



COMPETITIVENESS MIRROR



2023

'To see what everybody else has seen and to think what nobody else has thought.'

Albert Szent-Györgyi



COMPETITIVENESS MIRROR

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In addition to its primary mandate for achieving and maintaining price stability, the Magyar Nemzeti Bank (MNB) is required by law to use the instruments at its disposal to support the economic and environmental sustainability policies of the government, including the strengthening of competitiveness, a prerequisite for convergence. The Competitiveness Mirror aims to monitor how the competitiveness targets and recommendations made by the MNB have been implemented so far, thus contributing to the necessary turnaround in competitiveness. The Competitiveness Mirror regularly assesses Hungary's progress in competitiveness, based on the 330 recommendations published in the MNB's Competitiveness Programme. The monitoring system uses both descriptive and analytical methods to measure the implementation of the central bank's recommendations.

The Competitiveness Mirror was prepared under the general guidance of Gergely Baksay, Executive Director for Economic Analysis and Competitiveness. The Competitiveness Mirror was completed with the help of staff from the Directorate for Fiscal and Competitiveness Analysis, the Directorate Financial System Analysis, the Digitalisation Directorate, the Insurance and Pension Funds Supervision Directorate, the Directorate Lending Incentives, the Directorate Financial Infrastructures and Payments, the Directorate Monetary Policy and Financial Market Analysis, the Directorate Structured Finance Strategy as well as the Budapest Stock Exchange. This publication has been approved by Barnabás Virág, Deputy Governor for Monetary Policy and Financial Stability.

The Competitiveness Mirror is based on information available for the period ending June 2023.

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Executive Summary

The early years of the 2020s have been characterised by global economic pressures in the wake of crises of historic magnitude. The lesson from economic history is that competitiveness policies bolstering the supply side of the economy and improving its flexibility are especially valuable in such a decade fraught with risks. In 2019, the MNB published its *Competitiveness Programme in 330 Points*, providing guidance on the interventions necessary to achieve the turnaround in competitiveness that would serve as the foundation for sustainable convergence. As a constituent part of the central bank's competitiveness measurement system, the *Competitiveness Mirror* is intended to constantly monitor the delivery of the recommendations formulated. This publication presents the progress achieved in terms of measures launched or implemented in the period from the last summary in December 2021 up to June 2023.

With an energy crisis and war between Russia and Ukraine, the implementation of the MNB's 330-point competitiveness programme has continued at a slower pace; over the last 1.5 years, the priority-weighted implementation rate of the recommendations has increased from 42 per cent to 46 per cent. Ever since the Programme was presented in February 2019, there has been a common trend of deceleration in the implementation of the recommendations; an implementation rate of 22 per cent at the start of its term has been followed by increases by 12, 8 and 4 percentage points, respectively. Leading up to 2023, successive waves of crisis had also decelerated the implementation of competitiveness reform measures; even so, a sufficient number of new measures were taken in all the 12 areas examined to raise the status of the recommendations. The statuses of 33 recommendations have changed since the last publication, with 7 progressing to started status, 20 to partly implemented and 6 to fully implemented. Since the beginning of 2019, implementation has launched in 263 recommendations out of the total of 330; of these, 123 were in started, 115 in partly implemented and 25 in fully implemented status.

Of the 12 main competitiveness areas, the highest rate of implementation since 2019 has been achieved in research, development and innovation (65 per cent), efficient governance (62 per cent), and new financial model (51 per cent). In research, development and innovation, substantive progress has been achieved as 2 recommendations progressed to fully implemented status. Firstly, on the initiative of the Ministry of Culture and Innovation, the financial costs of SMEs, tertiary education institutions and research institutes relating to intellectual property rights have been reduced as, under new rules, they have to pay only a quarter of the patent application, search, investigation and grant fees. Secondly, under the *John von Neumann Programme*, the state reimburses 50 per cent of doctoral tuition fees to the employer if their employee is pursuing self-financed doctoral studies on the basis of a study contract. Measures facilitating more efficient governance include providing online administration options in an increasing number of scenarios for citizens, the transformation of the website of the National Tax and Customs Administration, and efforts to make the treasury system more competitive. The Magyar Nemzeti Bank has continued its active stance on improving the financial system, including enhancements to the legislative environment in several areas. While optimisation is important, the financial sector is also responsible for providing the retail clients with appropriate services; to this end, the central bank passed a decree encouraging actors to operate an adequate number of ATMs. In order to make instant payments available as an option in an increasing number of payment scenarios, payment service providers will be required under new rules in effect as of February 2024 to execute instant payments submitted using single data entry solutions or requests for payment. Importantly, there will be no direct transaction fee on such payments. Access to credit in the corporate sector has been bolstered by the fact that both Hungarian guarantee institutions have concluded agreements with the European Investment Fund; as a result, guarantees of up to 90 per cent are now possible under the COSME guarantee scheme. Reducing the interest rate risk of borrowers, variable-rate mortgage lending virtually ceased by the beginning of 2019 as a result of the MNB's actions; the share of the remaining variable-rate schemes then fell rapidly, to below 20 per cent by the beginning of 2023.

The digitalisation of the Hungarian economy has continued; however, successful convergence demands further measures, which have been set out in the National Digitalisation Strategy. The government published the *National Digitalisation Strategy* (NDS) in December 2022, determining a wide range of development directions until 2030. Of the 330 competitiveness recommendations of the central bank, the Strategy applies to 24 recommendations representing 6 areas. Concerning the **SME sector**, the NDS formulates development directions mainly for digital preparedness and urges the spread of data-driven technologies; it also designates the further enhancement of digital infrastructures as an objective. On the **labour market**, a central element of the strategy is the rapid and systematic introduction of the European Digital Competence Framework for Citizens, on which a number of training and development programmes will be based in the decade ahead. In **healthcare**, the National Digitalisation Strategy includes measures such as the further development of the National eHealth Infrastructure (EESZT), the creation of a Smart Hospital system, and the expansion of telemedicine operations. In **education**, special emphasis is placed on improving digitalisation, with measures ranging from digital teaching methodologies, through the enhancement of digital competences, to the digital asset pool. The aim is to fully implement eGovernment in order to facilitate more efficient **governance**; this will involve the introduction of paperless, completely electronic back office operations. Data governance will be introduced and, in public administration, all development will be conducted on the once-only principle to eliminate duplications in the future. In the **modern infrastructure** chapter, the strategy focuses on the development of the telecommunications infrastructure, including connecting more institutions to the optical network, increasing the 5G capacity of optical cables, 5G/6G standardisation and the creation of a 5G Centre of Excellence.

The green economic turnaround is an absolutely necessary baseline in part due to the energy crisis and the extreme weather events, and decisive action has been taken during the period to this end. The energy crisis after the COVID-19 pandemic and the outbreak of the Russia–Ukraine war triggered pivotal changes in the energy sector, with several government programmes supporting an increase in the number of green investment projects. In the last quarter of 2022 and the first quarter of 2023, the state provided own-funds financing, capped at 15 per cent, to energy-intensive SMEs taking out energy efficiency investment loans. Under the *Factory Rescue Programme*, the state provided HUF 150 billion in non-repayable grants to large companies for energy efficiency and energy production investments. The green investment stream of the *Gábor Baross Reindustrialisation Loan Programme* is also expected to increase the number of green investments. The Bond Funding for Growth Scheme (BGS) of the Magyar Nemzeti Bank has coincided with increasing demand for bonds financing specifically green investment purposes. Until the end of April 2022, a total of 20 issuers' green bonds for HUF 539 billion were placed on the market under the programme, representing approximately 19 per cent of all bond issuances supported by the BGS. Greening the economy is assisted by the fact that, between 1 January 2022 and 1 June 2023, installed solar capacity increased by 1,900 MW in Hungary, reaching nearly 5,000 MW, which is 80 per cent of the government's 2030 target. In terms of the development of irrigation infrastructure, an important step forward was the extension, to 1 October 2023, of the deadline for several key tender applications (water management development, irrigation communities).

Hungary's most important resource is its well-qualified workers, who are essential for transitioning to a knowledge- and technology-driven growth model. Two new components were added to the complex **family support system** in 2023. Firstly, women who give birth between the ages of 25 and 30 are entitled to an exemption from personal income tax up to the level of the gross national average wage as of July of the previous year. Secondly, from early 2023, women who give birth to or adopt a child within two years of completing their studies will have their student loan debt cancelled in full. In **healthcare**, progress has been made in both the prevention and the early detection of diseases. The range of products subject to the public health product tax has been significantly extended and the rate of the tax raised. Excise duties on alcoholic beverages and tobacco have also increased. General practice and hospital on-call services have been restructured, with the National Ambulance Service taking over organisational responsibility over the former, while the role of county hospitals strengthened in the case of the latter. Both the general practice and the health visitor system have been brought under the control of the National Directorate General for Hospitals, and the reorganisation of general practices has started. Over recent years, doctors' salaries have risen 2.5-fold and nurses' pay by more than 70 per cent under a comprehensive pay reform in the healthcare sector. Payment for performance has been introduced for nurses and doctors, whose basic pay set out in the pay scale can now be reduced by their employers by 20 per cent or increased by 40 per cent, depending on their performance. In recent years, there has been a dynamic growth in the provision of same-day care in the health sector; under the *Széchenyi 2020* programme, 19 sites to house at least 4 healthcare specialisms have been set up to provide same-day care. In **education**, input testing will be added to student performance assessments

from the 2022/23 school year. In the future, Year 4, 5, 6, 7 and 10 pupils will take 2 tests every year, in both mathematics and reading comprehension. As of January 2023, teachers' salaries in public education increased by 10 per cent, while career starters received a 25 per cent pay rise. The 6-year public task funding contracts concluded with the universities changing their models stipulate that 30-50 per cent of the financing for the institutions will depend on certain qualitative parameters such as reducing drop-out rates and progress in international tertiary education rankings. Since the 2022/23 academic year universities have had the discretion to decide on the criteria for reallocating students between the state-scholarship and the fee-paying categories. From 2023, tertiary education institutions will also have the discretion to decide what language requirements to stipulate as a precondition for awarding a degree.

A total of 26 competitiveness recommendations in 6 areas are substantively impacted by the Hungary's Recovery and Resilience Plan, which helps tackle the main economic and social challenges of the Covid-19 pandemic. On the **labour market**, it is planned to further develop the examination system in the future with the centralised network, providing nationwide access, of the National Central Accredited Examination Centre (OKAV). Also in the framework of the Recovery and Resilience Facility (RRF), Individual Learning Accounts and a national micro-credential system will be introduced. The **family-friendly programme** is also impacted by a measure under which a public spending effectiveness review will focus, in its first round, on the forms of family and housing support provided, and on healthcare spending. As primary care is a priority in **healthcare**, a project with a HUF 85 billion total budget aims to improve the prevention of the leading chronic diseases and ensure access to safe, high-quality care. The plan also foresees the refurbishment of the built infrastructure of blood donation and the network of ambulance stations. The objectives of the RRF also include ensuring that the healthcare system remains sustainable and financeable, among other things through eliminating duplications and streamlining profiles. In addition, there are funds available for the further expansion of same-day and ambulatory care capacities. In **education**, the '*21st Century Vocational Education and Training Institutions Development Programme*' has been launched, aimed at providing an attractive learning environment at the institutions of the vocational training centres and creating conditions for high-quality vocational education. Under the RRF, the government committed to introducing a new career path model for teachers and making tertiary education more practice-focused so as to meet labour market demand. In order to foster more efficient **governance** operations, RRF plans include the introduction of e-receipts and e-VAT, and the reduction of the number of tax types. In the area of **green economy**, the installation of grid energy storage facilities by energy market operators is improving energy efficiency; in addition, HUF 43 billion funding is available for waste management improvements and HUF 58 billion for water management.

Competitiveness Mirror – Measuring the implementation of the Competitiveness Programme

The *Competitiveness Mirror* assesses progress in the competitiveness turnaround based on the implementation of the MNB's 330 points. In February 2019, the central bank formulated 330 recommendations in 12 areas in its Competitiveness Programme to improve Hungary's competitiveness and achieve successful and sustainable convergence. In this publication, we assess the implementation of the recommendations for the fourth time since 2019.

The current version of the *Competitiveness Mirror* covers the effects of measures announced between December 2021 and June 2023. This publication contains the 174 recommendations that have changed in any form since the 2022 *Mirror*. The majority of the measures presented (141) did not reach a level that would change the status of the recommendation, while in 33 measures improved the implementation status of the recommendation to a new level.

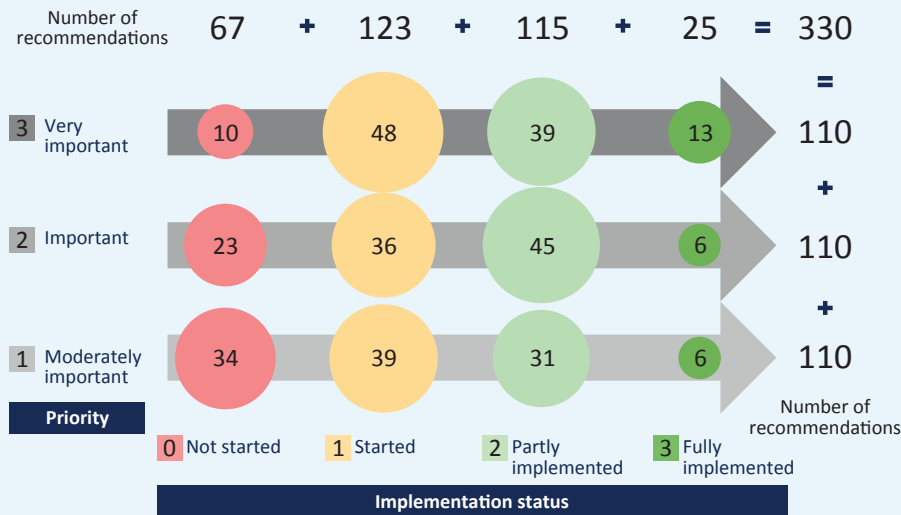
The *Competitiveness Mirror* evaluates the degree of progress achieved in the implementation of the recommendations on a 4-step scale. In terms of what is to be considered as implementation, the recommendations in the 330 points fall into two groups. One part of the recommendations requires the approval of a specific measure, the introduction of new regulations or adjustments to those in place. By contrast, recommendations in the other group set directions for development, where the objectives can be accomplished by implementing programmes involving a series of coordinated actions. In assessing the degree of implementation, it must be taken into consideration whether the approved regulation or initiated programme is fully aligned with the recommendation made in the 330 points. Taking these aspects into account, the categories indicating the degree of implementation are applied with reference to the following criteria:

- A recommendation is **'fully implemented'** when the corresponding regulatory adjustments (including amendments) have taken place. If the recommendation was of a more comprehensive nature, then if the programme to achieve the objective has started and is running efficiently. A recommendation may also be considered fully implemented when the same goal has been met by different but equally effective and efficient means.
- The **'partly implemented'** category comprises programmes which have been organised and are set to be launched, as well as measures about to be approved. Additionally, it may also comprise approved measures or ongoing programmes that do not fully cover the corresponding recommendations in the 330 points or are more limited in scope. In such cases, implementing the initial recommendation requires changes to the programme or measure, or the adoption of a new measure.
- A recommendation may be considered **'started'** when a specific plan or strategy has been adopted to implement a measure proposed as part of the 330 points. The 'started' category also comprises recommendations that partly involve an approved measure or initiated programme, but its key elements have not been implemented.
- The **'not started'** category comprises recommendations in respect of which no measure has been approved or no specific notification has been made, or no programme involving the recommendation has been initiated.

The recommendations have been categorised depending on the degree to which, in the central bank's opinion, the measure contributes to improving competitiveness. All the recommendations will contribute to Hungary's sustainable convergence, but not all of them are of equal importance, while some are in fact key to achieving that goal. Based on the level of contribution to improving competitiveness, three categories ('moderately important', 'important' and 'very important') have been established. In all of the 12 key areas, the recommendations have been classified into these groups in equal proportions, i.e. each of the three categories comprise 110 recommendations.

From the 330 recommendations in the *Competitiveness Programme*, progress has been made in 263 cases since the introduction of the programme in February 2019 (Chart 1). Within that, implementation is underway in the case of 123 recommendations, 115 are partly implemented, while the objective has been fully reached with respect to 25 recommendations. Overall, implementation has at least started in 80 per cent of the recommendations. The biggest progress has been made in recommendations prioritised as ‘very important’; of the 110 recommendations in this category, 100 have seen their implementation start. This compares with 87 for recommendations categorised as ‘important’ and 76 for those in the ‘moderately important’ priority group.

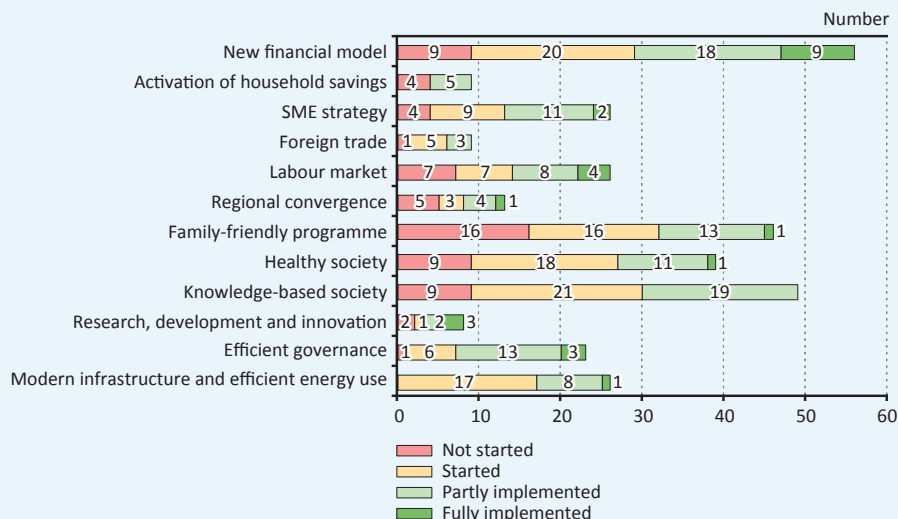
Chart 1
Implementation status of the competitiveness recommendations by priority (2023)



Source: MNB.

Of the 25 fully implemented recommendations, 9 are in the *New Financial Model* chapter, while the other 16 fully implemented recommendations are found across 8 different chapters (Chart 2). The largest number of ‘partly implemented’ recommendations (19) are in *Knowledge-based society*, followed closely by 18 ‘partly implemented’ recommendations in *New Financial Model*. These two areas also headed the rankings in ‘started’ recommendations, with 21 and 20 recommendations, respectively. Of the 12 areas, only in the *Modern infrastructure and efficient energy use* chapter have all the recommendations reached at least ‘started’ status.

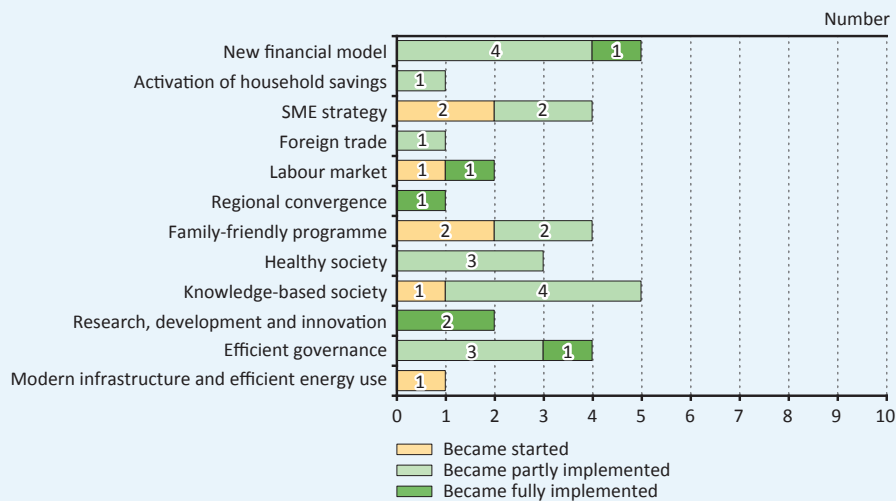
Chart 2
Implementation status of competitiveness recommendations by key areas (2023)



Source: MNB.

