GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

ÁKK

HUNGARY
ÁKK – INVESTOR PRESENTATION

December 2021

DISCLAIMER

These materials may not be copied, published, distributed or transmitted and may not be reproduced in any manner whatsoever. These materials do not constitute an offer to sell or the solicitation of an offer to buy any securities for sale in any jurisdiction. Persons into whose possession this announcement comes are required to inform themselves about, and to observe, any such restrictions.

This presentation contains forward looking statements, including statements about the beliefs and expectations of Hungary (“Hungary"). These statements are based on the Hungary's current plans, estimates and projections, as well as its expectations of external conditions and events. Forward-looking statements involve inherent risks and uncertainties and speak only as of the date they are made. As a result of these risks, uncertainties and assumptions, undue reliance should not be placed on these forward-looking statements. A number of important factors could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements. Hungary is not obliged to, and does not intend to, update or revise any forward-looking statements made in this presentation whether as a result of new information, future events or otherwise.

This communication has been prepared by and is the sole responsibility of Hungary, which is the subject of this communication. This communication is provided for information purposes only. The information and opinions herein is believed to be reliable and has been obtained from sources believed to be reliable, but no representation or warranty, express or implied, of whatsoever nature, is made with respect to the fairness, correctness, accuracy, reasonableness or completeness of the information and opinions. There is no obligation to update, modify or amend this communication or to otherwise notify the recipient if information, opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

The recipient is strongly advised to seek its own independent advice in relation to any investment, financial, legal, tax, accounting or regulatory issues discussed herein. Analyses and opinions contained herein may be based on assumptions that if altered can change the analyses or opinions expressed. Nothing contained herein shall constitute any representation or warranty as to future performance of any financial instrument, credit, currency, rate or other market or economic measure. Furthermore, past performance is not necessarily indicative of future results. Hungary disclaims liability for any loss arising out of or in connection with a recipient’s use of, or reliance on, this communication.

This communication is not for distribution to, or for the use of, individual or private customers (including those as defined by the rules of the UK’s Financial Services Authority (FSA)).

This communication is not for publication or distribution, directly or indirectly, in or into the United States or in any other jurisdiction in which such publication or distribution would be prohibited by applicable law. This communication is confidential and solely for the use of the person it is addressed to and its advisers. This presentation does not constitute an offer or invitation to sell, or any solicitation of any offer to subscribe for or purchase, any securities to any person in any jurisdiction and nothing contained herein shall form the basis of any contract or commitment whatsoever. In particular, the securities referred to herein may not be sold in the United States absent registration or an exemption from registration under the U.S. Securities Act of 1933, as amended. The Issuer does not intend to register any portion of the offering of securities in the United States or to conduct a public offering of securities in the United States. or any other jurisdiction. No securities may be offered, sold or delivered in the United States. No public offering is being made in the United States or in any other jurisdiction where such an offering is restricted or prohibited or where such offer would be unlawful. Any offering of securities will be made by means of an offering circular which will contain detailed information about the Issuer, as well as financial information. Neither this communication nor any portion hereof may be sent or transmitted into the U.S. or any jurisdiction where it is unlawful to do so. No money, securities or other consideration is being solicited by this communication or the information contained herein and, if sent in response to this communication or the information contained herein, will not be accepted. Neither this communication nor any information herein nor the fact of its distribution shall form the basis of, or be relied on in connection with, any contract or commitment or investment decision whatsoever.

This presentation is directed only at and is for distribution only to persons who (i) are outside the United Kingdom, (ii) are "investment professionals" falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended) (the "Order"), (iii) are persons falling within Article 49 (2)(a) to (d) of the Order or (iv) are other persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 the Financial Services and Markets Act 2000, as amended) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons in (i), (ii), (iii) and (iv) together being referred to as "Relevant Persons"). This announcement is directed only at Relevant Persons and must not be acted on or relied on by persons who are not Relevant Persons. Any investment or investment activity to which this announcement relates is available only to Relevant Persons and will be engaged in only with Relevant Persons.

MiFID II product governance / Retail investors, professional investors and ECPs – Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the securities has led to the conclusion that: (i) the target market for the securities is eligible counterparties, professional clients and retail clients, each as defined in Directive 2014/65/EC (as amended, "MiFID II"); and (ii) all channels for distribution of the securities are appropriate. Any person subsequently offering, selling or recommending the securities (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the securities (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

This Presentation does not disclose all the risks and other significant issues related to an investment in securities issued by Hungary, nor does it propose to do so. Potential investors should ensure that they fully understand the terms of any securities and any applicable risks.

KEY FACTS AND FIGURES ON HUNGARY

Area: 93,023 sq. kilometres

Capital: Budapest

Population: 9.7m

Life expectancy at birth: 75.5 years

Currency: Forint (HUF)

Exchange rate (2020): 307.93 HUF = 1.00 USD[1]

Nominal GDP (2020): HUF 47,988 billion

Real GDP growth (2020): -4.7%

Public debt (2020): HUF 36,684 billion

Public debt in foreign currency (2020):
HUF 7,318bn (EUR 20 billion)

Sovereign ratings: BBB / Baa2 / BBB
Stable outlook for all three rating

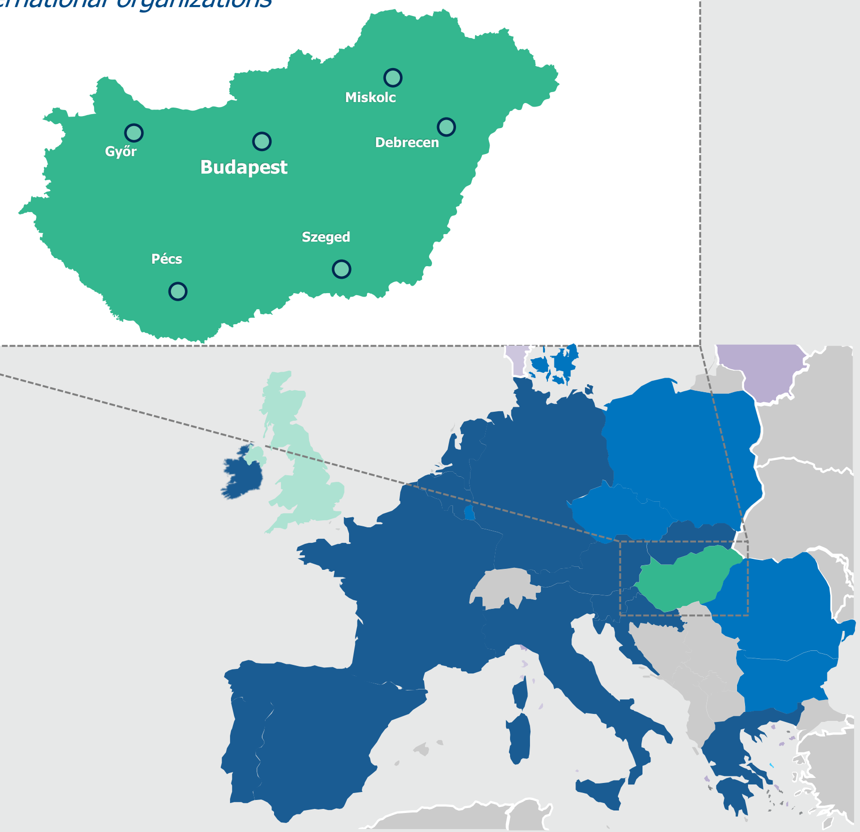
Government: parliamentary republic

EU member country since: 2004

Schengen area member since: 2007

Key economic sectors: manufacturing; wholesale and retail trade; automotive; education and health

A high income economy with a strategic location at the centre of Europe and memberships in key international organizations



Note: 1. Average exchange rate in 2020. The rate has been used to present approximate EUR equivalents to HUF nominal values.
Sources: Government Debt Management Agency of Hungary (AKK), Hungarian Central Statistics Office (HCSO), HIPA, Magyar Nemzeti Bank (the central bank of Hungary) (NBH), World Bank, Bloomberg, European Commission

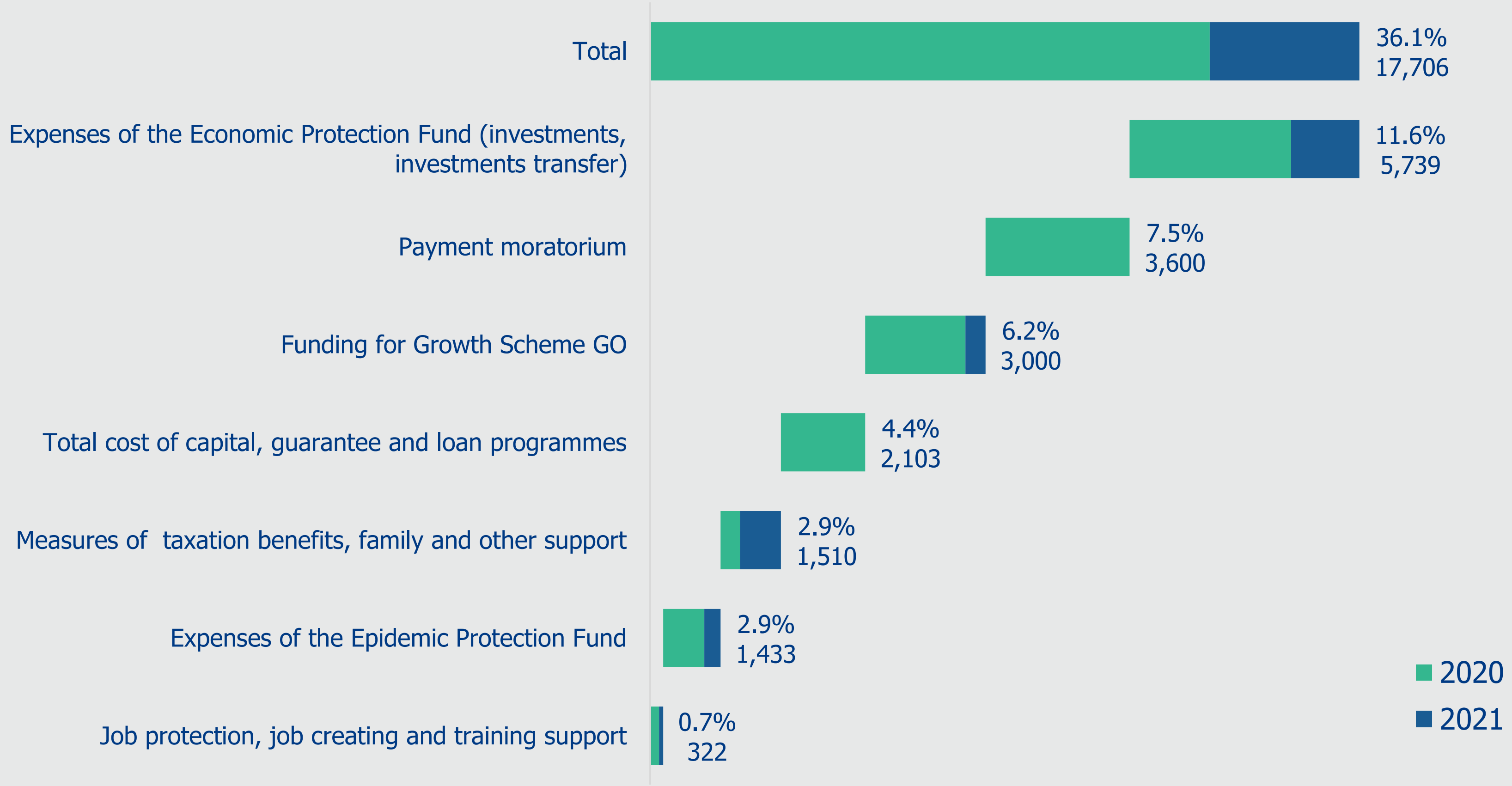
HUNGARY IS IN STRONG POSITION TO FACE THE IMPACT OF COVID-19

GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.
ÁKK

Measures to face coronavirus pandemic	• The Government is taking **extraordinary measures to contain mass infections and mitigate the economic impact of Covid-19** • The **NBH took a series of coordinated measures** including adjustment of policy rates, introduction of new liquidity enhancing facilities and executing asset purchases • Fiscal and monetary policy measures in 2020-2021 produced a **total stimulus of HUF 17,706 billion** equalling 36.1% of GDP
Strong and resilient economy	• **Hungary was one of the fastest growing economies in Europe with real GDP growth of 4.6% in 2019** (2.5 times higher than the EU average), **GDP dropped by 4.7% in 2020** (lower than EU average of 5.9%) • **The economy benefits from strong investment dynamics,** enjoying the third highest investment rate in Europe in 2020 • **The level of unemployment is low,** amounting to 4.5% in Q1 2021, 4.1% in Q2 2021 and 3.9% in Q3 2021
Sound fiscal policies	• **The fiscal deficit had constantly been below the EU ceiling of 3% since 2012**, however the ESA deficit for 2020 was 8.0% of GDP (compared to the original 1.0% target) in response to Covid-19 • **Domestic fiscal rules and counter-cyclical fiscal policies have allowed the public debt to decline steadily since 2011** – i.e. by 14.8 percentage points over 2011-2019, reaching 65.5% of GDP at year end 2019; as a result of the pandemic, the debt ratio has increased to 80.1% by the end of 2020 • **Fiscal policy continued to be supportive in 2021 in response to Covid-19, however in medium term the government remains committed to fiscal consolidation and reduction of public debt.**
Favourable external position	• **Hungary enjoys a positive net international lending position since 2009** • **This positive external position is largely explained by the country's trade surplus,** which has been supported by the rise in services exports in recent years • **External debt indicators were close to historical lows pre-pandemic** • **International reserves exceed EUR 37 billion on November 30, 2021**
Effective debt management	• **Hungary is an Investment Grade country** • **In spite of the ongoing pandemic, Moody's upgraded Hungary in September 2021; the outlook is stable in case of all major rating agencies** • **The structure of public debt is favourable** with a contained share of FX debt, increasing average term to maturity, entering the green bond market and a highly diversified, deep and liquid domestic market • **The development of the retail market has been a key driver of the expansion of the domestic investor base**

GOVERNMENT MEASURES TO ALLEVIATE ECONOMIC IMPACT OF THE PANDEMIC

Value of the economic measures in 2020-2021 (% of GDP, HUF billion)



Source: Ministry of Finance (MoF)

DESPITE THE INCREASE OF THE DEBT RATIO IN 2020, THE GOVT. IS COMMITTED TO THE REDUCTION OF THE PUBLIC DEBT

Evolution and Target of the public debt ratio (% of GDP)

- The government wants to deliver more direct budgetary support in order to alleviate the size of the downturn.
- Looking ahead, domestic fiscal rules stipulate the reduction of the public debt.

Source: MoF

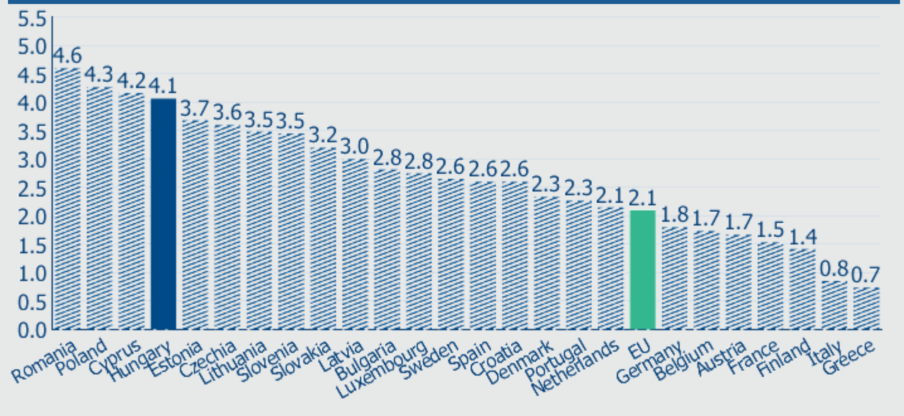
II. STRONG AND RESILIENT ECONOMY

HUNGARY CONTINUES TO BUILD ON SOLID ECONOMIC GROWTH SINCE 2013

Key highlights

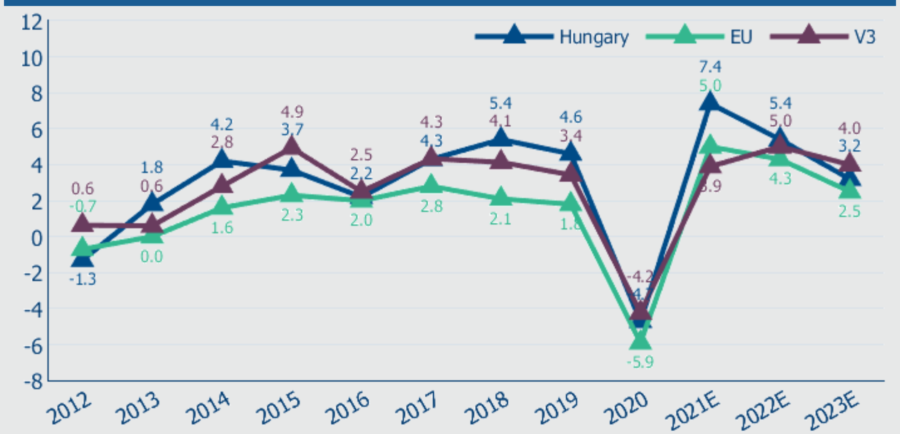
- **Since 2013, Hungary's GDP growth has been among the fastest in Europe, as evidenced in the chart on the right**
- **Growth has been partly driven by the turnaround in employment** that happened in the wake of the structural reforms implemented after the economic crisis, including the tax regime
  - Unemployment decreased to a historic low of **3.3% in 2019**
  - **This has allowed the Hungarian economy to grow by 4.1% on average between 2014 and 2019, while the EU average has been 2.1%**
- **In 2019, real GDP grew by 4.6%, the fifth highest level in Europe** and approximately 2.5 times faster than the EU average
- **In 2020, real GDP decreased by 4.7%,** lower than the EU average of 5.9%
- The strong momentum in Hungarian economic activity entering the Covid-19 crisis is supportive of the outlook compared to peers
  - The unemployment rate increased to 4.5% in the first quarter of 2021, but decreased to 4.1% in the second quarter of 2021 and declined further to 3.9% in the third quarter of 2021
- **Hungarian economy has been growing faster than the EU on average and is expected to recover faster**

Fourth highest GDP growth among EU countries 2014-2019*



*Source: Eurostat | *excluding Ireland and Malta*

Real GDP Growth - European Commission Forecast (YoY, %)



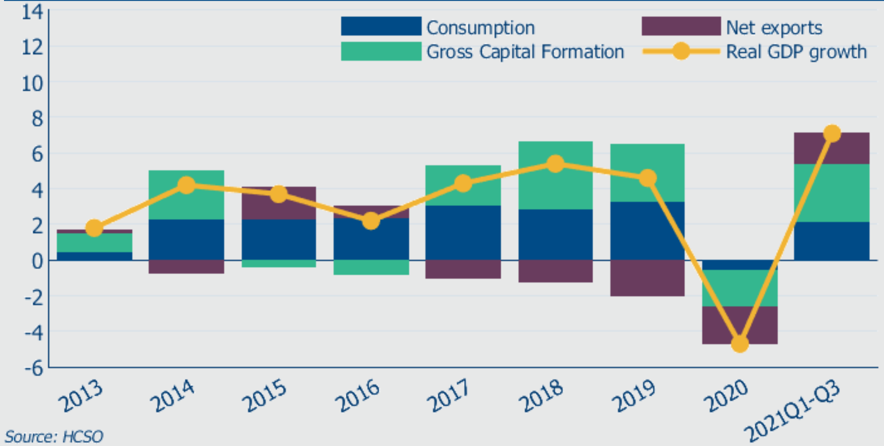
Sources: Eurostat, European Commission 2021 Autumn Economic Forecast; Note: Unadjusted data

GROWTH IS DRIVEN BY BOTH CONSUMPTION AND INVESTMENT

Key highlights

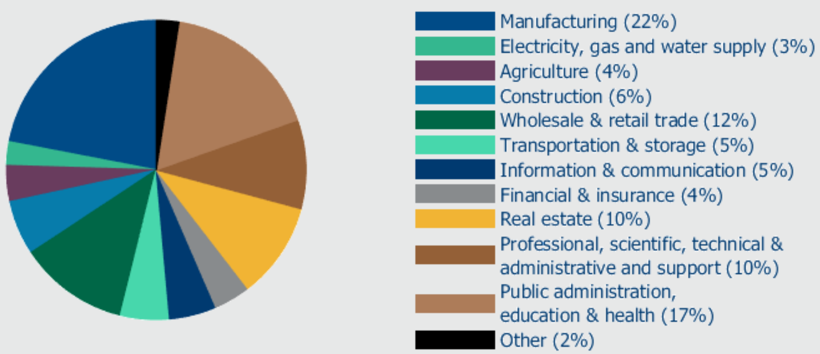
- **Growth in Hungary has been consistently supported by strong household consumption until 2019**
  - Household consumption has been supported by increasing household wealth and a low unemployment rate
  - This has contributed to the development of the services industry
- **Investment activity has picked up significantly between 2017 and 2019**
  - All major sectors and components of GDP contracted in 2020
- **The contraction is mainly the result of the ongoing pandemic**
- **In the first three quarters of 2021, GDP increased by 7.1% relative to the corresponding period of the previous year**
  - The growth contribution was positive in case of consumption, investments and net exports
  - The growth contribution of services industry and construction was positive

Contribution to GDP growth by expenditure (percentage points)



