STRATEGY FOR GLOBAL ASSET AND LIABILITY MANAGEMENT 2019 - 2022

MINISTER OF ECONOMY AND FINANCE

Carlos Augusto Oliva Neyra

VICE MINISTER OF TREASURY

Betty Armida Sotelo Bazán

GENERAL DIRECTOR OF PUBLIC INDEBTEDNESS AND TREASURY

Jorge Enrique Siu Rivas

DIRECTOR OF ANALYSIS AND STRATEGY

Eduardo Alfonso Olavegoya Hurtado

TECHNICAL TEAM

Fernando Figueroa Manrique Malcolm Stewart Robles Ángel Polo Rodríguez María Bedoya Palomino Yoselyn Granda Vizcarra Pedro Portocarrero Moreno Albert Chávarri Balladares Carlos Japay Robles

ORIGINAL TITLE

ESTRATEGIA DE GESTIÓN INTEGRAL DE ACTIVOS Y PASIVOS 2019 - 2022

INFORMATION

Investor Relations Office

Phone: (511) 311-5933

E-mail: inversionistas@mef.gob.pe

Website: http://www.mef.gob.pe/inversionistas.php

General Directorate of Public Indebtedness and Treasury

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

Original version published on November 30th, 2018

Translation by Cecilia Torres Quintana



Message from the Minister of Economy and Finance

Over the last six years, the Strategy for Global Asset and Liability Management (EGIAP in Spanish) has served as an instrument for decision-making on financial management in order to manage the assets and liabilities of the Non-Financial Public Sector (NFPS) to the extent that this Strategy has been setting the guidelines for public finance. The EGIAP is also an instrument to prioritize funding for investment projects with resources coming from Treasury securities auctions; to strengthen the domestic public debt securities market with higher depth, liquidity and competitiveness; and to obtain higher returns on the country's financial assets.

Other achievements include making debt management operations in order to reduce refinancing risk and foreign exchange mismatches; the expansion of the investors' base through the gradual implementation of the Euroclear platform; the improved centralization of the resources in the Treasury's Single Account; the registration of the accounting and financial information by the public entities into the Financial Instrument Module; and measures to demand that entities from the three governmental levels plan their expenditure accurately and predictably.

The year 2018 has proved to be difficult for the international financial markets due to trade tensions adversely affecting commodities prices around the world; tighter financial conditions from advanced economies with higher interest rates; an uneven economic expansion and foreign exchange crisis in Argentina and Turkey.

Among emerging economies, there are still mixed financial conditions with increased interest rates in the Czech Republic, India, Indonesia, Mexico and the Philippines, and reduced interest rates in Brazil, Colombia, Chile and Peru. In addition, the International Monetary Fund (IMF) believes that given that the current international outlook is one of downward risks on the short and medium-term basis, Latin America will face greater difficulties to grow. Under this circumstances, the IMF recommends that emerging countries set as priorities in their economic policies the need to reinforce resilience through a suitable and cautious combination of fiscal, monetary and foreign exchange policies to weaken a vulnerable position in view of worsening global financial conditions, strong foreign exchange moves and a capital flow return.

In this context, it is needed a strong management of the Government's resources so that it will represent lower costs and financial risks. For this purpose, it is necessary to identify financial needs timely and accurately; to identify accumulated balances that have not been used by public entities; to strengthen the fungibility and the prioritization of the financing sources that promotes the use of accumulated balances and to improve the predictability of returns and expenditure flows and the execution of projects.

To conclude, this Strategy has challenges in terms of improving public funds management in order to finance the budget; having access and opportunities to gather quality financial information coming from the NFPS entities; and keeping strengthening the public debt securities market.

Carlos Augusto Oliva Neyra Minister of Economy and Finance of Peru

CONTENT

EXECUTIVE SUMMARY	4
INTRODUCTION	7
I. CURRENT SITUATION	8
1.1. Financial Assets	8
1.2. Financial Liabilities	11
II. GUIDELINES FOR THE GLOBAL FINANCIAL ASSET AND LIABILITY MANAGEMENT	15
III. THE 2019-2022 STRATEGY	18
3.1. Challenges for the 2019-2022 period	18
3.2. Strategic Actions	20
3.3. Reference Quantitative Strategic Targets for 2019 and 2022	21
IV.NFPS INDEBTEDNESS	21
4.1. NFPS Financial Needs	22
4.2. NFPS Financing Sources	23
APPENDIX 1: Schedule on the 2019 Regular Auction Program for Treasury Securities	25
APPENDIX 2: Main Achievements Concerning the Challenges Set on the 2018 2021 EGIAP	
APPENDIX 3: Long-term Vision	28
APPENDIX 4: NFPS Scenarios and Forecasts on Debt Indicators	31

LIST OF ACCRONYMS AND ABBREVIATIONS IN ENGLISH

ASIA EM Asian EM peers

ETF Exchange-Traded Fund

EUR Euro

FC Foreign Currency FS Financial System

FSF Fiscal Stabilization Fund

G7 Germany, Canada, United States, France, Italy, Japan and the UK

GDP Gross Domestic Product GG General Government

IMF International Monetary Fund

LA5 Brazil, Chile, Colombia, Mexico and Peru

LA6 Brazil, Chile, Colombia, Mexico, Peru and Uruguay

LCY Local currency

MMF Multiannual Macroeconomic Framework

NFPS Non-Financial Public Sector

OECD Organization for Economic Cooperation and Development

PEN Peruvian sol

PPP Private Public Partnership

S&P Standard & Poor's

USD US dollar VaR Value-at-Risk



LIST OF ACCRONYMS AND ABBREVIATIONS IN SPANISH

BCRP Central Reserve Bank of Peru (Banco Central de Reserva del Perú)

CUT Cuenta Única del Tesoro (Treasury's Single Account).

DGETP Dirección General de Endeudamiento y Tesoro Público

(General Directorate of Public Indebtedness and Treasury)

DGPMADF Dirección General de Políticas Macroeconómicas y

Descentralización Fiscal (General Directorate of Macroeconomic

Policy and Fiscal Decentralization)

D y T Donaciones y Transferencias (Donations and Transfers)

EGGAP Estrategia de Gestión Global de Activos y Pasivos (Strategy for

Global Asset and Liability Management)

EGIAP Estrategia de Gestión Integral de Activos y Pasivos (Strategy for

Global Asset and Liability Management of the Non-Financial Public Sector)

ESSALUD Seguro Social del Perú (Social Healthcare Scheme of Peru)
FCR Fondo Consolidado de Reserva (Consolidated Reserve Fund)
FONAFE Fondo Nacional de Financiamiento de la Actividad Empresarial de

Estado (National Fund for the Financing of State Companies).

MEF Ministerio de Economía y Finanzas (Ministry of Economy and Finance)
ONP Oficina de Normalización Previsional (Previsional Normalization Office)
PAEAD Programa Anual de Endeudamiento y Administración de la Deuda

(Annual Program for Indebtedness and Debt Management).

RD Recursos Determinados (Specified Resources)

RDR Recursos Directamente Recaudados (Directly Collected Resources)

RO Recursos Ordinarios (Ordinary resources)

ROOC Recursos por Operaciones Oficiales de Crédito (Resources from

Debt Operations)

RSL Reserva Secundaria de Liquidez (Secondary Liquidity Reserve)
VAC Valor Adquisitivo Constante. VAC bonds (Inflation-linked Bonds)

EXECUTIVE SUMMARY

The Strategy for Global Asset and Liability Management¹ outlines the guidelines for the Public Treasury financial administration helping it manage the public finances with responsibility and sustainability. It also contributes to keeping the country's remarkable record on how prudent and reliable its fiscal policies have been implemented, which have been highlighted by the main credit rating agencies.

The EGIAP has led the actions of the Treasury in terms of financial assets and liabilities management, reducing both the exposure to contingencies and financial costs. The financial assets balance of the Non-Financial Public Sector (NFPS) attained S/ 115,746 million in July 2018 (16% of GDP), with 69% of these resources managed by the Public Treasury. In line with the currency structure, the sol accounts for 62.9% of the financial assets portfolio, followed by the US dollar with 36.4%.

The NFPS financial liabilities closed at S/ 162,806 million² (22.5% of GDP³). Fixed rate liabilities reached 87.7% of the total and the domestic currency composition posted at 62.9%.

This composition is explained by the management applied to the financial liabilities over the last years with a Treasury's reduced exposure to contingencies affecting interest rates or foreign exchange rates, alleviating the exposure to external shocks due to a lower position of debt in foreign currency, de-concentrating debt maturity, and contributing to reducing re-financing risks.

Likewise, under the EGIAP, important advances are shown such as: identification of the financial assets and liabilities of the NFPS entities; the sustained insertion of the public resources in the Treasury's Single Account (CUT in Spanish); financial allocation of public funds in line with the actual implementation of activities or projects; the strengthening of the public debt securities market, among others. Thus, it is forecast that, by the end of 2018, the reference quantitative targets on the 2018 Annual Program for Indebtedness and Debt Management (PAEAD in Spanish) will have been achieved, as it seen as follows:

The Legislative Decree N° 1441 – National System of Treasury – sets out that the Strategy for Global Asset and Liability Management of the Non-financial Public Sector (EGIAP in Spanish), formerly named as Strategy for Global Asset and Liability Management (EGGAP in Spanish), is part of the process that manages public resources of the Public Sector financial administration and it must be in accordance with the guidelines of the financial planning.

