, the impact on the indicators, which monitor

the NFPS gross public debt, achieved by December 2019 (pre-COVID-19), must be reduced in order to decrease fiscal vulnerability. Thus, the public debt management must be focused on this challenge.

e. Improve the global management of fiscal risks

Under the fiscal risk management, **principles**, **guidelines**, **methodologies** and **models** will be gradually set, and based on this, the necessary regulation will be made to identify, measure, mitigate and monitor fiscal risks, apart from determining their coverage.

Preventive measures that are intended to mitigate the impact of fiscal risks in the public finances must be strengthened and monitored on a permanent basis.

To the extent that some programs for economic reactivation involves guarantees by the National Government, as it is the *Reactiva Perú* program and other similar ones, there is a risk that this guarantee materializes which could lead to an increase in the fiscal requirements that the Treasury will have to meet. On this matter, **these contingent liabilities must be monitored in order to adopt the timely and necessary measures**.

4.5 Strategic Actions

In general, strategic actions are intended to assist in setting the path and the guidelines to meet the challenges posed. These actions were raised to:

a. Strengthen treasury management

To expand the scope of the CUT so that it includes public funds that are, at present, deposited in ordinary common banking accounts, as well as those funds that are being managed by other NPFS public bodies like trust properties.

To consolidate the centralization of public funds in the CUT in order to allocate resources more efficiently as the public budget is implemented. For instance, resources from the disbursement of loans can be channeled for the implementation of projects that are financed with external debt.

To approve the legal framework to make it possible the application of the best international practices in terms of management of financial assets and liabilities so that the Treasury will be able to define the financial instruments and the most flexible opportunity to strengthen an efficient capitalization of the public resources it manages.

To provide the Treasury with other liquidity instruments such as the implementation of repo operations that ensure treasury liquidity in the short-term.

To approve guidelines, policies and schemes that are necessary to the best application and control of the liquidity management scheme.

b. Continue modernizing the Treasury

To promote tracking of the treasury operations by integrating system information, automated process and by promoting the use of electronic payment systems and electronic payments means as well. The Treasury pledges to work in conjunction with collecting and financial entities with whom the National Treasury System works.

To continue redefining the treasury management regulation concerning liquidity management, revenues and payment management that provides for improvement in managing financial information and the corresponding accounting record as well.

c. Make financial planning dovetail with the public budget structure

To promote and manage, together with the General Directorate of Public Budget and the General Directorate of Public Accounting, specific improvements that increase efficiency and flexibility when using diverse financing sources, budgetary classifiers and the types of accounts that are used in the public budget structuring concerning public indebtedness.

Likewise, to create a cash planning through the development of periodical cash flows based on a methodology and/or software that allows to harmonize and standardize information that supports the expected revenues and expenditures, resulting in an increase in efficiency and in the reduction of operational risk events.

d. Strengthen the public debt management

To prioritize fixed rate sovereign bond issuance in the mid-end and long-end of the yield curve, essentially by maintaining the strategy that has been being implemented over the last years. There will be the necessary flexibility to adapt to the extraordinary, current situation of the market, re-adopting as soon as possible the guidelines of this strategy.

To evaluate the risks of the NFPS gross debt portfolio and monitor the opportunities of the market to execute debt management operations to mitigate these risks. For instance, in the current situation, there are interest rates at historical lows that could prioritize the replacement of liabilities previously agreed with new debt made under conditions that are more advantageous in terms of cost and risk. In this sense, the use of derivatives will also mitigate risk in the interest rates and foreign exchange rates in the flows of the service of the NFPS gross public debt.

In order to help increase liquidity and depth of the public debt market, as well as to expand and diversify the investors' base, the implementation of the phase 2 of the "Secondary Market Link" with the Euroclear platform, the launching of the Exchange-Traded Funds within the Issuer-Driven ETF Program and the securities loan operations will be completed.

As part of the adaptation process to the best market practices that are supposed to include environmental, social and governance (ESG) criteria, it is expected to

implement an ESG sovereign bond to finance investment projects that meet with the said criteria.

e. Improve the global management of fiscal risks

To prepare guidelines, methodologies, models and the necessary regulations to identify, measure, mitigate and monitor fiscal risks, in addition to defining their coverage. This process calls for the participation of experts to set management milestones at the level of international standards

To assess alternatives of mitigation that help reduce the impact of diverse fiscal risks in the public finances, analyzing the probability and impact of their materialization individually and/or as a whole, which will set the alarm for the authorities about the levels of exposure of the public finances.

