Medium-Term State Debt Management Strategy for 2019 - 2022

Introduction

The Medium-term state debt management strategy for 2019 - 2022 (hereafter referred to as the Strategy) is a tool designed by the Ministry of Finance of Ukraine (hereafter referred to as the MinFin) to assess the current status and dynamics of the state debt of Ukraine and define objectives, targets and tasks over the medium term to optimize state debt structure from a cost/risk perspective while preserving an acceptable level of debt burden for the country.

The Strategy is being implemented in the context of Ukraine's macroeconomic stabilization. The Ukrainian economy has turned to a sustainable growth phase. The country's economic recovery has been supported by a strong commitment from international organizations, which has materialized amongst other ways through provision of concessional loans.

Over the medium term, Ukraine's state debt management primary objective is to secure the required financing at the lowest possible cost, while containing risks. In this respect, 4 main objectives for state debt management have been identified:

- 1. Increase the share of state debt denominated in local currency.
- 2. Lengthen average debt maturity, and ensure a smooth state debt repayment profile.
- 3. Attract long-term concessional funding.
- 4. Continue developing strong investor relationships and further improve the state debt management policy framework.

Debt sustainability analysis highlights a relatively low level of risks within Ukraine's current debt structure. Debt to GDP ratio, standing at 52.3% as of the end of 2018, is expected not to exceed 43.0% target by the end of 2022. FX risk and refinancing risk have been identified as key threats to state debt sustainability for the upcoming years. One of the tasks of this Strategy stands in the constant monitoring and mitigation of these risks.

An indicative roadmap has been set for the current and the next three years. This roadmap foresees construction of EUR-denominated Eurobond yield curve, increase in issuance of UAH-denominated domestic government bonds, particularly by means of enhancing the participation of international investors in the Ukrainian domestic market, as well as further issuance of USD-denominated Eurobonds. Also, pro-active liability management operations through buyback of government securities can be further performed subject to favorable market conditions. The purpose of the mentioned liability management exercises is to further smoothen Ukraine's state debt service profile and reduce peak pressure on the state budget. Other measures within this Strategy will be implemented in order to strengthen investor relations and improve Ukraine's credit ratings.

State debt split by holders as of end of period

	2017	,	2018		Q1 2019		
	UAHm	% of total	UAHm	% of total	UAHm	% of total	
External debt	1,080,310	50%	1,099,201	51%	1,094,870	51%	
International financial institutions	456,553	21%	418,110	19%	397,402	19%	
Bilateral loans	49,296	2%	47,931	2%	47,251	2%	
Commercial banks	2	0.0%	11,080	1%	28,475	1%	
Eurobonds holders	574,460	27%	622,080	29%	621,743	29%	
Domestic debt	753,399	35%	761,090	35%	763,765	36%	
NBU	2,381	0.1%	2,248	0.1%	2,248	0.1%	
Domestic government bond holders	427,572	20%	445,840	21%	453,085	21%	
State banks, SOEs and DGF (recapitalization)	320,693	15%	311,625	14%	307,725	14%	
Owners of VAT refund bonds	2,753	0.1%	1,377	0.1%	706	0.0%	
Total state debt	1,833,710	86%	1,860,291	86%	1,858,636	87%	
as % of GDP	61.5%		52.3%				
State-guaranteed debt	307,965	14%	308,130	14%	287,049	13%	
as % of GDP	10.3%		8.7%				
Total public debt	2,141,674	100%	2,168,422	100%	2,145,684	100%	
as % of GDP	71.8%		60.9%				

State debt split by instruments as of end of period

	2017		2018		Q1 2019		
	UAHm	% of total	UAHm	% of total	UAHm	% of to	
Marketable securities and loans	775,150	36%	851,984	39%	876,287	4	
Domestic government bonds	198,309	9%	216,576	10%	223,821	1	
Eurobonds	574,460	26%	622,080	29%	621,743	2	
NBU and commercial banks loans	2,382	0.1%	13,328	1%	30,723		
Concessional loans	505,849	23%	466,041	21%	444,653	2	
International financial institutions	456,553	21%	418,110	19%	397,402	1	
Bilateral loans	49,296	2%	47,931	2%	47,251		
Other, incl. recapitalization	552,710	25%	542,266	25%	537,696	2	
Total state debt	1,833,710	85%	1,860,291	86%	1,858,636	8	
% of GDP	61.5%		52.3%				
State-guaranteed debt	307,965	14%	308,130	14%	287,049	1	
% of GDP	10.3%		8.7%				
Total public debt	2,141,674	100%	2,168,422	100%	2,145,684	10	
% of GDP	71.8%		60.9%				

State debt split by currency as of end of period

	2017	2018	Q1 2019
	% of total	% of total	% of total
UAH	34%	33%	35%
USD	46%	48%	47%
EUR	8%	9%	10%
XDR	10%	8%	7%
JPY	1%	1%	1%
CAD	0.5%	0.4%	0.4%
Total state debt	100%	100%	100%

State debt split by interest rate type as of end of period

	2017	2018	Q1 2019	
	% of total	% of total	% of total	
Fixed	71%	75%	76%	
Variable	29%	25%	24%	
Total state debt	100%	100%	100%	

State domestic debt split by maturity as of end of period

	2017	2018	Q1 2019
	% of total	% of total	% of total
< 3 years	29%	32%	32%
3-5 years	4%	5%	6%
5-7 years	7%	8%	7%
7-10 years	9%	10%	9%
>10 years	51%	46%	46%
Total state domestic debt	100%	100%	100%

State external debt split by maturity as of end of period

	2017 % of total	2018 % of total	Q1 2019 % of total
< 3 years	23%	23%	22%
3-5 years	12%	8%	10%
5-7 years	8%	19%	16%
7-10 years	22%	13%	15%
>10 years	35%	38%	37%
Total state external debt	100%	100%	100%

As part of the analysis, a set of over 60 countries was selected based on the size of their economies, their macroeconomic performance in recent years, as well as their credit ratings. From this list of relevant peers only 18 countries, which published a comparable Strategy and up-to-date comparable data on their state debt, were finally selected.

This peers sample was divided into three categories based on the following classification:

- regional peers: geographical proximity to Ukraine;
- rating peers: similar credit rating according to international rating agencies;
- peers regional leaders: large EM countries, acting as economic drivers in their regions.