Information as of July 2018.
This percentage differs from the gross debt ratio against the GDP, published by the Central Reserve Bank of Peru.
The difference is mainly due to the short-term debt considered, the methodology that assesses recognition bonds of the Previsional Normalization Office (ONP in Spanish), and the foreign exchange rate used.

Estimated Results of the Reference Quantitative Targets on the 2018 PAEAD

Indicator	Range at End-Dec. 2018	Estimated Results at End- Dec. 2018 ^{1_/}
Percentage of soles in the portfolio 2_/	58.9% - 62.5%	66.3%
Percentage of fixed rate debt in the portfolio	85.6% - 86.2%	88.2%
Percentage of domestic debt in the gross balance	58.3% - 62.0%	65.7%
Average term-to-maturity (years)	11.6 - 11.5	12.3
Average term-to-reprice (years)	10.9 - 11.0	11.8
Accumulated amortizations for the following 12 months 3_/	3.0% - 3.0%	1.4%
Percentage of financing flow in domestic currency 4_/	58.8% - 66.1%	79.4%

Source: MEF - DGETP.

- 1_/ Every indicator corresponds to the NFPS. They are all preliminary data. Treasury bills are excluded.
- 2_/ The effect of financial derivatives being equal to 0.2% is included.
- 3_/ Indicator calculating the most immediate pressure on payments.
- 4_/ Includes financing of debt management operations.

In this sixth edition, the 2019-2022 EGIAP confirms its commitment to the objective of being a continued support to fiscal responsibility. Additionally, it presents challenges and strategic actions, as well as updated guidelines for the financial management as listed:

- a. The strengthening of the public debt securities market in soles, taking into consideration a suitable maturity profile.
- b. Financial planning in line 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 assessing other financial instruments to face eventual financial instability.
- e. Making public funds profitable and reducing liquidity cost.
- f. Identification of fiscal risks and assessing alternatives to mitigate the effect on the public finances.
- g. Strengthening automated payment mechanisms and the fact of getting timely financial information that is both comprehensive and reliable.

Considering this, three big challenges that also include different issues that the EGIAP intends to deal with have been identified: first of all, it is required to have timely and reliable information on financial assets and liabilities in order to ensure that the Republic meets its obligations and to design the financial budget composition. After this, new regulations in connection with the use of public resources approved within the framework of the Modernization of the Financial Administration of the Public Sector must be implemented, and finally, there must be a continued development of the public debt securities market in soles.

To respond to such challenges, the EGIAP will focus its efforts on the following strategic actions:

- To strengthen the information systems, the systematization of payment mechanisms, the consolidation of the systems that register financial information and the expansion of the Treasury's Single Account coverage will be sought.
- To set the prioritization and the fungibility of the use of resources through regulation improvements and to strengthen the financial programming of the resources that come from public indebtedness.

 To strengthen the public debt securities market, there will be a continued development of instruments to ease trading through Euroclear and similar ones and other instruments such as the ETF and Repos, and also giving priority to benchmark issuances in the sovereign curve.

The updated EGIAP maintains the long-term vision⁴ concerning the NFPS public debt. Debt in domestic currency should be closed to 78% of the total (+/-3%); fixed rate debt to 95% (+/-2%) and the average-term to maturity to 13 years (+/-2 years). For the 2019-2022 EGIAP, a range of reference quantitative targets for some monitoring indicators for the NFPS public debt has been considered:

Reference Quantitative Targets for NFPS Debt Indicators at the end of 2019 y 2022 (*)

Indicator	Estimated Range at End- Dec. 2019	Estimated Range at End- Dec. 2022
Percentage of soles in the portfolio	66.8% - 68.9%	69.6% - 75.4%
Percentage of fixed rate debt in the portfolio	87.9% - 88.8%	87.1% - 89.6%
Percentage of domestic debt in the gross balance	66.7% - 68.8%	69.5% - 75.4%
Average term-to-maturity (years)	11.8 - 11.8	10.7 - 11.3
Average term-to-reprice years)	11.2 - 11.3	10.0 - 10.8
Accumulated amortizations for the following 12 1_/	2.0% - 1.9%	1.3% - 1.2%
Percentage of the financing flow in domestic currency 2_/	78.0% - 83.9%	82.0% - 89.8%

Source: MEF - DGETP.

The EGIAP also considers the NFPS financing needs in line with the estimations set out on the 2019-2022 Multiannual Macroeconomic Framework (2019-2022 MMF) and their financing sources. Based on this, in 2019, funding coming from the domestic debt market will continued to be favored.

To conclude, the EGIAP includes the new Schedule for the 2019 Program for the Treasury Securities Regular Auctions to provide the market players with more information and transparency.

Page **6/34**

^(*) Hedging derivatives are included. Treasury bills are excluded.

¹_/ Indicator calculating the most immediate pressure on payments.

²_/ Includes financing for debt management operations.

Time horizon greater than 10 years.

INTRODUCTION

The Strategy for Global Asset and Liability Management has been formulated and presented to the general public in order to introduce, with a long-term vision, the policies and objectives of the strategy for the Treasury financial management. It also presents the guidelines and general actions to be followed by the NFPS entities within a framework of responsible and sustainable management of the public finances.

This scope of action has been strengthening the public net debt management in line with the macroeconomic policy in general. Similarly to previous versions, this updated Strategy is in accordance with the fiscal policy guidelines set on the MMF 2019-2022.

This document is divided into four sections that enable to connect the financial assets and liabilities management guidelines with the necessary strategic actions that will gradually help achieve the challenge of managing public resources efficiently.

The first section covers the current situation of the NFPS financial assets and liabilities, together with an analysis of the structure and composition of each of them, providing a general outlook of the NFPS financial balance-sheet.

The second section presents the guidelines to be followed to manage the financial assets and liabilities of the public sector.

The third section describes the 2019-2022 Strategy and lists challenges such as: information gathering, fungibility, prioritization and development of the public debt securities market, as well as the strategic actions required to face the challenges and targets for the 2019-2022 period. Following this, the reference quantitative strategic targets that allow the estimation of the main debt management indicators for in this period are presented hereon

The fourth section introduces the NFPS requirements and financing sources in which the market debt composition and credits that will cover our financial needs for the 2019-2022 period are described being in accordance with the projected fiscal deficit of the NFPS on the current MMF.

The last section contains the supporting appendices: the first appendix shows the Schedule for the 2019 Program for the Treasury Securities Regular Auctions; the second appendix describes the main achievements concerning the challenges set out on the 2018-2021; the third appendix presents the long-term vision that should guide the targets for the domestic/foreign currency ratios, the average-term to maturity and the fixed/variable rate ratio of the NFPS debt; and the last one shows the scenarios and projections related to the NFPS debt.

I. CURRENT SITUATION

In 2018, the credit rating agencies have highlighted the responsible management of public finances, which supports the Peruvian credit profile. This has meant a source of credibility and confidence for the investors, contributing to improving the investment climate and the prospects for economic growth. This situation is reflected by the Standard & Poor's and Fitch Rating affirmation of the sovereign debt rating at A- (domestic currency) and at BBB+ (foreign currency). Moody's assigned A3 (for debt in both currencies), with a stable rating outlook maintained in all cases.

The agencies coincide that the strengths of the credit profile of Peru are based on its history of trustworthiness and the responsible handling of the economic policy, the improved outlook for economic growth and the implementation of measures to increase the Government's revenues and to expand the tax base.

Likewise, it is worth pointing out the Peruvian debt level as one of the lowest of the region (24.9% of GDP) in 2017, only surpassed by Chile (23.6% of GDP) over the same period. This level is still lower than the averaged countries with the same rating (48.3%) and OECD country members (67.9%).

Table N° 01
Summary of 2017 Indicators
Peru, Reference Countries in the Region with Similar Rating and
OECD Country Members

		Latin America					Averaged Countries	
Indicator (%)	Peru	Brazil	Chile	Colombia	Mexico	Α-	OECD	
Public Debt (% GDP)	24.9	84.0	23.6	49.4	54.2	48.3	67.9	
Domestic public debt (% GDP)	15.2	70.5	16.9	25.3	25.7	26.4	43.0	
Debt in LCY (% Gross debt)	62.0	94.7	81.5	66.4	81.4	81.4	92.7	
Debt (% Revenues)	137.5	278.9	104.3	192.8	218.3	147.6	174.3	
Interests (% Revenues)	6.2	18.2	3.9	11.7	9.8	5.6	4.6	
Revenues (% GDP)	18.1	30.1	22.6	25.6	24.8	33.8	40.0	
Economic Result (%GDP)	-3.1	-7.8	-2.7	-3.1	-1.1	-1.3	-0.7	
Deposits in the FS in LCY (% total deposits in the FS)	65.4	100.0	85.1	100.0	82.2	89.0	85.2	

Source: MEF, BCRP, FMI, Fitch Ratings, Moody's Investors Service and S&P Global Ratings. Information on Peru comes from Government official sources. Debt estimations are based on the Non-Financial Public Sector and on the General Government current revenues. Information on reference countries comes from the General Government to ensure

comparability, in line with the International Monetary Fund estimations. The averaged countries with A- ratings refer to all countries that until August 31, 2018 maintained a long-term debt rating in domestic currency or in foreign currency of A-, as stated by S&P or Fitch or the equivalent of A3 as stated by Moody's.