To coordinate the periodical monitoring of the current credit status within the *Reactiva Perú* program framework and similar programs. Thus, there is a projection of possible requirements for the materialization of these risks.

To define guidelines for an appropriate management of risks associated with the use of fungible assets; in particular, the supervision and registration of fungibility operations and the limits, responsibilities and risks as well.

4.6 Projections for the 2021-2024 period

To the extent that the baseline scenario represents the probability that the assumptions it involves are closer to occur, the analysis of the position and the estimations of the NPFS gross debt are taken from this scenario as a reference

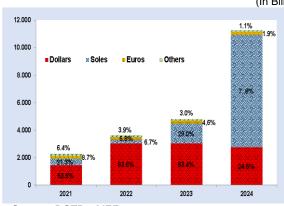
✓ <u>Projected payment of the amortizations of the NFPS gross debt for the following four years</u>

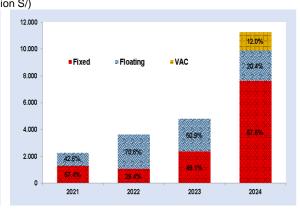
Around 1.0% of the total due (S/ 2.27 billion) is explained by the payment of the amortization in 2021. From now on, the annual levels of amortizations are slightly growing until 2023, and in 2024, they are almost tripled compared to 2023 due to the maturity of the nominal 2024 sovereign bond for S/ 6.74 billion and the 2024 VAC bond for S/ 1.36 billion. This situation provides some slack in the national Treasury, resulting in the use of additional resources for the benefit of other priority sectors.

In 2021, payments that will be made in currencies other than the sol represent around 79% and 64%, on average, for those to be matured in the following three years. Meanwhile, in the interest rate composition, 57% of maturities in 2021 are related to fixed rate liabilities. Around 49% is observed for the 2022-2024 period, which favor an accurate budget planning to pay debt service.



Chart 19 Maturities of the NFPS Gross Public Debt by Currencies and Interest Rates (In Billion S/)



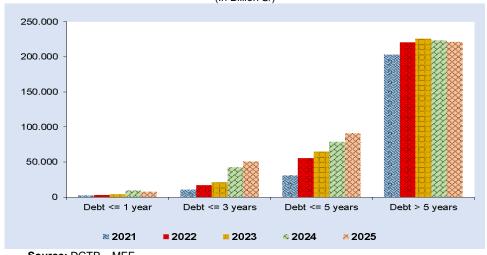


Source: DGTP - MEF

✓ Projected composition by term of maturity

Over the last years, as part of the strategy implementation, one of the objectives has been to smooth out the profile of payment of the NFPS gross public debt, considering long-term debt preferably. In this regard, the strategy for the current loan maturity and for those that are expected for the following years continues to favor longer-than-5 years terms. The effect of this structure is also seen in the maturity profile of the NFPS gross debt. Lower pressure in the national Treasury is a reflection of de-concentration.

Chart 20 Term-to-Maturity of the Central Government Gross Debt (In Billion S/)



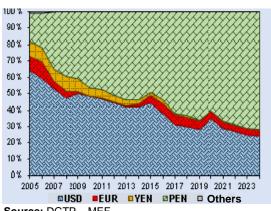
Source: DGTP - MEF

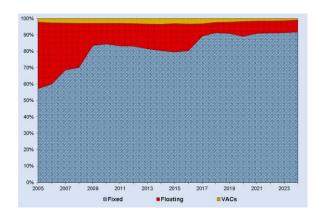
Projected composition by currencies and interest rates

The participation of the domestic currency in the total NFPS gross public debt would be around 72% at the end of 2024, higher than the one that would be attained in 2020 (59%). At the end of September 2020, this indicator reached by

59.6%. In the meantime, the fixed rate component would remain 75% higher than that registered since 2009, attaining 91% approximately at the end of 2024.