List of selected peers for Ukraine (S&P / Moody's / Fitch: B- / Caa1 / B-) by sample

Regional peers (8)	Rating peers (6)	Peers – regional leaders (4)
Albania	Jamaica	Nigeria
(B+ / B1 / NR)	(B / B3 / B+)	(B / B2 / B+)
Bosnia and Herzegovina	Lebanon	Uruguay
(B/ B3 / NR)	(B- / Caa1 / B-)	(BBB / Baa2 / BBB-)
Bulgaria	Macedonia	Thailand
(BBB- / Baa1 / BB)	(BB- / NR/ BB)	(BBB+ / Baa1 / BBB+)
Croatia	Montenegro	Turkey
(BBB- / Ba2 / BB+)	(B+ / B1 / NR)	(B+ / Ba3 / BB+)
Poland	Pakistan	-
(A- / A2 /A-)	(B- / B3 / B-)	
Serbia	Ghana	-
(BB / BB / BB)	(B / B3 / B)	
Hungary	-	-
(BBB / Baa3 / BBB)		
Czech Republic	-	-
(AA- / A1 / AA-)		

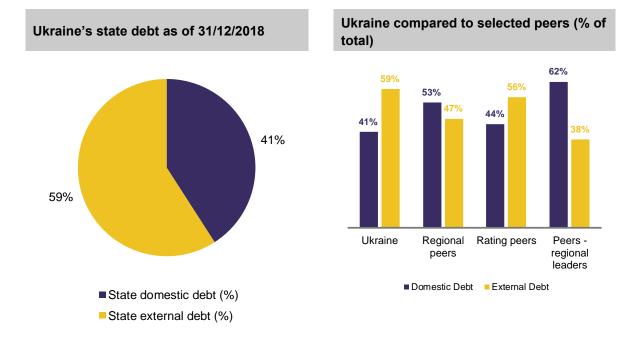
Source Rating agencies Note As of the end of May 2019

The average indicators for each of the sub-samples were used to benchmark Ukraine's state debt structure within the implemented analysis.

2.1 State debt composition

Domestic vs external debt

Ukraine's state debt is characterized by a relatively high share of external debt, accounting for 59.1% of total state debt. Ukraine's share of external debt stands above the average figure for both regional peers and peers – regional leaders. External debt represents, on average, 47% of total debt for regional peers and only 38% for peers – regional leaders. This indicates a relatively higher vulnerability of Ukraine to external shocks. At the same time, the share of external debt for rating peers comprises, on average, 56% and is comparable to Ukraine's share of external debt.

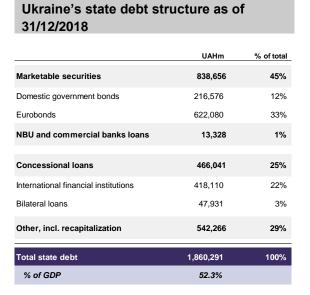


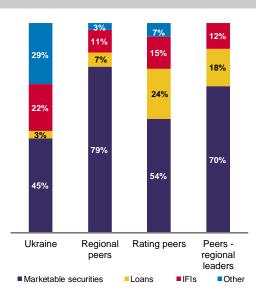
Increasing the share of state debt denominated in local currency will enable Ukraine to reduce its vulnerability to external factors and is, therefore, **one of the main objectives of state debt management**. In this regard, further development of the domestic government bond market through the expansion of the range of available debt instruments, enhancing state debt management predictability and attracting foreign investors to the market is required.

State debt composition by instruments

Marketable securities constitute 45% of Ukraine's total state debt, including 33% of Eurobonds and 12% of domestic government bonds. "Other" category reflects non-market state debt and comprises among other domestic government bonds issued for the recapitalization of state banks and SOEs. The share of such domestic government bonds is substantial compared to selected peers, representing approximately 29% of Ukraine's total state debt.

The amount due to international financial institutions (hereafter referred to as the IFIs) **represents 25% of the total state debt** and illustrates their strong support of Ukraine received over the last few years, especially from the International Monetary Fund (hereafter referred to as the IMF) and the World Bank. This share is considerably lower for selected peer groups.



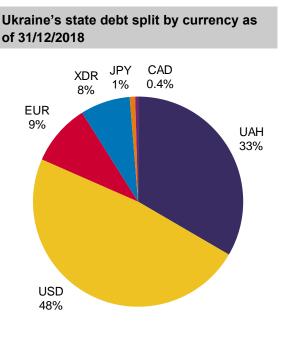


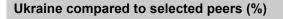
Ukraine compared to selected peers (%)

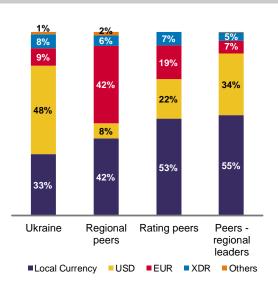
Ukraine's state debt is largely dominated by foreign currency denominated debt with respective share amounting to 67% as of end 2018. USD-denominated debt represents 48% of the total state debt and is predominantly composed of USD-denominated Eurobond series. The second largest category comprises EUR-denominated debt mainly raised as a part of the EU's Macro-Financial Assistance (hereafter referred to as the MFA) over 2015 - 2018. SDR-denominated debt raised as part of financing within the IMF programs represents 8% of Ukraine's state debt as of the end of 2018. The existence of domestic debt denominated in foreign currency increases the share of total foreign currency denominated debt and, hence, its FX risk.

Ukraine's share of local currency denominated debt is lower compared to regional and rating peers (33% vs. 42% and 53%, respectively). The difference is even wider in case of peers - regional leaders which have on average 55% of their state debt denominated in local currency.

These figures underline a priority of Ukrainian government's actions in accordance with the first state debt management objective aimed at (i) deepening the local currency bond market and mitigating FX risks, including by reducing the share of USD in Ukraine's state debt portfolio through the issuance of Eurobonds in other currencies.

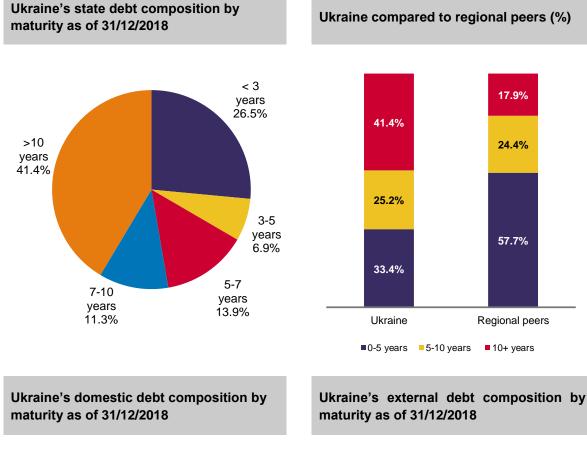


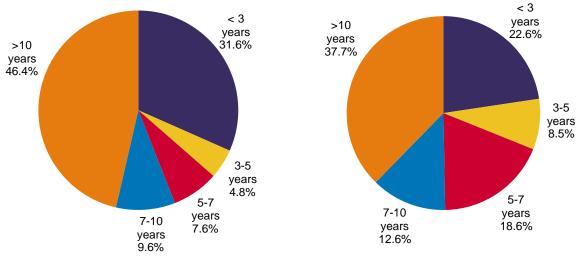




State debt composition by maturity

Ukraine's state debt structure by maturity is balanced, with a high portion of long-term debt that is greater as compared to regional peers. The largest share is attributed to debt instruments maturing in more than 10 years. In contrast, the share of short-term debt maturing in less than 5 years is smaller as compared to regional peers. At the same time, the current structure of Ukraine's state debt portfolio and external debt instruments indicates an opportunity to increase an average term to maturity, including through the issuance of long-term Eurobonds. As of the end of 2018, the weighted average term to maturity of Ukraine's domestic debt (including domestic government bonds in the NBU portfolio) amounts to 10.0 years, while state external debt matures on average in 8.1 years. As a consequence, the weighted average time to maturity of Ukraine's total state debt stands at 8.9 years.