1.1. Financial Assets

1.1.1.Position of the NFPS Financial Assets

At July 2018, the total NFPS financial assets reached S/ 115,746 million (16% of GDP), a slight increase of 1.6% against the December 2017 result. By ownership, the resources of the public entities deposited at the Public Treasury and the Private

Financial System correspond to 50.4%; the allocated and committed funds to 23.1%, and the Public Treasury own resources to 21.1%.

Table N° 02
NFPS Financial Assets by Ownership and Source
(In Million Soles)

	Dec	17	Jul	18	
By Ownership and Source	Balance	PCT. (%)	Balance	PCT. (%)	Usage Consideration
1. Public Treasury Own Resources	<u>27,419</u>	<u>24.1</u>	<u>24,393</u>	<u>21.1</u>	They are resources coming from tax collection
1.1. Ordinary Resources (RO)	13,426	11.8	14,403	12.4	(RO) and debt operations (ROOC). They are mainly aimed at covering budgeted expenditures, paying debt service and covering
1.2. Resources by Credit Operations (ROOC)	13,993	12.3	9,989	8.6	expenses for investment projects.
2. Funds, Allocated and Committed Resources	<u>27,501</u>	<u>24.1</u>	26,760	<u>23.1</u>	They come from different sources and, by Law,
2.1. Fiscal Stabilization Fund (FSF)	20,718	18.2	20,896	18.1	they have their own accumulation and spending rules. The FSF and the RSL are to
2.2. Secondary Liquidity Reserve (RSL)	0	0.0	0,1	0.0	keep liquidity reserves to face instability. Additionally, there are other funds for public
2.3. Other funds	3,578	3.1	3,338	2.9	investment, technological innovation and
2.4. Allocated and Committed Resources	3,205	2.8	2,525	2.2	others.
3.Resources in Public Entities in the Public Treasury	20,295	<u>17.8</u>	25,948	22.4	They mainly come from public entities own
3.1. Specified Resources (RD)	9,632	8.5	12,797	11.1	resources and from Public Treasury transfers. Depending on funding sources, they are aimed
3.2. Directly Collected Resources (RDR)	4,310	3.8	4,935	4.3	at covering investment plans and the current expenditure of the own entities. Most of these
3.3. Donations and Transfers (DyT)	3,862	3.4	4,502	3.9	resources are found in the Treasury's Single
3.4. Other Resources	2,491	2.2	3,714	3.2	Account (CUT).
4. Resources in Public Entities in the Private Financial System	32,134	28.2	32,412	28.0	These resources mainly come from intangible
4.1. Consolidated Reserve Fund (FCR)	16,350	14.3	17,108	14.8	assets. For instance, the resources from the FCR are to fulfill the obligations related to
4.2. Companies - FONAFE	5,097	4.5	5,070	4.4	pension schemes managed by ONP. Regarding EsSalud, the resources correspond
4.3. EsSalud	4,200	3.7	4,511	3.9	to revenues to cover expenditures on health
4.4. General Government	6,487	5.7	5,723	4.9	benefits.
5. Accounts Receivable	6,589	<u>5.8</u>	6,233	<u>5.4</u>	They are resources collected by the Central Government through debt operations to be transferred to a public entity in charge of debt service.
TOTAL	<u>113,937</u>	<u>100.0</u>	<u>115,746</u>	<u>100.0</u>	

Source: MEF - DGETP.

Of the total of the financial assets in the NFPS, Funds, Allocated and Committed Resources represent 51.1%, being all ruled by their own Law, in addition to Resources in Public Entities in the Financial System, which demonstrates the presence of rigidities that makes it difficult to establish a true global management of the treasury.

1.1.2. Financial Assets Portfolio Analysis

a. Instrument-based structure

With respect to the assets managed by the Public Treasury (S/ 79,838.0 million), term deposits are the main instrument for capitalization (54.4%), and they can be mainly found at the Central Reserve Bank of Peru (BCRP). Part of this is capitalized through auctions of term deposits in the private financial

system conducted by the BCRP, in conjunction with the Public Treasury, to handle the monetary policy conducted by the central bank.

Table N° 03
NFPS Financial Assets by Instruments
(In Million Soles)

By Type of Instrument	Dec17		Jul18		Change	
by Type of instrument	Balance	PCT. (%)	Balance	PCT. (%)	Balance	Var. (%)
1. Resources Managed by the Public Treasury	78,400	<u>68.8</u>	79,838	<u>69.0</u>	<u>1,438</u>	<u>1.8</u>
1.1. Current Account	12,637	11.1	10,279	8.9	-2,358	-18.7
1.2. Term Deposits	58,770	51.6	62,917	54.4	4,147	7.1
1.3. Investments in Securities	404	0.4	409	0.4	5	1.1
1.4. Account Receivables	6,589	5.8	6,233	5.4	-356	-5.4
2. Resources Managed by Public Entities	35,537	<u>31.2</u>	<u>35,908</u>	<u>31.0</u>	<u>370</u>	<u>1.0</u>
2.1. Current and Savings Account	10,485	9.2	11,575	10.0	1,090	10.4
2.2. Term Deposits and Others	9,329	8.2	8,166	7.1	-1,163	-12.5
2.3. Investment in Securities	15,723	13.8	16,167	14.0	444	2.8
TOTAL	<u>113,937</u>	<u>100.0</u>	<u>115,746</u>	<u>100.0</u>	<u>1,809</u>	<u>1.6</u>

Source: MEF - DGETP.

Regarding the assets managed by public entities in the private financial system (S/ 35,908.0 million), investment in securities is seen as the main capitalization instrument (14.0%). The intangible assets from the Consolidated Reserve Fund (CRF) and EsSalud, managed in accordance with their policies and investment regulations, are highlighted. Public entities specifically keep their balances in current accounts and term deposits, under the legal regulation in force⁵.

b. <u>Currency-based structure</u>

In the currency-based structure of the resources managed by the Treasury, it is seen that the prominent currency is the local currency, followed by the US dollar with resources coming mainly from the FSF. The local currency is also the main currency for resources managed by public entities, followed again by the US dollar, coming basically from the CRF resources. Both groups keep an important part of the assets in dollars. Nevertheless, their exposure to the foreign exchange risk is explained by the fact that as they are reserves, they must be denominated in a convertible foreign currency.

Page 10/34

Directoral Resolution N° 016-2012-EF/52.03 and the EGIAP.

Table N° 04 NFPS Financial Assets by Currency

(In Million Soles)

B. C. C.	Dec	17	Jul	18	Change	
By Currency	Balance	PCT (%)	Balance	PCT (%)	Balance	PCT (%)
1. Resources Managed by the Public Treasury	<u>78,400</u>	<u>68.8</u>	<u>79,838</u>	<u>69.0</u>	<u>1,438</u>	<u>1.8</u>
1.1. Soles	44,420	39.0	48,750	42.1	4,330	9.7
1.2. Dollars	32,945	28.9	30,286	26.2	-2,659	-8.1
1.3. Euros	205,76	0.2	157,56	0.1	-48,2	-23.4
1.4. Yens	829	0.7	643,99	0.6	-185	-22.3
2. Resources Managed by the Public Entities	<u>35,537</u>	<u>31.2</u>	<u>35,908</u>	<u>31.0</u>	<u>370</u>	<u>1.0</u>
2.1. Soles	24,424	21.4	24,099	20.8	-325	-1.3
2.2. Dollars	11,106	9.7	11,804	10.2	698	6.3
2.3. Euros	7	0.0	5	0.0	-2,3	-33.7
TOTAL	<u>113,937</u>	<u>100.0</u>	<u>115,746</u>	<u>100.0</u>	<u>1,809</u>	<u>1.6</u>

Source: MEF - DGETP.

1.2. Financial Liabilities

1.2.1.NFPS Financial Liabilities Position

As of July 31, 2018, the NFPS total debt attained to S/ 162,806 million (22.5% of GPD)⁶, an increase of 1.3% compared to end-December 2017. This is mainly explained by a rise in the sovereign bond balance and Treasury bills. In contrast, the credits (non-market debt) diminished by 13.9% and as a result, market debt turned into the most representative liability (86.8% of the total) in the NFPS debt portfolio.

By jurisdiction⁷, compared to previous years, domestic debt is the most representative and it mostly includes sovereign bonds that have been issued in the local market (91% of domestic debt). The foreign debt is mainly related to global bonds (74% of the foreign debt). In the currency-based structure of the debt, the sol is the most representative currency (62.9) and, by type of rate, the fixed rate position represents 87.9% of the total.

Of this total, 93% is equivalent to S/ 151,865 million and corresponds to the Budgetary Central Government. The Budgetary Central Government definition includes every unit being part of the Executive, Legislative or Judicial branches. Entities that are part of different institutional units such as universities, charitable organizations, supervisory bodies or other autonomous units all compounding the Central Government are not included. Other entities or institutional units being part of this level of administration constitute the Central Government Sector.