Chart 21
Evolution of the NFPS Gross Debt Composition by Currencies and Interest Rates





Source: DGTP - MEF

✓ Service and cost at risk of the NFPS gross public debt

The average cost of the NFPS gross public debt in annual terms in soles is defined by the payment of interests of the debt plus the additional amount that might be generated as an effect of changes in the foreign exchange rate and the interest rates. This surplus, which is considered a risk, was defined by taking into account the stochastic evolution of the interest rates and foreign exchange rates, as well as their correlation a whole. The probable increase of the cost due to changes in the foreign exchange rates and interest rates represents, on average, around 255 bps for the 4-year analysis.

Table 08
Cost and Risk of the NFPS Gross Debt for the 2021-2024 Period

	2021	2022	2023	2024
Average cost of the NFPS in soles	5.6%	5.4%	5.4%	5.5%
Risk to exposure of currencies and interest rates.	2.5%	2.8%	2.6%	2.4%
Risk to exposure of currencies and interest rates.	2.5%	2.8%	2.6%	

Source: DGTP - MEF

✓ Debt ratios and amortization profile

The estimation of some debt indicators relative to the GDP that is expected for the following years shows a downward trend of the main economic indicators (GDP, primary result, debt, etc.) due to the COVID-19. Such indicators have been projected and published in the 2021-2024 MMF, as well as the effect of the planned debt management operations (the execution of these operations will be subject to market conditions) for the period of analysis.

This financial cost considers the upward evolution of the interest rates for the loans agreed at fixed rates of passive debt and the fixed rates of the new financing and the expected stability of the foreign exchange rate, which will increase the cost of the debt for the following years.

The risk of the financial cost in soles is defined by the difference between the maximum cost (at 95% confidence) and the average cost.

1.6%





"DECADE OF EQUAL OPPORTUNITIES FOR WOMEN AND MEN" "YEAR OF THE BICENTENNIAL OF PERU: 200 YEARS OF INDEPENDENCE"

Table 09 **Ratios of the NFPS Gross Public Debt**

(% GDP) 2021 2022 2023 2024 34.7% 36.1% 35.6% 33.8% 1.8% 2.1% 2.1% 2.6% 0.4% 0.4% 0.3% 1.0%

1.7%

1.7%

NFPS/GDP interests Source: DGTP - MEF

NFSP/GDP amortization

NFPS/GDP debt

NFPS/GDP service

Table 10 Ratios of the NFPS Gross Public Debt

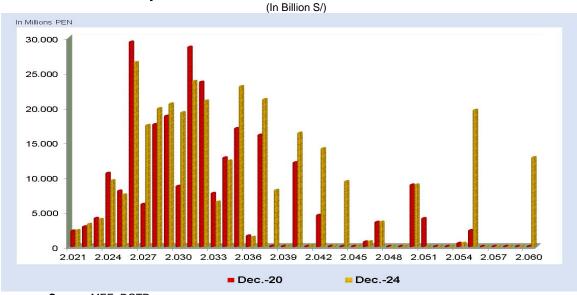
1.5%

(% revenues) 2021 2022 2023 2024 186.5% NFPS/revenues debt 166.2% 162.2% 156.5% NFPS/revenues service 9.3% 9.6% 9.8% 12.1% NFPS/revenues amortizations 1.5% 1.8% 2.1% 4.7% 7.4% NFPS/Revenues interests 7.8% 7.8% 7.7%

Source: DGTP - MEF

Finally, in order to complete the exercise, the profile of the dynamic gross debt of the NFPS was forecasted. This includes the flows of the new debt that would be incurred in each of the fiscal years until 2024 to meet the financial requirements, as well as the impact of the debt management operations that are scheduled to be carried out in the period to reduce the portfolio risks. The following chart shows that the amortization profile for the following years would be smoothed out compared to the profile at the end of 2020; this de-concentration is the result of long-term maturities that have been redistributed to favor a better stability for the following years.