Compared to December 2021, greatest progress has been achieved in the *New Financial Model* and *Knowledge-based society* chapters (Chart 3). In the *New Financial Model* chapter, 5 recommendations changed status, including 4 receiving ‘partly implemented’ and 1 ‘fully implemented’ status. In the *Knowledge-based society* chapter 5 recommendations progressed, with 1 recommendation acquiring the status of ‘started’ and 4 recommendations ‘partly implemented’. 4 recommendations achieved higher status in each of the following areas: *Efficient governance*, *SME strategy* and *Family-friendly programme*. Of the 4 recommendations in the *Efficient governance* chapter, 3 became partly implemented and 1 fully implemented. In both the *SME strategy* and the *Family-friendly programme* chapters, 2 recommendations achieved started status and 2 recommendations partly implemented status. In all 12 areas there were decisive measures during the period that were sufficient to achieve an increase in the status of the relevant recommendation.

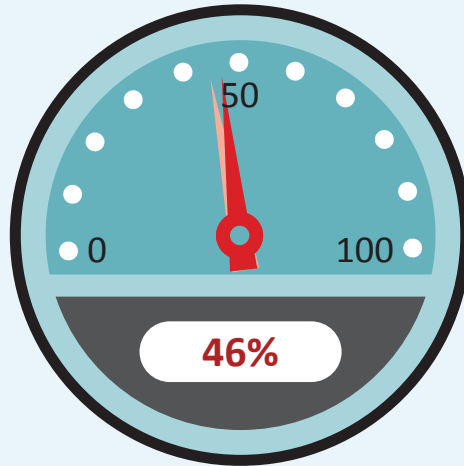
Chart 3
Change in the status of the competitiveness recommendations between December 2021 and June 2023 by key areas



Source: MNB.

By capturing implementation results in a single figure by area and on aggregate, the methodology used in this publication is suitable for presenting the degree to which the recommendations have been implemented. Recommendations are scored 0–3 according to the status of their implementation, where 0 stands for ‘not started’ and 3 for ‘fully implemented’. The score obtained is then weighted by the priority of the recommendation concerned (a number between 1 and 3, where 3 stands for recommendations rated ‘very important’). The resulting implementation scores are aggregated for each key area, as well as for all recommendations collectively. The aggregate implementation status is a percentage that shows the level of implementation, weighted by priority, compared to the full implementation of the recommendations.

Chart 4
Aggregate implementation status – weighted by priority – of the competitiveness recommendations in 2023

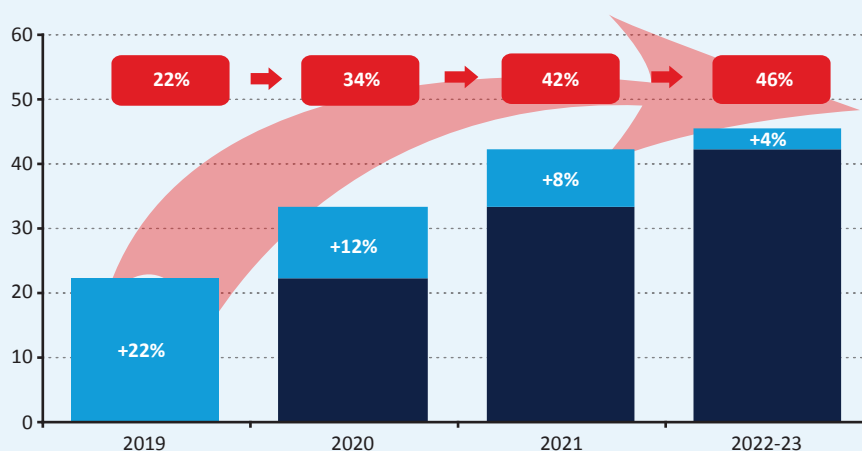


Note: The aggregate priority-weighted implementation status of the Competitiveness Programme stood at 42 per cent in December 2021 (pink pointer) and 46 per cent in June 2023 (red pointer).

Source: MNB.

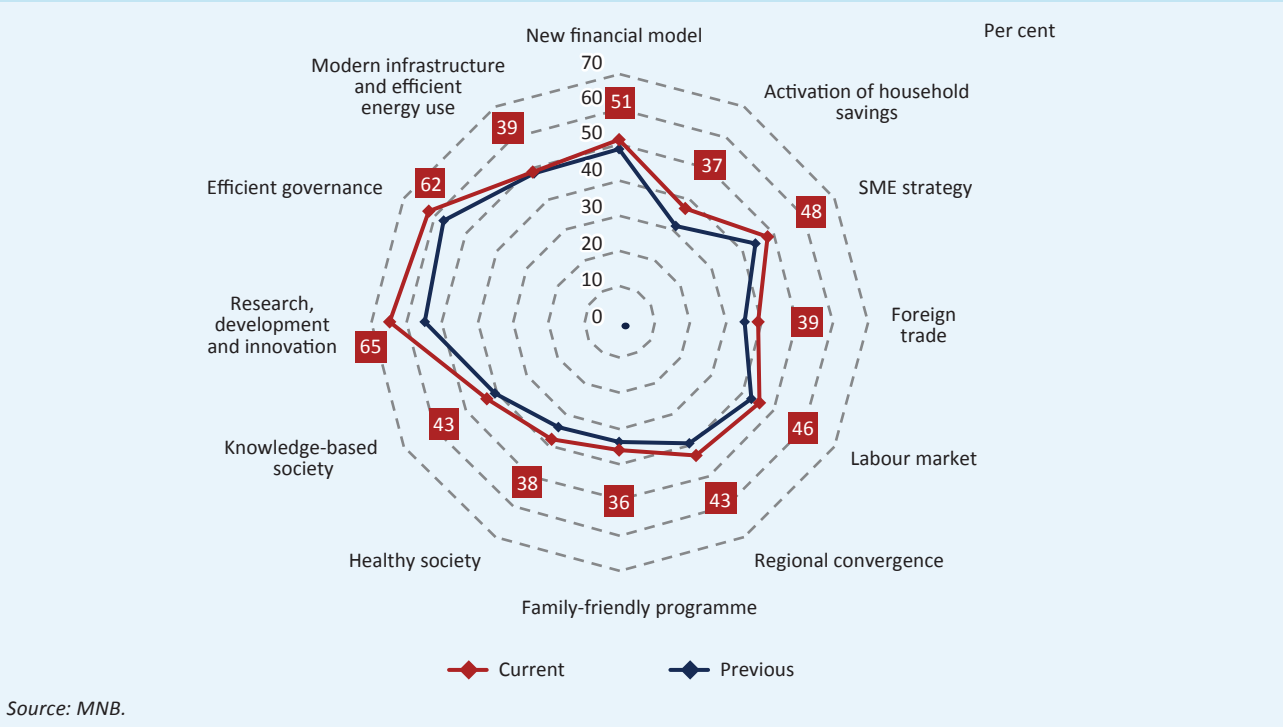
Priority-weighted implementation of the *Competitiveness Programme* stood at 46 per cent in June 2023, reflecting a slowdown in the delivery of competitiveness reforms (Chart 5). In 2019, the year at the start of which the Programme was published, 22 per cent of its recommendations were delivered; this was followed by gradually decreasing levels of implementation in 2020 and 2021 (12 and 8 percentage points, respectively). The implementation rate rose by only 4 percentage points in 2023 compared to 42 per cent in December 2021 (Chart 4). The three chapters where the rate of implementation of recommendations was the highest were *Research, development and innovation* (65 per cent), *Efficient governance* (62 per cent) and *New Financial Model* (51 per cent). The steepest rises compared to December 2021 were recorded in the chapters *Research, development and innovation* (10 percentage points), *Activation of household savings* (6 percentage points) and *Efficient governance* (5 percentage points). The potential for progress in terms of priority-weighted implementation was highest in the chapters *Family-friendly programme*, *Activation of household savings* and *Healthy society* (Chart 6).

Chart 5
Changes since 2019 in the implementation of competitiveness recommendations



Source: MNB.

Chart 6
Aggregate implementation status of competitiveness recommendations by key areas in the 2022 and 2023 publications



In this publication, the implementation phase of the recommendations is indicated by four different colours and the change in the implementation phase by coloured arrows corresponding to the new status. A recommendation is shown in the 12 chapters if there is any new development in the implementation relative to the comparison performed in December 2021. If this new development also results in a step forward in the implementation phase of the recommendation, the progress is indicated – in addition to the change in the background colour of the recommendation – by an arrow of the colour of the new status at the description showing the implementation of the recommendations. The priorities belonging to the recommendations depend on whether the recommendation has been classified as moderately important (1), important (2) or very important (3). For instance, the recommendation ‘Offer more flexible guarantee rates (70 to 90 per cent)’ progressed from the ‘started’ phase to ‘partly implemented’, so its background switched from yellow to light green. The change in the status is also indicated by a light green arrow. The priority for the recommendation is 2, i.e. this recommendation has been classified as important. For easier orientation, the table below provides an overview at the end of each section and also at the end of the summary table concluding the publication.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started ↑		Changed to Partly implemented ↑	Changed to Fully implemented ↑

4. Offer more flexible guarantee rates (70 to 90 per cent)	↑ 2
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1 New financial model

The priority-weighted implementation of the recommendations in the New Financial Model chapter rose from 49 per cent in December 2021 to 51 per cent in June 2023. Of the 56 recommendations in this chapter, progress was identified in 20 cases; however, there are still 47 recommendations where implementation is at least in ‘started’ status. Progress was sufficient to achieve a status change in only 5 recommendations: 4 recommendations achieved partly implemented status and 1 fully implemented status. The 51 per cent implementation rate indicates that there is plenty of room for further improvement, especially in terms of the operational efficiency of banks and the development of the capital market.

Hungarian guarantor institutions also play a key role in mitigating the negative economic effects of war in neighbouring country following the pandemic; without institutional guarantees, a significant number of micro- and small enterprises would have no access to bank finance at all or only at very unfavourable terms. In line with the transitional wartime provision of the European Commission and under the COSME programme, institutional guarantees of 80 or, in some cases, up to 90 per cent are available currently, until the end of 2023. Thanks to accelerated negotiations with the European Commission and the European Investment Fund, the InvestEU agreement, available in the new programming period, may be signed by the two guarantors before the end of this year, making more flexible guarantee rates available in the longer term. Recently, both institutions have significantly expanded the scope of eligible customers and transactions, acceptable credit ratings, coverage levels and guarantee amounts, while also stepping up their marketing activities to promote their products.

As a result of the MNB’s measures, variable-rate mortgage lending virtually ceased by the beginning of 2019, after which the share of the remaining variable-rate schemes fell rapidly, to below 20 per cent by the beginning of 2023. The popularity of the MNB’s Certified Consumer-Friendly products is demonstrated by the dynamic rise in their sale. For instance, Certified Consumer-Friendly Home Insurances, first introduced in January 2020 were being offered by as many as 11 insurers by the end of 2022, with more than 29,000 contracts already concluded. Introduced in early 2021, Certified Consumer-Friendly Personal Loans achieved a market share of around 20 to 25 per cent by March 2023. To make it easier for customers to compare bank account packages, the central bank has revamped its bank account selector software, so that customers can now access a modern, fast and bank-independent comparison site. Another important event regarding the account packages was the restructuring of the basic account product, which may now be a suitable choice for pensioners and socially disadvantaged people too.

The MNB’s instant payment system is being renewed so that it can be used in an even wider range of payment situations in the future. As of 1 February 2024, payment service providers will be required therefore to provide customers with the option of making payments using single data entry solutions. Effective from the same date, service providers will also have to execute instant payments initiated by a request for payment. To achieve this goal, it is essential that instant payment solutions are not priced at a competitive disadvantage. This has been addressed by the legislator, as payments using a single data entry solution or request for payment will be free of charge for customers from 2023.

There have been a number of legislative changes in the area of distributed ledger technologies since the latest version of the Competitiveness Mirror was produced. These include Regulation (EU) 2022/858 of the European Parliament and of the Council, which may pave the way for the tokenisation of financial instruments within a regulated framework. This is expected to be followed by a single EU regulation on crypto-assets in the third quarter of 2023 (MiCA). The MNB has a project in this field called ‘MNB blockchain’, which aims to use distributed ledger technology in order to reduce the administrative burden of mortgage borrowers taking out insurance. The project is in the IT development and testing phase, following a successful public procurement procedure.

#	Recommendation	Priority
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1.1. Improve the efficiency of the guarantee scheme

4. Offer more flexible guarantee rates (70 to 90 per cent)

↑ 2

Both Hungarian guarantee institutions have signed agreements with the European Investment Fund (EIF), as a result of which they are now able to offer guarantees at rates as high as 90 per cent under COSME (the Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises), up from the maximum 80 per cent customary in the past. Due to the fact that COSME was first announced in the previous programming period, guarantee applications may be submitted under the scheme until the end of 2023. The protracted pandemic has delayed the adoption of the InvestEU programme framework previously planned for the 2021-2027 cycle, and the Commission has significantly reduced the resources initially allocated to the new programme, which has also constrained funding application opportunities. However, thanks to the acceleration of negotiations in 2023, the Hungarian guarantor institutions may sign the InvestEU agreement before the end of this year.

In order to mitigate the negative economic effects of the Russia–Ukraine war, institutional guarantees provided by both Garantiqa Hitelgarancia Zrt. (GHG) and the Rural Credit Guarantee Foundation (AVHGA) are available to businesses until 31 December 2023, in line with the European Commission’s transitional provision. Although the Commission’s Communication on the war authorises Member States to provide guarantees of up to 90 per cent, most government loan schemes helping SMEs access to loan offer institutional guarantee rates of 80 per cent.

6. Make concerted marketing efforts to promote institutional guarantees

1

In order to increase the visibility and recognition of state-backed institutional guarantees, GHG continued its ongoing marketing promotion efforts in 2022. In this context, it conducted awareness and image campaigns using primarily online marketing tools on social media platforms, its own media platforms and on the media platforms relevant to the Hungarian SME sector. In 2022, the guarantee institution also participated in the national advertising campaign promoting Széchenyi Card schemes. In addition, it promoted institutional guarantees and its Garantiqa Direkt service both through a nationwide roadshow and at industry conferences.

In 2022, the AVHGA continued its major campaign effort to promote its products in agricultural journals, at agricultural fairs, at banking training courses and presentations, and via online platforms.

1.3. Support for credit convergence

1.3.1. Sound lending for sustainable economic growth

9. Mitigate interest rate risks for customers

↑ 3

Since 2017, the Magyar Nemzeti Bank (MNB) has taken a number of measures to support the reduction of households’ interest rate risk and the proliferation of mortgage loans with longer interest periods, including the introduction of the category of Certified Consumer-Friendly Home Loans and the imposition of different debt brake requirements on different interest periods. By the beginning of 2019, variable-rate mortgage lending had fallen to a very low level as a result of the MNB’s measures. The ratio of variable-rate loan products to the total portfolio also declined rapidly, falling below 20 per cent by the second half of 2023, as a result of the end of the replacement of variable-rate credit facilities and the repayment of the outstanding loans. The MNB also assisted this trend with a recommendation on raising awareness of the interest rate risk of variable-rate mortgages. As a result, the variable-rate mortgage facilities still in existence no longer pose a risk to financial stability, given the short maturities remaining and the income dynamics of recent years.

#	Recommendation	Priority
10.	Increase financial awareness	2

The National Core Curriculum (NAT) also reflects the need to strengthen financial literacy in several areas of education: mathematics, civics, geography, engineering and design. In the 2022/2023 school year, more than 450,000 copies of the Money Compass Foundation's free accredited textbooks and workbooks (also available in digital format) will help students with their financial education. The Foundation's textbook for secondary schools entitled 'Compass to Finance' is the first among accredited textbooks to include augmented reality (AR) solutions, which were also added to its primary school textbook 'Missions in the World of Money'. Technical schools offer e-learning material with additional chapters on entrepreneurship for the compulsory finance and entrepreneurship subject. This school year, the environmental studies workbooks for Year 3 and 4 students and the mathematics workbooks for Year 3–8 pupils have been supplemented with a chapter on 'Everyday finances', which was developed by the Money Compass Foundation based on the new National Core Curriculum.

1.3.2. Cheaper banking with more intense price competition		
11.	Continue to promote Certified Consumer-Friendly products	3

As an indication of the popularity of the Certified Consumer-Friendly Framework, the market share of Certified Consumer-Friendly Loan (MFL) products within all home loans potentially eligible for certification has been close to 70 per cent since 2019. Following the successful uptake of the certification framework, the MNB decided to extend the scope of certified products in 2019 to further promote competitiveness objectives. Since January 2020, Certified Consumer-Friendly Home Insurance policies have been available to consumers to protect against real risks and support the online claims settlement process. By the end of December 2022, 11 insurers had introduced consumer-friendly certification and consumers had taken out more than 29,006 certified consumer-friendly home insurance contracts, covering HUF 1,098 billion in assets. As of January 2021, the range of qualified consumer-friendly products was extended with Certified Consumer-Friendly Personal Loans, which support the trend of digitalisation at the banks while also boosting competition on the personal loan market. Up to March 2023, the market share of Certified Consumer-Friendly Personal Loan products was between 20 and 25 per cent.

16.	Enable simple, user-friendly bank account switching	2
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Customers can achieve terms better suited to their payment habits by switching their account package, adding different discounted modules to their existing package or replacing the services they use with the cheaper ones available. Often, customers will find that these options are also available at their current bank, allowing them to tailor the package of services to better suit their needs. Nevertheless, if customers still decide to switch banks, a simplified bank account switching service is now available, in which all the customers need to do is contact the new payment service provider they have chosen. Most banks already offer online account opening, making it quick, easy and convenient to open a new account. In such cases customers simply write to the new bank declaring their intention of switching banks. The registration and use of secondary identifiers makes account switching more convenient, as it is no longer necessary to provide the new account number to those partners who had used the secondary identifiers for making payments. Further enhancements of online administration (adding discount modules or new services online or from an app, or submitting the bank switching declaration online) are intended to further simplify the tailoring of services to customers' needs. It is becoming increasingly common for banks to offer fewer types of bank account packages, providing instead a choice of different modules within the same bank account package for the customer to select from; this may affect the number of account switches, as customers can increasingly access better services without switching.

17.	Increase the comparability of bank account plans	 2
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In order to make it easier to compare account packages, the MNB has updated its account selector programme. This provides customers with a modern, fast and bank-independent account comparison site. It is important to improve customer awareness and knowledge of account packages and related services, and further progress could be made by making the list of terms and conditions more accessible and easier to understand, or by promoting awareness and understanding of the statements of annual charges available to all customers.

#	Recommendation	Priority
1.3.3.	Cheap products more conveniently available	

18.	Develop and promote bank accounts to improve the banking relations of retirees and socially disadvantaged persons	↑ 2
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Account packages specifically intended for pensioners are already available; the basic account product has also been restructured, which could be a good choice for a significant number of customers without any special eligibility conditions. As a result, it may now be a good choice for pensioners and socially disadvantaged people as well. In addition to the new basic account product, a completely free social basic account may further increase the number of bank account holders.

1.4. Enhancing digital transformation in banking

1.4.1. Efficiency means lower cost for banks and lower interest rates for customers

21.	Optimise branch networks	2
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While digitalisation continues to gain ground, the MNB still attaches high importance to ensuring access to bank branches; nevertheless, branches are becoming ever more streamlined, with ever more digital solutions supporting the administration. The MNB's Recommendation No 4/2021 (III. 30.) on digital transformation has contributed to these trends. While optimisation is important, offering individuals and households with the right services is essential, as is stated in, among other things, MNB Decree No 1/2023 (I. 17.), which encourages the operation of a requisite number of ATMs.

1.4.2. Banking products and services with a few clicks

24.	Develop and deepen the digital transformation	3
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In its comprehensive survey of digitalisation in the banking system, the MNB has found that the digital maturity of Hungarian banks has continued to improve, the level of digitalisation has increased further, and the sustained development of the credit institutions at the forefront of digitalisation has been coupled with a convergence on the part of the less digitalised banks; nevertheless, the banking system as a whole is still at an average level of maturity. Digital development means that the digital availability of certain banking products is increasingly seen as a basic service, with internet and mobile banking platforms becoming the main channels for communication with customers. The progress achieved by the organisations responsible for digitalisation in banking has been encouraging; in addition, dedicated teams within the institutions themselves are also actively contributing to the attainment of digitalisation objectives. Nevertheless, further digitalisation and automation improvements and modernisation steps will be necessary in internal operations. It is also encouraging to see an increasing openness – albeit at a slower pace – towards working with innovative players, as Hungarian banks are actively seeking opportunities to cooperate with fintech companies. Following the MNB's recommendation to strengthen the digitalisation of the domestic banking system, all Hungarian credit institutions have developed and submitted to the central bank a comprehensive digital transformation strategy and roadmap in line with the MNB's expectations. The implementation of the strategies has started and is regularly reviewed by the MNB and evaluated through feedback.