As specified in the Legislative Decree N° 1437 - National System of Public Indebtedness – it is stipulated that the issuance and the placement of internal and external bonds are subject to their corresponding regulation.

Table N° 05 NFPS Public Debt Status

(In Million Soles)

	Doo	47	Cha	N 0 0 0		
	Dec			Jul18		inge
DV ODIOIN	Balance	PCT. (%)	Balance	PCT. (%)	Balance	Chg. (%)
BY ORIGIN	405.007	04.5	444.007	00.0	F 500	4.0
Securities in Circulation	<u>135,887</u>	<u>84.5</u>	141,387	86.8	<u>5,500</u>	4.0
Global Bonds	45,071	28.0	45,402	27.9	331	0.7
Sovereign Bonds	88,151	54.8	92,713	56.9	4,562	5.2
Treasury Bills	2,491	1.5	3,097	1.9	606	24.3
Other Bonds	174	0.1	176	0.1	2	0.9
Credits	<u>24,888</u>	<u>15.5</u>	<u>21,419</u>	<u>13.2</u>	<u>-3,469</u>	<u>-13.9</u>
Multilaterals	12,835	8.0	12,356	7.6	-478	-3.7
Paris Club	3,146	2.0	3,437	2.1	291	9.2
Others	8,907	5.5	5,626	3.5	-3,281	-36.8
TOTAL	160,775	100.0	162,806	100.0	2,031	1.3
BY JURISDICTION						
Foreign Debt	61,252	38.1	61,392	37.7	140	0.2
Domestic Debt	99,523	61.9	101,414	62.3	1,892	1.9
TOTAL	160,775	100.0	162,806	100.0	2,031	1.3
BY CURRENCY						
PEN	100,573	62.6	102,425	62.9	1,852	1.8
USD	48,944	30.4	49,190	30.2	247	0.5
EUR	9,901	6.2	9,909	6.1	8	0.1
Others	1,357	0.8	1,282	0.8	-75	-5.6
TOTAL	160,775	100.0	162,806	100.0	2,031	1.3
BY RATE TYPE						
Fixed	139,518	86.8	143,086	87.9	3,568	2.6
Floating	11,536	7.2	11,402	7.0	-133	-1.2
VAC	4,847	3.0	4,030	2.5	-817	-16.9
ONP	4,874	3.0	4,288	2.6	-587	-12.0
TOTAL	160,775	100.0	162,806	100.0	2,031	1.3

Source: MEF - DGETP.

1.2.2. Financial Liabilities Portfolio Analysis

a. Public debt maturity profile

The profile of the NFPS debt maturities indicates that the larger number of them are concentrated in the medium and long-term maturities. It is worthwhile to keep implementing a policy to closely monitor this concentration in the short-term in order to avoid re-financing risks. It is projected that the debt service for



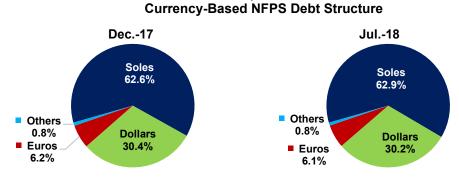
the following 12 months in 2019 would attained 1.9% of the total⁸ (4.7% in December 2017). Likewise, the debt average term to maturity is 12.6 years⁹ (11.9% in LCY and 13.9% in FC), slightly lower than that of December 2017.

Graph Nº 01 **NFPS Amortization Profile** 100% 16 14 Accumulated percentage(%) Domestic currency 12 75% Foreign currency · % accumulated (right axis) In billion S/ 8 50% 6 25% 0% 2018 2020 2022 2024 2026 2028 2030 2032 2034 2036 2038 2040 2042 2044 2046 2048 2050 2052 2054

Source: MEF – DGETP.

b. Currency-based structure

Public debt solarization continues strengthening; however, a larger number of liabilities denominated in foreign currency are still kept (37.1%). Among these currencies, the most representative one is the US dollar (30.2%), followed by the euro (6.1%).



Graph № 02

Source: MEF - DGETP.

Through a sensitivity analysis¹⁰, using the Value-at-Risk metric (historical method) at 99% of confidence with an interval of one-year-time horizon, the debt balance in foreign currency could rise in 1.1% of GDP at maximum. Thus, the debt solarization would fall from 62.9% to 60.1%. In the meantime, in the face

Foreign exchange rate volatility.

⁸ Considering the debt position up to July 2018, the projection of the debt service for 2019 represents 4.4% of the total debt.

Galculation based on the public debt database as at July 31, 2018.

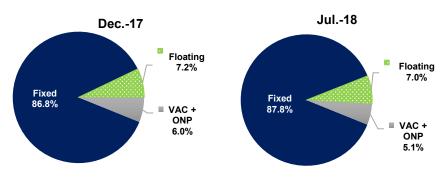


of a domestic currency depreciation, the projected debt service for 2019 could rise, at 99% confidence, by S/790 million at maximum (0.1% of GDP).

c. Interest rate structure

The position of floating rate liabilities keeps decreasing, then the predictability of the future flows of the NFPS public debt service gets consolidated.

Graph Nº 03 NFPS Debt Structure by Type of Rate



Source: MEF - DGETP.

To face adverse movements of the interest rates, specifically, six-month Libor rate increases, the annual interest payment could rise in S/ 120 million at maximum.

Table Nº 06 **Summary of the NFPS Financial Liabilities Monitoring Indicators**

Indicator	December 2017	July 2018
Percentage of soles in the gross balance	62.6%	62.9%
Percentage of nominal fixed rate debt in the gross balance	86.8%	87.9%
Average term-to-maturity (years)	12.9	12.6
Average term-to-reprice (years)	12.4	12.2
Accumulated amortizations over the following 12 months	4.7%	4.4%

Source: MEF - DGETP.

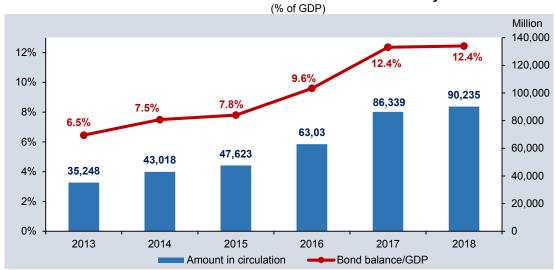
d. Public debt securities market

In July 2018, the sovereign bond balance grew to S/ 90,235 million, (4.5%) increased than in 2017), posting 12.4% as a share of GDP. At present, there are 11 references of fixed rate nominal sovereign bonds¹¹. Two out of eleven references (medium and long-term) concentrate, as a whole, 28% of the total debt related to this source.

Additionally, there are 7 VAC bonds references.

Graph N° 04 Public Debt Securities Market Growth in Domestic Currency for 2013-2018*

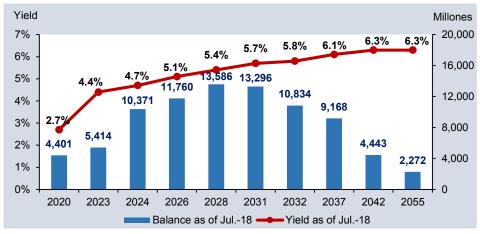
Vice Ministry of Treasury



*The annual nominal GDP as June 2018, published by the BCRP, was used to calculate the ratio. Source: MEF - DGETP and BCRP.

There is a medium and long-term concentration (between 2024 and 2032) in the sovereign bond maturity profile, posing a refinancing risk because of the future expectations of the market and the volatile yield rates. Likewise, there are benchmarks with higher coupons and current prices over par, which means greater financial burden for the Government, presenting a challenge for the debt management from now on.

Graph N° 05 Nominal Bond Balances vs. Yield Curve July 2018 (Millions of soles)



Source: MEF - DGETP.

II. GUIDELINES FOR THE GLOBAL FINANCIAL ASSET AND LIABILITY **MANAGEMENT**

In accordance with the EGIAP, various strategic actions have been implemented over the last years. These actions respond to six guidelines that conduct the financial asset



and liability management. Due to recent changes in regulation to improve the Public Treasury performance and bring it to the level of the best international practices, new guidelines have been set in this Strategy in order to follow and strengthen this modernization over the next years, all this by means of strategic actions that will come up as the objectives of each guidelines are met:

a. <u>To strengthen the public debt securities market in soles through an appropriate maturity profile.</u>

A developed public debt securities market means: (i) having liquid benchmarks in domestic currency that are part of a maturity profile in line with the Treasury's payment capacity; and (ii) having compensation and settlement systems on a national and international basis to foster transparency and competitiveness in the formation of prices.

In this regard, the Government provides the public with a risk-free yield curve as a reference in order to help natural and judicial persons have access to financing and strengthen, in general, the development of the financial system in domestic currency. In addition, higher indebtedness in soles, through the Government's issuance of sovereign bonds, reduces the public debt exposure to external shocks; in particular, exposure to foreign exchange rate changes, apart from reducing the corresponding financing costs.