Chart 22 **Projected Amortizations of the NFPS Gross Public Debt**



Source: MEF- DGTP



APPENDICES

APPENDIX 1: Schedule on the 2021 Treasury Securities Regular Auction Program

Jan	January 2021								
S	М	Т	W	Т	F	S			
					1	2			
3	4	5	6	7	8	9			
10	11	12	13	14	15	16			
17	18	19	20	21	22	23			
24	25	26	27	28	29	30			
31									

Feb	February 2021								
S	М	Т	W	Т	F	S			
	1	2	3	4	5	6			
7	8	9	10	11	12	13			
14	15	16	17	18	19	20			
21	22	23	24	25	26	27			
28									

Ma	March 2021								
S	М	Т	W	Т	F	S			
	1	2	3	4	5	6			
7	8	9	10	11	12	13			
14	15	16	17	18	19	20			
21	22	23	24	25	26	27			
28	29	30	31						

Apr	April 2021								
S	М	Т	W	Т	F	S			
				1	2	3			
4	5	6	7	8	9	10			
11	12	13	14	15	16	17			
18	19	20	21	22	23	24			
25	26	27	28	29	30				

May	May 2021								
S	М	Т	W	Т	F	S			
						1			
2	3	4	5	6	7	8			
9	10	11	12	13	14	15			
16	17	18	19	20	21	22			
23	24	25	26	27	28	29			
30	31								

June 2021									
S	М	Т	W	Т	F	S			
		1	2	3	4	5			
6	7	8	9	10	11	12			
13	14	15	16	17	18	19			
20	21	22	23	24	25	26			
27	28	29	30						

July	July 2021									
S	М	Т	W	Т	F	S				
				1	2	3				
4	5	6	7	8	9	10				
11	12	13	14	15	16	17				
18	19	20	21	22	23	24				
25	26	27	28	29	30	31				

Aug	August 2021								
S	М	Т	W	Т	F	S			
1	2	3	4	5	6	7			
8	9	10	11	12	13	14			
15	16	17	18	19	20	21			
22	23	24	25	26	27	28			
29	30	31							

Sep	September 2021								
S	М	Т	W	Т	F	S			
			1	2	3	4			
5	6	7	8	9	10	11			
12	13	14	15	16	17	18			
19	20	21	22	23	24	25			
26	27	28	29	30					

Oct	October 2021								
S	М	Т	W	Т	F	S			
					1	2			
3	4	5	6	7	8	9			
10	11	12	13	14	15	16			
17	18	19	20	21	22	23			
24	25	26	27	28	29	30			
31									

Nov	November 2021								
S	М	Т	W	Т	F	S			
	1	2	3	4	5	6			
7	8	9	10	11	12	13			
14	15	16	17	18	19	20			
21	22	23	24	25	26	27			
28	29	30							

Dec	December 2021									
S	М	Т	W	Т	F	S				
			1	2	3	4				
5	6	7	8	9	10	11				
12	13	14	15	16	17	18				
19	20	21	22	23	24	25				
26	27	28	29	30	31					

On Thursdays of each week: Sovereign bonds auctions.

This is a referential schedule. The General Directorate of Public Treasury reserves the right to modify the dates of any of the auctions.

The General Directorate of Public Treasury will actively carry out debt management operations as soon as the market conditions allow for.





APPENDIX 2: Monitoring of the Position and Risks of the Financial Assets and Liabilities