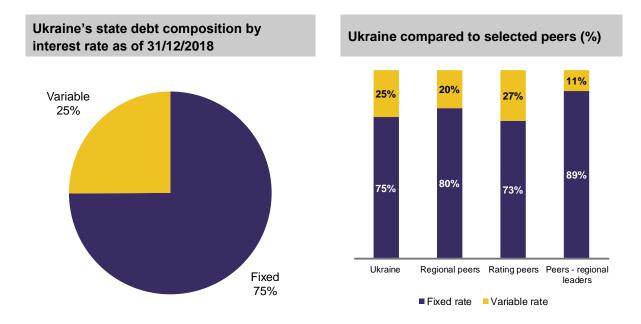




State debt composition by interest rate type

Ukraine's state debt includes a high portion of fixed-rate debt instruments (75%), which contains its interest rate risk. The share of Ukraine's fixed-rate state debt is higher as compared to its rating peers (73%), although lower as compared to its regional peers and peers – regional leaders, which have 80% and 89% of fixed-rate debt, respectively.

Within Ukraine's state debt with variable interest rates, the majority of it is linked to EURIBOR (the Euro Interbank Offered Rate) and LIBOR (the London Interbank Offered Rate). Therefore, such state debt interest payments are sensitive to the increase in interest rates in the Eurozone and the USA.



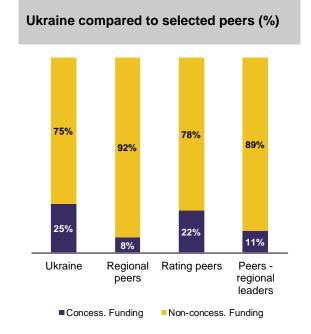
State debt composition by financing terms

The share of concessional instruments in Ukraine's state debt structure accounts for 25% and is significantly higher compared to regional peers (8%) and peers – regional leaders (11%).

Ukraine's share of concessional debt corresponds to the rating peers' level of 22%. A significant share of concessional debt in Ukraine's state debt structure results from considerable support of economic development by international partners. Furthermore, one of the objectives of this Strategy is to increase the amount of financial support by deepening the cooperation with IFIs (EU, IMF, World Bank, European Investment Bank, EBRD), as well as through the development of new partnerships with foreign countries.

composition as of 31/12/2018						
	UAHm	% of total				
Non-concessional funding	1,394,250	74.9%				
Concessional funding	466,041	25.1%				
of which IBRD	135,455	7.3%				
of which EU (MFA)	104,974	5.6%				
of which IMF	142,834	7.7%				
of which EIB	18,849	1.0%				
of which EBRD	15,999	0.9%				
of which bilateral loans	47,931	2.6%				
Total state debt	1,860,291					
% of GDP	52.3%					

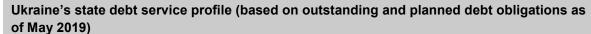
Ilkraina's state debt concessional

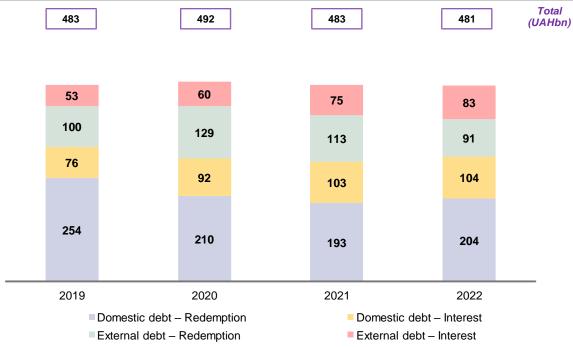


2.2 State debt service

Ukraine's state debt service profile

Ukraine's moderately smoothed debt service profile during 2019 - 2022 with a limited number of refinancing peaks is a result of Ukraine's active state debt management policy following the restructuring of the state and state-guaranteed external commercial debt in 2015. The average state debt interest and redemption amount accounts for UAH 484.7bn with a standard deviation standing at UAH 4.6bn in 2019 - 2022, based on outstanding and planned debt obligations.





Source MinFin, based on data prepared for the Budget Declaration 2019-2022

Periods of state debt refinancing peaks

State debt interest and redemption in 2019 - 2022

UAH bn	2019	2020	2021	2022
Total	483.4	491.5	482.9	481.0
Average	484.7			
Standard deviation	4.6			
Debt payments / GDP	12.0%	10.8%	9.5%	8.6%
Debt payments / state budget revenues	47.1%	44.9%	40.4%	36.7%

Sources MinFin, MEDT

The amount of expected state debt payments in 2019 is in line with state debt interest and redemption in 2020 - 2022. Therefore, the difference between 2019 expected state debt interest and redemption amount and 2020 - 2022 average figure accounts for only UAH 1.7bn. Smoothing refinancing peaks will be accomplished by issuing new debt with longer maturities which will limit repayments during specified years and by performing liability management exercises.

2.3 State debt cost

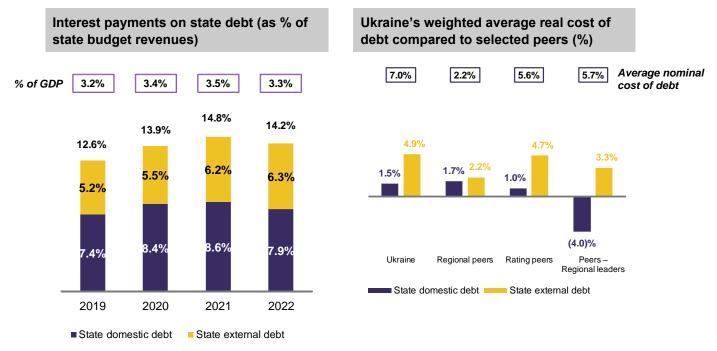
Evolution of Ukraine's state debt interest payments

	2015	2016	2017	2018
State domestic debt interest payments (in UAHbn equiv.)	57.7	62.6	71.7	73.7
USDbn equivalent	2.7	2.5	2.7	2.7
% of GDP	2.9%	2.6%	2.4%	2.1%
% of state budget revenues	10.8%	10.2%	9.0%	8.0%
State external debt interest payments (in UAHbn equiv.)	26.8	33.2	38.8	41.7
USDbn equivalent	1.2	1.3	1.5	1.5
% of GDP	1.3%	1.4%	1.3%	1.2%
% of state budget revenues	5.0%	5.4%	4.9%	4.5%
Total state debt interest payments (in UAHbn equiv.)	84.5	95.8	110.5	115.4
USDbn equivalent	3.9	3.7	4.2	4.2
% of GDP	4.2%	4.0%	3.7%	3.5%
% of state budget revenues	15.8%	15.5%	13.9%	12.6%

Average state debt cost

Ukraine's weighted average cost of state debt stands at 7.0% as of the end of 2018, which slightly differs from average figures for rating and peers – regional leaders (5.6% and 5.7%, respectively). Such cost of debt arises from average external debt nominal cost of 4.9% and a relatively higher average nominal cost of state domestic debt of 10.1%, which, in turn, results primarily from corresponding inflation levels and NBU's inflation targeting policy reflected in key policy rate increases over the last periods. Taking into account inflation, the real cost of state domestic debt amounts to 1.5%.