Thus, the Government will focus both on strengthening the public debt securities market, producing aligned liquid benchmarks and promoting a strong secondary market of these securities, as well as expanding the investors' base.

b. <u>To plan financing that is consistent with the multiannual public budget expenditure</u> in line with an optimal balance structure.

Articulating financing to implement the budget needs a regulatory framework that stipulates flexibilization in the use of resources, regardless their source of origin when allocated on the budget. Based on this, financial imbalance due to the lack of fungibility among these sources will disappear; consequently, the need for public indebtedness could be reduced.

Therefore, it is important to improve the predictability of the sources and uses by means of a financing structure that links the budget, the fiscal policy and the accounting to get a better fiscal balance. Additionally, it is necessary to strengthen the financial programming to avoid accumulated resources that have not been used.

All this must be consistent with an optimal balance structure to ensure a sustainable and stable record of the financing over time, considering: (i) to manage the mismatches between the flows and balance of financial assets and liabilities; (ii) to continue giving priority to the indebtedness in domestic currency (both locally and internationally) to reduce vulnerability; and (iii) to seek that asset yield maximizes in order to have a strong public finance.

Vice Ministry of Treasury

c. <u>To promote efficiency in the use of public funds through fungibility and the prioritization in the use of financing sources.</u>

Efficiency in the use of resources is vital to reduce their liquidity cost, making it necessary to have a strong legal framework to eliminate rigid cash management, making that the Treasury's resources be fungible, authorizing their use, regardless of expenditure constraints.

Prioritization in the use of financing sources will result in a more effective cash management, using the resources properly, avoiding the financial burden that could come from spending a type of refundable financing source.

Therefore, the implementation of the current legislation to manage the available resources efficiently is needed.

d. <u>To maintain liquidity reserves and contingent credit lines or explore other financial instruments to face situations of financial instability.</u>

The best international practices suggest to build liquidity buffers to overcome stress situations, providing the Treasury with enough liquidity, and reducing uncertainty in the financial markets concerning the stability of the public debt securities.

With this in mind, the MEF must identify those situations of financial instability to which it is exposed. Based on this, the MEF must build up and maintain liquidity reserves in addition to contingent credit lines to face such events successfully.

Likewise, there is a need for managing the cost of these resources at reasonable levels and that specific guidelines can be outlined to make them profitable through low risk instruments.

e. To make public funds profitable and reduce liquidity cost.

During favorable economic cycles, the Treasury will be enable to accumulate savings from identified surpluses to use them during lower growth periods, supporting, then, the fiscal balance on a long-term basis. It is necessary, however, to maintain the purchasing power of such savings over time and reduce their liquidity costs. As a result, the Treasury needs to implement mechanism to make these funds profitable.

Additionally, by means of flows centralized in the CUT and the fungibility implementation, the Treasury will be able to identify temporary liquidity surpluses through that it will have to identify its best profitability option in terms of opportunity cost. Likewise, the NFPS entities will have to identify resources available for capitalization.

Making profit of the resources will result in reducing their opportunity cost; however, profitability must be made through the Public Treasury's mechanisms and guidelines for managing financial assets, to be applied by NFPS entities.

f. <u>Identify fiscal risks and assess alternatives to reduce their effects on public finances.</u>

Identifying fiscal risks involves a proper and timely monitoring in the case of adverse performance of commodities price, foreign exchange rate, interest rates, refinancing risks, natural disasters, lawsuits filed against the State, Public-Private Partnerships (PPP)' risks, political risk, among others. Prospecting and trend analysis techniques, VaR calculation, including their different methodologies, implementation of judicial arbitration, assessment of PPPs' contingent liabilities and expert judgement, among other tools, are used for identification purposes.

It is mandatory for the Government to manage fiscal risk globally through which it will be able to quantify and take corrective measures *ex ante* to preserve fiscal sustainability, resulting from a timely financial assets and liabilities management in the face of adverse shocks.

A suitable risk management will maintain fiscal strength as a key variable to maintain or improve credit rating over time.

g. <u>To strengthen both electronic payment systems and the gathering of timely, reliable and comprehensive information.</u>

It is a must to have e-payment systems to simplify payment, as well as a modern system for registration, allowing a timely consolidation of financial information of all NFPS entities.

From a strategic perspective, baseline information is useful for timely decision-making; otherwise, these decisions would be made based on lack of information and error.

Timely, reliable and comprehensive information will allow to make more accurate diagnosis to discover opportunities; to do sensitivity analysis; to assess the execution of the expenditure; to calculate revenues levels; to validate accounting data; to forecast revenue and expenditure; and to determine needs for indebtedness, among others, improving the timeliness and reliability of information when making decisions on public fund managing.

III. THE 2019-2022 STRATEGY

3.1. Challenges for the 2019-2022 period

There are three major challenges to the current situation faced by the Treasury that involves a number of problems that are intended to be tackled by the Strategy:

a. <u>To improve the timeliness and reliability of information on the finances of NFPS entities.</u>

The Treasury needs to have timely and reliable information on the financial flows and the position of the financial assets and liabilities of the public entities in order to be able to distribute their resources and ensure that the commitments are honored, in addition to designing the financial structuring on the budget.

The Treasury is in charge of the financial structuring through which **historic** levels as a baseline for flows are required to be identified, based on every source of financing, to avoid concentration and set rules for spending limit.

The process of registration and consolidation of the financial assets and liabilities of the NFPS entities has constraints to produce timely and high-reliable statistics, making it difficult to manage assets and liabilities globally, to monitor that the public entities fully implement the policies and the accounting reconciliation that has been reported on an individual and aggregate basis.

Despite the progress made with the centralization of public funds towards the CUT, there are still public entities that raise their own funds. Such a raising is not reported to the Treasury. For this, **the coverage of the CUT must be strengthened** to provide the Treasury with complete information on the funds kept by public entities on their accounts, being this another effect to the ones concerning cash management.

b. To manage public funds from different financing sources of the budget to be timely allocated and disbursed.

In order to get public funds efficiently managed, regulation on constraints in the use of public funds must be completed and adopted. Regarding the accumulated own resources and transferred resources balances,¹² they are mostly kept in the financial system. This means a low execution of the resources that have been allocated to the entities, diminishing the Treasury's management ability over their resources and putting a limit to an efficient financial programming.

Furthermore a **clear regulation**¹³ is needed to meet temporary cash needs by transferring resources among financing sources.

There are still room to make improvements in the use of resources coming from public indebtedness; in particular, resources to fund investment projects, reducing the gap between the time when resources are obtained and the time when they are used.

c. To continue improving the debt public securities market development.

Over the last years, important reference points in the yield curve in soles in terms of volume and liquidity have been set, allowing their concentration in years that are closer to each other, especially, in the medium-end of the curve. This situation does not only have an effect on the good practices of the market in terms of reference points, but it is seen as a probable refinancing risk that could be a source of stress to the Treasury. A gradual arrangement of these reference points must be one of the short-term objectives.

In addition, as part of the assistance aiming at strengthening the public debt securities market, the establishment of an Exchange-traded Fund, based on the Sovereign Debt Fund currently in force, must be fostered, apart from the gradual

Regulation on operating procedures is required to be approved.

Page 19/34

Specifically, royalties, mining royalties, among others.

implementation of Euroclear as a settlement and trading platform that makes it possible to have a larger base of investors of securities issued by the Peruvian Treasury.

3.2. Strategic Actions

The strategic actions are aimed at setting the course of action and the guidelines to meet the challenges. In this regard, the following strategic actions are brought up:

a. Strengthening of the information systems.

To set up mechanisms to consolidate the financial information that allows the identification of historic levels as a baseline for financing sources.

To continue consolidating the systems that register financial data from the NFPS entities to produce timely and reliable statistics to improve the monitoring of policy implementation made by public entities, as well as the accounting reconciliation reported on an individual and aggregate basis.

To implement regulatory changes to consolidate the CUT coverage, through a gradual incorporation of all public funds, regardless their financing source and to strengthen and integrate the treasury information systems.

b. Fungibility and prioritization of financing sources.

To determine priorities in the use of resources to promote the efficient execution of balances accumulated by the NFPS entities in order to release resources for other entities not having this sort of savings, improving forecast for Government's revenues and payment, which is a necessary condition to efficiently manage the Government treasury.

To complete the current regulation to facilitate an easy temporary use of resources, regardless of the expenditure allocation.

To strengthen the financial programming of the resources resulted from public indebtedness, with the payout requirements in line with the timing of use to avoid other financial costs.

To take into consideration funding through sovereign bond issues in addition to Government revenues in the financing structure of the investment projects funded with resources coming from the external public indebtedness.

c. Strengthening of the public debt securities market in soles.

To continue strengthening the development of the public debt securities market in soles, through the Program for the Regular Auctions of Treasury's Securities in order to have a better public debt maturity profile, to expand the investors' base and to give priority to fund the fiscal needs through the issuance of these instruments.

To start a gradual prioritization process of the reference points in the sovereign yield curve in soles with the aim of deconcentrating them and updating their costs to the current market conditions.

To conduct special auctions to continue increasing the secondary market liquidity, and the size of the public debt securities market in general when market conditions are favorable. Likewise, to conduct special auctions to exchange and to repurchase public debt securities in domestic currency in order to improve not only the gross debt profile, but to provide the investors with the chance of rebalancing their financial assets according to the profiles or their investment portfolio targets.