Financial Assets

Monitoring of Financial Asset Positions

Monitoring of Financial Asset Positions								
By Composition	Dec16	Dec17	Dec18	Dec19	Sept20			
Total NFPS (in million soles)	118,597	110,559	115,316	120,287	108,072			
Government levels								
General Government	94.3%	93.9%	93.3%	93.7%	92.5%			
National Government	92.2%	91.1%	91.0%	90.4%	90.4%			
In the Treasury	71.9%	68.0%	62.8%	62.4%	60.3%			
Consolidated Reserve Fund	13.0%	14.2%	15.5%	15.9%	18.3%			
Others	7.3%	8.8%	12.7%	12.2%	11.8%			
Regional Governments	0.4%	0.3%	0.5%	1.3%	0.6%			
Local Governments	1.7%	2.4%	1.7%	2.0%	1.6%			
Non-financial companies	5.7%	6.1%	6.7%	6.3%	7.5%			
·								
Asset classes								
Cash equivalent	80.3%	80.5%	76.9%	76.8%	76.4%			
Sight position	17.0%	19.2%	19.4%	19.5%	36.4%			
Term position	63.4%	61.3%	57.4%	57.3%	40.0%			
Fixed income	5.3%	5.9%	7.0%	6.9%	7.9%			
Sovereign bonds	2.4%	2.7%	3.1%	3.4%	4.2%			
Corporate bonds	2.0%	2.2%	2.8%	2.8%	3.1%			
Others	0.8%	0.9%	1.0%	0.6%	0.7%			
Floating income	7.0%	8.2%	11.2%	11.6%	10.6%			
Stocks	1.8%	1.9%	2.6%	2.4%	2.5%			
Investment fund	4.1%	4.6%	5.3%	3.9%	4.4%			
Others	1.2%	1.7%	3.2%	5.3%	3.8%			
Accounts receivable	7.2%	5.5%	5.0%	4.7%	5.0%			
Derivatives	0.1%	0.0%	0.0%	0.0%	0.0%			
Currencies	44.00/	04.00/	0.4.007	00.00/	75 70/			
PEN	44.0%	61.3%	64.2%	62.9%	75.7%			
USD	52.1%	37.7%	35.2%	36.6%	23.7%			
EUR	0.2%	0.2%	0.1%	0.1%	0.1%			
JPY	3.7%	0.7%	0.5%	0.5%	0.6%			
Others	0.0%	0.0%	0.0%	0.0%	0.0%			
Interest rate classes								
Fixed rate	91.6%	90.2%	87.0%	86.5%	88.0%			
Cash and cash equivalents	80.3%	80.4%	76.8%	76.8%	76.4%			
Fixed income	4.7%	5.2%	6.5%	6.4%	7.4%			
Others	6.5%	4.5%	3.6%	3.2%	3.2%			
Indexed rate	0.5%	0.5%	0.5%	0.4%	0.5%			
Fixed income	0.5%	0.5%	0.5%	0.4%	0.5%			
Floating rate	6.7%	8.0%	10.3%	10.2%	9.6%			
Floating income	5.9%	6.9%	8.9%	8.7%	10.0%			
Others	0.9%	1.1%	1.4%	1.4%	1.7%			
Not applicable	1.2%	1.3%	2.3%	2.9%	2.8%			
The applicable	11270	110 70	2.070	2.070	21070			
Liquidity capacity								
Liquid assets	17.0%	19.2%	19.4%	19.5%	36.4%			
Term liquid asset	70.7%	66.8%	62.5%	62.0%	45.1%			
Term deposits	61.9%	60.3%	56.2%	56.5%	39.0%			
Transfers of resources	6.7%	5.0%	4.6%	4.3%	4.7%			
Others	2.0%	1.5%	1.7%	1.2%	1.4%			
Liquid market assets	11.1%	12.7%	15.8%	15.5%	18.2%			
Bonds	5.2%	5.6%	6.6%	6.7%	7.8%			
Investment funds	4.1%	4.6%	5.3%	3.9%	4.4%			
Others	1.9%	2.5%	4.0%	5.0%	6.1%			
Iliquid assets	1.2%	1.3%	2.2%	2.9%	0.2%			
Derivatives	0.0%	0.0%	0.0%	0.0%	0.0%			

Derivatives
Source: DGTP – MEF

Duration by Asset Classes and Currencies (*)

(In years)

By Composition Group	Dec16	Dec17	Dec18	Dec19	Sept20
Asset Classes					
Cash and cash equivalents	0.27	0.12	0.19	0.21	0.06
Positions at sight	0.00	0.00	0.00	0.00	0.00
Savings accounts	0.00	0.00	0.00	0.00	0.00
Term deposits	0.33	0.14	0.23	0.25	0.11
Fixed income	7.44	8.37	7.83	8.78	8.44
Sovereign bonds	7.44	8.37	7.83	8.78	8.44
Floating income	0.00	0.00	0.00	0.00	0.00
Trusts	0.00	0.00	0.00	0.00	0.00
Accounts receivables	4.18	4.21	4.00	4.20	4.16
Derivaties	0.00	0.00	0.00	0.00	0.00
TOTAL	0.65	0.43	0.49	0.51	0.41
Per currency					
PEN	0.57	0.41	0.46	0.48	0.25
USD	0.36	0.27	0.36	0.38	0.78
EUR	5.61	4.68	4.00	5.09	4.72
JPY	4.26	4.35	4.29	4.45	4.53
TOTAL	0.65	0.43	0.49	0.51	0.41