Ukraine's average interest rate on its external debt accounts for 4.9% and is in line with peers – regional leaders' average (4.7%). This underlines considerable support of Ukraine by international investors, and by IFIs, in particular.



In Q1 2019 Ukraine's Eurobond yield curve decreased by more than 150 basis points (hereafter referred to as bps), normalized its shape as compared to a yield curve as of the end of 2018 (short-term segment fell by more than 200 bps while the long end of the curve dropped by more than 150 bps).

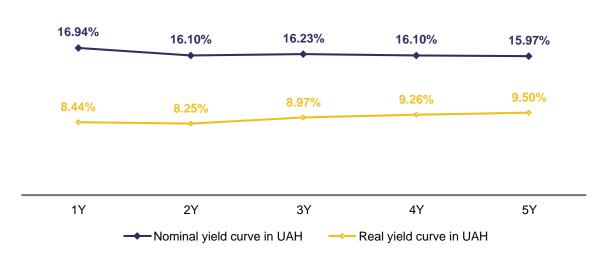
Ukraine's USD-denominated Eurobonds yield curve¹ as of end of period

	0.05	10.06	10.21	10.32	10.41	10.49	10.56	10.62	10.67	10.72	10.77	10.81	10.84	10.88
9.50	9.85		8.36	8.52	8.66	8.77	8.87	8.96	9.03	9.10	9.17	9.23	9.28	9.33
7.34 6.77	7.85 6.87	8.15 6.93	6.97	7.00	7.02	7.04	7.06	7.07	7.08	7.09	7.11	7.11	7.12	7.13
1Y	2Y	3Y	4Y	5Y	6Y ← Q1 :	7Y 2019	8Y	9Y 2018	10Y	11Y 017	12Y	13Y	14Y	15Y

Source Bloomberg Note 1 Logarithmic interpolation

Eurobond yield curve reflects both trends in global economy and geopolitical tendencies, investors' risk appetite in particular moment, and the impact of Ukraine-related risks.

Ukraine's UAH-denominated domestic government bonds primary yield curve²



Source Minfin

Note 2 UAH nominal yield curve is based on the results of primary auctions in 2018; real yield curve in UAH is calculated by using MEDT and NBU CPI forecasts

Ukraine's UAH-denominated domestic government bonds yield curve remains downward slopping, which is among others due to the corresponding inflation expectations.

2.4 Positive developments since June 2018

Ukraine's credit ratings

Ukraine's credit ratings have been trending upward since the sovereign debt restructuring in 2015. Since then Ukraine's ratings have been upgraded by 2 to 3 notches by each of the four international credit rating agencies.

The latest Ukraine's credit rating upgrade took place in December 2018, when Moody's upgraded country's rating from Caa2 to Caa1. The agreement between Ukraine and the IMF on a new Stand-By program, positive expectations with regard to corruption level reduction on the back of reforms introduced, as well as enhancement of Ukraine's economic resilience on the back of existing geopolitical risks contributed to the improvement of Ukraine's credit rating.

Ukraine's current credit ratings									
	Standard & Poor's	Moody's	Fitch	Japan Credit Rating Agency					
Current rating	B- / Stable	Caa1 / Stable	B- / Stable	CCC+ / Stable					
Last rating action	Rating B- Stable Affirmed (April 2019)	Upgrade from Caa2 to Caa1 Stable (December 2018)	Rating B- Stable Affirmed (March 2019)	Upgrade from CCC to CCC+ Stable (May 2018)					

Note As of 20/05/2019

Cooperation with IFIs

European Union Macro-Financial Assistance (MFA): On July 9, 2018, the legislative decision of the European Parliament and the Council of the EU on the provision of Ukraine with the Fourth programme of the EU macro-financial support totaling EUR 1bn became effective. This MFA program aims at supporting further economic stabilization in Ukraine as well as the reform agenda.

On November 30, 2018, the European Commission approved the provision of EUR 500m in the form of a loan agreement as part of the Fourth EU MFA program. The next tranche is expected after the implementation of 12 structural conditions by Ukraine related among others to public finance management, anti-corruption measures and social policy.

Overall, in 2014 - 2018 more than EUR 3.31bn was disbursed to Ukraine within four MFA programs.

IMF: On December 19, 2018, the Executive Board of the IMF approved a new 14-month Stand-By Arrangement in the amount of USD 3.9bn representing c.139% of country's quota in the IMF which replaced previous Extended Fund Facility program (EFF). Financing the balance of payment deficit and supporting structural reforms implementation are the key objectives of the program. After meeting all prior actions, Ukraine received the first tranche within the Stand-By program totaling USD 1.4bn on December 21, 2018.

The size of the previous EFF accounted for around SDR 12.35bn (about USD 17.5bn) corresponding to 900% of country's quota in the IMF, which, in turn, indicates significant support following the economic downturn. It was the largest program by quota approved after Greece 2010 SBA program (3,200%).

World Bank Group: On December 18, 2018, the World Bank's Board of Executive Directors approved provision of a Policy-Based Guarantee (PBG) for Ukraine in the amount of USD 750m. The program aims at supporting implementation of structural reforms in banking, anti-corruption, social and agricultural sectors. Received guarantee enabled Ukraine to attract two loans from Deutsche Bank with the respective amounts of EUR 349m and EUR 529m.

Overall, since 2014 Ukraine received USD 5.5bn in financing from the World Bank Group (incl. among others 4 DPLs and 7 investment loans). Most World Bank's investment projects aimed at improving the quality of basic public services, social protection and healthcare policy as well as private sector and energy efficiency development.