To start with the transition of the Sovereign Debt Fund to an Exchanged-trade Fund (ETF), which will be managed by a specialized manager, allowing it to become a tradable instrument in the stock exchange market.

To reinforce the communication channels with the credit rating agencies and the foreign and local investors to keep them informed about the debt indicators, as well as about the actions or operations that are intended to be carried out.

3.3. Reference Quantitative Strategic Targets for 2019 and 2022

Different indicators that monitor the NFPS debt to calculate the vulnerability level of the public finances have been defined. Their quantification comes from different deterministic scenarios to set a target reference range to be achieved to the end of 2019 and 2022, respectively. For this, projections of the market conditions, the macro level and the cost-risk analysis have been taken into account¹⁴.

Table N° 07
Reference Quantitative Targets of the NFPS Debt Indicators at the End of 2019 y 2022 (*)

Indicator	Expected Range at End-December 2019	Expected Range at End- December 2022
Percentage of soles in the portfolio	66.8% - 68.9%	69.6% - 75.4%
Percentage of fixed rate debt in the portfolio	87.9% - 88.8%	87.1% - 89.6%
Percentage of domestic debt in the gross balance	66.7% - 68.8%	69.5% - 75.4%
Average term-to-maturity (years)	11.8 - 11.8	10.7 - 11.3
Average term-to-reprice (years)	11.2 - 11.3	10.0 - 10.8
Accumulated amortizations over the following 12 months 1_/	2.0% - 1.9%	1.3% - 1.2%
Percentage of financing flow in domestic currency 2_/	78.0% - 83.9%	82.0% - 89.8%

Source: MEF - DGETP.

(*) Hedging derivatives are included. Treasury bills are excluded.

IV.NFPS INDEBTEDNESS

Public debt is one of the Treasury financing source that needs special treatment. Debt contracting requires to take into account many variables, for instance, financial conditions and, consequently, risk exposure. Then, over the last years, debt

¹_/ Indicator calculating the most immediate pressure on payments.

²_/ Includes financing for debt management operations.

¹⁴ For further details about the results, see Appendix 3.

management has played an important role because of key changes in its structure that have reached, in terms of currencies and interest rates, more than 60% in the local currency composition and more than 80% in fixed rate loans, apart from helping the public debt securities market develop.

There is still, however, room to continue implementing actions to mitigate the risks the public debt portfolio is exposed to. The following table shows an ideal approach¹⁵ of NFPS public debt indicators as a reference to be achieved, concerning the debt structure by currency, by interest rate and by average-term to maturity¹⁶.

Table N° 08 Long-term Reference Indicators

Indicator	Reference Targets	Range
Ratio of foreign currency debt vs. domestic currency debt	22 : 78	+ / - 3%
Ratio of fixed-rate debt vs. variable-rate debt	95 : 5	+ / - 2%
Average term-to-maturity (years)	13	+ / - 2

Source: DGETP - MEF.

In this regard, the strategy will continue focusing on (i) an increased debt participation in domestic currency; (ii) an increased fixed rate debt participation and; (iii) reaching an average-term to maturity of a debt that balances costs and risks.

4.1. NFPS Financial Needs

Financial needs for the following four years are in accordance with the ones on the MMF 2019 – 2022 for the NFPS and are shown as follows:

Year	Fiscal Deficit	% of GDP	Amortizations	% of GDP	Total	% of GDP
2018	22,398	3.0%	10,428	1.4%	32,826	4.4%
2019	21,592	2.7%	9,250	1.1%	30,842	3.8%
2020	16,637	1.9%	6,943	0.8%	23,580	2.7%
2021	9,310	1.0%	2,753	0.3%	12,063	1.3%
2022	9,690	1.0%	3,530	0.3%	13,220	1.3%

Source: MEF - DGPMDF.

Note 1: The amount for 2019 includes S/ 5,000 of prefinancing. Of this amount, as of July 2018, S/ 30.5 million have been issued.

Note 2: The amount for 2019 includes S/ 2,010 million resulting from a Petroperú external bond issuance of US\$ 600 million

In the Report on the 2018 – 2021 Revised Macroeconomic Projections, the NFPS fiscal deficit has been projected in 3.5% of the GDP. In the new 2019-2022 MMF, the fiscal deficit is expected to be 3.0% and 2.7% of the GDP for 2018 and 2019, respectively, due to an upward estimation for 2018 of the fiscal revenues in around 0.5% of GDP. This estimation is consistent with the NFPS public debt level, which is expect to have reached to 26.0% of GDP by the year 2022.

For full details, see Appendix 2.

Page 22/34

In the first approach included in the 2018-2021 EGGAP, the debt ratio in foreign currency has been calculated against the optimal domestic currency, using the mismatch model by Calvo, Izquierdo and Talvi.

and Finance

"DECADE FOR EQUAL OPPORTUNITIES FOR WOMEN AND MEN" "YEAR OF THE DIALOGUE AND THE NATIONAL RECONCILIATION"

4.2. NFPS Financing Sources

It is expected that the NFPS financing will come from resources form the securities market through the issuance of securities in domestic currency and from disbursements made by bilateral and multilateral organizations.

Graph Nº 06 Structure of the NFPS Financing Sources December 2015 **July 2018** Multilaterals **Multilaterals Paris Club** 17.0% 3.6% 7.7% Others 0.5% Sovereign **Global** bonds Paris Club bonds 31.0% 1.8% 61.3% Global bonds Sovereign 28.7% bonds 48 4% Source: MEF - DGETP.

4.2.1. Sovereign Bonds

The domestic public debt securities market size grew from 7.8% of GDP in 2015 to 12.4% in July 2018.¹⁷ Over the last years, raising resources through sovereign bond issuances in soles has represented the main financing source for the fiscal needs because of dual roles: to mitigate the foreign exchange risk in the gross debt structure and help in the development of the domestic public debt securities market.

In this regard, the raising of resources from the local market will be favored when financing the financial resources in 2019. Therefore, in the 2019-2022 MMF it is estimated that financing in 2019 through instruments issued by the Treasury amounts to S/ 25,193 million and 56% of them are aimed at the balance of payments.

The analysis to calculate the domestic demand (local investors) for sovereign bonds, considering different scenarios based on historic holdings, the increase in the total fund balance and the participation of the bonds in their portfolios indicate that the estimated local demand for this instruments would vary from S/ 4,610 million to S/ 8,819 million for 2019. Additionally taking into account the non-resident investors' demand, which had a participation in the sovereign bond holdings of about 40% as of July 31, roughly S/ 3,500 million could be obtained. Apart from this, the investors have a user-friendly access to Euroclear, allowing a gradual increased demand for Treasury notes in the future.

4.2.2. Global Bonds

As of July 2018, the yield curve in dollars maintains 6 reference points totalizing US\$ 9,336 million. There are also 2 reference points in euros for EUR 2,100 million. One of the objectives of the EGIAP is public debt solarization; however, due to the

The sovereign bond balance as July 2018 accounts for S/ 90,235 million.

fact that market conditions make it difficult to achieve this, there remains the possibility of the international market to complete financing needs.

4.2.3. Credits with Bilateral and Multilateral Organizations

Credits with bilateral and multilateral organizations account for 9.7% of the NFPS total debt. In July 2018, there is outstanding balance to be disbursed of around S/15,800 million. From this, around 89% represent credits arranged with multilateral organizations and 11%, with the Paris Club.

An important part of this amount corresponds to the aliquot to meet financial requirements for 2019, and that is aiming at financing investment projects. It must be said that this type of loan shows relatively lower market rates, 18 which always makes it possible a continuation of the agreed investment projects.

Page 24/34

Nevertheless, to the extent that these loans are agreed in foreign currency, they are exposed to the market risk concerning interest rates.



APPENDIX 1: Schedule on the 2019 Regular Auction Program for Treasury Securities

Jan	January 2019								
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					

Fe	February 2019								
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					

March 2019									
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									

Apı	April 2019								
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 2019								
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 2019 6									
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									

Jul	July 2019 7									
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							

August 2019 8									
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 2019 9									
S	М	F	W	G	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 2019									
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						

No	November 2019 11									
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 2019								
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 Tuesdays of each month: Treasury bill auctions.

On Thursdays of each month: Sovereign bond auctions.

In accordance with the Law on Indebtedness of the Public Sector for the 2019 Fiscal Year, the maximum amount of sovereign bonds to be issued is S/ 19,410.80 million.

In accordance with the article 16.3 of the article 1, Legislative Decree N° 1441, the maximum amount of Treasury bill balance due set on the Law on Financial Balance of the Public Sector Budget is S/ 3,000 million for the fiscal year 2019.

Terms and conditions of the information contained in this appendix: should coincide any of the regular auction dates with holidays, the auction will be conducted the following working day. Before each auction takes place, the General Directorate of Indebtedness and Public Treasury will specify the bills and bonds to be issued in the auction.