Source: DGTP - MEF

Modified Duration by Asset Classes (*) (In years)

By Composition Group	Dec16	Dec17	Dec18	Dec19	Sept20
Cash and cash equivalents	0.27	0.12	0.19	0.21	0.06
Positions at sight	0.00	0.00	0.00	0.00	0.00
Savings account	0.00	0.00	0.00	0.00	0.00
Term deposit	0.33	0.14	0.23	0.25	0.11
Fixed income	6.99	7.90	7.40	8.39	8.09
Sovereign bonds	6.99	7.90	7.40	8.39	8.09
Floating income	0.00	0.00	0.00	0.00	0.00
Trusts	0.00	0.00	0.00	0.00	0.00
Accounts receivables	4.07	4.13	3.91	4.13	4.11
Derivatives	0.00	0.00	0.00	0.00	0.00
TOTAL	0.64	0.43	0.48	0.50	0.41

Source: DGTP - MEF

Average Life by Asset Classes (*)

(In years)

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By Composition Group	Dec16	Dec17	Dec18	Dec19	Sep.t-20
Cash and cash equivalents	0.27	0.12	0.19	0.21	0.06
Positions at sight	0.00	0.00	0.00	0.00	0.00
Savings account	0.00	0.00	0.00	0.00	0.00
Term deposit	0.33	0.14	0.23	0.25	0.11
Fixed income	12.72	14.62	13.62	14.62	13.87
Sovereign bonds	12.72	12.72	11.64	12.80	11.92
Floating income	0.00	0.00	0.00	0.00	0.00
Trusts	0.00	0.00	0.00	0.00	0.00
Accounts receivables	5.43	5.23	5.05	5.10	5.03
Derivatives	0.00	0.00	0.00	0.00	0.00
TOTAL	0.78	0.53	0.59	0.60	0.51

^(*) This analysis includes hedging by the Central Government.

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Capitalization of Financial Assets (*)

Capitalization in Local Currency	Dec16	Dec17	Dec18	Dec-19	Sept-20
Cash and cash equivalents					
Positions at sight – BCRP	3.0%	2.0%	1.6%	1.8%	0.15%
Term deposits – BCRP	3.1%	2.7%	2.1%	2.1%	0.6%
Term deposits- FS	3.8%	3.9%	4.0%	3.8%	3.5%

Capitalization in Foreign Currency	Dec16	Dec17	Dec18	Dec19	Sept20
Cash and cash equivalents					
Positions at sight - BCRP	0.1%	0.3%	0.6%	0.3%	-
Term deposits - BCRP	0.6%	1.4%	2.6%	1.9%	(**)

Source: DGTP - MEF

(*) This analysis includes hedging by the Central Government.
(**) As of September 2020, the Central Government does not hold term deposits in FC at the BCRP.

Financial Liabilities

Monitoring of Financial Liability Positions

By Composition Group	Dec16	Dec17	Dec18	Dec19	Sept20
Total NFPS (in million soles)	145,976	160,780	178,292	192,729	217,047
By Origen					
Securities in circulation	75.6%	86.5%	86.1%	88.6%	84.3%
Sovereign bonds	44.4%	54.8%	57.2%	63.1%	56.5%
Global bonds	26.7%	28.0%	25.9%	23.4%	27.8%
Other bonds	4.5%	3.6%	3.0%	2.1%	0.0%
Credits	23.4%	12.0%	12.6%	10.9%	15.7%
Paris Club	3.4%	2.1%	2.0%	1.9%	1.9%
Multilateral organizations	15.5%	7.8%	6.5%	6.6%	10.0%
Other crédits	4.5%	2.0%	4.1%	2.4%	3.8%
T-bills	1.0%	1.5%	1.3%	0.4%	0.0%
By Jurisdiction					
Foreign debt	46.6%	38.1%	36.8%	34.1%	41.8%
Domestic debt	53.4%	61.9%	63.2%	65.9%	58.2%
By Curencies					
DEG	0.1%	0.1%	0.1%	0.1%	0.1%
EUR	6.1%	6.2%	5.8%	5.2%	5.4%
JPY	2.2%	0.9%	0.8%	0.7%	0.7%
PEN	53.9%	62.3%	63.6%	65.9%	58.2%
USD	37.8%	30.5%	29.7%	28.1%	35.7%
By Rate Type					
Fixed	77.4%	86.7%	89.5%	89.6%	86.7%
VAC	6.9%	6.0%	4.5%	3.8%	3.3%
Floating	15.7%	7.2%	6.0%	6.6%	9.9%