The central bank also supports the digitalisation of the Hungarian banking system by operating its Innovation Hub and Regulatory Sandbox frameworks.

26.	Support digital developments related to the instant payment system	2
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In order to ensure that instant payments are available as an option in an increasing number of payment scenarios, as of 1 February 2024, payment service providers will be required to provide their customers with the option of making instant payments using single data entry solutions (e.g. QR code). The technical specifications of the single data entry solutions are set out in the Annex to the MNB Decree. In order to promote the wider uptake of payment solutions based on requests for payment, as of 1 February 2024 it will become mandatory for payment service providers to execute instant payments initiated by a request for payment. In addition, new customer information rules will be introduced to ensure that the parties involved in instant payments are given clear confirmation of the successful completion of the transaction. Services reliant on instant payments will allow customers to pay quickly and conveniently in most payment scenarios, such as in physical settings, online, between private individuals, and in the case of bill payments, by bank transfer.

#	Recommendation	Priority
27.	Incentivise banks to introduce package pricing in retail payment services	↑ 1

A wider uptake of services reliant on instant payments will be achieved only if instant payment solutions are not priced at a competitive disadvantage to cash and cards. From 2023, payments using single data entry solutions (e.g. a QR code) or a request for payment must be free of charge for all customers. As a result, there is no direct transaction cost associated with payments using a single data entry solution.

1.4.3. Convenient credit applications online		
28.	Simpler and faster online contracting and e-signature	2

On 22 June 2023, Act XLVI of 2023 was promulgated, amending certain laws on economic, asset management and postal affairs; by amending provisions of the Civil Code, the E-Administration Act, the Act on Legal Practice and Act XCIX of 2021 on intermediary regulations concerning the state of emergency, the Act introduces hereto missing provisions concerning electronic private deeds and provides a longer-term legal basis for the contractual practices already followed by financial service providers and first introduced by the aforementioned emergency legislation. It clarifies that electronic documents containing a legal declaration applicable to a service provided by an organisation subject to Section 39(1) of Act CXXXIX of 2013 on the Magyar Nemzeti Bank also classify as electronic private deeds of full probative force, provided that the declarant, identified by the organisation via an audited electronic telecommunications device (as defined in the decree issued pursuant to the authorisation set out in Section 77(3)(d) of the MLA) has attached to such declaration their simple electronic signature (in which the date and time of signing is also captured).

35.	Increase the share of mortgage and consumer loans granted through digital channels	2
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Digital administration and product application solutions are constantly evolving. An increase in the role of digital channels in the sales of consumer loans may be facilitated by the fact that an amendment of Government Decree No 465/2017 (XII. 28.) on the detailed rules of the tax administration procedure is in the pipeline, further expanding the scope of employment data available in electronically downloadable pay statements, providing additional information inputs for the credit approval process.

1.5. Capital market expansion		
1.5.1. Get successful domestic companies listed		
42.	Provide incentives for listing of banks	3

In February 2022, the MNB issued a recommendation to encourage Hungarian banks and insurance companies to list on the Budapest Stock Exchange. Since April, the central bank has considered it good practice for the institutions concerned to list at least one series of ordinary shares on the BSE within two years in the case of acquisitions and transfers of holdings. This strengthens the transparency of financial institutions and thus protects depositors, investors and consumers.

As a result of the recommendation, in November 2022 Vienna Insurance Group, the leading insurance company in the Central and Eastern European region, became the latest Premium category issuer on the Budapest Stock Exchange. Now present on the Hungarian capital market following this launch, the international group has been active in Hungary since 1996 and is also listed on the Vienna and the Prague Stock Exchanges. Vienna Insurance Group listed its 128,000,000 ordinary shares on the Budapest Stock Exchange in what is referred to as a cross listing, increasing the market capitalisation of the Hungarian stock exchange by more than HUF 1,300 billion.

#	Recommendation	Priority
43.	Establish a modern corporate bond market	3

On 14 December 2021, the Monetary Council of the MNB decided to close its Bond Funding for Growth Scheme (BGS), so the central bank has not purchased any new corporate bonds since the HUF 1,550 billion limit of the Scheme was exhausted in April 2022. Launched in 2019 as a result of a strategic decision to develop capital markets, the Scheme aimed to improve the efficiency of monetary policy transmission by increasing liquidity in the corporate bond market. This objective was served successfully by the BGS throughout its existence. Prior to the launch of the Scheme, borrowing by Hungarian companies was dominated by bank loans, with only an insignificant portion of them having access to bond issuing as an alternative means for raising funds. As a result, the Hungarian corporate bond market was equal to only 1 per cent of GDP. Thanks to the BGS, this figure increased to 5.5 per cent. By the end of April 2022, 89 issuers had issued a total of 114 bond series under the Scheme, raising HUF 2,859 billion; the central bank's purchases totalled HUF 1,550 billion. The Scheme has had a significant positive impact on investor appetite. The dynamic growth of the Hungarian corporate bond market has been outstanding if compared with other markets across the region, transforming Hungary from a laggard among the Visegrád countries before the launch of the BGS to the frontrunner in the region. Furthermore, the convergence of the Hungarian corporate bond market has been accompanied by increasing demand specifically for bonds for green investment purposes. Until the last issuance under the BGS, a total of 20 issuers' green bonds with a nominal value of HUF 539 billion were placed on the market under the Scheme. This accounted for around 19 per cent of the bond issuance facilitated by the BGS.

1.5.2. Promote an environment to support the development of the capital market		
49.	Improve access to digital platforms	2

Regulation (EU) 2022/858 of the European Parliament and of the Council on a pilot regime for market infrastructures based on distributed ledger technology has been in force in full since 23 March 2023 and, accordingly, Act CXXXVIII of 2007 on Investment Firms and Commodity Dealers, and on the Regulations Governing Their Activities has been amended to include rules on the tokenisation of financial instruments. The tokenisation of financial instruments is expected to create opportunities to improve efficiency in the trading and post-trading processes and may contribute to the development of a secondary market for these instruments.

Expected to enter into force in the third quarter of 2023 and become fully applicable 18 months thereafter, the first cross-jurisdictional single EU regulatory and supervisory framework for crypto-assets, the MiCA, will cover a significant proportion of crypto-assets issued and crypto-asset services provided in the European Union, creating legal certainty in the crypto-asset market and seeking to ensure consumer and investor protection and market integrity, as well as reducing risks to financial stability.

1.6. Improve the competitiveness of the insurance and fund sectors		
51.	Increase the product value to customers in non-life insurance	3

To increase customer value in the non-life insurance sector, the MNB aims to develop a framework for a higher standard of services. As a first step, the concept of the Certified Consumer-Friendly Home Insurance (MFO) was developed, which sets minimum standards for home insurance product terms and conditions, as well as certain matters of procedure. There are currently 11 competing MFO products in the Certified Consumer-Friendly Home Insurance scheme, with more MFO products expected to be launched in 2023. This is also supported by improvements to the process of switching insurers (see Section 52).

In order to increase customer value, the MNB also launched a thematic audit into claims settlement in order to check compliance with the new provisions on claims settlement in the Act on the Business of Insurance, which entered into force on 26 June 2021. The overall picture was found to be positive, with claims settlement basically being appropriate, but there were differences in adaptation to the new legal environment, preparedness and implementation. Based on the findings of the inspection, the MNB found it necessary to develop a set of practical expectations in support of the statutory claims settlement rules, which will assist insurers in their claims settlement procedures, facilitate an understanding of the legislation and clarify the structure of a claims settlement process the MNB considers to be good practice.

#	Recommendation	Priority
52.	Provide legal and technological means to facilitate changing insurers	1

In response to weak competition on the home insurance market, a government decree in effect as of 30 April 2023 regulates, among other things, the ability to cancel policies and the conditions for presenting home insurance policies in the mortgage lending process. The legislator introduced the possibility of cancellation in March as one additional date of cancellation besides the insurance anniversary date. This provides customers with one more exit point if they find themselves dissatisfied with the premiums or the services of their home insurance contract. Furthermore, in the case of home insurance policies taken out with a mortgage loan from a bank, these policies tended to be products of the bank's strategic partner insurer; the government decree therefore stipulates that customers must be presented with the MFO calculator available on the MNB website when taking out a mortgage loan, thus facilitating a comparison of the diverse offers and also stimulating competition in the banking sales channel as well. The MNB has amended the MFO Call for Proposals, one stipulation of which is that the quarterly cancellation option is no longer a requirement from 1 March 2023. This is due to the fact that the campaign introduced by the government decree provides customers with an appropriate, focused option for cancellation, which is sufficiently consumer-friendly. By amending the conditions of its Call for Proposals in this manner, the MNB has helped ensure a more concentrated implementation of the cancellation campaign periods provided for in the government decree.

54.	Develop the digital links between the insurance and banking sectors	3
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The MNB's Blockchain Project is the first to be based on distributed ledger technology (DLT), the use of which is considered a revolutionary innovation not only in this country but also globally. The aim of this project is to facilitate the underwriting, registration and certification of mortgage-related insurance, primarily home insurance, solve decades-old data communication problems between banks and insurers, and reduce the administrative burden on consumers caused by the administrative and information flow difficulties between these two types of institutions. In preparation, the MNB produced the specification of the IT requirements for the development. The project is in the IT development and testing phase, following the successful completion of the relevant public procurement procedure, and there are regular discussions between the participating credit institutions, insurers and the MNB.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started 	Changed to Partly implemented 	Changed to Fully implemented 	

2 Activation of household savings

The implementation, weighted by priority, of the recommendations in the Activation of household savings chapter rose from 31 per cent in December 2021 to 37 per cent. In 1 of the 9 points of the chapter the degree of implementation increased, and minor progress was achieved in another 1 recommendation. Overall, 5 of the 9 recommendations are now in partly implemented status.

Progress was made in transforming the product structure of retail government bonds, increasing maturities and channelling cash into government bond purchases. The altered economic environment in 2022 has prompted the ÁKK to revise its retail strategy, including a transforming and rationalising of the product range in order to meet the needs of potential and existing customers. The decline in household cash holdings since the second half of 2022 could also support household purchases of government bonds, but further improvements are needed to channel cash more efficiently. In June 2023, the Government took a number of measures to shift some savings into government securities (the introduction of a 13 per cent social contribution tax on many forms of investment other than government securities, and the requirement for banks to send out letters raising awareness of the yield advantage of government securities over deposits); the effects of these measures will first emerge in the second half of the year.

The greatest contribution to activating domestic savings was made by the Hungarian Government Security Plus (MÁP+) bonds, introduced in 2019. These offered attractive investment opportunities for those wishing to make savings, and thus they were able to increase the ratio of debt held by residents within government debt. However, 2022 brought a turning point: uncertainty surrounding the outbreak of the Russia–Ukraine war and a high inflationary environment prompted retail investors to revise their government bond portfolios. The inflation-tracking Premium Hungarian Government Bond (PMÁP) became the most popular product, while interest in MÁP+ declined significantly. The stock of PMÁP doubled in 2022, reaching HUF 5,300 billion at the end of March 2023. Overall, households provide stable financing for the state even in the changed economic environment.

#	Recommendation	Priority
2.1.	Strengthening retail government debt financing	
1.	Increase maturity of bonds and redesign the product structure	3

On 8 April 2019, the ÁKK announced the transforming of the retail government bond portfolio, one of the most important elements of which was the introduction of the Hungarian Government Security Plus (MÁP+) in June 2019. In response to the changed economic environment, the revised retail government bond strategy was presented in December 2022, with the main objectives of developing a product range based on the needs of retail investors and creating efficient sales channels to increase and diversify the customer base. Within this context, the ÁKK intends to develop a product range based on a portfolio approach and three basic product types, while also retaining its other targeted products (Baby Bond, Euro Hungarian Government Bond, Bonus Hungarian Government Bond). The first product type is that of a fixed-rate security, to be introduced once inflation has peaked, in the second half or towards the end of 2023. The new product will have higher interest rates than MÁP+, but less favourable redemption conditions. MÁP+ will be retained in the product range but it will be repriced, while the One-Year Hungarian Government Bond will be phased out in order to streamline the product offering. The third component will be the currently most popular instrument, the inflation-tracking Premium Hungarian Government Bond (PMÁP). The increase in the maturities of the latest PMÁP series (from 3 and 5 years to 4 and 7 years, respectively), as well as the surge in sales in recent months, has resulted in the average remaining maturity of the stock of retail government bonds gradually increasing since September 2022, a positive development from a sovereign debt financing perspective. In June 2023, several government measures were taken to shift some of the savings into government bonds. On the one hand, in addition to the existing 15 per cent interest tax, a 13 per cent social contribution tax will be introduced from 1 July 2023 on the returns earned by households on certain types of savings, which will not apply to Hungarian government securities, shares, long-term investment accounts and real estate funds. On the other hand, banks are now required to send letters to their deposit holders in the fourth quarter of 2023, in which they must explain to them the difference between the returns available from government securities versus deposits. The impact of these measures will become apparent only in the second half of the year, when it will be possible to evaluate them in greater detail.

2.	Encourage the transition from cash savings to government securities	3
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Channelling the cash holdings of the Hungarian population, which are high in an international comparison, into government securities is a positive process in several respects (e.g. it helps reduce reliance on foreign sources of funding and improves the efficiency of monetary transmission). At the beginning of 2022, household cash holdings increased significantly due to the personal income tax rebate and the accumulation of reserves at the outbreak of the Russia–Ukraine war, but they started to decline gradually from the second half of 2022. This is due to the fact that, in the altered yield environment, the returns on government bonds rose relative to cash, and we believe that the decline in the latter may have encouraged the purchasing of government bonds. At the post offices of Magyar Posta and the sales points of the Hungarian State Treasury, customers can conduct government securities transactions with cash free of charge, which facilitates the efficient channeling of cash. Further expansion of sales channels and the introduction of new incentives may be needed to maintain and accelerate the positive trend that started last year.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started	Changed to Partly implemented	Changed to Fully implemented	

3 SME strategy


Weighted by priority, 48 per cent of the recommendations included in the chapter on SME strategy had been implemented by June 2023, compared to 44 per cent recorded as of the end of 2021.

Among the measures to help SMEs increase their productivity, it is worth mentioning that the legislation on local business tax already allows, in principle, offsetting capital investment against local business tax, but few municipalities apply this in practice. Progress concerning the recommendations to improve productivity and economies of scale is indicated by the fact that the M&A market was very active in 2021-2022, with the amount and number of M&A deals reaching multi-year records.

In recent years, the public policy agency IFKA Public Benefit Nonprofit Ltd. (IFKA) has acted as a policy intermediary and integrator, coordinating and communicating to businesses the terms for applying for development funding. IFKA also already operates a nationwide network of advisors and mentors through the Advisory Voucher Programme launched in 2023. Several publicly-funded programmes and platforms support SMEs in accessing business development services, including the website vali.hu, which is a platform supporting the smallest enterprises. In the context of networking, support for clusters is a horizontal principle in the selection of projects for development schemes. As a measure to support young people and women to become entrepreneurs, the National Employment Service has been running a scheme for years in which it supports unemployed people in becoming self-employed entrepreneur.

The National Digitalisation Strategy 2030 (NDS) published in December 2022 sets out guidelines for the improvement of the digital preparedness of the SME sector, which can also have positive results on the innovation competence of businesses. The NDS aims to make technologies that support data-driven operations available to SMEs. To this end, the Strategy calls for specific investments in digital tools as well as programmes aimed at developing the digital competences of businesses and employees. The NDS also emphasises the further development of digital infrastructures in Hungary (Gigabit Hungary 2030, 5G network expansion), which will provide high-quality connectability for businesses as well.

As regards corporate acceleration, the state-owned company MVM has been running its MVM Edison competition series for years and supports competition winner start-ups with incubation and mentoring, providing seed funding for the best ideas. Such initiatives have been launched mainly in the technology & telecommunications sector. As a financial investor and a member of the MFB Group, Hiventures has developed its startup investment portfolio by channeling private capital in addition to EU and public funds, and now offers diversified startup and incubation services.

#	Recommendation	Priority
3.1.	Increasing the productivity of small and medium-sized enterprises through investment	
3.	Deductibility of investments from the local business tax base	 2

Following the amendment of the Act on Local Business Tax, municipalities have had the right since 2019 to grant tax exemption or tax relief by decree for an amount equal to all or part of the capital expenditure of companies in the tax year. The municipality may also allow a company to access such tax relief in subsequent year(s) if the local business tax base of the company in question is less than the amount of the relief calculated based on the CAPEX figure.

In practice, few municipalities take advantage of the opportunity to grant local business tax credit. There have been no measures adopted to provide a uniform regulation on deducting for capital expenditures nor granting tax relief against the local business tax base.

4.	Provide assistance for SME wage increases subject to investment commitments	3
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The 'Road to the Future' programme, launched in 2019 by the National Employment Fund, was followed in 2021 by the 'Programme to Increase Labour Intensity'. The two schemes combined provided nearly HUF 9.5 billion for capacity building investments by SMEs, and their terms stipulated the retention of specific employee headcounts (including the workers recruited as a result of the investment project) as well as a 10 per cent annual increase in the wage bill over 3 years.

3.2.	Increase productivity in the SME segment through greater economies of scale	
5.	Support acquisitions and mergers	3

Entering into force in 2023, the amendments to the Competition Act (Act LVII of 1996 on the Prohibition of Unfair and Restrictive Market Practices) have increased the thresholds for the notification of economic concentrations to the Hungarian Competition Authority (GVH). The notification threshold for a group of companies involved in a merger has been modified from HUF 15 billion to HUF 20 billion, taking into account the effects of inflation since initially setting the thresholds in 2017. The measure could result in a 10-15 per cent fall in the number of notifications to the GVH related to mergers and acquisitions, and the number of administrative investigations.

The Hungarian M&A market was much more active in the period 2021-2022 than in previous years. According to publicly available data, there were 132 M&A transactions in 2021 and 137 in 2022, while the estimated market size increased from USD 4.64 billion to USD 5.88 billion. In 2021 and 2022, 40 per cent and 42 per cent of all transactions, respectively, were made up of deals with Hungarian entities on both sides, while the share of transactions with foreign buyers and Hungarian sellers or Hungarian buyers and foreign sellers both represented around 30 per cent of the total number of M&A deals. Hungarian venture capital and private equity investment activity was also dynamic in 2022, with a total of 37 M&A transactions (EY M&A Transaction Barometer 2022).


#	Recommendation	Priority
3.3.	Improve the productivity of small and medium-sized enterprises through targeted measures and networking	
8.	Increase the innovation management capacity of SMEs by establishing a non-profit advisory centre	1

As an integrator of business development services, IFKA offered several programmes including investment development support and business development services, channelling EU and national development funds (Future Hungarian Multinationals Programme, Modern Benchmark Factory Programme, National Green Champions, Evolution – Renewable Enterprises Programme in aid of a generational change, Supplier Development Programme, Healthcare Industry Programme, Food Industry Supplier Development Programme). Also a government initiative, vali.hu provides general business information for small and start-up companies, and runs programmes such as the National Entrepreneurial Mentoring Programme (mentoring 500 businesses, providing 1,500 financial advice sessions) and the Modern Enterprises Programme (vallalkozzdigitalisan.hu), which provides business development advisory services for SMEs, in addition to promoting IFKA schemes.

The National Digitalisation Strategy 2030 (NDS) approved in December 2022 sets out welcome guidelines for the improvement of the digital capabilities of businesses, which can also have positive results on the innovation capabilities of SMEs. In the field of data-driven operations and value creation, the NDS aims to provide SMEs with access to, and use of, technologies such as big data, artificial intelligence (creation of an Artificial Intelligence Innovation Centre) and fin-tech services.