APPENDIX 2: Main Achievements Concerning the Challenges Set on the 2018-2021 EGIAP

Some challenges have been set on the 2018 – 2021 EGIAP, and their achievements are listed as follows:

- With respect to the availability of the information and the predictability of the revenues and expenditures flows, the Financial Instruments Module has been implemented. This Module is a web system into which the NFPS entities enter information about the position of their financial assets and liabilities. Additionally, with the aim of improving flow predictability, some measures have been taken to demand entities at the three governmental levels to register more accurate information about their expenditure programming.
- Concerning how dynamic the financial assets management is, it is seen the
 continuation of a gradual incorporation of the resources that finance the public
 budget in the CUT. As of June 2018, the CUT concentrated 87% of this resources
 approximately.

Likewise, there have been advances in financial allocation concerning the availability of public funds in line with the actual execution of the activities or projects in charge of public entities, improving financing, in particular, in terms of cost, of the financing coming from sovereign bond issuance, reducing accumulated balance-sheet balances as well.

Additionally, some measures were taken to promote public investment, such as: transference of available balances of the National Government and Regional Governments, according to a projection for the end of the 2018 fiscal year, considering the Ordinary Resources and Resources for Debt Operations benefiting the contingency reserve; recovering of balance-sheet balances of some public entities to be allocated by the Treasury; and authorizations to use those unused resources, now for an implementation that differs from what they were initially demanded for.

• Since the Strategy implementation, a further deepening and development of the public debt securities market are being taken place, showing a major increase in the sovereign bond balance to S/ 90,235 million at end-July 2018, an increase of 89.5% compared to 2015, when bonds 2026 and 2055 had a major balance increase (1.3 and 1.2 times, respectively). Likewise, as of July 2018, S/ 69,946 million were traded in the secondary market (78% more than last year), an increase of 1.3 times compared to 2015, when the sovereign bonds 2024, 2026, and 2028 had an important participation. It must be said that the rise in the balance of bonds in the domestic market are in line with the aim of reducing foreign exchange risk of the debt portfolio.

Investors' confidence is seen in increased holdings. Compared to 2015, holdings grew in 73% for the non-resident investors and in 78% for the resident investors. Banking institutions rose their position in sovereign bonds by 171%.

To conclude, the seven reference quantitative targets set on the 2018 PAEAD, concerning the NFPS coverage are expected to be achieved.



Reference Quantitative Targets Assessment on the 2018 PAEAD

Indicator	Range at End- December 2018	Expected result at End- December 2018 ^{1_/}
Percentage of soles in the portfolio 2_/	58.9% - 62.5%	66.3%
Percentage of fixed rate debt in the portfolio	85.6% - 86.2%	88.2%
Percentage of domestic debt in the gross balance	58.3% - 62.0%	65.7%
Average term-to-maturity (years)	11.6 - 11.5	12.3
Average term-to-reprice (years)	10.9 - 11.0	11.8
Accumulated amortizations for the following 12 months 3_/	3.0% - 3.0%	1.4%
Percentage of the financing flow in domestic currency 4_/	58.8% - 66.1%	79.4%

Source: MEF - DGETP.

- 1_/ All indicators shown are from the NFPS. They are all preliminary data and exclude Treasury bills.
- 2_/ The effect of financial derivatives being equivalent to 0.3% is included.
- 3_/ Indicator that calculates the most immediate pressure on payments.
- 4_/ Includes financing for debt management operations

APPENDIX 3: Long-term Vision

Guidelines and actions of the Strategy must be in line with the public debt long-term vision (currency, maturities and rates). Long-term indicators of the Strategy for currencies, maturities and rates are as follows:

Long-term Indicators

Indicator	Strategic targets	Range
Ratio of foreign currency debt vs. domestic currency debt	22 : 78	+ / - 3%
Ratio of fixed-rate debt vs. floating-rate debt	95 : 5	+ / - 2%
Average term-to-maturity (years)	13	+/-2
Fuente: MEF – DGETP.		

This edition of the EGIAP has an insight on the analysis of maturities and types of interest rates to better approach the targets to be achieved. The analysis of currencies was covered in detail in the 2018-2021 Strategy.

Maturities

Theory and Maturity Neutrality

As stated by Barro¹⁹ (1995), Barro²⁰ (1979) and Sill²¹ (1994), the average term-to-maturity of the debt is considered as neutral compared to the economic activity, based on the following assumptions: (i) households are aware of the link between budgetary constraints imposed by the Government and the relation between current and future taxes; (ii) tax rates are not "distorting" and do not have an impact on relative prices; and, (iii) the set of options for the investment portfolios that are available for households are not impacted by the Government's action. Nevertheless, these assumptions are not actually the case.

Other considerations that lead us to choose a maturity structure

The choice of a debt maturity structure are led by considerations such as: (i) minimization of financial costs; (ii) budgetary agreements and commitments; (iii) internal or external shocks (iv) risk distribution and (v) policymakers' incentives, among others. From all this it is assumed that a shorter average term-to-maturity can be the source of payment and refinancing problems²² and high revenues volatility.

²⁰ Barro, Robert (1979). "On the determination of Public Debt", Journal of Political Economy, 87, October.

¹⁹ Barro, Robert (1995). "Optimal Debt Management", NBER, Working Paper 5327, October.

Sill, Keith (1994). "Managing the Public Debt". Business Review, Federal Reserve Bank of Philadelphia, July/August.
 Apart from tax burden, other factors to determine average term-to-maturity debt are as follows: (i) payment capacity,

⁽ii) debt sustainability, (iii) the smoothing of debt service payment considering a context of tax burden level, (iv) revenues volatility, and (v) Government expenditure volatility.

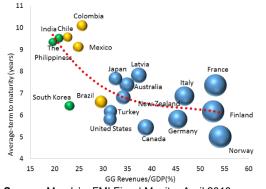


Debt maturity and tax burden

Data from a group of countries that can be compared against²³ LA5 countries' data²⁴ (OECD²⁵ and ASIA EM²⁶ country members), together with G7 advanced countries data²⁷ indicates an inverse relation between average term-to-maturity and tax burden. This also points out that Governments of medium-income economies having low tax burden (proxy: General Government revenues/GDP) have more chances to face a refinancing crisis and, as a result, they go for a longer term-to-maturity to mitigate this risk. The average term-to-maturity of countries with a high tax burden is around 7.5 years, that is: France 53.1% (7.4 years), Latvia 37.3% (7.8 years), or G7 40.6% (7.7 years). Furthermore, there are major differences in the average term-to-maturity among advanced countries: Canada 38.8% (5.4 years) and the United Kingdom 3.5% (14.9 years). Conversely, countries having lower tax burden have an average term-to-maturity of around 10 years: Colombia 25.6% (10.1 years), Mexico 24.8% (9.1 years) or Chile 22.6% (9.6 years).

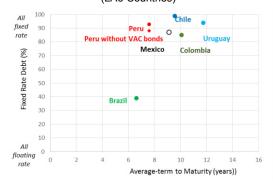
For this group of countries, an average term-to-maturity correlation against tax burden points out an inversed relation between tax burden and maturity for 2017. In line with the correlation²⁸, with the exception of ASIA EM, an expected maturity of 13.29 years is estimated for Peru with a 18.2% of tax burden (according to the IMF). Despite the fact that this result indicates a good approximation, the lack of data to compare shows that these results are not enough strong. By including ASIA EM for comparison purposes (India, South Korea and the Philippines), the average term-to-maturity for Peru represents 10.4 years²⁹, which is consistent with our LA5 peers.

GG Revenues/GDP vs. Public Debt Average Term-to-Maturity, 2017 (LA5 Countries Comparable to OECD and Asia EM and G7)



Source: Moody's, FMI Fiscal Monitor April 2018. **Elaborated by:** MEF – DGETP.

Fixed Rate Public Debt vs. Average Term-to-Maturity, 2017 (LA6 Countries)



Source: Moody's; VAC bonds are included; MEF: Peru without VAC bonds.

Elaborated by: MEF – DGETP.

They can be compared each other against: debt rating, export ratios to GDP, commodities exporters.

²⁴ LA5: Brazil, Colombia, Chile, México and Peru. LA6 = LA5 + Uruguay.

²⁵ Compared OECD country members: Australia, Canada, Chile, Finland, Latvia, Mexico, New Zealand, Norway and Turkey.

Compared ASIA EM countries: India, South Korea and the Philippines.

²⁷ G7: Canada, France, Italy, Germany, Japan, United Kingdom and United States.

This correlation uses 16 data; however, this polynomial adjustment is only intended to prove the relation between maturities vs. tax burden of those countries that can be compared to us. Except from Peru, a polynomial adjustment becomes $y=44.389-2.7029 x + 0.0638 x^2-0.0038 x^2-0.0005 x^3$ with $R^2=0.62$, y= number of the debt average years, x: General Government revenues against GDP.

²⁹ If ASIA EM countries that can be compared to India, South Korea and the Philippines are included in the sample, a new polynomial adjustment for 19 data, that is $y = 22.001 - 0.9779 x + 0.0207 x^2 - 0.0001 x^3$ with $R^2 = 0.52$.