Ukraine major institutional supports

IFI	Amount	Selected program terms
EU	EUR 3.3bn in MFAs (Disbursed in 2013 - 2019)	 <u>Macro-Financial Assistance program (MFA) I:</u> The agreement signed in April 2013 Total disbursed amount: EUR 610m Interest rate: 1.875% / 1.375% p. a. (two tranches loan) Maturity date: till 2030 <u>MFA II:</u> Total disbursed amount: EUR 1,000m Interest rate: 1.875% / 1.375% p. a. (two tranches loan) Maturity date: till 2029 <u>MFA III:</u> The agreement signed in May 2015 Total disbursed amount: EUR 1,200m Interest rate: 0.25% p. a. Maturity date: till 2031 <u>MFA IV:</u> The agreement signed in September 2018 Total disbursed amount: EUR 500m (total program amount accounts for EUR 1,000m) Interest rate: 1.25% p. a. Maturity date: till 2031
IMF	USD 14.5bn (Disbursed in 2014 - 2019)	 Id-month SBA program: The agreement signed in 2018 Total disbursed amount: SDR 1.0bn (total program amount accounts for SDR 2.8bn) Maturity date: till 2020 Extended Fund Facility: The agreement signed in 2015 Total disbursed amount: SDR 6.18bn Maturity date: till 2025 2-year Stand-By Arrangement: The agreement signed in 2014 Total disbursed amount: SDR 2.97bn Maturity date: till 2019
World Bank	USD 5.9bn (Committed in 2014 - 2019)	 Policy-Based Guarantee (PBG): The agreement signed in December 2018 Total guaranteed amount: USD 750m The loans attracted under the obtained guarantee EUR 349m loans raised in December 2018 with maturity dates in 2022 and 2028 and respective interest rates of 3.27% and 3.76% EUR 529m loans raised in February 2019 with maturity dates in 2023 and 2029 and respective interest rates of 3.92% and 4.41% Development Policy Loans (last signed program): DPL II The agreement signed in September 2015 Total disbursed amount: USD 500m Interest rate: Libor 6m + c.38 bps margin Maturity date: till 2031 Second Roads and Safety Improvement Project: The agreement signed in September 2012 Total committed amount: USD 450m Interest rate: Libor 6m + c.10 bps margin Maturity date: till April 2029 Power transmission project: The agreement signed in June 2007 Total committed amount: USD 200m Interest rate: Libor 6m + c.58 bps margin Maturity date: till September 2027
USA	USD 3.0bn (in form of guarantees)	• Three loan guarantees of USD 1bn each granted within cooperation with USAID in May 2014, May 2015 and September 2016 to support economic recovery and reform progress in Ukraine
EIB	EUR 594m (as of the end of 2018)	 Tenor: from 20 to 24 years Interest rate: from EURIBOR 6m + 55 bps margin to EURIBOR 6m + 131 bps margin Selected projects: 750kV Zaporizhzhia-Kakhovka High Voltage Line Project European Roads of Ukraine Hydro Power Plants Rehabilitation Project
EBRD	EUR 504m (as of the end of 2018)	 Tenor: 15 years Interest rate: EURIBOR 6m + 100 bps margin Selected projects: 750kV Zaporizhzhia-Kakhovka High Voltage Line Project Kyiv-Chop Road Rehabilitation Pan-European Transport Corridors

Source IFIs, MinFin

3.1 Objective 1. Increase the share of state debt denominated in local currency

Reducing FX exposure of state debt

Since 2015, one of the objectives of the state debt management is to reduce FX risk related to a significant share of foreign currency denominated debt in Ukraine's state debt structure. An increase in the share of local currency denominated debt as well as the diversification of currencies in the state debt FX mix will enable Ukraine to reduce the potential impact of an FX shock on its debt service, thus improving Ukraine's state debt sustainability. The state debt currency structure should take into account the currency mix of Ukraine's balance of payments, as well as the level of correlation between UAH and other currencies.

Reducing the share of FX-denominated debt by gradually limiting non-UAH denominated domestic government bond issuances will have a positive impact on the value of FX reserves in the long run. The build-up of international reserves, in turn, will support the creation of a well-balanced financial and economic environment by effectively supporting Ukraine's foreign trade expansion.

A substantial FX risk related to exchange rates volatility, especially UAH/USD, is a consequence of a relatively high degree of dollarization of the country's economy. The large part of payments for Ukrainian exports is still denominated in USD, with 71.3%¹ of current account receipts in 2018 held in USD. The importance of containing FX risk is also corroborated by the fact that the Ukrainian banking sector is also widely exposed to changes in exchange rates. The share of FX-denominated assets in the Ukrainian banking system amounted to 39.2%¹ as of the end of 2018.

Attraction of international investors into the local currency bond market

To increase the share of local currency denominated debt, issuance of local currency bonds for foreign investors is set as one of the tasks of Ukraine's state debt management. In order to extend the participation of international investors on the Ukrainian domestic government bond market, it is necessary both to facilitate the access and to stimulate investors' interest through the increased access to information and issuance of UAH-denominated Eurobonds. In addition, implementation of liquidity stimulating measures in secondary market is vital, including among others through the construction of a benchmark yield curve by means of liquid issues of benchmark bonds, performance of liability management operations, such as switches and buy-backs. The implementation of such measures will facilitate the arrival of anchor investors enabling larger issuances of domestic government bonds with longer maturities, as well as a decrease in the cost of borrowing.

The growing appetite of international investors for local currency bonds would empower Ukraine to extend its current investor base. The issuance of local currency bonds for foreign investors would also pave the way for Ukrainian companies with regard to the issuance of local currency bonds subscribed by such investors, as well as set a new yield benchmark for such debt instruments for the Ukrainian companies. This would ultimately result in the deepening of the domestic capital market.

3.2 Objective 2. Lengthen average debt maturity, and ensure a smooth state debt repayment profile

Containing refinancing risk

In order to ensure that Ukraine meets its existing debt obligations, the country will require sustainable access to the capital markets in the upcoming years and continuous control over its refinancing risk. Therefore, in order to spread out the refinancing risk over the future years, Ukraine will favor longer term and soft amortizing instruments, if possible. Thereby, the MinFin plans to increase

¹ Source NBU

the average term to maturity of Ukraine's state debt. In turn, access to the international capital market in the medium term envisages the need for further cooperation between Ukraine and the IMF.

Over a broader time horizon, containing refinancing risk can be achieved by increasing the weighted average time to maturity of Ukraine's state debt portfolio by refinancing bonds before their maturity as well as by reducing the concentration of debt repayments in the coming years to accomplish a smooth debt maturity profile. The increase in time to maturity of the state domestic debt can be also achieved by, among other initiatives, increasing the activity of primary dealers as market makers on the secondary domestic government bond market, improving the liquidity of the Ukrainian banks and attraction of foreign investors to the domestic market. Expansion of domestic government bond market can be also achieved by facilitating access to investments into domestic government bonds for households and conveying a broad information campaign to stimulate the conversion of households' savings into investments, which will contribute to the demand for long-term risk-free assets in the future.

The implementation of such measures should be foreseeable for all market participants.

Liability management operations

Following the successful liability management operation in September 2017, the implementation of other similar transactions is considered, subject to favorable market conditions. The amendments to the Budget Code of Ukraine introduced in September 2017 fully authorize the execution of the following liability management transactions:

- **A Tender Offer**, which is a public offer provided by an issuer to buy back all, or a part, of its outstanding debt obligations from investors for cash;

- **An Exchange Offer**, which is an offer provided by an issuer to exchange all, or a part, of its outstanding debt obligations for new debt obligations with different terms.

Such transactions also help (i) decrease refinancing costs depending on the evolution of spreads, as Ukraine may benefit from improved economic and debt parameters, and (ii) expand maturity of state debt portfolio as a whole by deferring near-term maturities, thereby reducing the refinancing risk.