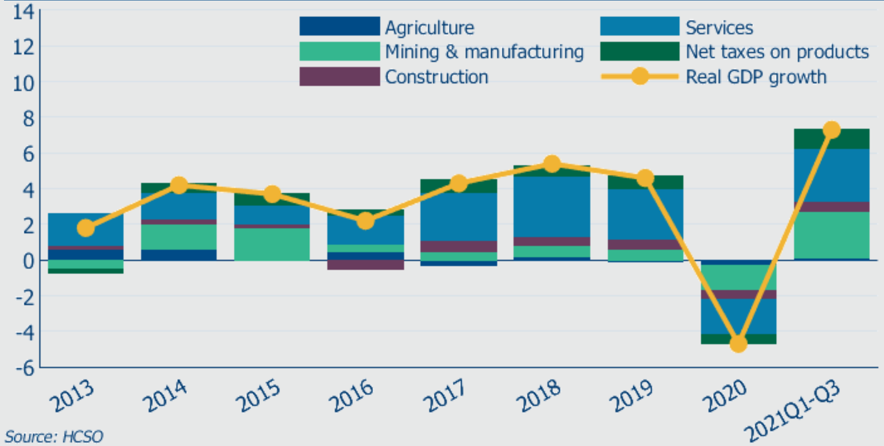
Source: HCSO

Nominal GDP breakdown by sector
(First three Quarters of 2021, % of total)



Source: HCSO

Contribution to GDP growth by sector (percentage points)

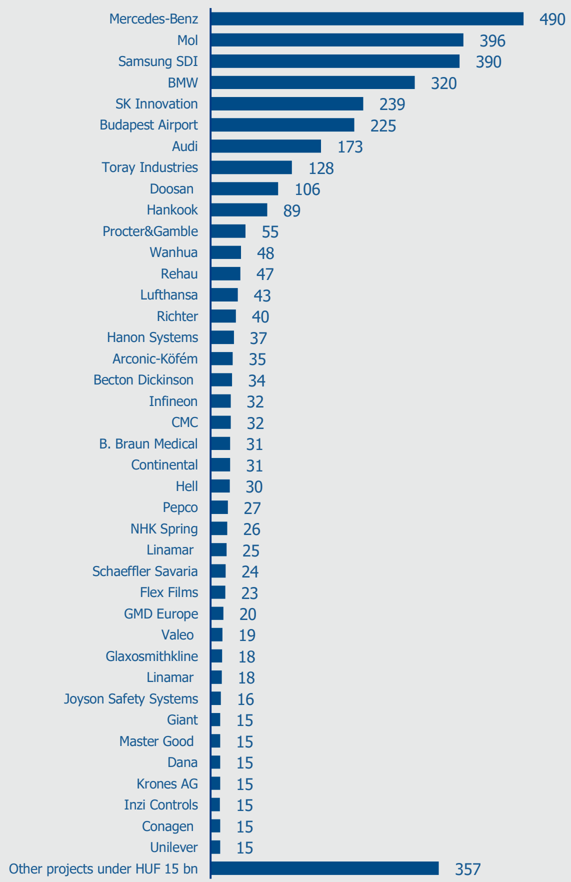


Source: HCSO

INVESTMENT DYNAMICS ARE SUPPORTIVE FOR THE BROADER ECONOMIC OUTLOOK

ÁKK
GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

Flagship investment projects announced prior to 2020
(HUF billion)

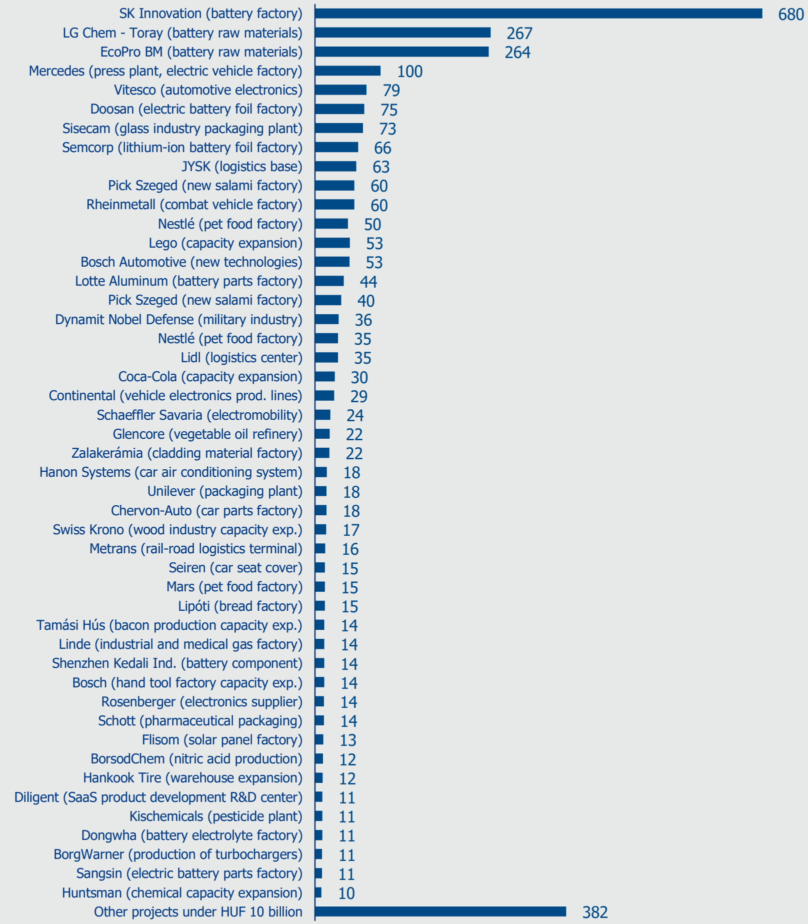


HUF 7,400 billion
TOTAL INVESTMENT PROJECTS
~15% OF ANNUAL GDP

HUF 22-37,000 billion
ADDITIONAL EXPORT
PERFORMANCE PER YEAR

22-29 percentage points
TOTAL GDP GROWTH
INVESTMENT & EXPORT EFFECTS

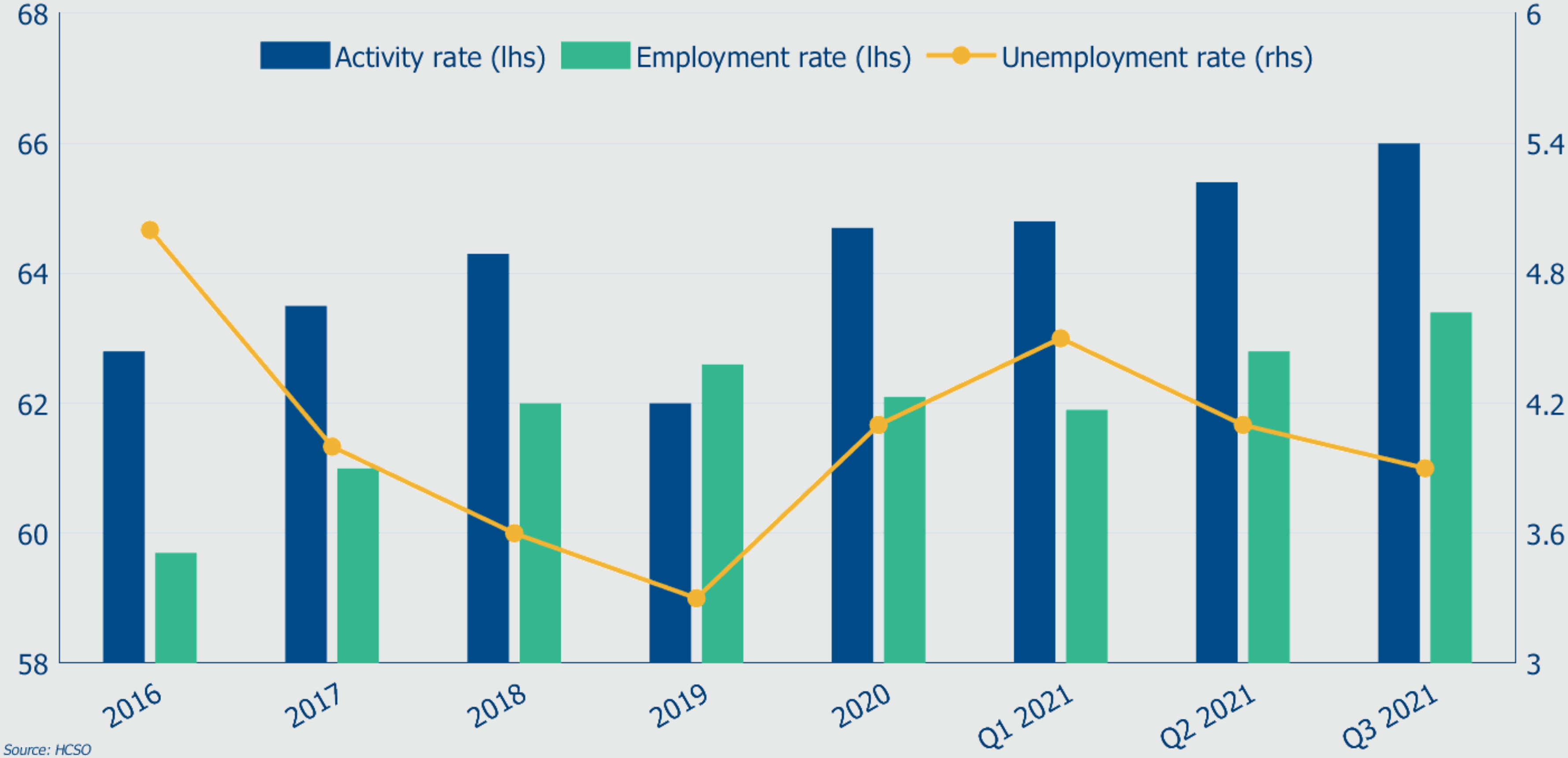
Flagship investment projects announced since early 2020
(HUF billion)



Source: MoF

LARGE-SCALE JOB LOSSES SUCCESSFULLY MITIGATED

Labour market activity weathered the shock and surpassed pre-pandemic levels (period average, %)



Source: HCSO
Note: Unemployment rate is based on the international sampling methodology pursuant to the guidelines of the International Labor Organization.