Interest Rates

The level of the interest rates is set by: (i) the quality of the borrower (income and creditworthiness), (ii) loan maturity, and in case of bonds, (iii) bond liquidity, among others. Such considerations have an impact on the Government's decision about interest rate levels. Therefore, it is said that the indebtedness cost is inversely related to the country (fiscal) strength. Additionally, in a world where future events and squalls in economic matters are unlikely to be predicted, the "special" position of the Government (that is, making budgetary commitments) forces policymakers to choose a prudent and conservative stand that avoids affecting the intertemporal budgetary balance and weighting between a structure of fixed and/or floating interest rate. Thus since the floating rates are the most vulnerable and are characterized by: (i) the risk of an increased in the debt service and (ii) hedging needs for not affecting the projected Treasury's cash flow, the targeted debt ratio at a floating rate, concerning the total debt balance cannot exceed from 5% (+/- 2%)³⁰.

Most credits with bilateral, multilateral organizations or agencies are floating rate loans.



APPENDIX 4: NFPS Scenarios and Forecasts on Debt Indicators

Forecasts that are included on the 2019-2022 MMF, which define the objectives and fiscal rules for this multiannual period, the domestic and international market perspectives that will "trigger" the access and conditions to raise new debt and some expected debt management operations are key elements that are required to set the target reference range to be achieved at end-2022. For this purpose, four deterministic scenarios are played out (baseline, optimistic, pessimistic and stress scenarios)

Forecasts for Some NFPS Macroeconomic Variables Used in Simulations for Each Scenario

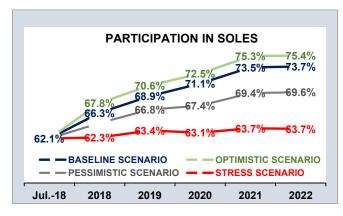
Assumptions	Baseline scenario		Optimistic scenario		Pessimistic scenario		Stress scenario	
	External	Internal	External	Internal	External	Internal	External	Internal
Primary result (% GDP)	Between -1.7 0.5% ii		Between -1.7 0.6% in		Between -1.7 0.1% ii	,	Between -1.7 -0.5% i	,
GDP Real growth rate (%)	Between 4.0 5.0% ii		Between 4.0 5.0% in		Between 4.0 4.7% ii		Between 4.0 4.0% ii	

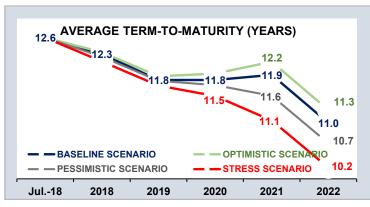
Source: MEF - DGETP.

Results of Simulations and Determination of the Range for indicators

The following graph shows the results of some monitoring indications of the NFPS gross debt that would be achieved in the following 4 years.

Some NFPS Gross Debt Indicators





Source: MEF - DGETP.

At the end of 2022, the reference range of the NFPS gross debt monitoring indicators that are expected to be reached has been determined, considering the results of the pessimistic and optimistic scenarios.

Forecast for the NFPS Gross Debt Reference Indicators at End-2022 (*)

Description	Expected Range at End- 2022
Percentage of soles in the gross debt	69.6% - 75.4%
Percentage of nominal fixed rate debt in the gross balance	87.1% - 89.6%
Percentage of domestic debt in the gross balance	69.5% - 75.4%
Average term-to-maturity (years)	10.7 - 11.3
Average term-to-reprice (years)	10.0 - 10.8
Accumulated amortizations for the following 12 months 1_/	1.3% - 1.2%
Percentage of financing flow in domestic currency 2_/	82.0% - 89.8%

Source: MEF - DGETP.

- (*) Hedging derivatives are included. Treasury bills are excluded.
- 1_/ Indicator that calculates the most immediate payment pressure.
- 2_/ Includes financing for debt management operation

Forecast for the Debt Service and Composition of the Gross Debt³¹

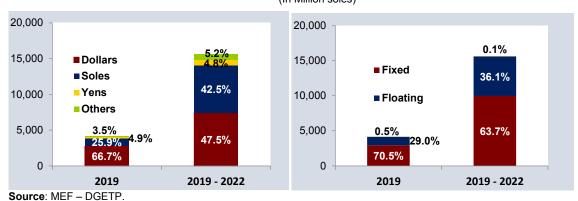
The baseline scenario shows conservative assumptions that are expected to be met. What follows is the position analysis and the NFPS gross debt projections:

a. Projection of the gross debt service based on currencies and interest rates

The amortizations in 2019 post approximately 1.9% of the total due with an average of around 1.2% until 2022. On a relative basis, the pressure to pay, corresponding to the debt service on the National Budget, will vary from 7.7% to 7.8% of the annual revenues.

By currencies, the sol posts around 26% in 2019 and 43% for the accumulated maturities over the following 4 years. According to this, in 2019, fixed interest rate loans account for 71%, and 64% correspond to the following 4 years.

Maturities by Currencies and NFPS Interest Rates (In Million soles)

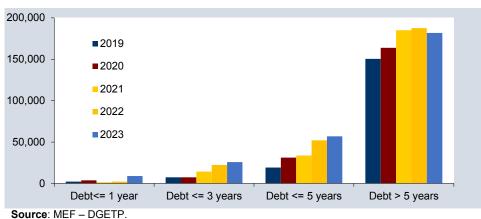


b. Projection of the gross debt composition by residual term to maturity

The maturity structure of the current loans and of those ones expected to be got over the following years continue favoring terms longer than 5 years. For 2022, this concentration will be still larger. The impact of this structure is also seen on the public debt maturity profile.

³¹ Treasury bills are not included.

NFPS Gross Debt Term to Maturity (In Million soles)

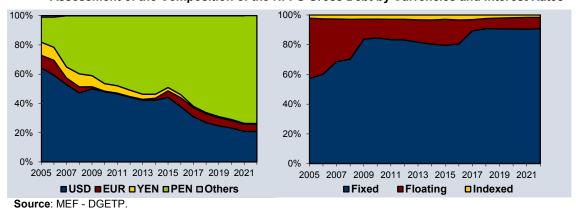


In the baseline scenario, the percentage of debt maturity greater than 5 years, as of December 2022, is expected to be around 78.3%, a relative position similar to previous years. This is explained by sovereign bond issuances that are expected to be made (reopenings), including the financing of debt management operations. Despite this, the average term-to-maturity indicator is expected to be around 11 years at end-2022.

c. Projection of the composition of the gross debt by currencies and interest rates

The participation of the domestic currency in the total of the gross debt is expected to be around 73.7% at end-2022, higher than the one expected to be reached in 2017. At end of July 2018, this indicator posted 62.1%.

Assessment of the Composition of the NFPS Gross Debt by Currencies and Interest Rates



The projected fixed rate component in the gross debt structure for the following years remains above 85% since 2018, accounting for around 89.3% at end-2022.

Gross Debt Indicators Compared to the GDP and the Revenues

The following table shows, on a relative basis, some debt indicators against the expected GDP for the following years in order to assess their budgetary feasibility. Debt balance will slightly grow until 2021. Concerning flows, they will grow until 2020.



NFPS Debt Ratios over GDP

(% of GDP)

Baseline scenario	2019	2020	2021	2022
NFPS debt/GDP	24.6%	25.6%	25.9%	23.9%
NFPS service/GDP	1.6%	1.8%	1.6%	1.6%
NFPS amortizations/GDP	0.3%	0.5%	0.2%	0.2%
NFPS interest/GDP	1.3%	1.3%	1.4%	1.4%

Source: MEF - DGETP.

Concerning the expected NFPS revenues for the following years, the evolution of the payment capacity is assessed. On average, there is a downward trend in the debt balance with the exception of the year 2020, and flows will decrease until 2020. A fall in 2021 is observed and a rise, later on.

NFPS Debt Ratio over their Revenues

(In % of Revenues)

	2019	2020	2021	2022
NFPS debt/Revenues	127.2%	127.8%	126.0%	116.4%
NFPS service/Revenues	7.7%	8.5%	7.2%	7.8%
NFSP amortizations/Revenues	1.5%	2.1%	0.8%	1.1%
NFPS interests/Revenues	6.2%	6.4%	6.5%	6.7%

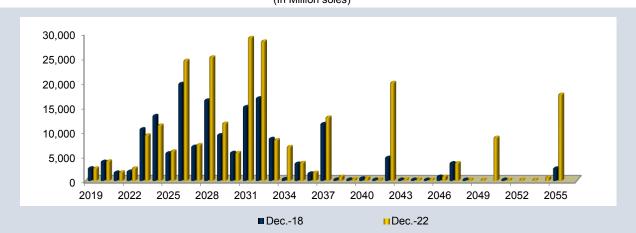
Source: MEF - DGETP.

Another objective of the strategy is to improve the NFPS debt maturity profile to avoid payment concentration in excess, specifically in the short term. In the following graph, the maturity profile resulting from the new indebtedness to be issued for the 2019 – 2022 period to finance the financial needs and the liabilities management operations to be carried out are shown.

Although higher liabilities concentrations are seen in the profile for some years, they could be easily refinanced as they refer to the global and sovereign bond redemption. The difference corresponds to the debt operations that are supposed to be being carried out to fund the portfolio of major on-going infrastructure projects.

NFPS Gross Debt Amortization Projection

(In Million soles)



Source: MEF - DGETP.