Implementation of liability management operations with domestic government bonds in the future will also promote further development of the domestic government bond market, among others, by increasing its liquidity.

3.3 Objective 3. Attract long-term concessional funding

Ukraine's ongoing macroeconomic recovery since 2014 - 2015 accompanied by strong reform momentum, contributing to a more stable and secure economic environment, created **more favorable conditions for minimizing state debt interest cost.** Reduction of the weighted average cost of state debt over the medium term will enable Ukraine to improve both fiscal performance and state debt sustainability.

Ukraine benefits from strong support from IFIs and aims to further expand cooperation with such multilateral institutions and establish bilateral partnerships, similar to those with Japan, Canada, Germany, and the USA. Much attention will be paid to raising funds from these institutions for the implementation of investment projects aimed at developing key sectors of the Ukrainian economy.

Deepening the cooperation with the IMF, the IBRD, and the EU within structural reforms' implementation in most vulnerable areas of the Ukrainian economy is important both for attracting concessional funding, including from the IBRD and the EU, as well as for strengthening the confidence of foreign investors and a further decrease in the cost of commercial loans.

3.4 Objective 4. Continue developing strong investor relationships and further improve the state debt management policy framework

Ensure strong support from international investors

In order to ensure sustainable access to international capital markets, **it is necessary to continue developing systematic and long-term investor relationships**. One of Ukraine's tasks within this Strategy is to expand its investor base in terms of geography and type of investors. As such, the Strategy envisages Ukraine providing investors with regular updates with regard to key macroeconomic and fiscal data.

Ukraine's efforts to develop communication with investors are supported **by regular update and publication of the investor presentation on the MinFin website**, dissemination of monthly outlooks on the essential developments and events in Ukraine, non-deal road shows, as well as by maintaining an official MinFin page on the Bloomberg terminal.

Reinforcing processes for Strategy implementation

The development and implementation of the Strategy is currently a part of the MinFin's responsibility. However, state debt management through an independent institution (agency, office) can contribute to a more efficient implementation of the Strategy and reinforce state debt management processes in general. Such institution should have capabilities for more flexible state debt management practices, particularly by performing Dutch auctions, syndicating domestic government bond issues with different maturities, collaborating with investors and solidifying relations with a network of primary dealers. The establishment of such Agency was envisaged by the Law on the 2019 State Budget of Ukraine. Furthermore, the preparation of appropriate amendments to the Budget Code of Ukraine started in Q1 2019.

Interactions with credit rating agencies

Ukraine will actively interact with rating agencies in the following years to further enhance its sovereign credit ratings with an ultimate goal to improve the investment attractiveness of Ukraine's sovereign debt instruments.

4.1 Key scenarios and macroeconomic assumptions

Macroeconomic and fiscal assumptions

The macroeconomic framework underpinning the Strategy corresponds to the forecasts of the Ministry of Economic Development and Trade (hereafter referred to as the MEDT) approved by the CMU on May 15, 2019, as well as the MinFin's assumptions.

	2018	2019	2020	2021	2022
Aain macroeconomic assumptions					
Real GDP growth rate (%)	3.3%	2.8%	3.3%	3.8%	4.1%
Nominal GDP (UAHbn)	3,558.7	4,035.2	4,551.7	5,069.9	5,617.3
Nominal GDP (USDbn)	130.8	147.3	161.4	172.4	187.2
GDP deflator (% change)	15.4%	10.3%	9.2%	7.3%	6.4%
-					
State budget deficit (% of GDP)	1.66%	2.23%	2.09%	1.88%	1.70%
Prevatization proceeds (UAHbn)	0.3	17.1	5.0	6.0	6.0
Exchange rates					
Period average:					
USD/UAH	27.2	27.4	28.2	29.4	30.0
End of period:					
USD/UAH	27.7	28.0	29.4	30.5	30.7
XDR/UAH	38.5	38.9	40.9	42.4	42.7
EUR/UAH	31.7	32.1	33.7	34.9	35.2
CAD/UAH	20.3	20.6	21.6	22.4	22.5
JPY/UAH	0.3	0.3	0.3	0.3	0.3

Sources MEDT, MinFin

4.2 Current projections

Debt stock ratios

According to the base case scenario, Ukraine's state debt level is considered sustainable. The Debt/GDP ratio is expected to progressively go down from 52.3% as of the end of 2018 to 42.4% as of the end of 2022. Such downward trend highlights Ukraine's ability to repay its debt over the long term.

2020

2021

Evolution of Ukraine state debt stock 2018 2019 State domestic debt

State domestic debt					
in UAHbn equivalent	761.1	799.2	887.1	948.6	983.5
in USDbn equivalent	27.5	28.5	30.2	31.1	32.0
% of GDP	21.4%	19.8%	19.5%	18.7%	17.5%
State external debt					
in UAHbn equivalent	1,099.2	1,260.9	1,250.3	1,329.9	1,400.0
in USDbn equivalent	39.7	45.0	42.5	43.6	45.6
% of GDP	30.9%	31.2%	27.5%	26.2%	24.9%
Total state debt					
in UAHbn equivalent	1,860.3	2,060.1	2,137.4	2,278.6	2,383.5
in USDbn equivalent	67.2	73.6	72.7	74.7	77.6
% of GDP	52.3%	51.1%	47.0%	44.9%	42.4%

Source MinFin

2022

Evolution of Ukraine's state debt interest and redemption indicators

	2019	2020	2021	2022
tate domestic debt interest and redemption				
in UAHbn equivalent	330.5	302.4	295.2	307.9
in USDbn equivalent	12.1	10.7	10.0	10.3
% of GDP	8.2%	6.6%	5.8%	5.5%
% of state budget revenues	32.2%	27.6%	24.7%	23.5%
state external debt interest and redemption				
in UAHbn equivalent	152.9	189.1	187.7	173.1
in USDbn equivalent	5.6	6.7	6.4	5.8
% of GDP	3.8%	4.2%	3.7%	3.1%
% of state budget revenues	14.9%	17.3%	15.7%	13.2%
otal state debt interest and redemption				
UAHbn equivalent	483.4	491.5	482.9	481.0
in USDbn equivalent	17.6	17.4	16.4	16.0
% of GDP	12.0%	10.8%	9.5%	8.6%
% of state budget revenues	47.1%	44.9%	40.4%	36.7%

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The control over the state debt risks is based on the analysis of refinancing risk, liquidity risk, as well as interest rate, currency, budget and state debt management² (contingent liabilities) risks.

5.1 Refinancing risk

State debt maturing in 2019 - 2022

When it comes to Ukraine's existing state debt portfolio, significant refinancing peaks are anticipated over the next 4 years. In particular, in 2019 debt interest and redemption payments total UAH 483bn, and the average amount of state debt payments in 2020 - 2022 is expected at UAH 485bn. The major part of these payments is composed of domestic debt repayment both in local and foreign currencies.