Source: DGTP - MEF

Evolution of the Average Life and Modified Duration

Debt Indicators	Dec16	Dec17	Dec18	Dec19	Sept20
Average-Term-to-Maturity (years)	12.6	12.7	12.0	12.5	11.4
Modified duration (years)	7.1	7.6	7.3	8.0	7.6

Weighted Average Yield Rate in soles of Global and Sovereign Bonds issued by the Treasury (In local currency)

Bonds	Dec16	In PEN	Dec17	In PEN	Dec18	In PEN	Dec.19	In PEN	Jun20	In PEN	Sept-20	In PEN
Global USD (in millions)	31,370	8.0%	30,297	5.7%	30,715	6.6%	30,290	4.5%	42,958	4.2%	43,662	3.8%
Global EUR (in millions)	7,562	6.8%	8,285	5.2%	8,715	6.1%	8,122	4.0%	8,671	3.6%	9,474	3.3%
Sovereign (in millions)	64,819	6.2%	88,151	4.9%	102,009	5.5%	121,612	4.4%	122,189	4.1%	122,622	3.9%
Total/Average	103,752	6.8%	126,732	5.1%	141,439	5.8%	160,024	4.4%	173,818	4.1%	175,758	3.8%

Source: DGTP-MEF

APPENDIX 3: NFPS Gross Public Debt: Evolution of Some Indicators

(In Million S/)

	2020	2021	2022	2023	2024
Baseline scenario					
Total gross debt	236,743	278,563	293,397	304,904	315,048
Fixed rate	88.1%	90.1%	90.4%	90.7%	91.1%
Soles	59.9%	66.7%	68.9%	71.1%	71.8%
Foreign debt	58.4%	65.4%	67.7%	69.9%	70.7%
Soles (in 5 years)	34.3%	33.1%	40.0%	49.2%	53.4%
Fixed rate (in 5 years)	57.5%	73.4%	74.9%	76.9%	79.1%
Averate-term-to-maturity (years)	11.25	12.00	11.51	11.10	11.23
Average-term-to-reprice (years)	10.83	11.68	11.22	10.84	11.01
Equivalent rate	5.8%	5.8%	5.5%	5.4%	5.5%

	2020	2021	2022	2023	2024
Optimistic scenario					
Total gross debt	227,902	272,751	289,135	302,436	315,279
Fixed rate	88.6%	90.7%	91.0%	91.4%	91.9%
Soles	62.8%	69.6%	72.3%	74.6%	75.4%
Foreign debt	60.7%	67.8%	70.7%	73.0%	74.0%
Soles (in 5 years)	33.6%	32.6%	41.6%	52.2%	57.1%
Fixed rate (in 5 years)	53.5%	71.3%	73.8%	77.2%	79.9%
Averate-term-to-maturity (years)	11.29	12.29	11.87	11.51	11.65
Average-term-to-reprice (years)	10.91	12.00	11.60	11.28	11.45
Equivalent rate	5.7%	5.7%	5.5%	5.3%	5.4%

	2020	2021	2022	2023	2024
Pessimistic scenario					
Total gross debt	248,725	294,326	312,658	324,710	334,702
Fixed rate	87.6%	87.8%	87.4%	87.1%	87.4%
Soles	56.5%	61.9%	63.4%	64.6%	65.3%
Foreign debt	55.6%	61.2%	62.7%	63.9%	64.7%
Soles (in 5 years)	32.3%	32.5%	41.3%	48.4%	51.7%
Fixed rate (in 5 years)	56.5%	73.0%	75.7%	76.8%	78.3%
Averate-term-to-maturity (years)	11.19	11.68	11.12	10.56	10.60
Average-term-to-reprice (years)	10.74	11.13	10.48	9.90	9.98
Equivalent rate	5.8%	5.7%	5.5%	5.4%	5.4%