9.	Support the operation of clusters	2
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In both the 2014-2020 and 2021-2027 operational programme structures, GINOP and GINOP Plus give preference to companies applying as accredited cluster members in the awarding of funding. Cluster policy supported the creation of cluster-type cooperation with significant funds in the 2007-2013 programming cycle. The portal klaszterfejlesztes.hu, maintained by the Ministry of Finance, names a total of 27 clusters, while the database lists a more than additional 180 clusters.

10.	Support the emergence of clusters and other forms of networks	 1
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In a positive development underpinning the implementation of the recommendation, the new Industrial Strategy 2030 currently taking shape sets out several directions for the development and strengthening of industry clusters, including focusing competitiveness enhancements around large integrator companies in the Hungarian food and agribusiness sectors. The Future Hungarian Multinationals Programme, which is designed to support Hungarian SMEs with growth potential, names as a specific target group the supplier companies linked to a single major integrator with a cooperation agreement.

12.	Support the operation of mentor networks	1
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IFKA launched its Advisory Voucher Programme in 2023, which helps the businesses participating in the programme access business and expert advisory services.




3.4.	An inspiring environment for entrepreneurship	
13.	Provide preferential grant application and borrowing options for young and female entrepreneurs	 2

Measures supporting this target group include a scheme of the National Employment Service, which it supports unemployed people in becoming self-employed entrepreneur and has had several iterations since its launch in 2017. The scheme provides (up to) six months of the current gross minimum wage as a non-reimbursable grant, disbursed periodically. Unemployed people planning to set up a business can apply for support up to the amount allocated for each county. The administration needed in order to participate in the scheme is simple, which is very helpful for persons new to self-employment. To be eligible, the person considering setting up self-employment must have been registered as unemployed for at least 1 month, must have the qualifications and licences required for the intended self-employment activity and must have registered their business before applying for the aid.

#	Recommendation	Priority
15.	Increase the number of accelerators sponsored by large corporations	 1
<p>Among state-owned companies, MVM has been running its Edison Startup competition series since 2016, jointly with MVM Smart Future Zrt., supporting the competition winner start-ups with incubation and mentoring, and providing seed funding for the best ideas. The programme also received significant promotion. Such initiatives have been launched mainly by technology & telecommunications companies in recent years. As for financial investors, MFB Group member Hiventures has developed its startup investment portfolio by channeling private capital in addition to EU and government funds, and it now offers diversified startup and incubation services.</p>		
17.	Organise and support relevant startup conferences and meetups	1
<p>Startup and Innovation Day, an event series organised by Hiventures, has become the largest international platform showcasing startups and innovation in the region, with financial and professional investors from Europe and beyond. In 2022, the Startup Safari backed by global companies such as Microsoft, Google and Morgan Stanley was held in Budapest. In addition, several Hungarian academic and professional institutions (e.g. the Hungarian Association for Innovation) are active in this field.</p>		
3.5. Qualified human resources in small businesses		
21.	Provide digital courses conditional on achievements	1
<p>The National Digitalisation Strategy 2030 (NDS) calls for measures to support the transfer of modern digital skills in the field of education, especially in vocational education and training, and to align them with the needs of the labour market. In the development and measurement of competences, the DigComp system is intended to introduce a multi-level, differentiated training and certification system (DigComp levels). The planned competency-based DigComp hierarchy is to comprise elements such as training and retraining of workers capable of applying Industry 4.0 technologies, big data and data asset management at higher levels, artificial intelligence and sector-specific skills (e.g. Digital Academy for Agriculture). In addition, there is a specific objective to support digital training at companies.</p>		
3.6. Support an SME sector that is competitive in modern times		
22.	Make company websites mandatory	3
<p>In 2020, nearly two-thirds (63 per cent) of Hungarian businesses had a website, while on average 77 per cent of businesses did so in the European Union. Hungary is still in the bottom third of the EU ranking in this respect, lagging significantly behind even the other countries in the region. Mandating that businesses operate a website is not on the agenda.</p>		
23.	Develop digital infrastructure in rural areas	2
<p>Digital infrastructure in Hungary may be considered mature in an international comparison, and is above the EU average. However, according to the National Digitalisation Strategy 2030 (NDS), 856,000 Hungarian households (21 per cent of the total) do not have access to high-speed networks. In addition, the NDS is also intended to prepare the Hungarian infrastructure for the expected intensified use of 5G networks in the future; currently, 1,800 out of 3,200 municipalities do not have the technological capacity to support the backhaul network. For the next quantum leap of the SuperFast Internet Programme, the NDS is formulating the implementation of the 'Gigabit Hungary 2030' national network development programme to ensure that by 2030, internet connections with at least 1 Gbps symmetrical bandwidth are available at all locations. This measure is intended to ensure that 70 per cent of business locations have internet access of at least 1 Gbps bandwidth by 2025 and 100 per cent have access by 2030. The necessary funds for the launch and implementation of these development projects have been allocated under priority axis 3 of the Digital Renewal Operational Programme, with a budget of nearly EUR 80 billion. For the planning period up to 2030, funds from the CEF2 and InvestEU programmes will be available for network development, in addition to the Digital Renewal Operational Programme Plus for the 2021-2027 cycle as well as government funding.</p>		

#	Recommendation	Priority
24.	Tighten rules for the management of ICT risks	2
<p>Hungary has adopted the cybersecurity certification scheme developed by the European Union by designating the Supervisory Authority for Regulatory Affairs as the national cybersecurity certification authority from 1 January 2022; it will also seek to raise awareness of cyberspace threats and safe practices in its communications intended for the wider public.</p> <p>One of the Digital Economy objectives of the National Digitalisation Strategy 2030 is to extend the coverage of the Modern Enterprises Programme, which is intended to raise awareness among businesses in regard to cybersecurity (e.g. on the use of ICT tools and solutions with a security certificate).</p>		
25.	Establish the John von Neumann Fund to support firms' ICT developments	2
<p>The resource map for supporting the digital transformation of the domestic SME sector is summarised in the draft National Digitalisation Strategy 2030. Dedicated resources will be available under Chapters 1.1 and 1.2 of the Digital Renewal Operational Programme Plus (DIMOP Plus) and indirectly under the Economic Development and Innovation Operational Programme Plus (GINOP Plus) within the operational programme structure of the years 2021-2027. In the DIMOP calls for applications for 2021-2022, HUF 14 billion in development funds was announced to support the digital development of small and medium-sized enterprises. The DIMOP development budget for the period 2023-2024 allocates HUF 103 billion to support the digital development of SMEs, of which the schemes under heading 1.2.3 provide HUF 46 billion in the form of loans and guarantees to support the digitalisation of businesses.</p> <p>Neumann János Nonprofit Kft. performs primarily social and communication tasks. The Neumann Technology Platform is involved in several thematic collaborations (Artificial Intelligence Coalition, 5G Coalition, Blockchain Coalition, Drone Coalition) to promote and raise awareness of digital technologies.</p>		
26.	Give preference to knowledge-intensive industrial services in EU aid criteria	3
<p>In the 2021-2027 GINOP Plus calls, knowledge-intensive specialisation will continue to be a horizontal principle in calls for R&D and innovation, based on the National Smart Specialisation S3 strategic principles. A knowledge- and technology-intensive funding focus is set out in the National Digitalisation Strategy 2030 (NDS) DG II 'Targeted and innovative development of the ICT sector and ecosystem' set of measures concerning the allocation of resources in the Digital Renewal Operational Programme. The NDS also formulates the sectoral focus of R&D&I funding horizontally, referring back to the S3 strategy, while supporting projects aimed at the development and exploitation of advanced digital technologies (blockchain, drone, IoT, artificial intelligence, quantum computing) in Hungary (development of infrastructure for Science Park and National Laboratories, support for R&D&I activities of digital technology companies, attracting AI research and development centres to Hungary).</p>		

Legend

Not started	Started	Partly implemented	Fully implemented
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4 Foreign trade

The priority-weighted implementation of the recommendations in the Foreign trade chapter rose from 35 per cent in the 2022 Competitiveness Mirror to 39 per cent.

The Industrial Strategy 2030 concept, which is currently in the planning phase, continues to consider vehicle manufacturing as the flagship of Hungarian industry, and sees the promotion of domestic battery production and the expansion of export capacities as integrally linked to this process. The industrial strategy identifies a horizontal development direction of enabling the companies that form the domestic supply base to move up the value chain and produce higher added value. A related policy within the strategy is the strengthening of the electrical equipment and component manufacturing sector in the transition to electromobility. The emerging Industrial Strategy 2030 identifies as priority sectors the food industry, with its high domestic embeddedness; a knowledge-intensive healthcare industry relying on Hungarian companies, and the ICT sector, which all have high export potential. The Industrial Strategy 2030 is currently in the planning phase; its resource allocation and the timing of its implementation are not yet known.

Since the previous Competitiveness Mirror was published, a number of large FDI investments have been announced, with a particular focus on the battery manufacturing plants of Far Eastern parent companies. Experience so far suggests that the hosting economy can best exploit the benefits of FDI if local operation of the investor company is integrated into the national economy through the supply chain and high value-added processes in the value chain framework (R&D, marketing) will be progressively implemented into it. In a sign of expanding Sino-Hungarian financial relations, China Construction Bank has set up an independent representative office in Budapest, following the 2 major Chinese banks already present in Hungary. The MNB's Renminbi Programme initiative helps deepen bilateral financial relations.

In line with the directions set out in the Competitiveness Programme with regard to foreign trade and the economic structure, in period 2021-2022 the Future Hungarian Multinationals Programme supported, among other things, the internationalisation of Hungarian businesses and the strengthening and market diversification of domestic suppliers. The Foreign Market Growth Support Programme and the Foreign Market Access Support Programme run by the Ministry of Foreign Affairs and Trade (KKM) and the HEPA Export Promotion Agency also supported SME access to foreign markets. In the implementation of the International Development Cooperation 2025 (IDC) strategy, the Ministry of Foreign Affairs and Trade carried out several programmes to support technology-intensive and service-exporting Hungarian businesses in the years 2021-2022. Hungarian companies have been involved in water, health and agricultural development projects in the Balkans and in developing countries (Kenya, Uganda).

#	Recommendation	Priority
4.1.	Increase the activity of Hungarian small and medium-sized enterprises abroad	
1.	Strengthen export of services (besides export of goods)	3

In the implementation of the International Development Cooperation 2025 (IDC) strategy, the Ministry of Foreign Affairs and Trade carried out several programmes to support technology-intensive and service-exporting Hungarian businesses. Under the programme, some USD 896 million (approximately HUF 265 billion) worth of development projects were implemented with the participation of Hungarian enterprises in the period 2020-2021. In the framework of EU integration support for the development of the Western Balkans, the Ministry of Foreign Affairs and Trade supported the implementation of water management, health and agricultural projects in Bosnia and Herzegovina, Albania and Montenegro with the participation of Hungarian businesses. As a positive signal of their involvement in knowledge-intensive exports, Hungarian companies have participated in development cooperation projects in Kenya and Uganda in fields such as the development of health services and the implementation of cybersecurity improvements in the financial sector; the project implemented in Uganda was worth HUF 1.5 billion.

2.	Exploit the benefits offered by China's Belt and Road Initiative	2
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Chinese companies decided to make large FDI investments in Hungary. The most significant of these is the EUR 7.3 billion investment by battery manufacturer giant company, CATL in Debrecen. CATL plans to build its largest European factory in Hungary. The logistics capacities operated by Far Eastern entities in Hungary will be expanded via a EUR 27 billion project by the Chinese corporate group CECZ, to be built in the E-Commerce Industrial and Logistics Park near Vác. Experience so far suggests that the hosting economy can best exploit the benefits of FDI if local operation of the investor company is integrated into the national economy through the supply chain and high value-added processes in the value chain framework (R&D, marketing) will be progressively implemented into it.

In a further sign of the strengthening of bilateral economic relations, the Bank of China, the China Development Bank and the China Construction Bank are all among the major Chinese banks that announced in April 2023 their intentions of establishing representative offices in Hungary. The MNB is an active partner in strengthening Sino-Hungarian financial relations through its Renminbi Programme.

Hungary has joined the Huawei SEEDs Scholarship Programme, which was launched in 2021 and involves 12 European countries. Among the Hungarian universities, the University of Pécs, the István Széchenyi University of Győr and Óbuda University had previously joined it, contributing nearly 30 student projects.

3.	Support the entry into fast-growing new markets with stable institutions	1
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In the years 2021-2022, the Ministry of Foreign Affairs and Trade and the HEPA Export Promotion Agency implemented the Foreign Market Growth Support Programme, which aids the expansion and multinationalisation of Hungarian companies abroad with a budget of HUF 10 billion, and the Foreign Market Access Support Programme, which helps Hungarian companies enter export markets.

4.2.	Utilise the knowledge received with FDI	
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7.	Channel public development funds to manufacturing sectors that are knowledge-intensive or well embedded domestically	2
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The priority sectors of the emerging Industrial Strategy 2030 include supporting knowledge-intensive sectors with a high domestic embeddedness and reliant on Hungarian businesses, such as the healthcare industry (pharmaceuticals and medical devices) and the ICT sector. The resource allocation and the timing of the implementation of the Industrial Strategy 2030 are not yet known.

The Future Hungarian Multinationals Programme aimed at supporting Hungarian SMEs with growth potential and a readiness to enter foreign markets – the measure intended to support channelling development funds towards embedded market participants. Under the GINOP Plus 1.2.1-2021 scheme, HUF 100 billion of funding was made available to support the implementation of development projects. The Széchenyi Card programme was expanded to include schemes supporting agriculture as an embedded sector (Agricultural Széchenyi Investment Loan Max+, Agricultural Széchenyi Card).

#	Recommendation	Priority
8.	Provide incentives for strongly subsidised enterprises to use Hungarian suppliers	3

The highly popular Future Hungarian Multinationals Programme also supported the strengthening of SMEs supplying to international value chains, through the development of the capacities and competences of businesses, and the expansion of the market linkages of the suppliers. Currently in the planning phase, the 'Industrial Strategy 2030' also formulates recommendations in support of achieving this objective. In the automotive industry, it is a development aim to ensure that Hungarian suppliers can move up the value chain and produce higher value-added products. In connection with battery production and the transition of the automotive industry to electromobility, strengthening the capacities and competences of the Hungarian electrical equipment and component manufacturing industry is also an economic development priority in support of delivering on the recommendation.

Legend


Not started	Started	Partly implemented	Fully implemented
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5 Labour market

Weighted by priority, the implementation status of the recommendations in the Labour market chapter rose from 43 per cent in December 2021 to 46 per cent. Since the publication of the Competitiveness Programme, the implementation of 73 per cent of the labour market-related recommendations has commenced. Since the publication of the 2021 Competitiveness Mirror, there have been status changes for 2 recommendations, concerning atypical work and adult learning. In addition, new measures were adopted in a further 8 recommendations, but had no effect on the status of the implementation of the relevant items.

In the recent period, significant progress has been made in atypical work, with the entry into force of a teleworking package in the summer of 2022, which introduced flexible rules on teleworking and its conditions. Wages have continued to rise in several professions in the public sector over the period, and further salary increases are expected, but there remains considerable scope for wage increases in some professions (e.g. teachers, healthcare workers). The employment of more vulnerable groups in the labour market is currently supported by several programmes (subsidies for gaining work experience, 'Labour support to companies' scheme) through wage subsidies to businesses. To alleviate the shortage of labour, the government intends to further encourage the employment of foreign guest workers by simplifying their employment and further updating the related regulations.

From 2022, vocational and qualifying examinations in vocational training and adult education will only be available at independent, accredited examination centres. Under new arrangements, vocational education will be separate from the organisation of examinations. Within the framework of the Recovery and Resilience Facility (RRF), it is planned to further develop the examination system in the future with the centralised network with nationwide coverage of the National Central Accredited Examination Centre (OKAV), which is equipped with state-of-the-art facilities and will provide the basic conditions for high-quality professional examinations for professions and qualifications for which no accredited examination centre is available. Also in the framework of the RRF, Individual Learning Accounts (ILA) will be introduced, which will allow the involvement of several stakeholders in the financing of adult learning; a national micro-certification system will also be introduced in order to integrate short courses into a single framework. A central element of the National Digitalisation Strategy is the rapid and systematic introduction of the European Digital Competence Framework for Citizens (DigComp), on which a number of training and development programmes will be based in the decade ahead. The Start scheme for young entrepreneurs, announced in 2022 under the National Talent Programme, has come to an end, while Phase II of the GINOP programme to support training at the workplace has been launched.

#	Recommendation	Priority
5.1.	Activate labour market reserves for the private sector	
4.	Provide additional incentives for atypical forms of employment to encourage capacity building and organisational development	 3

The teleworking package entering into force on 1 June 2022 has the potential to help increase the take-up of home working, which is categorised as an atypical form of employment. The new rules define teleworking not solely as working outside the employer's premises all the time; the definition has been extended to include arrangements where the employee works partly at and partly outside the workplace, for example at home. Furthermore, teleworking can now be introduced in all positions where it is feasible. The legislative package provides for flexible rules on teleworking, for example by allowing customised agreements between employers and employees on remote working. In addition, health and safety and work equipment requirements will be simplified, and employers will be able to pay employees a flat payment to cover utilities costs, which is free from personal income tax up to 10 per cent of the minimum wage (HUF 23,200 per month in 2023).

5.2.	Activate labour market reserves via tax regime instruments	
11.	Promote targeted work time reduction combined with full or partial social contribution tax compensation and/or public wage compensation in vulnerable groups	1

Among the more vulnerable groups on the labour market, young people and those with low educational attainment will continue to receive assistance with finding work under various programmes. Through the subsidies available for work experience arrangements, employers can receive a 100 per cent wage subsidy for 90 days if they employ a qualified young person under 30 years of age or a disadvantaged jobseeker (long-term unemployed, career starter, childcare allowance recipient, person leaving fostered employment, individual over 50 years of age, person with low educational qualifications). The aid is also available for part-time employment. In addition, the 'Labour support to companies' scheme also helps companies hire applicants under 25 years of age or those who have been registered jobseekers for at least 1 month, covering 50 per cent of the wage costs for up to 6 months.

5.4.	Incentives for Hungarians living abroad to return home	
14.	Increase wages paid in high-demand jobs in the public sector	3


As of 1 January 2023, a further 11 per cent increase was added to the series of salary rises for doctors; from July 2023, the basic wage of health professionals (nurses and non-medical health workers) will rise by 18 per cent. Wages for the latter are expected to rise further on 1 March 2024.

For teachers, from 1 January 2023, the sectoral professional bonus increased from 20 per cent to 32 per cent. In addition, on the basis of current information and plans, a significant increase in teachers' pay may start in 2023. According to the plans, wage increases this year may amount to at least 21 per cent, with retroactive effect to January, followed by wage increases relative to 2021 of 25 per cent in 2024 and 29 to 30 per cent in 2025. With these measures, the average teacher salary could reach 80 per cent of the average graduate salary by 2025.

In 2022, pay increases for law enforcement workers continued, in line with earlier and novel announcements. Pay for soldiers and police officers will continue to rise in two stages: first in September 2022 and then in January 2024, to varying degrees according to staff category.

16.	Support Hungarian companies' recruitment abroad by deducting expenditures and tax benefits	1
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No significant progress has been made in the recruitment of Hungarians living abroad in recent years; however, the Government has drawn up a new Bill intended to promote the employment of foreign guest workers. Now before Parliament, the Bill proposes to simplify the administration of residence permits for guest workers of the government's strategic partners, the recipients of priority investments in the national economy and employers participating in the Outstanding Exporter Partnership Programme. Guest workers would be granted a maximum 3-year residence permit without a permanent residence permit, and quotas would regulate the number of guest workers in specific sectors and professions. If adopted, the law is expected to enter into force on 1 November 2023.