THE MACRO ENVIRONMENT IS STABLE AND THE BANKING SECTOR IS STRONG

Key highlights

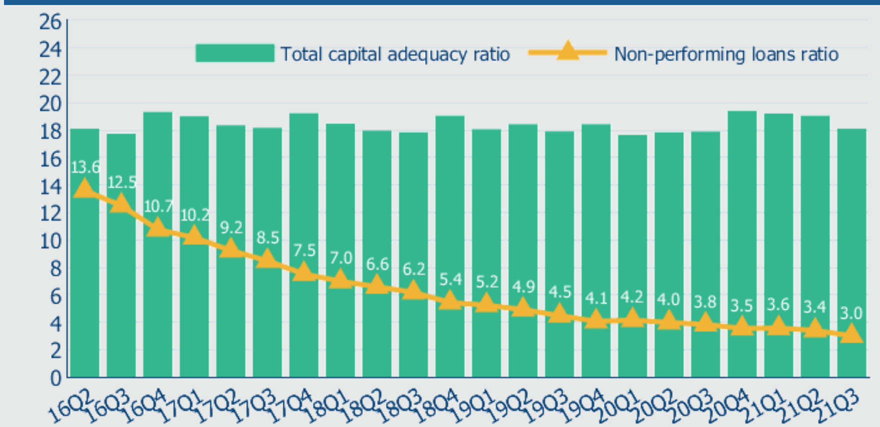
- **The NBH's primary statutory objective is to maintain price stability**
  - Policy rate has been increased to 2.40% during 2021 in order to avoid second-round inflationary effects and to properly anchor expectations
  - Baseline yearly average inflation has remained within the defined tolerance band (3%, with a tolerance range of +/- 1%) between 2017 and 2020
  - **During 2021, headline inflation is expected to exceed the upper band level;** according to the Monetary Council's assessment, the global pick-up in commodity prices is appearing in consumer prices for a growing range of goods
  - Inflation is expected by NBH to stabilize around the inflation target in 2023
- **The banking sector is well capitalized and the quality of loans improved since the end of 2015,** as evidenced on the graph to the right
  - The NBH has developed a comprehensive macro-prudential framework to ensure financial stability and the Basel III regulation is implemented

Source: NBH

Inflation vs inflation targets (yearly average data, %)

Sources: HCSO, NBH; Note: Based on seasonally unadjusted data, compared to the corresponding period of the previous year; forecasts after 2020

Total capital adequacy and non-performing loans ratios (%)



Source: NBH; Note: NPLs are loans at least 90 days overdue

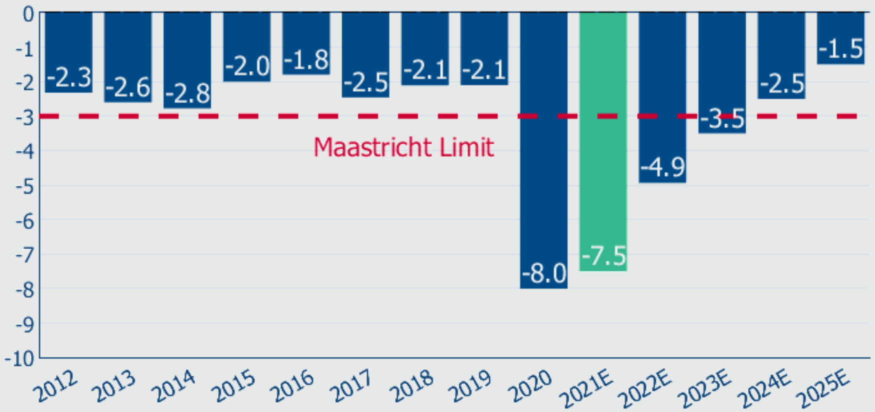
III. SOUND FISCAL POLICIES

PUBLIC FINANCES ARE STRONG AND SUPPORT DEBT SUSTAINABILITY WITH DEBT-TO-GDP STEADILY DECLINING

GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

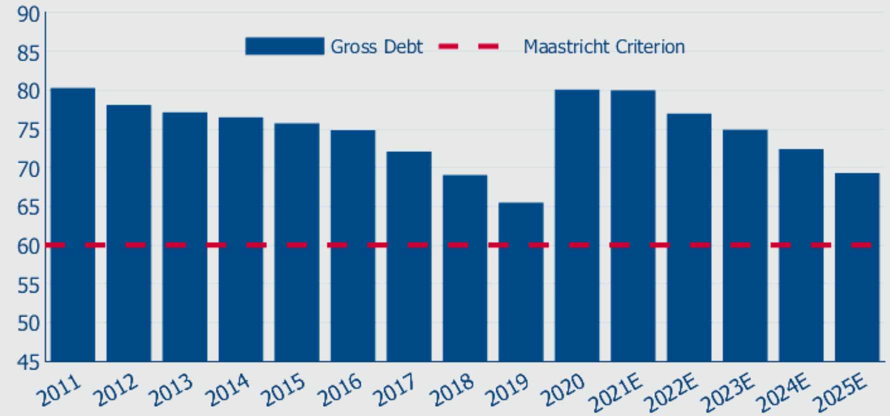
ÁKK

Evolution of Hungary's fiscal deficit (% of GDP)



Source: HCSO, MoF; Note: Latest (December 2021) forecast

General Government Debt (% of GDP)



Source: NBH, MoF

Key highlights

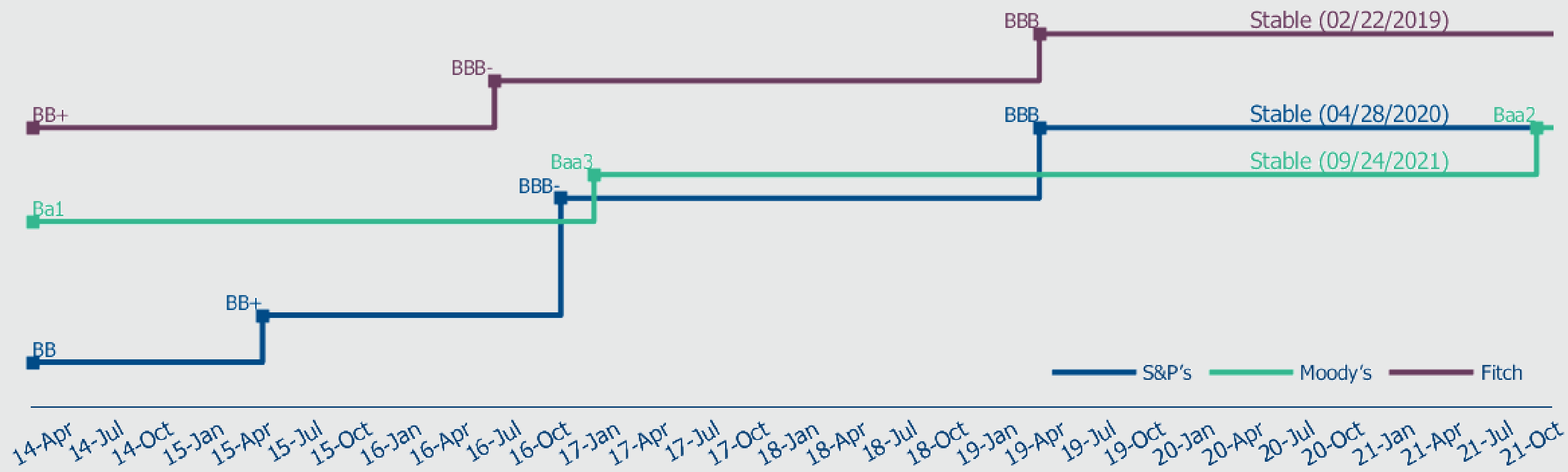
- **Budget deficit remained below the 3% Maastricht threshold between 2012-2019,** demonstrating the authorities' commitment to fiscal consolidation
- **The government originally aimed to achieve fiscal balance by 2020.** The authorities originally set the 2020 ESA budget deficit target to a historic low of 1.0% of GDP. However due to the epidemic the ESA deficit amounted to 8.0% of GDP in 2020.
- The deficit in the original budget plan for 2021 was 2.9%, now the Ministry of Finance expects it to be 7.5% of GDP. Fiscal balance deteriorated due to a basis effect of the economic downturn in 2020 and recovery measures, but looking ahead a significant improvement is expected.
- According to the latest prognosis of the Ministry of Finance, **the Government expects the budget deficit to GDP ratio at 4.9% in 2022, 3.5% in 2023, 2.5% in 2024, and 1.5% in 2025.**

- **Under Hungary's Fundamental Law, reducing state debt is one of the main objectives of the Government**
  - As long as the debt of the government exceeds 50% of GDP, only budgets which provide for a reduction of the government debt-to-GDP ratio can be adopted
- **Authorities strictly comply with this rule**
  - Fiscal consolidation and a prudent debt management have supported a reduction in Hungary's debt-to-GDP ratio. The country has enjoyed a rapid decrease in government debt to GDP ratio of 14.8 percentage points between 2011 and 2019
  - **In 2019, the debt rate declined to 65.5%**, but in 2020 the debt rate increased to 80.1% as a result of the pandemic. In a State of Danger, such as COVID-19 pandemic, a special rule allows for a temporary debt increase

IMPROVING FUNDAMENTALS LEADING TO REDUCED HUNGARY RISK PREMIUM AND LOWER COST OF FINANCING

Evolution of Hungary's ratings

- **Hungary's credit ratings have improved since 2014,** in line with the improvement in the macro-economic fundamentals
  - Hungary has benefitted from multiple rating upgrades since 2014
  - It is currently rated BBB/Baa2/BBB with a stable outlook for all three rating agencies
- **Financing conditions have thus become increasingly supportive,** with Hungary also benefitting from the global context of low rates



Source: NBH

IV. FAVOURABLE EXTERNAL POSITION

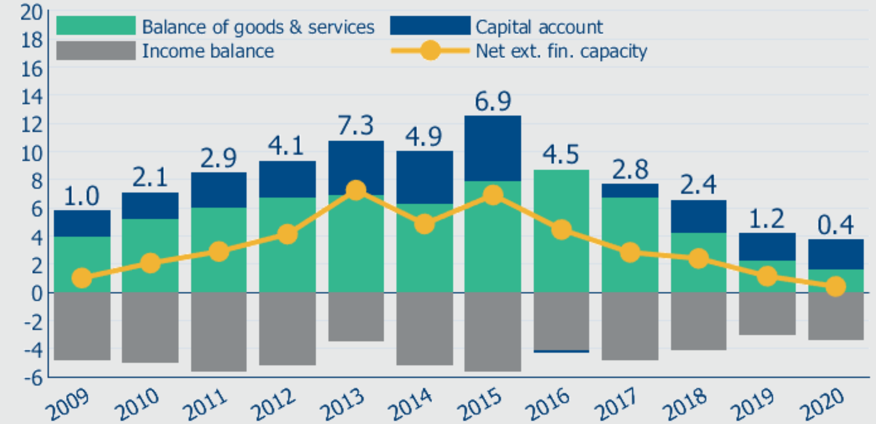
HUNGARY ENJOYS HEALTHY EXTERNAL ACCOUNTS AND A NET LENDING POSITION

Key highlights

- **Hungary's net external lending position is resilient**
- **Until 2019, the current account posted a surplus in each year since 2009**
  - **The country has been enjoying a net international lender position since 2009**, largely explained by the country's trade surplus that has shown significant surplus amounting to 2-9% of GDP between 2009 and 2020
  - The trade surplus increase has been driven by a rise in net services exports that represented 3% of GDP in 2020
  - **Hungary also benefits from a positive capital account**, partly driven by EU transfers
- **The goods and services export bases are diversified,** both in terms of sector and geography

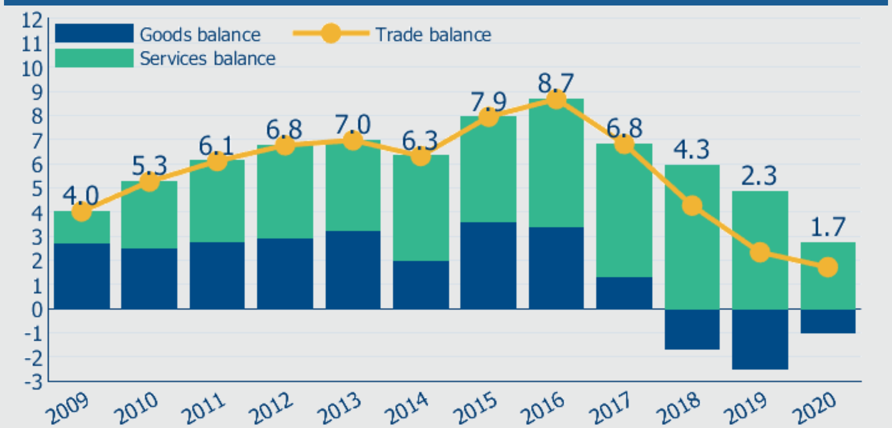
Source: NBH, HCSO

Net external lending components and position (% of GDP)