This risk can be mitigated owing to the development of the domestic government bond market. The institute of primary dealers has been established to ensure sufficient liquidity of the government securities. In 2018, the main primary dealers for Ukrainian domestic government bonds comprised (ranked by total amount purchased): PrivatBank, Oschadbank, Ukreximbank, Ukrgazbank, OTP Bank, Citi, First Ukrainian International Bank, Alfa-Bank, Kredobank, Raiffeisen Bank Aval, Ukrsibbank and Pivdennyi Bank.

Development of domestic government bonds market is also envisaged by attracting international investors to Ukraine's domestic market. In order to achieve it, in May 2019, the Ukrainian market was connected to the network of the international central securities depository Clearstream through the securities account at the Depository of the National Bank of Ukraine. This initiative facilitated access to the Ukrainian government securities for international investors, thus increasing demand for domestic government bonds and boosting their liquidity.

Since refinancing risk in the upcoming years stems also from a significant amount of Eurobonds due over the respective period, the reduction of the risk is also possible with the implementation of liability management operations.

Average time to maturity of Ukraine's state debt

	years
State debt	8.9
State domestic debt	10.0
State external debt	8.1

Weighted average time to maturity of Ukraine's state debt as of 31/12/2018

Source MinFin

Ukraine's state debt structure has a balanced average time to maturity. In October 2017, Ukraine has successfully re-profiled its state domestic debt held by the NBU, thus extending the average time to maturity.

On the external side, first in Ukraine's history a 15-year Eurobond issue in 2017 and recent issue of Eurobonds due in 2028 enabled Ukraine to lengthen the average time to maturity of state external debt. Moreover, the large share of concessional funding, which tends to have a longer time to maturity, as well as continuous liability management operations will enable further extension of Ukraine's state external debt maturities in the medium term.

² According to CMU resolution №815 dated 01/08/2012 state debt management risk includes a risk of an event that can lead to the increase in state (local) budget expenditures related to debt interest and redemption

5.2 Liquidity risk

External liquidity indicators				
	2015	2016	2017	2018
International reserves, USDbn	13.3	15.5	18.8	20.8
State external debt service, USDbn	1.2	1.3	1.5	1.5
Exports, USDbn	47.9	46.0	53.9	59.1
Imports, USDbn	50.2	52.5	62.5	70.3
International reserves to external debt service	10.8x	12.3x	12.8x	13.6x
International reserves in months of imports	3.0x	3.0x	3.2x	3.4x
Exports to external debt service	39.0x	36.5x	36.7x	38.6x

Sources State Statistics Service of Ukraine, NBU

Following an economic downturn in 2014, Ukraine suffered from a sharp decrease in its international reserves. Owing to the financial support received from the international community as well as the NBU's decision to implement a floating exchange rate regime, the country was able to quickly restore its international reserves, from USD 7.5bn as of the end of 2014 to USD 15.5bn as of the end of 2016 and USD 20.8 bn as of end of 2018.

As of end-December 2018, Ukraine's international reserves amounted to USD 20.8 bn, representing 3.4 months of future imports, which indicates considerable progress in rebuilding international reserves from 1.8 months of imports as of end-2014. IMF future disbursements in the context of the ongoing program and/or establishment of the new cooperation program with the IMF will help further strengthen Ukraine's international reserves position.

5.3 Exchange rate risk

UAH correlation with other currencies

The impact of UAH/USD exchange rate fluctuations on the state budget is accentuated by a high degree of correlation with other major currencies in which Ukraine's debt obligations are denominated, thus increasing exchange rate risk of Ukraine's state debt.

Historical correlation between exchange rates of UAH and main currencies of Ukraine's state debt since January 2017

	UAH/USD	UAH/EUR	UAH/XDR	UAH/JPY	UAH/CAD
UAH/USD		98%	96%	96%	99%
UAH/EUR	98%		95%	97%	99%
UAH/SDR	96%	95%		91%	95%
UAH/JPY	96%	97%	91%		97%
UAH/CAD	99%	99%	95%	97%	

Source Bloomberg (31.03.2019)

The Forecast of Economic and Social Development of Ukraine anticipates a slowdown in depreciation of the Ukrainian hryvnia against the US Dollar in the coming years, in the context of monetary policy normalization. Such nominal exchange rate dynamics should expectedly lead the Real Effective Exchange Rate (REER) towards reaching its long-term equilibrium.

5.4 Interest rate risk

The average time to re-fix the interest rates for Ukraine's state debt portfolio accounts for 5.1 years. Such a figure indicates that a relatively low share of the state debt will be exposed to interest rate risk in the near future. Moreover, the value is higher for the domestic debt compared to the external one due to a larger share of state domestic debt with fixed rates.

Interest rate risk indicators

	Domestic debt	External debt	Total state debt
Average time to re-fix the interest rates (years)	5.4	4.1	5.1
Debt with interest rates to be refixed in 1 year (% of total)	35.4%	33.2%	34.8%
Service payments with fixed interest rates (% of total)	69%	77%	71%

Source MinFin (31/12/2018)

Note 1 Debt re-fixing in 1 year includes variable-rate debt and fixed-rate debt maturing in 2019

The proportion of Ukraine's state debt with interest rates to be re-fixed in 2019 constitutes 35%. In particular, the interest rates are expected to be re-fixed for 35% of state domestic debt and 33% of state external debt in 2019.

Ukraine aspires to maintain the current interest rate structure, i.e. to keep a limited share of external debt to be re-fixed in the near-term, thus limiting the interest rate risk. With regard to the domestic market, such figure is in line with the government's expectations on decreasing interest rates in the medium term as well as with the forecast of decreasing inflation till 2020.

5.5 Budget risk

Following the government's fiscal consolidation efforts and the introduction of the medium-term budget planning, Ukraine managed to reduce state budget deficit to GDP ratio from 2.9% in 2016 to 1.7% in 2018.

In particular, as a result of the medium-term budget planning introduction starting from 2019, a new budget declaration is developed and becomes the main document of the budget process. Among others, the budget declaration will contain the ceilings for the state budget deficit, state debt stock, and the expenditures ceilings, split by the main budget institutions for the next three years, which will significantly increase the predictability of Ukraine's fiscal policy.

Ukraine aims to continue its fiscal consolidation efforts in the future in order to further reduce the state budget deficit, which, combined with other factors, will contribute to the reduction of the debt burden.

5.6 Other risks

Macroeconomic risks and their implications for state debt management strategies

Following the 2014 crisis, two main macroeconomic risks were identified that could create uncertainty for Ukraine's state debt management

• **Real GDP growth risk:** GDP growth rate can be lower than the expected level, as it happened in 2014 - 2015.

Inflation risk: the NBU prudent monetary policy and shift towards inflation targeting framework, in
particular, significantly reduced the pace of inflation in Ukraine. However, the risk of rising inflation
should be considered among the potential scenarios.

The above-mentioned macroeconomic risks are beyond the control of the MinFin, thus not defining the analysis of Ukraine's state debt management.