#	Recommendation	Priority
5.5.	Strengthen the system of adult training	
18.	Introduce output criteria and independent examination centres in the system of adult education and training	 1
<p>From 2022, vocational and qualifying examinations in vocational training and adult education will only be available at independent, accredited examination centres. Under new arrangements, the accredited examination centres will enjoy a high degree of independence, and vocational education will be separate from the organisation of examinations. Individuals who have successfully completed their training with the relevant institution will receive a certificate, in possession of which they will need to find an accredited examination centre where they can take their examinations and receive a state-recognised certificate once they have passed. However, by the end of 2025, state-maintained educational establishments with a cooperation agreement that do not have a core state vocational education and training function will be able to organise vocational examinations without accreditation.</p> <p>Within the framework of the Recovery and Resilience Facility (RRF), it is planned to provide a centralised network with nationwide coverage of the National Central Accredited Examination Centre (OKAV), which is equipped with state-of-the-art facilities and will provide the basic conditions for high-quality professional examinations for professions and qualifications for which no accredited examination centre is available. In addition to the investment in construction and the purchase of equipment, the OKAV network will set up a database, which will be a systematic collection of practical and examination questions selected on the basis of the training and outcome requirements as well as the programme requirements of the relevant professions and qualifications for which examinations are available in the central building of the network, and will also depend on the equipment available in the examination rooms of the central building.</p>		
19.	Ensure that first qualifications may be obtained free of charge in adult training	2
<p>Under the Recovery and Resilience Facility (RRF), several actions are planned to focus on the development of lifelong learning. To increase the number of participants in adult learning, Hungary plans to introduce a system of Individual Learning Accounts (ILA). The ILA is an indirect funding instrument that brings together stakeholders (businesses, social partners, municipalities, churches, NGOs, individuals, the state) in the process of funding training and leaves it up to the individual to decide how to use the training support by selecting from a list of quality-assured training options. A single, national micro-credential scheme is being developed in connection with the introduction of the Individual Learning Accounts. For tertiary education, adult education and vocational education and training, short training contracts that do not otherwise give rise to a legal relationship can be administered under an adult learning relationship, so micro-credentials issued after completing the training will be harmonised with the adult learning/continuous adult learning system.</p>		
20.	Develop digital and language skills in senior generations	3
<p>A measure within the National Digitalisation Strategy is the rapid and systematic introduction of the European Digital Competence Framework for Citizens (DigComp). Once introduced, it will serve as the foundation for a targeted measure aimed at strengthening digital inclusion, launching digital literacy programmes for citizens, developing e-health competences, supporting IT and digitalisation training in vocational and adult education and training, and engaging older citizens in the digital world.</p> <p>Under the Recovery and Resilience Facility (RRF), the programme 'Improving the adaptability and productivity of employees and enterprises through labour force development' supports the improvement of workforce skills and training with the help of adult educators, thus contributing to the competitive growth of the Hungarian workforce. The HUF 70 billion programme will be managed jointly by the employment and adult education departments.</p>		

#	Recommendation	Priority
5.6.	Strengthen professional training	
22.	Introduce a mandatory further training minimum for companies	3

In the second phase of GINOP Plus 3.2.1-21, companies can apply for a total of HUF 15 billion in conditional non-reimbursable support for the implementation of on-the-job training. The amount of eligible funding is HUF 75 million for SMEs and HUF 150 million for large corporates. The aid intensity is 70 per cent for micro and small enterprises, 60 per cent for medium-sized businesses and 50 per cent for large corporates. Four types of training are eligible for support: soft skills, ICT, language and professional skills, with training delivered either in contact hours or online. A minimum of 3 people must be involved in the course, and the maximum eligible training cost per person is HUF 250,000, which may rise to HUF 350,000 if certain criteria are met (disadvantaged workers, free enterprise zone, priority sector, or ICT training). In addition to the costs of training, gross wages lost per hour of working time due to the participation of employees in training, as well as project management and project preparation activities, are also eligible.

5.7.	Strengthen entrepreneurial propensity	
25.	Incorporate entrepreneurship skills into public and tertiary education	2

The Start scheme for young entrepreneurs, announced in 2022 under the National Talent Programme, came to an end in the spring of 2023. The Start programme was first launched in spring 2022, and the second call was open until 20 December 2022, inviting young people aged between 18 and 35 to apply with technology-based service and product ideas. The organisers were looking for healthcare, social, community-oriented and green solutions. 20 teams took part in the 8-week mentoring and training period, and received a gross grant of HUF 3 million each to implement their ideas. Two competitors were granted an additional HUF 5 million each at the end of the training course to finance the launching of their business. The programme was organised by the National Talent Centre in collaboration with Design Terminal.

One of the planned actions of the National Digitalisation Strategy is the development, support and mentoring of higher-level citizenship and entrepreneurial competences.

26.	Run domestic and foreign media programmes for the promotion of entrepreneurship	1
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In March 2023 the MoneyWeek finance and entrepreneurship week for schools took place for the 9th time. The week-long programme focused on ‘Modern Money Management and Digital Security’ and ‘Think and Do Business’. In 2023, 570,000 textbooks and workbooks were made available jointly by the Money Compass Foundation and the Ministry of the Interior. Almost 144,000 students from more than 1,000 schools participated in the programme, with the help of 506 volunteers.

Legend

<i>Not started</i>	<i>Started</i>	<i>Partly implemented</i>	<i>Fully implemented</i>
<i>Changed to Started</i> ↑	<i>Changed to Partly implemented</i> ↑	<i>Changed to Fully implemented</i> ↑	

6 Regional convergence

Owing to progress in one of the recommendations in the Regional convergence chapter since December 2021, the priority-weighted implementation of our recommendations has risen from 40 per cent to 43 per cent. Of the 13 recommendations to promote the convergence of regions, 6 were implemented over the course of the last year and a half; while most of these were programmes with minor impacts or a continuation of programmes from previous periods, one recommendation was implemented in full. Overall, since the launch of the Competitiveness Programme in 2019, there has been some level of progress in 8 recommendations, representing 62 per cent of the total.

Support to increase labour market mobility has continued in the recent period, mainly by extending or relaunching previous programmes. Labour market mobility is supported through the development of the 'Travel allowance', 'Housing allowance' and 'Development of workers' hostels' programmes, and indirectly the relaunched 'From fostered employment to the private sector' programme. Labour mobility will be helped by an increase in the tax-free travel allowance amount and the introduction of nationwide and county passes. Significant amounts of EU and national funding could be available in the years ahead to support the development of rural areas and agriculture and help reduce inequalities. The development of rural settlements will continue to be supported by the Modern Cities Programme and the Hungarian Village Programme, as well as the 'Converging Settlements' programme, which now supports the convergence of the most disadvantaged settlements in 178 locations. In the past two years, the European Investment Bank has continued to provide significant amounts of funding to Hungary, including for energy, environment and SME investments.

#	Recommendation	Priority
6.1.	Encourage labour mobility	
1.	Support labour market mobility by providing incentives for commuting	3
	<p>Although the ‘Development of workers’ hostels’ programme is currently not open for applications, a number of workers’ hostels have been built recently with the support of the programme. The programme has been announced six times since 2017. So far, HUF 24 billion of funding has been used to build 61 workers’ hostels, providing nearly 8,500 places. As of January 2023, the tax-free travel allowance for commuting to work was doubled from HUF 15 to HUF 30, so employers can now reimburse their employees tax free up to a maximum of HUF 30. The minimum reimbursement amount (60 per cent of the maximum possible tax-free amount) has also doubled, from HUF 9 to HUF 18. The national and county passes introduced in May 2023 also help support commuting by making it easier to use long-distance rail and coach transport.</p> <p>The ‘Travel allowance’ scheme is available this year as well, from March to December, providing support for former jobseekers if they find a job located at a distance of up to 60 kms from their home. The travel allowance is equal to 5 per cent of the minimum wage (i.e. it is currently HUF 11,600) per 10 kilometres, and is granted for six months.</p>	
2.	Support labour market mobility by supporting change of residency status	2
	<p>The ‘Housing allowance’ is available this year as well, between March and December. The scheme provides housing rental support for former jobseekers if they find a job located at a distance of at least 60 kms from their home. The grant can be awarded for a period of six months and is capped at HUF 162,400 per month.</p>	
3.	Provide mobility incentives to supplement the employment benefits granted to fostered workers	3
	<p>The ‘From fostered employment to the private sector’ programme was relaunched in August 2022, and again in March 2023; under this scheme, fostered workers who find a job in the private sector can receive a monthly mobility incentive of HUF 45,600. The bonus is paid for the original remaining period of fostered employment if the former fostered worker starts working in the private sector before the end of the period of fostered employment. The programme can help increase the mobility of former fostered workers.</p> <p>Although the ‘Development of workers’ hostels’, ‘Travel allowance 2023’ and ‘Housing allowance 2023’ programmes do not specifically target the labour market mobility of fostered workers, they can still support their integration into the primary labour market.</p>	
4.	Improve interurban passenger transport	2
	<p>As of 1 May 2023, nationwide and county passes were introduced to make long-distance rail and bus transport more cost-competitive for the public. The new county pass allows unlimited travel within the borders of the specific county, while the nationwide pass allows unlimited travel on all long-distance coaches and trains throughout the country. From 1 July 2023, the nationwide pass will be valid on Intercity and other reserved-seat trains as well (seats will have to be booked separately).</p>	
6.2.	Direct support for less developed regions	
6.	Ensure strong reliance on the sectoral and technological specialisations of economic centres outside Budapest	3
	<p>In November 2022, the European Commission approved Hungary’s agricultural policy strategy for the period 2023-2027; accordingly, Hungarian agriculture will receive over EUR 10 billion in funding in the years ahead. The rural development programme may make a significant contribution to rural development, as it will aim to develop, among other things, rural businesses, craft trades and tourism. Around 30 per cent of the rural population is expected to benefit from the programme and the projects will create at least 7,000 new jobs. Payments of previously granted subsidies are ongoing, with HUF 750 billion earmarked in the budget in 2023.</p> <p>Developments under the Modern Cities Programme will continue this year. Of the 270 planned projects under the programme, 133 have already been fully or partly implemented. So far, HUF 2,200 billion of the HUF 4,200 billion programme for the development of 23 cities with county rights has been paid to the project owners. The programme has helped finance a number of projects in the fields of healthcare, education, tourism, culture, industry, sport and transport.</p>	

#	Recommendation	Priority
6.3.	Funding in less developed regions	
13.	Increase the absorption of funds from the European Investment Bank (EIB)	1

In the past two years, the European Investment Bank Group has continued to provide significant amounts of funding to projects in Hungary. In 2021, the Group invested a total of EUR 891 million, and in 2022 it committed EUR 804 million to support public and private investments. In 2021, the EIB provided EUR 300 million to the Hungarian government to improve the energy efficiency of households (home renovation programme), and also provided financing to help SMEs and the economy (e.g. healthcare) recover faster from the Covid pandemic. In 2022, the EIB provided financing in the fields of energy, transport and innovation, and also supported SMEs. Three quarters of the financing supported climate policy and environmental sustainability, including refurbishment to improve the energy efficiency of residential buildings; the EIB also provided support for greener long-distance coaches and trains and for upgrading the road network across the country. Also in 2022, EIB advisory services intensified their advisory support to public and private sector organisations in the areas of climate change, transport and R&D.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started 	Changed to Partly implemented 	Changed to Fully implemented 	

7 Family-friendly programme

Up to June 2023, progress was made in 65 per cent of the family-friendly recommendations presented in the Competitiveness Programme. As a result, weighted by priority, the implementation status of the recommendations in the chapter rose to 36 per cent from the 34 per cent registered in December 2021. From the 46 recommendations aimed at achieving a demographic turnaround, 1 has been fully implemented, another 13 have been partly implemented and the implementation of 16 recommendations has started.

Two new measures have been added to the complex family support system in 2023. Women who give birth between the ages of 25 and 30 are entitled to an exemption from personal income tax (PIT) up to the gross national average wage as of July of the previous year. Also from 1 January 2023, women with student loans who give birth to or adopt a child within two years of completing their studies will have their student loan debt cancelled in full. The increase in the minimum wage has been accompanied by an increase in the upper limit for childcare benefit and graduate childcare benefit, and mothers under 30 years of age do not have to pay PIT on these benefits. In addition, the prenatal baby support and the Village CSOK programme have been extended, and access to certain family support options has been simplified and the application process accelerated. The government intends to fine-tune the complex family support system so that as many desired children as possible can be born and the financial situation of families can improve. As one of the commitments under the Recovery and Resilience Facility (RRF), the family and housing support system will be reviewed accordingly in 2023.

Several measures have been implemented or started in order to make the healthcare system more family-friendly. The construction of the National Laboratory for Human Reproduction and the family-friendly maternity unit in Pécs has started. Since the summer of 2022, human reproductive services are provided exclusively in public infertility clinics, coordinated by the new Directorate for Human Reproduction set up within the National Directorate General for Hospitals. With centralisation effective from July 2023, health visitors will continue their careers under the oversight of local hospitals. New healthcare sector guidelines on diagnosing live intrauterine pregnancies and determining associated risks have been developed, and a food safety guide on the risks for pregnant women has been published. To help provide better care for children with different or delayed development, the Child Pathway Methodology Centre was set up to support parents in understanding children's development from birth to school age, identifying developmental differences and helping them find the right professionals.

Measures to support families in their daily lives were also taken last year. The number of places in nurseries increased by 85 per cent (from 32,000 to 59,000) between 2010 and 2023, so that more than 1,000 municipalities in Hungary boasted nurseries in the spring of 2023. From 1 January 2023, the number of 'father's days' will double, i.e. men will be able to take 10 (instead of 5) days off after the birth of their child. However, under the amendment they will receive only 40 per cent of the absence allowance for the second 5 days. In 2022, Elizabeth Camps attracted 180,000 participants, with the total number of participants exceeding 1 million over the course of the 10 years of the programme. In February 2023, the 2000th Family-Friendly Place Award was presented; the Award is given to companies that support the harmonious balance between work and family life.

#	Recommendation	Priority
7.1.	Strengthen the elements of the family support system	

1.	Raise the ceilings applicable to the infant care allowance (CSED) and the childcare allowance (GYED)	3
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With the increase in the minimum wage on 1 January 2023, the maximum amount of childcare benefit reached HUF 324,800 gross, while the graduate childcare benefit increased to HUF 162,400 for students studying for a bachelor's degree programme and HUF 207,480 for those in master's degree programmes. From 1 January 2023, the personal income tax exemption for mothers under 30 will also apply to the amount of childcare benefit and graduate childcare benefit, so that the net amount received by the beneficiaries will be higher. From January 2023, families raising a permanently ill or severely disabled child will be entitled to an additional HUF 10,000 tax credit on top of the existing benefits, while the gross amount of the home nursing allowance for children (GYOD) will be HUF 232,000.

3.	Introduce an initial capital scheme for young returnees who undertake to have children in Hungary	3
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The deadline for claiming prenatal baby support has been extended until 31 December 2024, with the same conditions as before.

6.	Ensure a constant review of the elements of the family support system and analysis of their efficiency	↑ 1
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One of the objectives of the government in the 2022-2026 cycle is to fine-tune the complex family support system so that as many desired children as possible can be born and the financial situation of families can improve. Accordingly, from the spring of 2023, access to certain family support elements has been simplified and accelerated. As a consequence of the amendments to the law, among other things, the compulsory proof of pupil or student status has been abolished, childcare benefit (gyed) is now automatically granted after the expiry of childcare allowance (gyes), the division of the family allowance has been simplified, and it has become possible for the biological father to claim maternity allowance if the mother dies before the claim is made. In order to support single-parent families, the minimum amount of orphan's pension has been increased to HUF 50,000, and the state can advance unpaid maintenance faster and at a higher maximum amount. Hungary has committed to a spending review to improve the efficiency of public spending, which is one of the components of the Recovery and Resilience Facility (RRF). Hungary will have to review at least 10 per cent of its budget each year in 2023 and 2024, which it will do in the first year by reviewing family and housing allowances and healthcare spending.

7.	Promote parenting (by awareness, advertising of family support, and support for preparatory training)	2
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The Child Pathway Methodology Centre was set up to help provide better care for children with different or delayed development. The Methodology Centre was set up by the Family-Friendly Hungary Centre in continuation of the earlier Child Pathway Project in order to support parents in understanding children's development from birth to school age, identifying developmental differences and helping them find the right professionals.

A record number, more than 10,000 children were lifted up high in the air at the same time in more than 35 locations in September 2022 during the 'Lift up your child' programme of the Three Princes, Three Princesses Movement, which promotes having children.

7.2. Family-friendly development of the healthcare system

8.	Ensure the prevention and treatment of diseases that hinder parenting	3
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In April 2023, a conference was held in Budapest to raise awareness and present the research and treatment options of endometriosis, a disease that affects one in ten women of childbearing age. Also presented at the conference was the Lucy app, a personalised menstrual and fertility calendar app that runs an algorithm created with the help of medical professionals and can help detect a number of gynaecological diseases, including endometriosis, based on the data and symptoms recorded in the diary. Sectoral guidelines for the screening and treatment of endometriosis is currently being developed.

#	Recommendation	Priority
10.	Provide more active support for artificial insemination	2
<p>The cornerstone of the National Laboratory for Human Reproduction in Pécs was laid in February 2022. The combined cost of the facility, designed to operate as part of the obstetrics department of the University of Pécs (PTE), and the family-friendly maternity ward is HUF 2.8 billion, and will double the size of the reproduction centre currently operating at the clinic to 1,146 square metres; in addition, the 1,000-square-metre obstetrics and gynaecology clinic will be refurbished and modernised.</p> <p>From summer 2022, only the state-owned infertility clinics will be authorised to provide human reproductive services. Accordingly, the last two infertility centres not acquired by the state will close at the end of June 2022. The new Directorate of Human Reproduction, created within the National Directorate General for Hospitals, coordinates the work of the infertility institutes taken over by the state. The professional mission of the Directorate includes establishing county-wide infertility clinics, central reporting, revising the training system, introducing egg donation and creating a state-funded sperm bank. In the spring of 2023, the rules on human reproduction were changed to allow the freezing and donation of gametes for personal use in the case of certain diseases, such as oncological risks.</p>		
12.	Reduce number of foetal deaths through improvements to prenatal care	↑ 2
<p>With centralisation effective from 1 July 2023, health visitors will continue their careers under the oversight of local hospitals instead of the municipal governments. The legal status of health visitors will be standardised, so that all health visitors will now be employed under a health service contract. The new licences will be issued automatically, while the new financing contracts will be arranged by the new employers. For the time being, health visitor districts will remain unchanged (the National Directorate General for Hospitals will decide on their demarcation in the future); however, given their new legal status, health visitors will also have to be available for secondment. Further, health visitors will no longer be automatically eligible for some of the allowances and fringe benefits they used to receive from the municipalities.</p> <p>New healthcare sector guidelines on diagnosing live intrauterine pregnancies and determining associated risks have been developed. Reasons for the new guidelines include the fact that more advanced diagnostic tools allow pregnant women to receive information about their unborn child earlier and in greater detail than before.</p> <p>The National Food Chain Safety Office (Nébih) has produced a food safety publication summarising the hazards to women during pregnancy (mainly bacteria and viruses).</p>		
13.	Reduce vaccine prices	1
<p>Covid-19 vaccines will continue to be available free of charge to Hungarian citizens.</p>		
7.3. Family-friendly tax reform		
18.	Increase the family tax base allowance for the children of mothers giving birth under 30 years of age	↑ 1
<p>Although the amount of the family allowance for the mothers concerned has not changed, effective from 2023, women who give birth between the ages of 25 and 30 are entitled to an exemption from personal income tax up to the gross national average wage as of July of the previous year.</p>		
7.4. Developing the institutional system providing day care for children		
19.	Ensure infant nursery care is available for all Hungarian children between 2 and 3 years of age	3
<p>The number of places in nurseries increased by 85 per cent (from 32,000 to 59,000) between 2010 and 2023, so by spring 2023 there are nurseries in three times as many, i.e. more than 1,000 municipalities in Hungary.</p>		
22.	Make family-friendly improvements to the public education system	2
<p>From January 2023, the government subsidy for the first successful language exam has increased from HUF 50,000 to HUF 58,000. In principle, the first successful language exam is reimbursed up to the age of 35, but the age limit is waived if you have children.</p>		

#	Recommendation	Priority
7.5.	Support for the daily lives of families with children	

23. Support the re-entry of women into the labour market following childbirth

3

From 1 January 2023, the number of ‘father’s days’ will double, i.e. men will be able to take 10 (instead of 5) days off after the birth of their child. Under the amendment, they will receive only 40 per cent of the absence allowance for the second 5 days. Increasing paternity leave was also necessary to comply with EU directives.