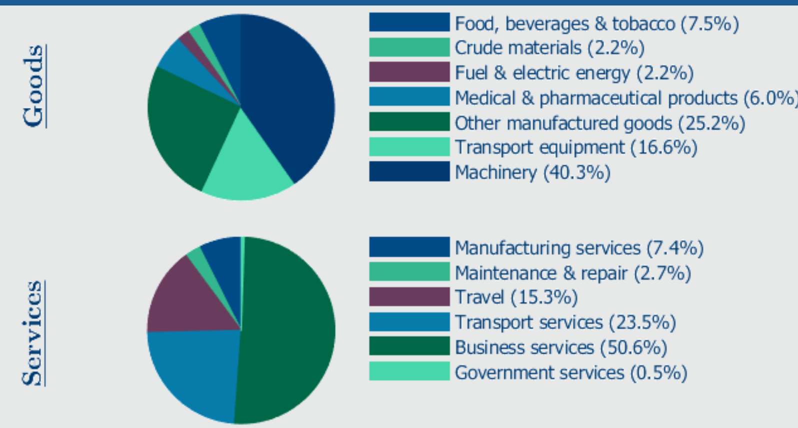
Source: NBH

Trade balance (% of GDP)



Source: NBH

2020 goods trade sectoral breakdown (%)



Source: HCSO

EXTERNAL DEBT HAS STEADILY DECLINED WHILE FX RESERVES HAVE INCREASED

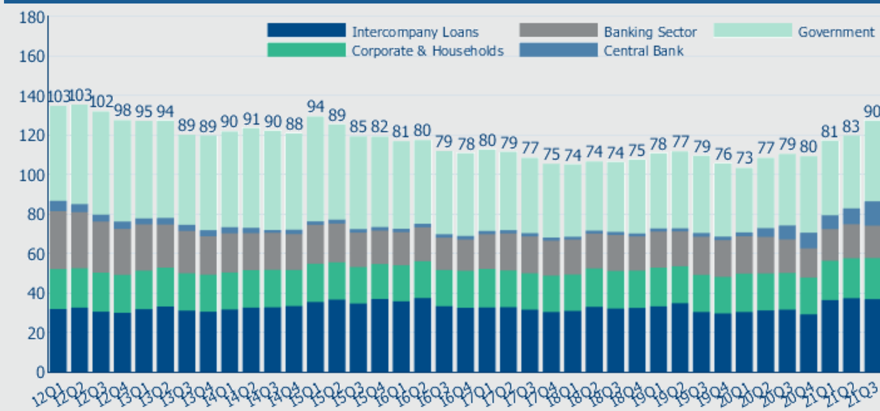
GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.
ÁKK

Key highlights

- **External debt indicators have been improving since 2012**
  - Hungary's gross external debt decreased substantially between 2012 and 2019, notably on the back of active public debt management
  - The external debt has increased since early 2020 mainly as a result of the pandemic
  - The net external debt of Hungary also improved between 2012 and 2019 and has deteriorated since early 2020
- **International reserves remain high and continue to considerably exceed the level considered as safe by the Guidotti-Greenspan rule**
  - Hungary's FX reserves to short-term debt ratio has been above 1.0x since Q2 2012
  - FX reserves amounted to EUR 37.0 billion on November 30, 2021

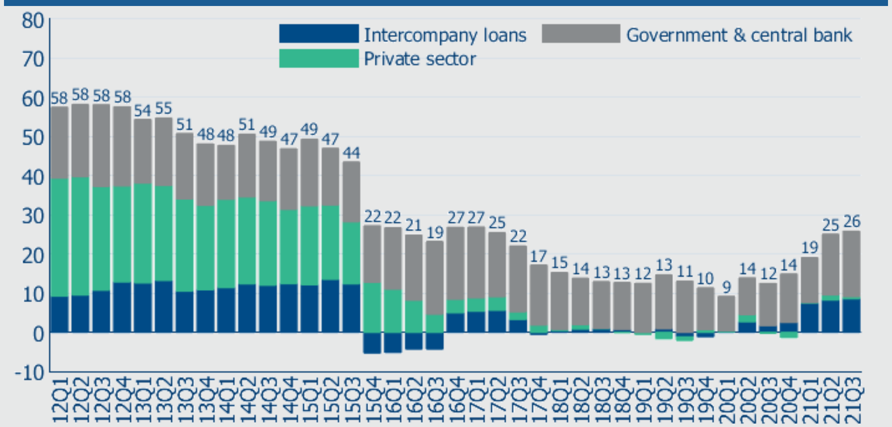
Source: NBH

Gross external debt (EUR billions)



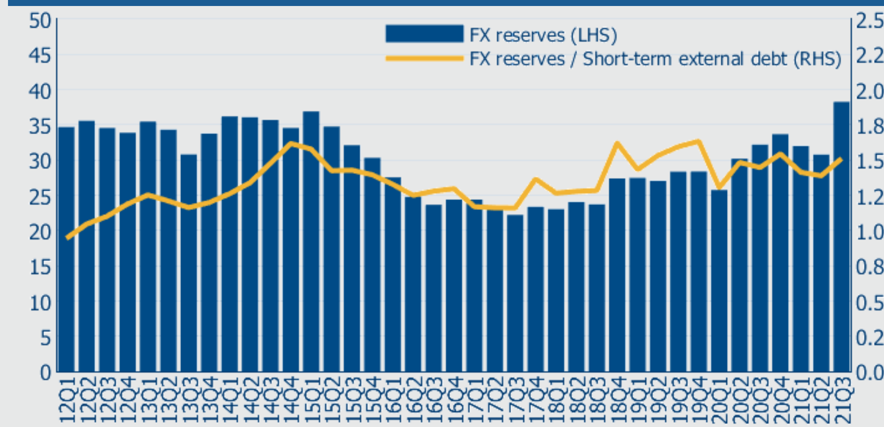
Source: NBH

Net external debt (EUR billions)



Source: NBH

International reserves level (EUR billion)



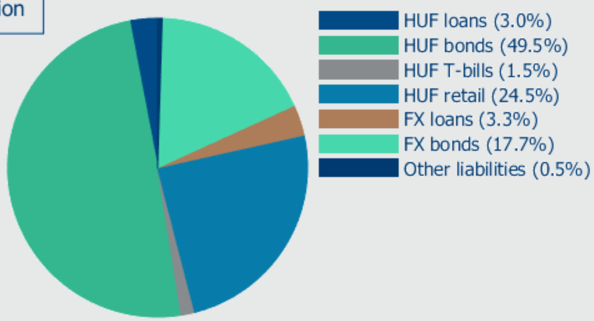
Source: NBH

V. EFFECTIVE DEBT MANAGEMENT

HUNGARY BENEFITS FROM A FAVOURABLE DEBT PROFILE

Hungary's government debt breakdown
(November 30, 2021, % of total)

Total debt:
HUF 40,233 billion



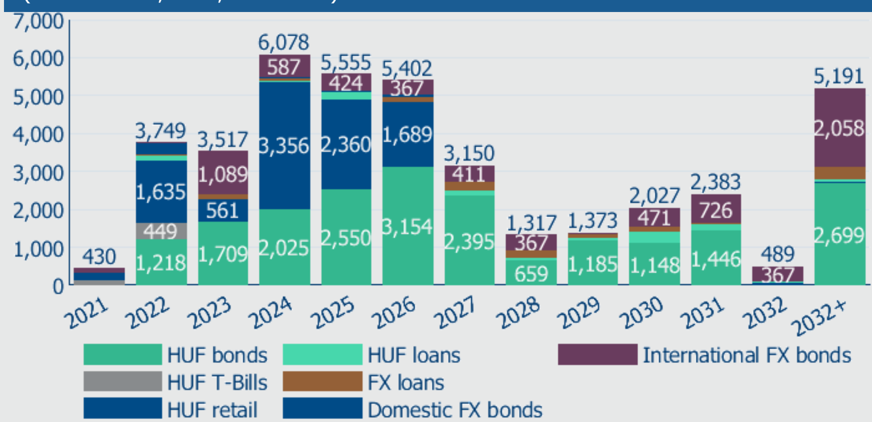
Source: AKK; Note: central government debt

Key targets and characteristics of Hungary's government debt[1]

	2021 benchmark targets		Dec. 31, 2021 figures[2,3]
Share of FX debt	Between 10% and 20%	-	20.4%
Currency mix of the FX debt (after swaps)	100% in EUR (with a 5% deviation allowed)	✓	100% in EUR
Share of domestic and FX debt with a fixed coupon	Domestic: 70%-90% FX: 70%-90%	✓	Domestic: 80.2% FX: 86.8%
Average time to re-fixing of domestic debt	Minimum 4.0 years	✓	4.5 years
Average time to maturity of domestic debt	Minimum 4.5 years	✓	5.1 years

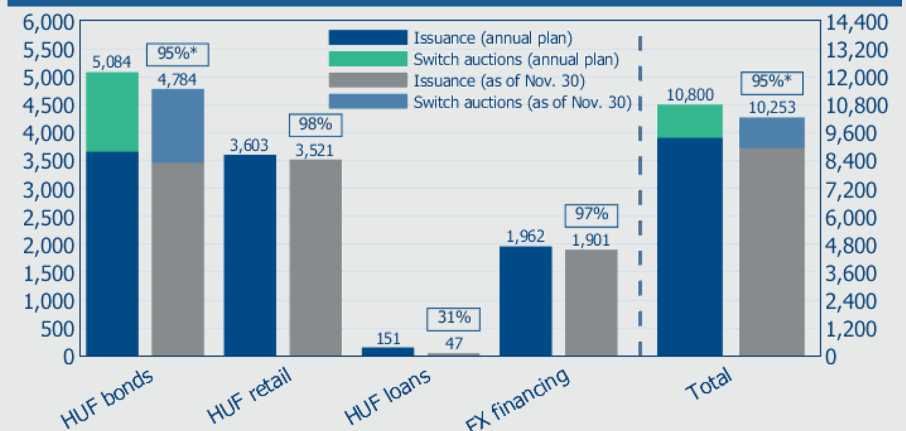
Source: AKK; Note: 1. Central government debt 2. 90-day moving average 3.Forecast

Hungary's government redemption profile
(November 30, 2021, HUF billion)



Source: AKK; Note: Central government debt, excluding MtM, swap and Repo deals

2021 issuance vs 2021 financing plan approved in December 2021
(November 30, 2021, HUF billion)