State debt management (contingent liabilities) risk

The Ukrainian banking sector is characterized by a relatively large proportion of banks with state participation, representing more than 50% of the sector's total assets. Four banks, partially or wholly owned by the state, constitute contingent liabilities that could materialize in case of banks' failure. PrivatBank, the largest commercial bank in Ukraine, was nationalized on December 19, 2016, following a major capital shortfall, which led to the need for capital injections by issuing domestic government bonds. In addition, contingent liabilities risk also stems from the additional recapitalization of the Deposit Guarantee Fund which may take place in case of commercial banks' bankruptcy.

To contain systemic risks of the banking sector associated with bank failures, bank recapitalization procedure and rules governing the termination of banking activities were simplified with the adoption of the Law On Simplifying Capitalization and Reorganization Procedures for Banks. In particular, the new Ukrainian legislation allows Ukrainian banks to:

- terminate their banking activity without the dissolution of the legal entity if they fail to meet the recapitalization requirements set by the NBU;
- shorten the duration of the bank reorganization procedures from 1.5 years to three-four months;
- merge with other banks to meet the recapitalization requirements set by the NBU, which was not possible under the previous legislation.

Ukraine's state derivatives overview

In accordance with the Ukrainian legislation, state derivatives do not constitute a part of Ukraine's state debt. The IMF and credit rating agencies also do not include state derivatives into state debt, as these instruments do not contribute to current expenses with regards to Ukraine's state debt interest payments.

Ukraine's state derivatives, issued in the context of 2015 debt restructuring, represent securities with contingent payments with a total nominal amount of USD 3.2bn and maturity in 2040. Such securities do not have a specific face value at the repayment date. Payments on these instruments depend on the growth rate of Ukraine's GDP from 2019 to 2038 with payments being possible annually in two calendar years, namely from 2021 to 2040.

Coupon payments are estimated as follows:

- <u>if real GDP growth is <3% or Ukraine's nominal GDP is less than USD 125.4bn</u>: payment is not made;
- if real GDP growth ranges between 3% and 4%: 15% of the real GDP growth from 3% to 4%;
- if real GDP growth is > 4%: 40% of the real GDP growth exceeding 4%, in addition to the amount for GDP growth from 3 to 4%;
- from 2021 to 2025 payments are limited at 1% of GDP.

Based on the analysis of the risk structure and the benchmarking of Ukraine's state debt, the following options of funding sources and state debt management activities within this Strategy are considered as the most expedient.

6.1 Available funding options

Domestic financing sources

	Available instruments (incl but not limited to)
Marketable securities	UAH-denominated domestic government bonds
	UAH-denominated inflation-linked domestic government bonds
	USD/EUR-denominated domestic government bonds
Commercial loans	Bank loans

External financing sources

	Available instruments (incl but not limited to)
World Bank	 Development Policy Loans ("DPL") Project-based loans Policy-Based Guarantees
EIB/ EBRD	 Project loans Intermediated loans
European Union	Macro-Financial Assistance (MFA)
Bilateral loans	Bilateral financing from partner countries
Commercial / semi-concessional loans	 Public Development Banks/agencies loans Commercial bank loans Bridge-loans
Eurobonds	Eurobonds denominated in USD / EUR / UAH (public and private placement)

6.2 Strategy for the medium term

Issuance of Eurobonds in other currencies for international investors

In order to optimize the state debt structure in terms of FX risk, placement of Eurobonds denominated in currencies other than USD on international capital markets is considered. The issuance of such debt instruments can among others contribute to lengthening the average

term to maturity of Ukraine's state debt, as well as to reducing the average state debt interest cost.

Diversification of currencies within Ukraine's state debt portfolio is one of the measures to contain state debt FX risk. In this regard, the possibility of entering the international market through the issuance of EUR-denominated Eurobonds is considered.

Due to lower interest rates, current conditions on European bond markets are more favorable than the bond market in the US dollars. As shown in the graph below, the interest rate swap curve in US dollars significantly exceeds a similar curve in Euro, indicating more favorable market conditions for transactions in Euro. Ukraine seeks to take advantage of this to reduce its own yield curve and, accordingly, reduce the cost of state debt service. The rationale for such issuance will be determined by the level of currency risk and demand among European investors.



Interest rate swap curves in USD and EUR as of 31/03/2019

Source Bloomberg

In addition, such a transaction would provide an opportunity to widen the investor base for Ukraine's debt instruments and to diversify Ukraine's funding sources which, in turn, would increase the flexibility of state budget financing and state debt management.

Also, local currency denominated Eurobond placement on international capital markets can be considered in order to provide the alternative source of financing and mitigate state debt FX risk. The rationale for such placement will be determined based on the available demand and international market conditions.

USD-denominated Eurobond issuance

The issuance of USD-denominated Eurobonds is considered and could be done either through: a tap of the existing outstanding Eurobonds or the issuance of a new debt instrument.

At the same time, the new issue should have a maturity which will enable Ukraine to smoothen its debt service profile.

Liability management operations

Continuing series of liability management transactions launched in 2017 to smoothen Ukraine's debt maturity profile is under consideration.

The first option envisages the buyback of the specific Eurobond series through the announcement a tender/exchange offer to reduce external debt refinancing peaks.

The second option implies a partial buyback/exchange of multiple Eurobond series in the form of the tender/exchange offer. For each of these series, the transaction can include a cap amount.

Concessional funding

As part of minimizing state debt interest expenditures by attracting and expanding concessional funding, potential partners for Ukraine are:

- IFIs
- Development Policy Loans ("DPL"), granted by the World Bank to support social and economic reforms;
- Policy-Based Guarantees ("PBG"), which consist of a partial guarantee issued by the World Bank for a commercial loan/bond issue;
- Budget and project financing within the agreements signed with IFIs (IMF, EBRD, World Bank, EIB, etc.);
- Bilateral loans from foreign countries

6.3 Active interactions with investors and international rating agencies

In 2018 annual rating "Assessment of Investor Relations and Data Dissemination" of the Institute of International Finance, Ukraine was recognized as the most-improved country for IR and data transparency practices since 2017, owing to the development of effective investor relations practices.

The main task for improving investor relations is an enhancement of transparency and publicity, including through further development of the official MinFin website. In this regard, MinFin is actively working towards improving relations with investors, which, among others, includes the following measures:

- dissemination of monthly reports on state budget performance, state debt and notable developments and events in Ukraine's economy;
- regular updates of the investor presentation with up-to-date detailed information on the economic situation and the structure of the state and state guaranteed debt;
- regular update of investor calendar including dates of important economic statistics publication;
- publication of a monthly macroeconomic review and forecast;
- answers to investors' inquiries and global investor conference calls.

The MinFin also regularly updates a page at Bloomberg terminal. The page contains information on sovereign financial instruments and aims at informing foreign investors, among others, regarding the schedule and the results of domestic government bond auctions, information on domestic government bonds and Eurobonds issued by Ukraine and the list of primary dealers with contact details.

Facilitation of the access to information for investors through the Bloomberg terminal is anticipated after switching to the Bloomberg auction platform, which is considered by the MinFin as one of the priorities for the near future.