24. Create a family-friendly workplace environment and provide incentives for day care in the workplace

3

In February 2023, the 2000th Family-Friendly Place Award was presented; the recipient was Richter Gedeon Nyrt. Award recipients are workplaces that support the harmonious balance between work and family life. In autumn 2022, the Three Princes, Three Princesses Foundation awarded the Family-Friendly Company of the Year Award for the 10th time in 3 categories (large, medium and small businesses), with 7 further companies receiving special award. 3 institutions across the country received the Family-Friendly Hospital Innovation Award, while Semmelweis University was named Family-Friendly University, which also entailed signing a professional cooperation agreement with the Foundation.

25. Support summer camps for children

3

In 2022, Elizabeth Camps attracted 180,000 participants, with the total number of participants exceeding 1 million over the course of the 10 years of the programme. In the year 2023, the Erzsébet Foundation plans to help the same number of camp participants again.

7.6. Support for home starters

28. Make family-friendly improvements to the services of the financial system

 **2**

From 1 January 2023, women with student loans who give birth to or adopt a child within two years of completing their studies will have their student loan debt cancelled in full. To obtain the grant, the person concerned must submit an application to the Student Loan Company using a dedicated form within 60 days of the birth of their child or the finalisation of the decision authorising adoption.

At the beginning of 2023 there were more than 300,000 children with a Treasury Start Securities account, commonly known as a Baby Bond. All newborns of Hungarian nationality automatically receive a HUF 42,500 start-of-life allowance, which parents and relatives can supplement with their contributions. These payments are eligible for a 10 per cent state subsidy, the maximum of which has been increased from HUF 6,000 to HUF 12,000 per year from 1 January 2022.

7.7. Support for home creation by expanding construction capacities

37. Increase the construction workforce




1

Construction order books have been shrinking since the second quarter of 2022, even as labour shortages are becoming less of a constraint on construction output. Since the second half of 2022, insufficient demand has been the main obstacle to growth in the sectoral output.

#	Recommendation	Priority
38.	Scheduled market entry of public investments	2

Public investment absorbs a significant share, around 50 per cent, of the available construction capacity in Hungary. The aim of the recommendation is to ensure that public investment – in order to support homebuilding in the construction market – is carried out in a phased manner, thus mitigating any negative effects on housing development, such as a shortage of construction capacity. In January 2023, the Ministry of Construction and Transport published the draft law on the procedures of public construction projects and, after a period of public consultation, the Bill was submitted to Parliament in April 2023 and is awaiting promulgation after it was adopted on 4 July 2023. The aim of the Bill is to establish a new basis for, and unify, the system of public construction, increase the efficiency of public construction projects taking into account the principle of environmental sustainability, provide adequate legal, professional and budgetary guarantees for the actors involved in the projects, and strengthen and unify the system of government entities involved in the implementation of public construction projects. The Bill proposes a new mechanism for the government to decide on public construction projects. The implementation of the projects will be based on a public works investment framework programme, which is drawn up and approved on the basis of the medium- and long-term construction needs of public sector operators. The list of investments included in the framework programme will be reviewed and published annually.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started 	Changed to Partly implemented 	Changed to Fully implemented 	

8 Healthy society

Up to June 2023, 38 per cent of the recommendations in the Healthy society chapter were implemented, which exceeds the status registered in December 2021 by 4 percentage points. Between December 2021 and June 2023, in terms of the recommendations aimed at improving the health of the population, the implementation of another 3 recommendations commenced, and thus progress has been made in 77 per cent of the recommendations. The implementation of 18 recommendations has started, 11 have been partly implemented and 1 has been fully implemented.

Significant advances have been made in the field of prevention, with major improvements in both the prevention and the early detection of diseases. The Healthline service, available by phone and online, has been launched to provide fast and reliable health information to the public. The range of products subject to the public health product tax has been significantly extended and the rate of the tax raised. Excise duties on alcoholic beverages and tobacco have also increased. The MillionSteps app, which encourages school children to move, has topped the download charts in the app stores. General practice and hospital on-call services were restructured, with the National Ambulance Service taking over organisational responsibility for the former, and the role of the county hospitals strengthened in the case of the latter. Both the general practice and the health visitor system have been brought under the control of the National Directorate General for Hospitals, and the phasing out of general practices with fewer than 1,200 patients has started, to be completed by 2028. The scope of newborn and adult screening has been extended; from 2025, the range of age-dependent occasional screening will also be restructured. A complex public health programme has been launched by the Hungarian Charity Service of the Order of Malta to improve access for people living in converging settlements. The development of the National eHealth Infrastructure (EESZT) has continued, so that all health documents are now available via a mobile app. The long-term care system will also be transformed: chronic patients who do not require constant medical supervision will be cared for by newly created specialist care centres.

The government has taken a number of measures to increase the efficiency and transparency of healthcare. Among other things, the system of inpatient care management has been restructured (smaller urban hospitals are now part of the county hospitals) and the financing of the system has been changed (to take better account of the different specialisation and progressivity structures of the institutions). Doctors' salaries have continued rise, and a new wage increase cycle has been introduced for skilled and other healthcare workers. At the same time, payment for performance has been introduced, and personal contribution contracts are being phased out. The right to choose a doctor freely has been abolished; however, the role of care assistant has been introduced: these are persons who can care for hospital patients even outside visiting hours. In 2023, new professional qualifications will be carried out for the first time in publicly funded outpatient and inpatient care, the results of which will form the basis for higher non-salary benefits for management. Also from 2023, hospital laboratory tests will be centralised, the machinery pool will be standardised and reagents will be procured centrally to ensure uniformity across the test results.

In recent years, there has been considerable growth in the importance of same-day care, telemedicine and innovative technologies in the domestic healthcare sector. Under the Széchenyi 2020 programme, 19 sites to house at least 4 professions have been set up to provide same-day care. The construction of a national network of skills labs for practical training has been completed. Under a healthcare industry support programme, 57 Hungarian companies completed 82 healthcare industry projects with a total of HUF 66 billion in state support. There has been a significant increase in the special levy and repayment obligations of pharmaceutical manufacturers and distributors. The use of artificial intelligence (AI) is becoming more and more widespread in Hungary, including the Ambulance Service, Semmelweis University and the central system of stroke care in this country. In addition, Hungary's first biobank has been launched and, for the first time, a manual therapy procedure in Hungarian was put on blockchain.

#	Recommendation	Priority
8.1.	Strengthening of prevention	
8.1.1.	Preventing illnesses	
1.	Promote healthy eating habits through information and tax benefits	3

Since 2022, the Healthline service has been available 24 hours a day from anywhere in the country; it is intended to help patients make more informed use of the care pathways with the help of the contact centre (available by dialling 1812) or on the egeszsegvonal.gov.hu portal for citizens. Healthline provides fast, reliable and up-to-date information, relieving the burden on primary and specialised care by answering certain questions.

The first book on lifestyle medicine in Hungarian was published in spring 2023. Entitled 'Lifestyle Medicine', the textbook discusses the effects of lifestyle factors on health, the diagnosis and treatment of lifestyle-related diseases, and the setting up and monitoring of customised lifestyle therapy.


Dietetic training in Hungary celebrated 100 years of history in 2022 and, to mark the occasion, the National Institute of Pharmacy and Nutrition (OGYÉI) launched a campaign to raise the profile of dietetics, increase the prestige of nutrition professionals and promote their services.

Established a year and a half previously, the GYERE® - Children's Health Programme of the Hungarian Dietetic Association (MDOSZ) conducted, with the support of the foundation of a leading multinational retail chain, the nutritional assessment of more than 5,000 primary school children in 24 Hungarian municipalities, and the dietitians also provided healthy eating advice.

The National Food Chain Safety Office (Nébih) launched a social campaign to promote food safety, with an initiative entitled #preventable to raise awareness of good food handling rules. In addition, Nébih has produced a dedicated food safety publication summarising the hazards, mainly bacteria and viruses, that pose a risk to women during their pregnancy.

2.	Incorporate basic health knowledge into public education curricula	3
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According to the State Secretary for Health, the new public health programme, still in draft stage in spring 2023, will focus on ensuring that health education starts already in childhood.

3.	Extend the public health product tax	 2
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The tax burden on products covered by the public health product tax (PHPD) increased significantly from 1 July 2022, partly due to its conversion to a banded form of tax, and partly due to an increase in the specific tax rate. Until now, whether or not a product would be subject to the PHPD in the product groups taxed on the basis of their sugar content depended on whether the sugar content of the product exceeded a certain level; the amendment now means that products containing less sugar than the prescribed limit will also be taxable. Previously, manufacturers who substituted sweeteners for sugar in the formulation of their products were exempt from paying the PHPD, but now they are liable to pay the tax, which has significantly expanded the range of products covered. New products, such as muesli, cereals and filled pasta, have been added to the range subject to PHPD. The PHPD rate increased from HUF 15 to HUF 23 per litre for soft drinks with added sugar, from HUF 300 to HUF 390 per litre for energy drinks containing taurine, while the PHPD rate for salty snacks increased from HUF 300 to HUF 390 per kilo.

However, from 1 March 2023 products will be exempt from the PHPD if, although liable to that tax, they are used as raw materials in a complex product liable to the PHPD, and the entity producing the finished product pays the tax. Under the new rules, businesses that source their raw materials within Hungary and sell them on the domestic market will not be disadvantaged compared to imports from abroad.

4.	Increase the excise duty on spirits	 1
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The majority of alcoholic products have been removed from the scope of the public health product tax and transferred to excise duty; the tax rate has also increased significantly from 1 July 2022. Certain alcoholic products, such as flavoured beers and alcoholic refreshments, remained subject to the public health product tax, but their tax content also increased from 1 July. Excise duty rates increased by an average of around 10 per cent. The excise duty on beer increased from HUF 1,620 to HUF 1,800, and on sparkling wine from HUF 16,460 to HUF 18,100 per hectolitre. At the same time, the tax increase on pure alcohol was almost 70 per cent, with the HUF 333,385 tax per hectolitre on pure alcohol rising to HUF 565,840 per hectolitre.

#	Recommendation	Priority
5.	Increase the excise duty on tobacco products to reduce smoking and the costs of related diseases	1

Excise duty on tobacco products increased in two stages. From 1 July 2022, the fixed rate of excise duty on cigarettes rose to HUF 27,800 per 1,000 cigarettes plus 23.5 per cent of the retail selling price, but not less than HUF 40,800 per 1,000 cigarettes. From January 2023, another increase came into force: the amount payable is HUF 29,500 per 1,000 units plus 24 per cent of the retail selling price, with a minimum of HUF 41,800 per 1,000 units. In addition to cigarettes, excise duties on cigars, cut tobacco, rolling tobacco, smoking liquids, products containing tobacco or consumed with tobacco, smokeless tobacco products and nicotine-based smoking substitutes have also increased.

New types of disposable electronic cigarettes, the so-called Elf Bars, are becoming increasingly popular in Hungary even though their sale is illegal. The Elf Bar is a battery-operated disposable device that imitates smoking and is available in a variety of flavours, prefilled with nicotine-based or nicotine-free liquid. As it is simple to use and compact in form, it is increasingly popular, especially among the young. Elf Bar is considered a tobacco product under current legislation, so it could only be legally sold in tobacconists' shops, with a seal, and only in unflavoured versions. Yet these products are increasingly offered for sale in online ads on various social media sites. The National Tax and Customs Administration is trying to put an end to this illegal trade through mystery shopping and on-site actions, but new solutions are needed to be found in order to curb these products more effectively.

6.	Provide opportunities for regular sports activities	3
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In two days, the Million Steps for Your School Challenge broke records in the spring of 2023. After its launch on 27 March 2023, 60,000 people downloaded the MillionSteps app in two days, making it the number one free app in both the Apple Store and Google Play. At the end of the 11-week challenge, 100 schools won HUF 1 million each to buy sports equipment. The aim of this health programme, launched by the Hungarian Transplant Federation with the support of the Active Hungary Programme, is to encourage participants to exercise regularly and to give an idea of how much we actually move.

The government is providing HUF 2.5 billion for the development of university sports in 2023. In April 2023, the Bogdánfy Road sports hall of ELTE University was inaugurated after a complete overhaul costing nearly HUF 1.2 billion. The works started in September 2021, and the renovation of the 2,400-square-metre hall was financed with HUF 650 million TAO funding through the Basketball Association (MKOSZ) and another HUF 300 million in own funds. In the autumn of 2022, the e-Sports Centre of the University of Debrecen was inaugurated. The facility was installed in the outer foyer of Nagyerdei Stadium with HUF 300 million of government funding and the University's own funds.

8.1.2. Supporting early recognition

8.	Strengthen the functions of the general practitioner system	3
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From 2023, the reorganisation of GP practices will start: a National Practice Management Agency will be set up under the National Directorate General for Hospitals and will take over the management of practice rights from local authorities, designate new district boundaries and provide the residents of each district with a GP of its choice in districts that are permanently vacant. From summer 2023 until 2028, GP practices with fewer than 1,200 patients will be phased out. Group practices will be abolished as they have become redundant given the existence of general practice partnerships, which represent a higher level of cooperation.

HUF 25 billion in non-reimbursable EU funding is available to support the purchase of equipment for GP and paediatric services. The development, led by the National Public Health Centre (NNK), aims to strengthen GP services in less developed regions of Hungary by supplying them with new tools for diagnosis, which have been lacking until now, in order to relieve the burden on specialist care. The project aims to purchase more than 60 types of equipment (e.g. cardiology equipment, emergency equipment, resuscitation bags, ultrasound equipment).

Under the Recovery and Resilience Facility (RRF), the National Directorate General for Hospitals and its consortium partner, the National Health Insurance Fund (NEAK), aim to strengthen the primary care system. With a total budget of HUF 85 billion, the project aims to improve the prevention of major endemic diseases and ensure access to safe, high-quality care. The project is also expected to expand the system of general practice partnerships, strengthen the role of primary care in prevention and chronic disease management, and expand telemedicine activities.

#	Recommendation	Priority
9.	Support regular physicals and screening tests	3

As of 1 January 2022, cystic fibrosis (CF) screening has been included in the mandatory screening of newborns, thus 27 metabolic diseases are now covered by mandatory newborn screening in Hungary. As part of a pilot research programme, newborn screening for SMA will be free of charge from 1 November 2022. Colonoscopy has been added to the range of screening tests available, with all insured persons aged between 50 and 70 years eligible for it every 22 months. It is planned to make it compulsory for GP practices to participate in organising and carrying out colonoscopies and rectal screening from 2025.

From 2025, it is planned to change the scope of occasional screening tests: tests at the ages of 25, 45 and 65 would be carried out primarily by general practitioners and secondarily by occupational health providers, whose responsibility for this task would be accompanied by a right to refer patients. Screening would include a general physical examination, BMI and abdominal circumference and blood pressure measurements, 12-lead ECG, spirometry, laboratory and ophthalmological tests, in addition to risk assessment for those at average risk of alcohol consumption, smoking, diabetes and depression. At the age of 65, this would be complemented by an abdominal ultrasound scan by a sonographer, and bone density measurements.

In autumn 2022, the Hungarian Charity Service of the Order of Malta launched a complex health development programme with HUF 16 billion of EU funding to make health care available to families living in the poorest settlements. As part of the project, eight vehicles equipped with medical equipment and set up as mobile health centres will be deployed as fully fledged medical practices, and four cars will be used to deliver equipment and staff to sites where there are surgeries available but the doctors and specialist staff are missing. In the mobile clinics, a healthcare assistant carries out the basic examinations and the doctor is connected online to participate in providing care, with the possibility of an additional specialist being brought in remotely if necessary. At the Health Points operated by the Maltese charity, regional health coordinators familiar with the local conditions help organise the onward transfer of patients for specialist care or to hospitals. To ensure that patients in converging communities have access to the medicines prescribed during the examinations, the charity is also providing assistance with the necessary medications, the most important element of which is the creation of a dispensing and packaging centre in Bicske. The centre, which will cost HUF 6.3 billion to build, will dispense the medication of each patient (automatically, although under the supervision of a pharmacist) in sachets organised by time of day and in the required dosage, before the medicines are then delivered directly to the patient. In another part of the programme, the charity is launching a new paediatric eye screening programme to screen around 2,000 children a year and it will put into service a new eye screening bus.

In the 'Taking screening local' scheme of the National Public Health Centre (NNK), around 43,000 people have been screened in nearly 500 municipalities over 4 years. In 2022, screening buses visited 57 municipalities in 11 counties for 77 screening days in the converging municipalities of the country. The buses are also used for offering health counselling, with the dieticians also present.

The Institute of Primary Care and Health Promotion of the University of Debrecen assessed more than 12,000 children for nutritional and musculoskeletal status, along with their eye, dental and cardiological examinations in the 2021/2022 school year. This complex school and kindergarten health programme is unique in the country and constitutes a key element of the health promotion activities of the city of Debrecen.

Under the Sure Start Children's House competition, a total of HUF 400 million was awarded to Children's Houses that focus on ensuring the healthy development of disadvantaged children, compensating for their developmental delays and strengthening the parenting skills of their parents. The programme has helped an additional 1,000 disadvantaged children aged 3 and under to provide them with continuous early childhood and community development options and alleviate their socio-cultural disadvantages.

#	Recommendation	Priority
10.	Set up a National Health Database	1
	<p>In May 2022, the European Commission proposed a regulation establishing the European Health Data Space, a health ecosystem of rules, common standards and practices, infrastructures and governance framework, which aims, among other things, to enable individuals to have increased digital access to their personal health data at national and EU level and to provide a consistent, reliable and efficient framework for the use of health data for research, innovation, policy and regulatory activities.</p> <p>The EESZT is under continuous development. Today, all prescriptions are electronic, with more than 800,000 e-prescriptions submitted every day. During the pandemic, 20 development projects were implemented, including a telemedicine system to support general practices, subsystems to support nursing care and digital wristbands in hospitals; also, the EESZT now supplies sets of data to other electronic systems (e.g. mothers' personal income tax credits to the National Tax and Customs Administration). In the spring of 2023, a new feature was added to the Health Window app, as a result of which the health documents, hospital records and laboratory results available in EESZT can now be accessed from this mobile phone app as well. Further developments are also underway: in the near future, the central management of waiting lists, the outpatient appointment booking system and the patient management system are expected to be integrated into the EESZT framework, and data from smart devices worn by individuals will also be uploaded to the cloud. To improve cybersecurity in the healthcare sector, the CyberShield, already operating in the financial sector, will be set up in cooperation with the Centre for Health Management Training and the National Cyber Defence Institute.</p> <p>Under the Recovery and Resilience Facility (RRF), the aim is to create a secure management of health data assets. The National Digitalisation Strategy includes measures for the further development of the EESZT (e.g.: development of a data sharing institutional system, development of an AI-based population-wide prevention system) and the development of a Smart Hospital system.</p>	
11.	Develop and systematically implement a comprehensive mental health package	2
	<p>The Ministry of the Interior and the World Health Organization (WHO) signed a cooperation agreement in 2022, which includes support for mental health. HUF 1.3 billion forints will be spent on expanding the child and adolescent psychiatric rehabilitation unit of St John's Hospital in Budapest, which will provide complex treatment for children aged 8-16 all in one place.</p>	
12.	Strengthen the system of emergency medical services	2
	<p>In order to ensure equal and continuous access, a unified primary care on-call system was introduced in February 2023 and is operated by the National Ambulance Service (OMSZ). The on-call service is available by dialling the central telephone number 1830 outside normal working hours. The new on-call system will be introduced across the counties in a phased approach, with Budapest not included in the new arrangements for the time being. The new on-call system was based on the positive findings of a pilot programme launched in Hajdú-Bihar county in July 2021 within the framework of an HRDOP. The effective operation of the on-call system is expected to reduce the number of ambulance callouts and the workload at the accident and emergency departments of hospitals. General practitioners will be on call at the district clinics from 4 p.m. until 10 p.m. on a rotating basis. They will be assisted by the National Ambulance Service (who will, if necessary, deliver the doctor to the scene) and nurses with extended competence. At weekends and on public holidays, GPs will also be on call on alternate days, between 8 a.m. and 2 p.m. At the same time, GPs will be relieved of some of their existing duties as they will not be required to be on call at night. Alongside the transformation of on-call care, emergency care management will also be streamlined from 2023. In the future, long-term emergency care will be provided by county hospitals, while city hospitals will be responsible for admitting patients on a 24/7 basis.</p> <p>HUF 2.5 billion was spent on purchasing new winter and summer uniforms for the paramedics of the National Ambulance Service (OMSZ) in 2022. In December 2022, a new HUF 650 million air rescue base was inaugurated in Szekszárd, replacing the base located in Pécs-Pogány and increasing the available area for air rescue by 1,350 square kilometres. In the spring of 2023, 34 new ambulances were put into service by the OMSZ. From the summer of 2023, paramedics who have completed the relevant training course will have the right to carry out on-site post-mortems of people who died of natural causes outside a healthcare institution.</p> <p>The 'Creating the conditions for healthcare in the 21st century' measure of the Recovery and Resilience Facility (RRF) is aimed at, among other things, overhauling the built infrastructure of blood donation and developing the network of ambulance stations.</p>	