*Source: AKK * Excluding switches*

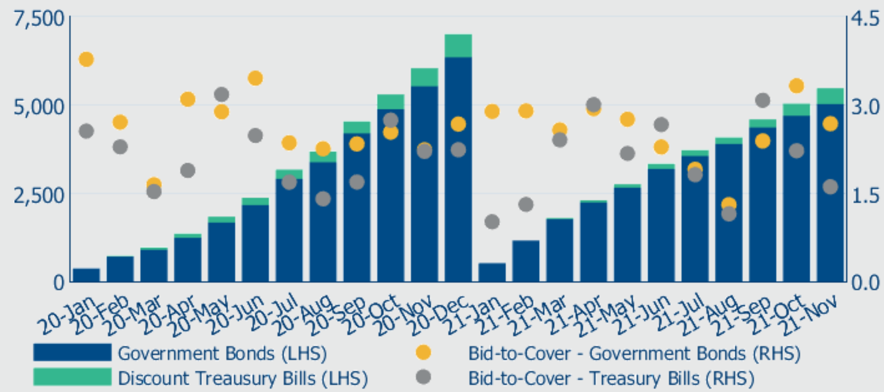
PERFORMANCE ON THE LOCAL WHOLESALE MARKET IS POSITIVE

Key highlights

- **To ensure simplicity and transparency, AKK issues standard debt instruments according to a fixed annual calendar published in advance**
- **Primary auctions are implemented as well as switch and buyback operations** to support a balanced government bond issuance pattern, to manage the redemption profile and to reduce refinancing risk
- **Hungary's local yields decreased between 2014-2020, but increased significantly in 2021 as a consequence of monetary policy tightening of the NBH to contain inflationary pressure**
  - Yields have decreased across the entire yield curve until end-2020
  - Short-term yields increased by approximately 2.5 percentage points, long-term yields increased by approximately 1.8-3.4 percentage points between December 2020 and November 2021 as NBH increased the central bank base rate from 0.60% to 2.10% in several steps between June 2021 and November 2021; subsequently the central bank base rate was increased to 2.40% in December 2021

Source: AKK, NBH

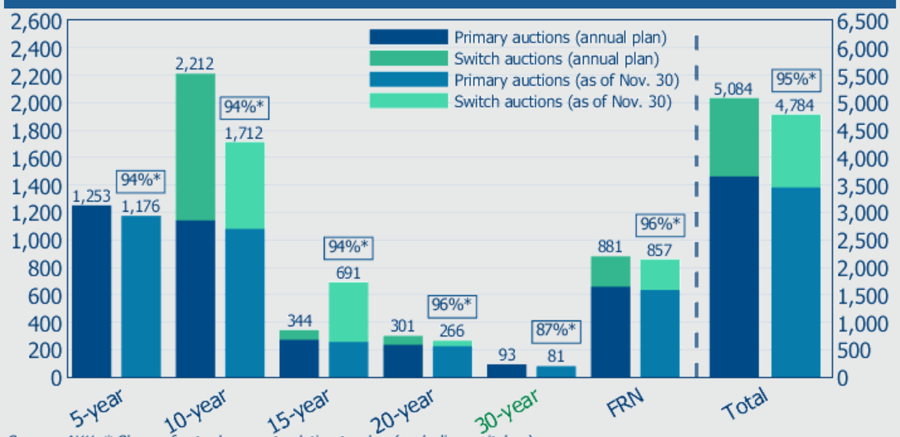
Cumulative monthly debt securities issuance and the ratio relative to the planned amount (HUF billion, %)



Source: AKK; Note: Government Bonds excluding repo transactions
Discount Treasury Bills according to OECD methodology

Government bond issuance on auctions by tenor

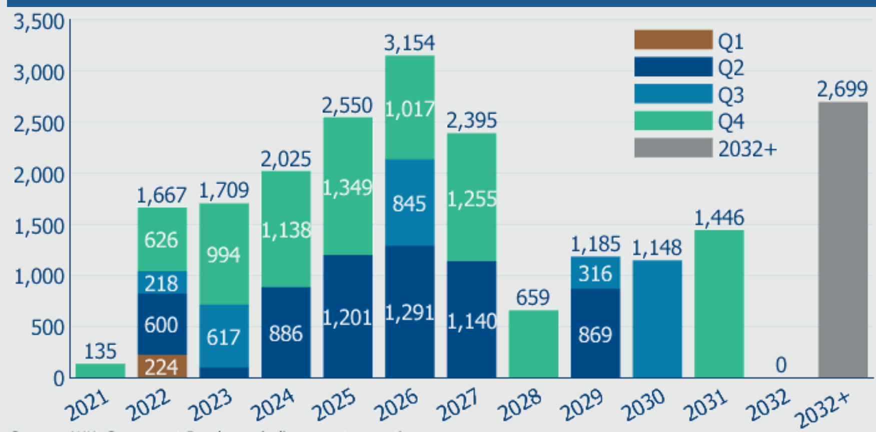
(2021 issuance vs 2021 financing plan approved in December 2021 excluding municipal bond sales, HUF billion)



*Source: AKK * Share of actual amount relative to plan (excluding switches)*

Redemption profile of wholesale government securities

(as of November 30, 2021, HUF billion)



Source: AKK; Goverment Bonds, excluding repo transactions

The debut issuance of the first Hungarian local currency denominated green government bond took place in April 2021.

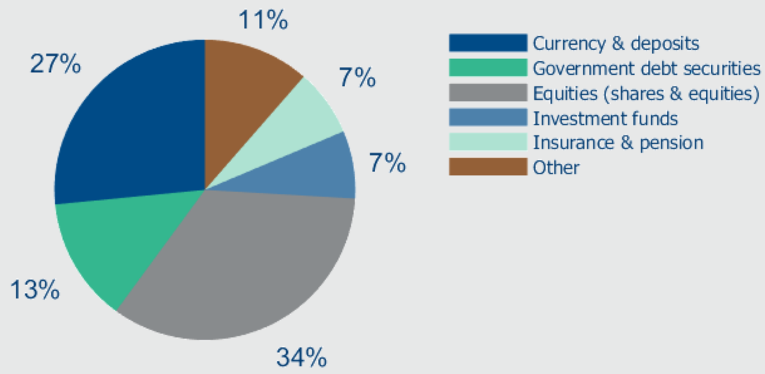
LOCAL RETAIL MARKET IS AN IMPORTANT DIVERSIFICATION TOOL

Key highlights

- **The HUF retail debt programme is an important financing channel for the Government** in addition to local and international wholesale markets
    - The outstanding amount of HUF denominated government retail securities has significantly increased since 2011.
- **Hungary issues retail instruments with different characteristics, which attract diverse retail investors**
    - Maturities range from 1 to 19 years, securities have step-up, fixed or inflation-linked coupon and besides dematerialized securities there are physical securities
- **AKK is regularly buying back retail securities from market makers to reduce the ownership of retail debt by non-household investors**
- **Using retail government bonds as collateral is not permitted in Hungary**
- Main distribution channels for retail securities are the Hungarian State Treasury, post offices and banks / investment companies

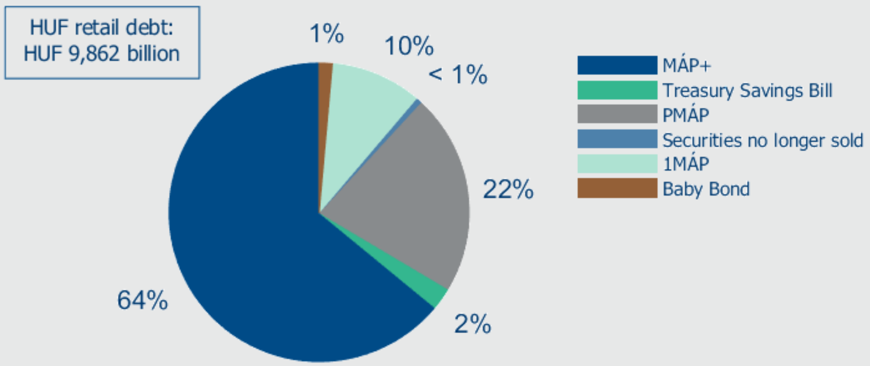
Source: AKK

Households asset structure (Q3, 2021, % of total)



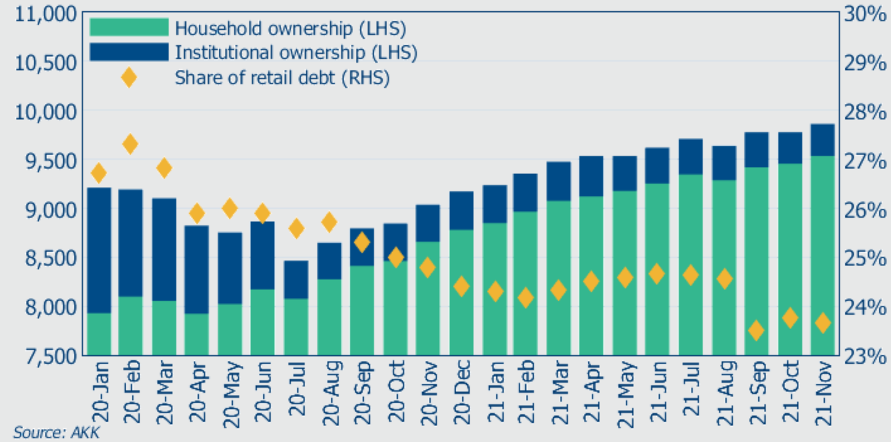
Source: NBH

HUF retail portfolio by instrument
(November 30, 2021, % of total)



Source: AKK

HUF retail securities
(HUF billion and % of total)



Source: AKK

HUNGARY'S EXPOSURE TO INTERNATIONAL MARKETS IS CAREFULLY MANAGED

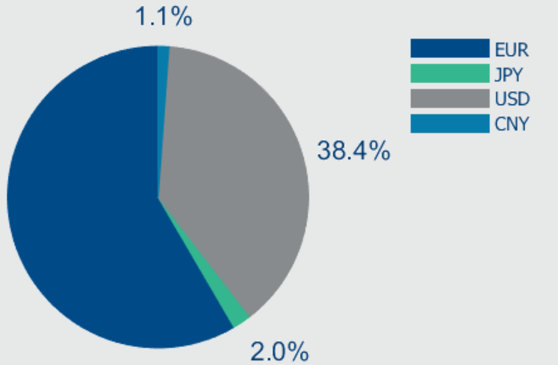
Key highlights

- **The share of Hungary's government debt in foreign currency is contained**
  - Buybacks implemented by AKK, both on public and OTC markets, have also contributed to this positive trend
  - Hungary strives to keep the share of FX exposure between 10% and 25% of total debt, but Hungary would also like to maintain its presence on the international capital markets to ensure diversification of funding sources
- **The FX debt is mainly denominated in EUR and USD, but is fully converted into EUR using cross-currency swaps**
  - 100% of FX debt is denominated in EUR after swaps as of the end of November 2021, in line with AKK debt management target to mitigate exchange rate risk
- **In December 2021, Hungary issued its first Green Panda bond in China in the amount of CNY 1 billion being the first foreign sovereign to enter this market; the bond was swapped into EUR, achieving a negative coupon of -0.013%**

Source: AKK

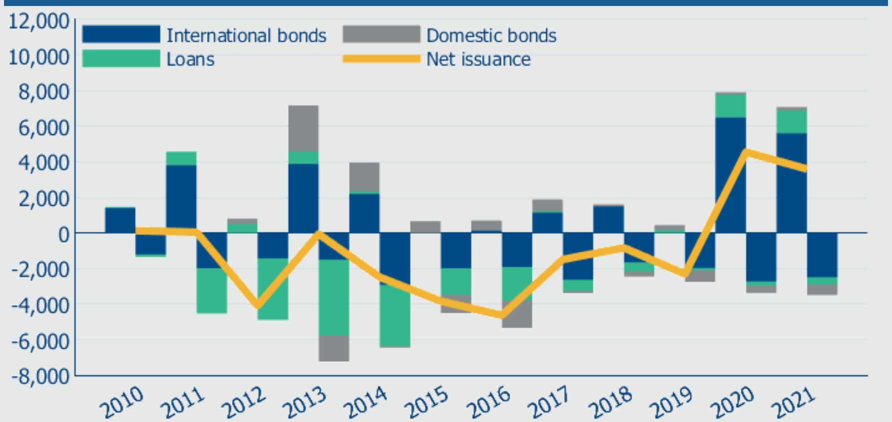
FX debt composition by currency before swaps
(November 30, 2021, % of total)

Total FX debt[1]:
EUR 24.1 billion



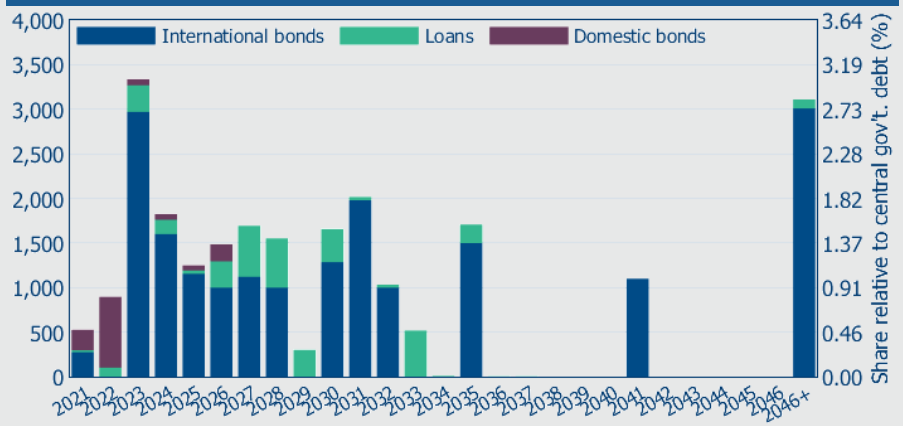
Source: AKK; Note: composition of the FX central government debt portfolio before swaps
[1] Excluding CCIR swaps; total FX debt including CCIR swaps amounted to EUR 23.0 billion

FX Redemption, Issuance & Net Issuance (EUR million)



Source: AKK; Note: Central government debt

Maturity profile of FX debt (as of November 30, 2021, EUR million)



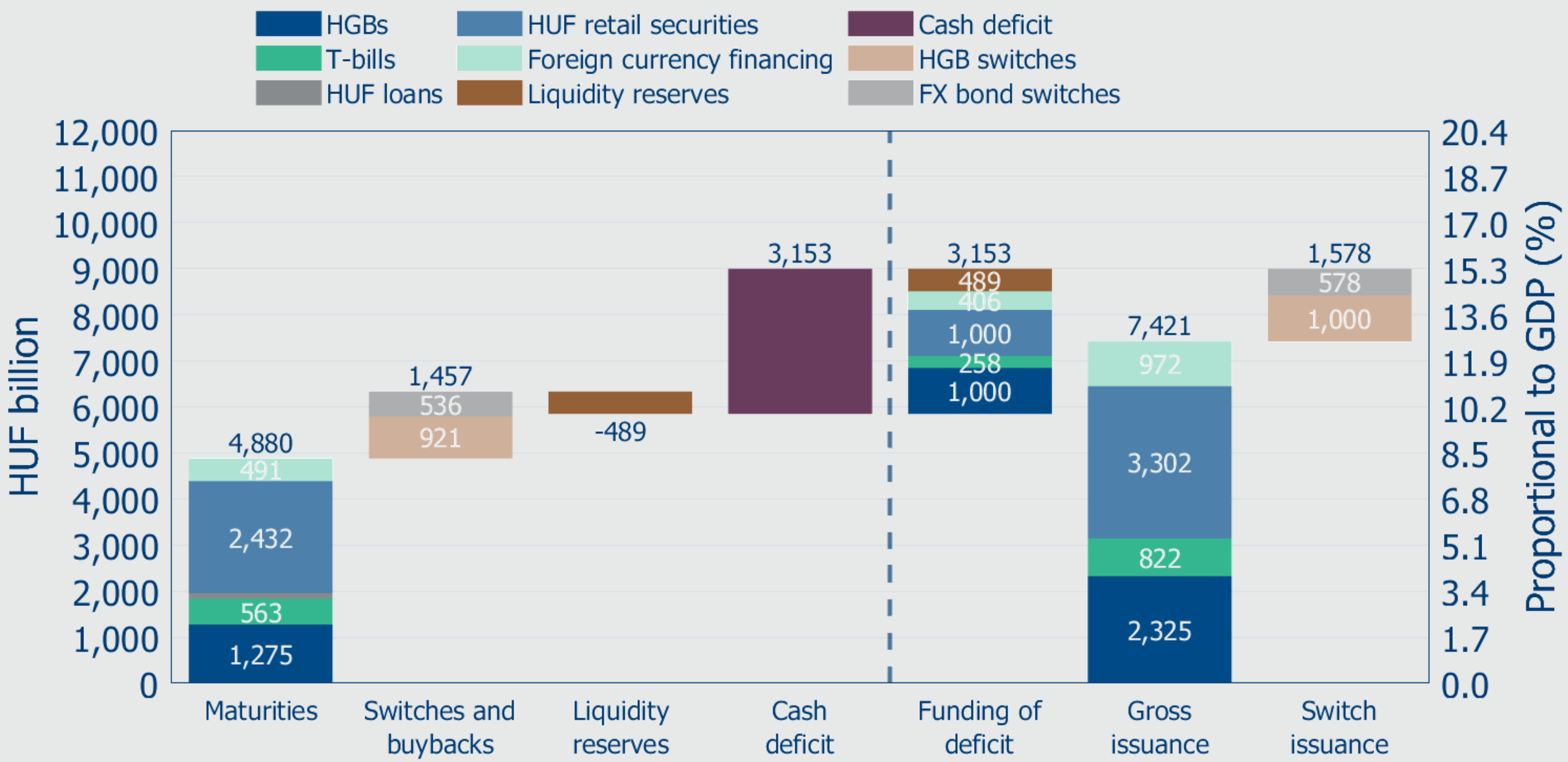
Source: AKK; Note: Central government debt

GOALS OF GOVERNMENT DEBT MANAGEMENT IN 2022

In 2022, the gross government security issuance and borrowing will be HUF 9,000 billion (15% of expected GDP) (including switch auctions) compared to the HUF 11,593 billion figure in 2021 and the HUF 11,311 billion average gross government borrowing volume in the last 5 years.

HUF Institutional Market	▪ Achieving 36% of institutional HUF bond issuance in the first quarter of 2022, mainly through the pro rata issuance of new (long) 5- and 10-year (2028 and 2032) benchmark bonds in the first quarter. ▪ Continuation of the switch auction programme with a volume of HUF 1,000 billion compared to the 2021 plan of HUF 1,500 billion. ▪ Monthly issuance of a new 10-year HUF green bond (similarly to the new 10-year benchmark also maturing in 2032), while continuing to issue the 30-year green bond on a quarterly basis. ▪ The development of the Hungarian government securities market with the introduction of the new Primary Dealer Framework from H2 2022.
Retail Market	▪ Reaching the goal of HUF 11 trillion in retail government securities owned by households until 2023. ▪ To develop and adapt a new retail government securities strategy in 2022.
FX	▪ Widening the tolerance band for the FX debt ratio from 10-20% to 10-25% to increase the optionality and room for manoeuvre of financing strategy, by taking into account the relative cost advantage of FX financing due to rising forint yields, while still aiming at a below 20% FX debt ratio in the medium term. ▪ FX bond switch of at least USD 2 billion in the second half of 2022 to pre-fund the 2023-24 FX bond maturities and further increase the average term-to-maturity of debt. ▪ AKK aims to strengthen Hungary’s market presence in Asia further through new green bond issue(s), for example in Japanese Yen in Q1 2022. ▪ Up to EUR 2 billion equivalent FX project loan (e.g. EIB, CEB, AIIB, etc.) and syndicated loan financing.
ESG	▪ Incorporating sustainability considerations and ESG principles into the medium-term public debt management strategy, taking current market trends into account.

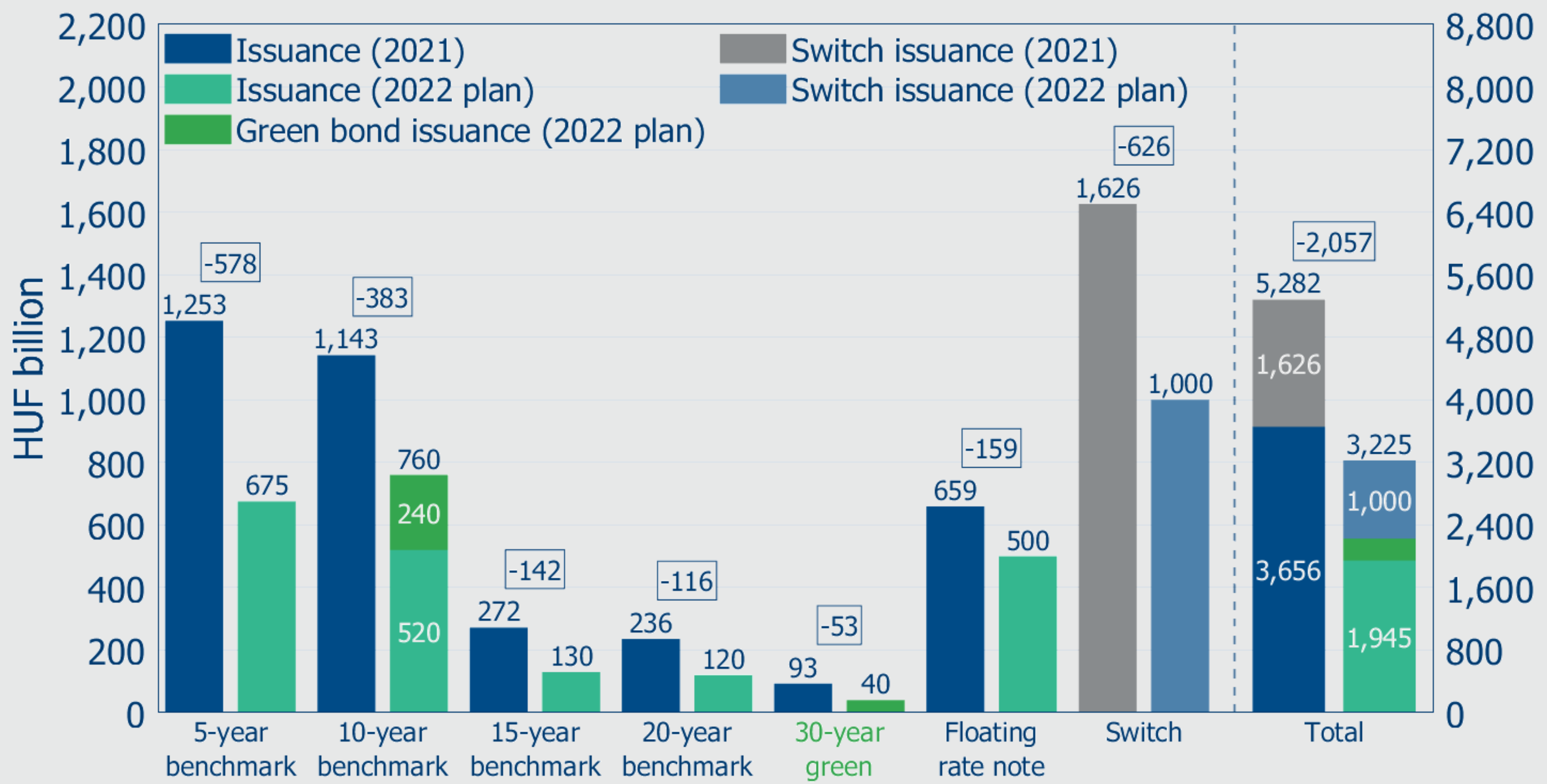
2022 FINANCING PLAN



Source: AKK; Note: outstanding amounts based on nominal values

The total net financing requirement for 2022 is HUF 3,153 billion, financed by net issuance of HUF 2,663 billion. Funding requirements exceeding the net issuance are financed by the use of liquidity reserves.