#	Recommendation	Priority
8.1.3. Supporting recovery from illnesses		
14.	Strengthen rehabilitation care	2
<p>Launched in March 2022, the 'Gondosóra' personal alarm watch programme will supply during its 4-year term every Hungarian citizen over 65 years of age with a free device, which they can wear on their neck or wrist and use it at home to report at the touch of a button any health emergency to a 24/7 call centre.</p> <p>As of the beginning of 2022, equine therapy for disabled and injured persons was added to the Health Act. Disabled persons whose benefits were significantly reduced with the introduction of the 2011 Act on Benefits for Persons with Disability were able to apply for a one-off compensation of half a million forints until the end of February 2022.</p> <p>The Autism Model House opened its doors in March 2022 and provides the opportunity for diagnosing children with autism in a calming environment in a building designed and created with their needs in mind, and to create development plans suited to their individual needs. Personal assistance for people with disabilities was launched in 4 municipalities under the Széchenyi 2020 programme. Operated by NGOs, this is a new tool in the toolkit of care policy in Hungary. Organisations working with children with type 1 diabetes can apply for HUF 200 million in government grants in 2023.</p>		
15.	Increase capacities for long-term and home care by strengthening cooperation between health care and social care systems	2
<p>From 2023 onwards, the care of the chronically ill will be progressively transferred to the social sector. In the future, patients whose condition does not require constant medical supervision but who need long-term care would be moved to specialised care centres, where the constant presence of a carer (a relative or other person) will also be possible. The purpose of this change is to relieve the burden on hospitals providing active care. In the first phase of this transformation, there will be a change in operators at 6 institutions in mid-July 2023, as nursing wards (with a total of 334 beds) will be transformed into specialised social care centres while remaining in their former locations. The fees charged by the specialised care centres will be set according to the rules applicable to old people's homes: the fee will be adjusted according to the income of the person receiving the care, with individuals without any income receiving free care.</p>		
8.2. Transforming the health financing system		
8.2.1. Reviewing the public financing scheme		
16.	Establish a public funding system based on actual costs	3
<p>A further objective of the Recovery and Resilience Facility (RRF) is to ensure the sustainability and financial viability of the healthcare system and to improve its cost-effectiveness by reducing duplications and creating streamlined care facilities. The key development objectives include increasing same-day and outpatient care capacities, boosting bed occupancy rates, reducing the average number of days of care, ensuring the secure management of health data assets and providing higher-quality services to improve the health of the population.</p>		
18.	Review the application of performance volume limits	1
<p>In inpatient specialist care, a new financing system came into force on 1 January 2023, which takes greater account of the real cost of care and the size of the population to be treated. From February 2023 onwards, healthcare providers will be billed according to these rules. In the future, financing will be based on 3 items: 1) weighted definition of annual budgets, with population numbers and case numbers representing 20 and 80 per cent, respectively, 2) occupational coverage equalisation, the equalisation of different professions; 3) taking into account different levels of progressivity with different cost requirements.</p>		
20.	Extend the application of pay-for-performance financing methods	2
<p>From February 2023, the GP performance evaluation system, which assesses the quality of care, will be a more prominent feature of GP financing than before. A key element of the indicator system is how GPs monitor their patients in need of care; they may do this largely through laboratory tests. However, this has resulted in a significant increase in waiting times for laboratory tests.</p>		

#	Recommendation	Priority
8.2.2.	Improving the situation of human resources	
22.	Establish a transparent remuneration system	3

As a result of the medical pay rise launched by the Act on the Employment Status of Health Workers at the beginning of 2021, in its third year (2023), doctors' salaries are on average 2.5 times higher. In accordance with the preliminary agreement, doctors' salaries increased by an average of 11 per cent in January 2023.

As a result of a four-stage pay rise for healthcare professionals in 2019-2022, nurses have seen their basic salaries increase by an average of 72 per cent compared to 2018. The increase in the basic salary of healthcare professionals will continue in two phases from 1 July 2023 and 1 March 2024, and will be complemented by a pay rise for all persons employed in healthcare, bringing the total to 83,000 professionals and 24,000 additional healthcare workers. However, 8,000 specialised assistants and nurses working in primary care did not receive a pay rise. These changes have had the overall result of an average increase by 32 per cent for nurses with primary or secondary education and an average increase by 55 per cent for nurses with a degree. As a first step, the salaries of professional and other staff will rise by 18 per cent in 2023; at the end of the second phase of the pay rise, the average basic salary of health professionals will be 37 per cent of the average basic salary of doctors.

Payment for performance has been introduced for nurses and doctors, whose basic pay set out in the pay scale can now be reduced by their employers by 20 per cent or increased by 40 per cent, depending on their performance.

In the summer of 2022, Parliament amended the rules on the KATA small business tax so that only self-employed persons providing their own services or selling goods to the public may opt for this form of taxation. As a result of this amendment, doctors and health professionals who previously paid this type of tax on a side job providing on-call services will now pay a higher rate of tax on those activities.

From 31 December 2023, personal contributor contracts will be abolished; in the future, only persons who have an employment contract (and volunteer helpers) will be allowed to work in public institutions. At present, the institutions have to finance contributor contracts from their own funds and contributors may receive higher remuneration than staff working under employment contracts.

23.	Increase the number of health care personnel and staff	3
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As of 2023, the right to choose a doctor has been abolished, except for primary care. Patients will be treated by a doctor assigned by the hospital according to its rota, and patients will not have the right to request a different doctor. From 2023 onwards, one caregiver per person will be able to support (even outside visiting hours) patients who are unable to care for themselves, require long-term hospital care, are in a mental health crisis or are dying. The details of the caregiver, who is chosen by the patient, are included in the patient's records; the caregiver's assistance, which does not classify as nursing, can relieve the burden on staff.

The 'I will be a nurse' scheme under the Széchenyi 2020 programme, which was implemented at a cost of HUF 4.4 billion, ended in spring 2022. In total, more than 3,200 students signed scholarship contracts in the 7 rounds of the programme. The main condition for the grant was that, after obtaining their qualifications, the participants would have to work for a publicly-funded healthcare provider in Hungary for a period at least as long as their grant period, and fill a job corresponding to the qualification they obtained with the support of the scheme. The vocational training courses eligible for grants were selected on the basis of vacancy survey results.

As of September 2022, residents will be able to work independently before taking their specialist exams, subject to authorisation from their tutors and according to their competences. The Association of Hungarian Residents rolled out nation-wide a programme of online seminars originally intended to support the preparation of trainee specialist doctors for their specialist examinations at the Institute of Surgery of the University of Debrecen. The aim of this initiative is to give all trainee doctors the opportunity to have access to the state-of-the-art, peer-reviewed knowledge they need to pass their specialist examinations in any subject, regardless of where they are trained.

An amendment to the law, adopted in autumn 2022, has made it easier for doctors, dentists and pharmacists from abroad to find work in the Hungarian healthcare sector. Under the amendment, doctors, dentists and pharmacists newly arrived in Hungary must first work under supervision for one year at an accredited healthcare provider. The background to this amendment is that, since May 2022, asylum-seeking professionals with health qualifications from Ukraine had been able to work under supervision in the Hungarian healthcare system once their degree recognition or equivalence procedure had started but before it was completed.

The University of Pécs has launched a university course in nursing and health management in Székelyudvarhely in the autumn of 2022. The courses are accredited in Hungary, and some are provided on a distance learning basis, while others are delivered face-to-face, with the help of local professionals. The favourable commuting allowance will double from the beginning of 2023. In the past, legislation capped at HUF 15 the cost reimbursement employers were able to pay; this has now risen to HUF 30. The minimum reimbursement level has also doubled, from HUF 9 to HUF 18.

#	Recommendation	Priority
8.3.	Improvement of the care system	
8.3.1.	Strengthening control in the care system	
29.	Ensure that minimum requirements, professional and financial guidelines and protocols are regularly reviewed and updated	3

As of January 2023, the governance of the healthcare system changed: the employer of staff working at state-owned hospitals is now the governing county hospital, while their employment contracts apply to varied locations, which facilitates the rotation of human resources across partner hospitals. Higher-level forms of care will be gradually transferred to county hospitals, while same-day surgery, basic internal medicine, obstetrics and emergency care will be available in city hospitals. The organisational role of city hospitals has been strengthened through the integration of primary care (including general practitioners and health visitors), public health prevention and central emergency services. Due to the change in the tertiary education model, the hospital integration process will also include the integration of the urban institutions managed by clinical centres into the clinical centre of the given university from spring 2023.

Work on developing and updating professional guidelines has continued, including in 2022 and 2023, guidelines concerning the treatment of inflammatory eye diseases, rehabilitation after stroke, the practice of liver transplantation and rehabilitation and the treatment of vascular stenosis, along with hospital pedagogy guidelines on the education of children with long-term conditions.

31.	Strengthen professional and financial control	3
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The Ministry of Interior plans to introduce a new magnetic card access system in all public hospitals by the end of 2023. The aim of the measure is to ensure that doctors and healthcare professionals spend the full 8 hours at work. Analysis of patient traffic data currently shows significant variation: the worst performing urban hospital has an average of 89 cases per staff member per year, while the best performing medium-size urban hospital has an average of 192 cases per staff member per year. Compared to pre-Covid data, there is a 12 per cent drop in patient care performance.

A working group of the Ministry of Human Capacities updated the methodological guidance on the practical application of clinical audits in spring 2022. A clinical audit is a cyclically repeated process in which doctors and professionals systematically review the effectiveness of their patient care and, if necessary, make changes to the practices they follow in the treatment and care of patients. First published in 2004, the technical document supporting the conduct of clinical audits was last revised in 2014.

The Ministry of the Interior placed the market of medical devices under close supervision in the spring of 2022 and has uncovered a number of abuses. In order to prevent fraud in the future, the rules governing the prescribing and countersigning of medical devices have undergone a series of tightening measures. In addition, charges have been brought in several cases in recent years on the grounds of gratuity payments and bribery.

In the spring of 2023, the legal requirements for medical aesthetic procedures were changed to ensure patient safety. The amendment clarifies that plastic reconstructive and aesthetic plastic surgery classifies as a healthcare service and thus excludes from this field any persons not authorised to perform such procedures.

From 2023, hospital laboratory tests, which were previously often carried out by private companies, will be centralised. Under the new system, the National Medical Laboratory Diagnostic Nonprofit Ltd. will be responsible for carrying out laboratory tests. The machinery pool will be standardised and reagents will be procured centrally to ensure uniformity across the test results. Sample traceability, consistent data quality, remote validation and national reagent management will be provided by the Sectoral Laboratory Information System (ÁLR), which will be established as part of the National eHealth Infrastructure (EESZT).

Hungary has committed to improving its public spending review arrangements to increase the efficiency of public spending, which is one of the components of the Recovery and Resilience Facility (RRF). Hungary will have to review at least 10 per cent of its budget each year in 2023 and 2024, which it will do in the first year by reviewing family and housing allowances and healthcare spending.

#	Recommendation	Priority
32.	Ensure standardised measurement and publication of the performance of health care institutions and patient satisfaction	2

Payment for performance has been introduced for nurses and doctors, whose basic pay set out in the pay scale can now be reduced by their employers by 20 per cent or increased by 40 per cent, depending on their performance. In 2023, new professional qualifications will be carried out for the first time in publicly funded outpatient and inpatient care. The results of professional qualification indicators will have to be published on the website of the organisation that carried out the qualification; these results will also form the basis of higher bonuses for management. The quality indicators are defined with the consent of the operators of the relevant healthcare institution. The report sets out the areas for improvement, the causes of the shortcomings and the measures proposed to address them.

34.	Introduce a management assessment system at government institutions	1
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A new quality assessment system, implemented for the first time in 2023, will be the basis for higher salaries for managers of institutions providing publicly funded outpatient and inpatient specialised care. However, the exact details of the new regulation on management pay on a qualitative basis are not yet known.

8.3.2. Increasing efficiency in the care system

35.	Increase the capacity for active same-day care	 3
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According to information from the Ministry of Interior, the number of same-day care treatments performed in 2022 approximated 100,000; on average, the necessary interventions were completed within 40 days from diagnosis. Treatment was provided on a same-day care basis in 80 per cent of the instances in this was an appropriate treatment option; this is in part due to the fact that same-day care is given 10 per cent higher funding in Hungary than active inpatient care.

In the framework of the 'Széchenyi 2020' programme and with the support of the European Regional Development Fund, a total of HUF 11.5 billion was spent on setting up same-day care centres at 19 sites across 11 cities and towns. At these locations, standalone multidisciplinary same-day care surgical units covering at least four specialties have been created. Under the programme, guidelines have been developed for the management of patient pathways and professional care management in same-day surgery; in addition, investments were made in infrastructure and equipment. Goals under the Recovery and Resilience Facility (RRF) also include the further expansion of same-day and ambulatory care capacities.

37.	Treat the pharmaceuticals trade as a strategic industry	1
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In spring 2023, new rules on the authorisation of medicines came into force, making it easier to use medicines awaiting approval, following the EU example. Also, it is now easier to launch on the market medicines developed by Hungarian entities.

38.	Develop telemedicine	1
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Telemedicine plays an important role in the complex health promotion programme launched by the Hungarian Charity Service of the Order of Malta. In the mobile clinics, a healthcare assistant carries out the basic examinations and the doctor is connected online to participate in providing care; also, where necessary, it is possible to bring in additional specialists remotely. In the HealNow project, a pilot teleconsultation and telemonitoring collaboration was launched between the pathology departments of the hospitals of Sopron and Wiener Neustadt. Since 2021, an online psychotherapy department has been successfully operating at the Psychiatric Clinic of the University of Szeged. In spring 2022, the 4.5-year telemedicine project at the University of Szeged, which included the development of 18 software applications at a cost of HUF 2.5 billion, was completed. A further goal under the Recovery and Resilience Facility (RRF) is to expand telemedicine operations. The development of this area is also an objective of the National Digitalisation Strategy.

#	Recommendation	Priority
39.	Increase reliance on innovative technologies to simplify care management	2

In the Széchenyi 2020 programme, the construction of a national network of skill laboratories in the health sector was completed in spring 2023 with HUF 13.5 billion funding from the European Union. The project has enabled 19 teaching hospital laboratories to provide hands-on training in diagnostic, therapeutic and life-saving interventions in a simulated environment, as well as the development of a standardised training programme and the creation of a network of trainers. From 2024, only software that fulfils all the conditions for reporting data to the National eHealth Infrastructure (EESZT) will remain on the market for GP IT systems. General practitioners will be able to access for free the state-owned miniHIS software, which was developed at a cost of HUF 8 billion. A digital health services limited liability company was acquired by the state at a cost of HUF 5.5 billion in spring 2022. 14 member states of the European Union have joined the CEF (Connecting Europe Facility) programme, which is expected to come into force in 2023 and will allow prescription medicines to be dispensed in all pharmacies in the countries that have joined the CEF, and provide access to life-saving medical records in the event of an emergency. One of the measures under the National Digitalisation Strategy is the development of the Smart Hospital system, which includes the introduction of inventory coding systems to improve the operational efficiency of the healthcare system and IT development projects to support hospital management. Under a healthcare industry support programme, 57 Hungarian companies completed 82 healthcare industry projects with a total of HUF 66 billion in state support.

The scope of application of artificial intelligence (AI) is constantly expanding in Hungary. The AI-based model used by the National Ambulance Service also produces monthly forecasts for life-saving and patient transportation tasks, which improves organisational efficiency in managing the availability of ambulance vehicles and paramedics. Semmelweis University has operated an AI-based teledermatology system since spring 2022. Each diagnosis made by the AI is reviewed by a dermatologist; the software prioritises the incoming cases and produces the differential diagnosis. Since autumn 2022, an AI-based central support system for stroke care has been in place, significantly shortening the diagnostic process and enabling faster access to life-saving treatment.

In the spring of 2023, a manual therapy procedure in Hungarian, the Movement Pyramid, was uploaded for the first time to a blockchain; it summarizes the laws and mechanisms of action in the healing and rehabilitation of the movement disorders of the human body. Now widely available, the Smart Diagnosis service by Synlab highlights the deviations from reference ranges as well as the probability of a given disease group occurring in a patient. In autumn 2022, the first robotic surgical device outside the capital was put into operation at Pécs University Hospital; the device can perform gynaecological, surgical, urological, ear, nose and throat, head and neck and cardiac surgery. Hungary's first biobank was established in Szeged; the biobank will help to significantly shorten research times. In the spring of 2022, the A&E and pharmacy locator website surgossegi.info was launched. The Faculty of Health Sciences of the University of Debrecen has launched a programme of international collaboration in order to support the development of innovative curricula and education in the health sciences, with the aim of integrating the innovative educational processes introduced in response to the pandemic into curriculum development and education. Also at the University of Debrecen, the first epidemiological coordination centre in Hungary was inaugurated; data processed here will be used to decide on the organisation of the healthcare system, the deployment of staff, and the reallocation of equipment and instruments. From the summer of 2022, the system for claiming reimbursement for the costs of travel undertaken to access healthcare will be simplified, as paper vouchers will be replaced by an online system.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started 	Changed to Partly implemented 	Changed to Fully implemented 	

9 Knowledge-based society

The aggregate implementation status of the recommendations included in the Knowledge-based society chapter was 43 per cent, which exceeds the level of 40 per cent registered in December 2021 by 3 percentage points. Up until June 2023, progress had been made in 40 recommendations, i.e. in 82 per cent of them, fostering the development of a knowledge-based society. 19 recommendations have already been partly implemented, while the implementation of 21 recommendations has started.

Input testing will be added to student assessments from the 2022/23 school year. In the future, Year 4, 5, 6, 7 and 10 pupils will take 2 tests every year, in both mathematics and reading comprehension. The first test will be in the autumn and the second one at the end of the school year, so that the results obtained can be used to measure progress during the year. As of January 2023, teachers' salaries in public education increased by 10 per cent, while career starters received a 25 per cent pay rise. On top of the 10 per cent pay rise in January, teachers in vocational education and training received an additional average pay rise of 5 per cent with retroactive effect from May 2023, the exact amount of which will depend on the individual teacher's performance. In July 2023, Parliament adopted a new law on the new career pathway for teachers, intended to create the foundations for the recognition of teachers in society and across the profession and to create a framework for further pay increases. In September 2023, the first dedicated practice-focused environmental science degree course (Z-specialisation) will be launched in Hungary.

There are countless measures and events to help young people find jobs: the Franciska Apponyi Future Workshop Programme, launched in 2023, aims to help 23,000 children living in specialised childcare to develop their vision for the future, while A Day for Girls and Huawei's nation-wide 'Women in Technology' career guidance programme specifically aims to help young girls find a career in technology. The government has set a target of one in two tertiary education students studying mathematics, science, engineering and information technology (STEM) by 2030. In 2023 over 1,000 mentors from 17 universities have participated in the Let Us Teach for Hungary programme, where university students mentor disadvantaged Year 6 to 8 pupils. Under the Path to Success Scholarship Programme, nearly 10,000 disadvantaged students received scholarships and mentoring in the 2022/2023 school year.

Significant progress has been made in the digital development of public education. Between 2022 and 2026, every student and every teacher will receive a personal laptop (615,000 devices in total) to ensure equal access to digital content. The objective of textbook digitalisation has been achieved and all state-developed textbooks are now available in electronic format as well. The traditional paper-based class and student gradebooks have been replaced by the Chalk system, in which task sets, study groups and digital development content are available.

The autonomy of tertiary education institutions has increased significantly in a number of areas. Starting from September 2023, universities and colleges will be able to decide for themselves whether they expect applicants to present proof of passing advanced matriculation exams in the admission process, and there will be no centrally set minimum score thresholds. From 2024 onwards, educational institutions will be able to determine the range of subjects that can be taken into account for the calculation of study and matriculation scores, as well as the activities and achievements for which they wish to award extra points in the admission procedure. Since the 2022/23 academic year universities have had the discretion to decide on the criteria for reallocating students between the state-scholarship and the fee-paying categories. Tertiary education institutions will also have the discretion to decide on the language requirements for the award of a degree; however, they will have to provide education in the foreign language skills necessary for pursuing the careers for which the relevant department qualifies its students.