PLANNED VOLUME OF HUF WHOLESALE BOND ISSUANCES



Source: AKK; Note: Expected 2021 and planned 2022 values

VI. ESG

HUNGARY'S ENVIRONMENTAL COMMITMENTS AND INITIATIVES

1994
UN Framework Convention on Climate Change

- Implementation in Hungary's national law in 2007

2002
Ratification of the Kyoto Protocol

- Implementation in Hungary's national law in 2007

2015
UN 2030 SDG Agenda

- Co-chairing of the Open Working Group on SDGs in 2013 and 2014

2016
Paris Agreement

- First EU member state to ratify the Paris Agreement in 2016

2019
EU Clean Energy Package

- Target of 20% of renewable energies in Hungary's energy mix by 2030

2019
European Green Deal

- Recipient of the EU modernization fund for lower income countries (c. €1bn over 2021 - 2030)

2020
Adoption of a draft National Clean Development Strategy

First Climate Change Action Plan

- Legally binding target: climate neutrality by 2050
- Act on Climate Protection

2021
National Clean Development Strategy

Long-term Renovation Strategy

National Hydrogen Strategy

- Climate Change Conference in Glasgow (COP 26)

Sources : *European Union; Government of Hungary; UN Treaties; UNFCCC*

NATIONAL STRATEGY TO ACHIEVE CLIMATE NEUTRALITY AND THE SDG

Hungary's strategies to mitigate climate change

Long term

National Clean Development Strategy

- This strategy aims to achieve **climate neutrality by 2050**
- To achieve this target, the additional annual investment need accounts for 4.8% of the GDP (early action scenario)

Short term

National Climate Change Strategy

- This strategy consists in a **comprehensive framework** of **targets and policies** on climate and green economy development
- Focuses on 4 pillars for the 2018 – 2030 period

National Climate Change Strategy: Four key pillars

Decarbonisation:
- Replacement of fossil fuel energy carriers
- Increase in energy efficiency
- Reducing natural resources consumption

Adaptation:
- Preservation of natural resources
- Adaptation of vulnerable regions and sectors

Analysis of climate vulnerability:
- Development of vulnerability methodologies
- Promoting climate-related research projects

Partnership for climate
- Horizontal integration in public administration
- Awareness-raising in the Education

Milestones and achievements – Climate change

32% GHG reduction	Hungary reduced its greenhouse gas emissions by 32%[1] between 1990 and 2019
EU top-10 emissions reduction	Hungary is in the EU top-10 for greenhouse gas emissions reductions between 1990 and 2019 (10th place[1])
Low emissions per capita	The Hungarian GHG emission per capita is 82% of the EU average[1]: the 7th lowest value in the EU (2019)
Ambitious GHG reduction target	The Government targets at least 40% GHG emissions reduction by 2030[2] (compared to the 1990 level)

Achievements of the SDGs

SDG Index Score (2021)	78.8%[3]	% of SDG achievement measuring progress towards the 17 SDGs
SDG index rank (2021)	25 / 165[3]	Country ranking relative to SDG achievements

Notes *1. National Inventory Report 2021 (Hungarian Meteorological Service)* ***2.*** *Law on Climate Protection (2020)* ***3.****Sustainable Development Report 2021 (Jeffrey D. Sachs et al.)*
Sources : *AKK; Sustainable Development Report 2021 (Jeffrey D. Sachs et al.) European Environment Agency Annual European Union greenhouse gas inventory 1990–2017 and inventory report 2019*

OVERVIEW OF FLAGSHIP ESG PROJECTS

ÁKK – Government Debt Management Agency Pte Ltd.

Project	Category	Objective	Description	UN SDGs	ICMA / EU Taxonomy
Development of electric cars	**Green**	Support the development and rapid adoption of electric cars in Hungary harnessing **sustainable and modern energy**	Government subsidies and registration tax credit to incentivize the shift to electric cars	7 Affordable and clean energy	The Green Bond Principles; EU
Electrification of railway network	**Green**	Limit the environmental impact of Hungary's railway network improving **sustainability of transport and settlements**	Electrification of not yet electrified railway network lines	11 Sustainable cities and communities	The Green Bond Principles; EU
Support to families	**Social**	Provide financial support to large families promoting **inclusive economic growth and social protection**	Various subsidies and tax incentives supporting families with children	8 Decent work and economic growth	The Social Bond Principles
Women / mothers employment	**Social**	Enable and incentivize the employment of women / mothers **enhancing gender equality**	Tax incentives and social benefits supporting full-time or part-time employment of women with children	5 Gender equality	The Social Bond Principles
MAP Plus bond program	**Governance**	Enhance **financial inclusion** through the development of a retail domestic bond market	Retail bond issuance program giving access to citizens to HUF denominated instruments with attractive rates and easy access (sold via banks, post office, Treasury…)	17 Partnerships for the goals	The Social Bond Principles

Sources : *AKK, Government of Hungary*

GREEN FINANCE IN HUNGARY

Key stakeholders	Initiatives	Achievements
• **The Hungarian Government Debt Management Agency (AKK)**	• **Hungary has adopted a green financing framework in May 2020**, which includes 6 green expenditure categories: - Renewable Energy - Energy Efficiency - Land Use and Living Natural Resources - Waste water Management - Clean Transportation - Adaptation	• Since then, **the country has issued several green bonds in both local and foreign currencies**: - June 2020: issuance of a €1.5bn Eurobond - September 2020: issuance of 2 Samurai bonds for a total of JPY 20bn - April 2021: debut issuance of a HUF 41.2bn green bond with a 30 years maturity with the intent of developing the local green bond market - December 2021: issuance of a Panda bonds for a total of CNY 1bn
• **The Hungarian Central Bank (NBH)**	• **The NBH announced its Green Program in February 2019** aiming to reduce the risks associated with climate change and expand the financing of the green economy • In July 2021, the NBH revamped its strategy through a **"Green Monetary Policy Toolkit Strategy"**	• The NBH was **among the first Central Banks worldwide to set up of a dedicated Green Bond portfolio in June 2019** • Under its newly adopted strategy, the NBH will continuously examine how monetary policy can achieve **price stability <u>and</u> environmental sustainability objectives**
• **The Hungarian corporate sector**	• **An increasing number of corporates are considering green issues** on the back of AKK and NBH efforts to help the sector grow	• Corporate Green Bonds **first issuance took place in August 2020** • **12 Hungarian corporates issued Green Bonds** in both local and foreign currency

*Note: * Including non-competitive issuance*

Source: AKK, NBH

GREEN BOND ALLOCATION REPORT 2020

In March 2021, Hungary published the Green Bond Allocation Report 2020

- **Hungary strives to achieve climate neutrality by 2050**
  - Green Bond Framework
  - Act XLIV of 2020 on Climate Action
  - Foreign-currency Green Bonds issuance in 2020
  - Local-currency Green Bonds issuance in 2021
- **Hungary committed to annual reporting on the allocation and the impact of its Green Bonds**
- Green Bond Allocation Report 2020 was compiled in March 2021
- Total green bonds proceeds amounted to HUF 573,68 billion; total eligible expenditures amounted to HUF 1,204.52 billion

Green Budget Expenditures (HUF billions)

Sectors	2018 Fact	2019 Fact	2020 Plan
Renewable Energy	4.86	0.84	2.05
Energy Efficiency	2.24	4.48	15.26
Land Use and Living Natural Resources	32.58	35.32	35.64
Waste and Water Management	4.36	2.66	2.80
Clean Transportation	327.36	340.23	372.63
Adaptation	0.67	7.60	12.94
Eligible Green Expenditures	372.07	391.13	441.32
Allocated Amount	372.07	201.61	

- **Hungary selected projects according to the eligibility criteria defined in the Green Bond Framework, best market practices and the second party opinion provider CICERO**
- Eligible green expenditures include investment expenditures, intervention expenditures, tax expenditures and selected operating expenditures
- Budget expenditures which obtained dedicated funding were excluded
- Nuclear power, armament and defence sector, fossil fuel production and power generation related projects were excluded
- None of the expenditures harms significantly any environmental objective of the EU

Source : AKK

GREEN BOND IMPACT REPORT 2020

In November 2021, Hungary published the Green Bond Impact Report 2020

- **Hungary committed to annual reporting on the allocation and the impact of its Green Bonds**
- Green Bond Impact Report 2020 was compiled in November 2021
- The report covers the allocations for the budget years 2018 and 2019 and the key environmental and social impacts resulting in budget years 2018, 2019 and 2020
- **The assessment of the environmental impacts was based on the ICMA Harmonized Framework for Impact Reporting Handbook (June 2021 edition)**
- The report summarizes the indicators on a project-by-project basis

Renewable Energy	Energy Efficiency	Land Use and Living Natural Resources	Waste and Water Management	Clean Transportation	Adaptation
8.2kt CO_2 equivalent GHG was avoided	49.5kt CO_2 equivalent GHG was avoided	More than 120 thousand projects supporting sustainable agricultural areas covering 794,438 hectares	Length of sewage system per kilometres of drinking water system increased to 761 meters	1,106.3kt CO_2 equivalent GHG was avoided	1.8% decrease in air pollutant particular matter (PM10) between 2018 and 2019
7 AFFORDABLE AND CLEAN ENERGY	7 AFFORDABLE AND CLEAN ENERGY	15 LIFE ON LAND	6 CLEAN WATER AND SANITATION; 11 SUSTAINABLE CITIES AND COMMUNITIES	13 CLIMATE ACTION	6 CLEAN WATER AND SANITATION; 13 CLIMATE ACTION

Source : AKK

GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

ÁKK

THANK YOU FOR YOUR ATTENTION!