The 6-year public task financing contracts concluded with the institutions changing their models record the needs of the relevant sectors, as identified by the universities in cooperation with the funding agencies in view of the expected economic and social processes. Under the financing contracts, 30-50 per cent of the funding for the institutions depends on qualitative parameters such as reducing drop-out rates and progress in international tertiary education rankings. The government is temporarily frontloading funding for domestic students and researchers from Erasmus+, Horizon Europe and other EU-funded research programmes, which has been suspended during negotiations with the European Commission. In 2023, 8 out of 10 students in tertiary education will be able to start their studies with a state scholarship; in addition to state scholarships, there are 33 other scholarships available from the state system, benefiting 180,000 students (60 per cent of the student population) with a total of HUF 72 billion. In cooperation with the Money Compass Foundation and the Ministry of the Interior, 570,000 textbooks and workbooks were used to help teach financial literacy in the 2022/23 school year, and more than 100 educational videos and additional e-learning materials are already available to help students learn everyday financial and management skills.

#	Recommendation	Priority
9.1.	Improving the public education system	
9.1.1.	Primary education focusing on skills development	
2.	Elaborate a National Core Curriculum focusing on skills development and practical knowledge	3
<p>Under the Ervin Lázár Programme, all students in Years 1 to 8 can enjoy a high-quality cultural experience at least once a year for free, regardless of their social status and place of residence. In addition to the events (such as theatre performances, concerts) already available, from 2023 onwards the Programme will also offer visits to folk music performances, national parks, national memorials, and farms showcasing native animals.</p>		
3.	Improve the methods and forms of teaching and learning	3
<p>One of the measures of the National Digitalisation Strategy is the development of digital pedagogical methodologies and training. The planned measure covers training teachers in digital methods, mapping and developing digital professional innovations, and data-driven analysis and monitoring of policies.</p>		
4.	Ensure standardised measurement and publication of the performance of educational institutions and the satisfaction of stakeholders	↑ 1
<p>Input testing will be added to student assessments from the 2022/23 school year. In the future, Year 4, 5, 6, 7 and 10 pupils will take 2 tests every year, in both mathematics and reading comprehension. The first test will be in the autumn and the second one at the end of the school year, so that the results obtained can be used to measure progress during the year.</p>		
6.	Increase the weight of sciences and information technology in secondary school admission examinations	2
<p>In September 2023, the first dedicated environmental science degree course (Z-specialisation) will be launched in Hungary. The training, which focuses on practice, will be offered by the 6 cooperating universities at 7 locations across the country. Its aim is to ensure that students can learn about and understand ecological sustainability and nature through practical, problem-solving techniques.</p> <p>A successor to the Youth Science and Innovation Talent Competition, which had been held 31 times in the past, the National Science and Innovation Olympiad was first launched in the autumn of 2022. Applicants were invited to put forward any kind of innovative work in the fields of engineering, science, environment, computer science and mathematics. The new format aims to reach a wider audience and expose young people to the joys and risks of becoming an entrepreneur.</p>		

#	Recommendation	Priority
7.	Improve career guidance and promote increased awareness in career planning	2

In 2023 over 1,000 mentors from 17 universities have participated in the Let Us Teach for Hungary programme, where university students mentor disadvantaged 6-8th grade pupils. Under the programme, more than 4,000 pupils from 107 primary schools are receiving mentoring. The expansion of the programme and its professional work is supported by the Let's Teach for Hungary Foundation, an organisation established by the founders.

The Hungarian Natural History Museum held its first career orientation open day, during which participants had the chance to learn about the Museum's collections through natural science demonstrations, see the diversity of the Museum's collections and gain insight into the work of researchers. Held again this year, the Day for Girls is a national career guidance day for female pupils promoting engineering, science and IT. On this day, female students from primary and secondary schools visit companies, universities and research institutes across the country to learn about science, technology and information technology from practitioners through interactive programmes.

Nearly 100 law enforcement career guidance training institutions were provided with educational aids in spring 2022. These vocational training institutions received projection and presentation equipment for professional/pedagogical support, while 18 different visual aids specific to the policing profession were produced with specialist help from the Miskolc Police Academy and made available to all the training locations.

The Franciska Apponyi Workshop for the Future Programme launched in spring 2023 helps 23,000 children in child protection care to develop their vision for the future. The antecedent to the programme was a mentoring programme implemented with the help of corporate and non-governmental partners in the fields of catering, the automotive industry and the arts.

One of the measures of the National Digitalisation Strategy is the development of an IT system to support career guidance for students; it is based on competence assessment, supports lifelong learning and outlines the possible career paths. The system is designed to help students adapt to the new situation and connect students, schools, and apprenticeships and workplaces.

9.1.2. Strengthen secondary education

10.	Strengthen dual vocational training	3
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In 2023, 43 per cent of applicants to secondary education wanted to continue their education in a technical school. Based on proposals from the Vocational Education and Training Innovation Council (VET Innovation Council), the Vocational Training Act has been amended, making the relationship between companies and schools more efficient, and allowing more students and partner companies to join dual training schemes. The amendment will widen access to vocational training, including for people without qualifications, with the aim of promoting convergence and reducing early school leaving. In addition, streamlining the administrative process will simplify the day-to-day running of the system in several areas.

11.	Strengthen the links between vocational training schools and market actors	2
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Under the Széchenyi 2020 programme, sectoral training centres were eligible to apply for funding of between HUF 150 and 400 million. The centres have been awarded over HUF 8 billion in grants under 28 contracts across the country. The development projects started in spring 2023. Among other things, an automotive training centre has been set up in Debrecen, where 4 new workshops will be used by around 3,000 students from the 5 mechanical engineering schools of the Debrecen Vocational Training Centre.

Under the Recovery and Resilience Facility (RRF), the '21st Century Vocational Education and Training Institutions Development Programme' was launched, aimed at providing an attractive learning environment at the institutions of the vocational training centres; creating conditions for high-quality vocational education; improving the infrastructure and energy efficiency of buildings, classrooms, workshops and laboratories, as well as the educational farms and community spaces used in training; and modernising the equipment pool. The total planned cost of the investments is HUF 96.2 billion.

#	Recommendation	Priority
13.	Reduce students leaving without a qualification	3

Under the Path to Success Scholarship Programme, nearly 10,000 students received scholarships and mentoring in the 2022/2023 school year. This grant is a tool intended to support success at school by reducing the drop-out rates identified in the action plan of the Hungarian National Social Inclusion Strategy 2030. While students are admitted to the programme primarily on the basis of social eligibility, scholarship amounts are based on their academic performance measured at the end of the previous year.

The Roma Minority Study Grant programme supports academically outstanding Roma students for a period of two school years, enabling them to continue their studies at a tertiary education institution after passing their school-leaving exams. In the academic years 2022/2023 and 2023/2024, 26 students received a monthly grant of HUF 30,000 per person.

Several drop-out rate reduction programmes are planned under the Recovery and Resilience Facility (RRF). In a pilot programme, testing is conducted at 5 small schools concerning the various ways of providing access to higher-quality education. Under the plans, HUF 16 billion will be spent on supporting the education of pupils who have special educational needs, are undergoing long-term medical treatment or are receiving specialised pedagogical services. In addition, further action is being planned to reduce segregation risks.

9.1.3. Making teaching careers more attractive

14.	Allocate more public and private funds to education	3
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According to information published by the government, public spending on tertiary education will reach 2 per cent of GDP in 2022, which is historically the highest level in this country.

16.	Provide regular further training for teachers	3
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In total, more than 100,000 teachers have taken part in digital literacy further training in recent years.

Under the Recovery and Resilience Facility (RRF), a programme to retrain teachers and improve the leadership skills of heads of institutions is planned to be launched in the third quarter of 2023, in response to changing needs, with a budget of nearly HUF 10 billion. The programme will enable teachers to qualify in a new field free of charge in just a short period (2 to 4 semesters). Training for heads of institutions and their deputies is necessary in order to enable them to manage their institutions more effectively and efficiently, and to meet the increasingly complex human resource management challenges of the future (e.g. performance evaluation).

The National Digitalisation Strategy includes several measures to improve the competences of teachers. Plans include, among other things, a systematic assessment of the digital competences of teachers, the (further) development and operation of programmes teaching digital pedagogical methodologies, and the launch of a 'Digital Teaching Assistant' programme aimed at ensuring that digital pedagogical solutions are also supported by higher-year students with an interest in IT and digitalisation.

#	Recommendation	Priority
17.	Improve the social esteem of teachers, kindergarten teachers and nursery nurses by extending and enhancing the career path model	3

As of January 2023, teachers’ salaries in public education increased by 10 per cent, while career starters received a 25 per cent pay rise. On top of the 10 per cent pay rise in January, teachers in vocational education and training received an additional average pay rise of 5 per cent with retroactive effect from May 2023, the exact amount of which will depend on the individual teacher’s performance.

In July 2023, Parliament adopted a new law on teachers’ careers, intended to create the foundations for the recognition of teachers in society and in their profession and to create a framework for further pay increases. The new law does not contain a detailed pay scale for teachers as yet, but it does set out new pay bands that are higher and wider than in the past. Among other measures, the law introduces a teacher performance evaluation system, the possibility of transferring teachers within the district and an increase in the amount of basic leave that teachers are entitled to.

The government has committed to reforming the teacher career path model under the Recovery and Resilience Facility (RRF). The aim of this measure is that the average salary of teachers should reach 80 per cent of the average salary of Hungarian graduates by 2025 and remain at least at that level up to 2030. Career starters will benefit from a pay increase in 2025 that is, on average, 10 per cent higher compared to other teachers. The salaries of teachers who work in public education in beneficiary or converging settlements or at schools where the proportion of disadvantaged pupils is higher than 10 per cent and an inclusive pedagogical method is used will receive at least 12.5 per cent higher pay than other teachers.

9.1.4. Increasing the efficiency of language teaching

18.	Redesign language examination requirements and align school programmes accordingly	1
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From January 2023, the government subsidy for the first successful language exam has increased from HUF 50,000 to HUF 58,000. In principle, the first successful language exam is reimbursed up to the age of 35, but the age limit is waived if you have children.

9.1.6. Enhancing digital skills

25.	Develop and maintain information technology instruments in schools and vocational training centres	3
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Between 2022 and 2026, the government intends to distribute a total of 615,000 laptops to all students in Year 5 and above as well as all teachers in order to ensure equal access to digital content. In the first phase of the programme, a total of 120,000 laptops were distributed to pupils in Years 5 and 12 in 2022, and 55,000 devices were distributed to teachers. Procurement is partly financed under the Recovery and Resilience Facility (RRF). Additionally, there are plans to purchase additional devices with the aim of developing the creativity and problem-solving skills of the students (e.g. robotics devices, programming kits, drones). In this project, priority will be given to small schools, typically in disadvantaged areas. 22,000 of the tablets used for the national census were distributed to educational institutions in the spring of 2023.

The National Digitalisation Strategy includes several measures to promote the digitalisation of the education system. Plans include, among other things, a survey of the pool of digital assets, ensuring a coherent approach to asset management, and supporting hybrid learning platforms and software.

#	Recommendation	Priority
26.	Develop digital learning materials	3

The objective of textbook digitalisation has been achieved in Hungary and all state-developed textbooks are now available in electronic format as well. The traditional paper-based class and student gradebooks have been replaced by the Chalk system, which registers a daily access count of 1.5 million. In 2022 and 2023, there were 137 million visits to the National Public Education Portal (Smart Portal), where users found 56,000 tasks and 5,000 sets of tasks and created 2,600 study groups; artificial intelligence provides the possibility for further improvement. The Smart Portal also provides access to the online museums start page 'Múzeum Digitár', the National Audiovisual Archive and the iWitness service. Videos, animations and interactive maps are also available in the media library. Teachers are supported in their work by 39,000 digital lesson plans, 224 smart textbooks and 36,000 smart tasks in the curriculum packs. Beyond making learning materials available in pdf format, the aim is to create interactive material that can be developed digitally.

Since February 2023, the Educational Milestones service has provided electronic access to the key data processed in education databases and, on request, it can issue proof of education IDs and student ID cards. On record in the system are education certificate data from 2003, general education and school-leaving certificates from 2005, tertiary education data from 2006 and language exam data from 2007.

In March 2022, the first Digital Knowledge Centre in Hungary was inaugurated in Nyíregyháza. Building on experience from the existing Digital Welfare Programme Points, knowledge centres will be set up in six rural towns and cities at a cost of HUF 2.4 billion. The centres provide a venue for digital literacy workshops and training for local public education and vocational training institutions, NGOs, tertiary education institutions; students can also request the knowledge centres to help them with career planning.

The National Digitalisation Strategy includes several measures to expand digital content. The plans include, among other things, expanding central digital content and services provision and developing a learning management environment and a digital support system to help reduce administrative burdens and streamline processes in schools.

Under the Recovery and Resilience Facility (RRF), the 'Digital Curriculum Development for Vocational Education and Training' programme has been launched with a budget of HUF 20 billion to deliver a comprehensive content upgrade of the vocational education and training system covering the entire training offer.

#	Recommendation	Priority
9.2.	Internationally recognised tertiary education	
9.2.1.	Boosting competition among tertiary education institutions	
28.	Create a competitive environment in tertiary education	3

Starting from September 2023, universities and colleges will be able to decide for themselves whether they expect applicants to present proof of passing advanced matriculation exams in the admission process, and there will be no centrally set minimum score thresholds. The application process is now fully electronic, students can even apply from their smartphones. From 2024 onwards, educational institutions will be able to determine the range of subjects that can be taken into account for the calculation of study and matriculation scores, as well as the activities and achievements for which extra points are awarded in the admission procedure. Students’ secondary school results will be worth a maximum of 100 points, while 300 points will be awarded for the school-leaving exams and 100 points will be at the discretion of the universities. No extra points will be awarded for advanced matriculation exam results; instead, the score will be equal to the percentage result for students who have passed the advanced matriculation exam and only two thirds of that figure in the case students with a basic level matriculation results. The objective of the admissions reform is to make its centrally governed system more flexible and create more competition between tertiary education institutions for students.

A project with HUF 1.8 billion of government funding was launched in February 2022 to renew the structure of tertiary education. The aim of the project is to make training more practical, flexible and more focused on the labour market, and to speed up the process of adding and creating new courses/qualifications.

The project ‘Delivering high-quality digital tertiary education’ was implemented under the EU’s Technical Support Instrument (TSI). The OECD-led project is implemented in close cooperation with the Ministry of Culture and Innovation (KIM) and the Hungarian Accreditation Committee (MAB). The public report prepared in the course of the project presents a feasible model for the introduction of a performance-based self-accreditation system in Hungary and evaluates the Hungarian quality assurance system in tertiary education. Based on the key findings of an international survey of new quality standards, practices and grants in digital tertiary education, the report offers recommendations and policy options to support the ongoing reform of the accreditation system in tertiary education in Hungary.

A measure under the National Digitalisation Strategy concerns digitalisation development with the aim of supporting tertiary education governance. The main elements of the measure include the creation of a tertiary education data inventory and the development of a methodology for its exploitation, the further development of the Graduate Career Tracking System, and the creation and operation of a website for the provision of information.

29.	Develop the infrastructure and equipment of tertiary education institutions	2
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14 science and innovation parks are currently being set up in Hungary; their aim is to achieve the effective sharing of the knowledge generated at universities to market participants. The investments are financed by the Economic Development and Innovation Operational Programme (GINOP). In spring 2023, Bosch and the Budapest University of Technology and Economics (BME) inaugurated their joint Competence Centre for Innovative Automotive Technologies. The competence centre will focus on the development of powertrains for electric vehicles, with BME and Bosch experts working together on the optimisation of electric vehicles. A HUF 1.5 billion infrastructure development started at the Hungarian University of Dance in January 2023 under the Széchenyi Plan Plus Operational Programme.

The government intends to implement major infrastructural improvements under the Recovery and Resilience Facility (RRF). The aim is to develop the building infrastructure and the equipment pool required for practical training, education and high-standard services at tertiary education institutions, with a view to promoting green and digital transition. The development projects will also contribute to the modernisation of training capacities and the enhancement of knowledge bases and their accessibility, contribute to the international competitiveness of the Hungarian tertiary education system and facilitate the greater integration of domestic institutions into the European Higher Education Area.

#	Recommendation	Priority
30.	Strengthen links between tertiary education and companies	2
	<p>It is a long-term strategic goal of the government to significantly increase the number of participants in dual training and to broaden the practical content of tertiary education courses. Today it is a considerable extra burden for students on dual courses that, besides the extra burden of working very long hours while studying at university, they are also usually required to meet the same study and examination requirements as students in traditional courses. In order to reduce this extra burden, students participating in dual training may benefit from easier access to subjects and exams in the future, and will be subject to more favourable reclassification rules under the proposals.</p>	
31.	Channel market needs and private capital into education	3
	<p>The 6-year public task financing contracts concluded with the institutions changing their models record the needs of the relevant sectors, as identified by the universities in cooperation with the funding agencies in view of the expected economic and social processes. The number of publicly funded and self-funded students varies from discipline to discipline: while in health and education almost all students can study on public scholarships, in economics courses the aim is to increase the contribution of market participants.</p> <p>The government has set a target of one in two tertiary education students studying mathematics, science, engineering and information technology (STEM) by 2030. Special attention will be paid to increasing the number of female students in STEM fields and Huawei's nation-wide 'Women in Technology' career guidance programme, which ended in March 2023, has been beneficial in furthering this aim.</p> <p>Under the Recovery and Resilience Facility (RRF), the government intends to implement a practice-oriented transformation of tertiary education courses to meet labour market needs. The reform will include a review of all the relevant laws, regulations and procedures, and a review of the tertiary education fields in the register of tertiary education qualifications. Under the plans, more than half (36) of accredited tertiary education institutions will carry out infrastructure development of in-house practice facilities, digital infrastructure and competence development, skills development for tertiary education students and staff, and internationalisation activities.</p>	

#	Recommendation	Priority
32.	Raise R&D expenditure in tertiary education to 0.5 per cent of GDP	2

With a budget of HUF 5 billion, the government is temporarily frontloading funding for Hungarian researchers from Horizon Europe and other EU-funded research programmes, which has been suspended during negotiations with the European Commission. The Horizon programme currently involves 12 proposals from 9 Hungarian universities. In early 2022 the National Research, Development and Innovation Office (NKFIH) launched a new portal for applicants in order to promote the participation of Hungary in Horizon Europe.

In a call for applications in 2022 by the Hungarian Scientific Research Fund (OTKA), 365 projects received funding for a total of HUF 13.2 billion. In 2023, the budget for applications is HUF 13.5 billion. Within the programme, there are several targeted sub-programmes, including the ‘Postdoctoral Excellence Programme’, which provides support in the early career stages to young people who attained a doctorate in 5 years, while the ‘Young Researcher Excellence Programme’ helps recipients start their own independent research and set up their own research group. More experienced researchers and the research teams they lead can apply for funding under the Researcher thematic call. In addition, a specific sub-programme was set up in 2022 to support research in international cooperation with Slovenian and Austrian researchers.

The call entitled ‘Acceleration Lane’ was launched in autumn 2022 with a budget of HUF 12.5 billion in order to encourage the development projects of Hungarian companies with the potential for rapid growth and significant added value. The programme, which builds on the knowledge capacities of universities and businesses in Hungary, has supported 74 projects in the implementation of innovative products and processes.

10 Hungarian research projects have won a total of nearly HUF 3 billion in funding from the National Research, Development and Innovation Fund under the 2022 call of the Frontline – Research Excellence Programme. Under the programme, the finest Hungarian and foreign researchers may receive financing, for internationally competitive sums, for a period of five years; this will enable them to successfully implement their projects at a Hungarian research institution and, ultimately, to apply for even larger sums of finance. The Momentum programme of the Hungarian Academy of Sciences and the János Bolyai Research Scholarship also serve the purpose of expanding the opportunities available to young researchers.

To bring together research in clinical medicine, the National Medical Research Centre (NOKK) was established in December 2021 by the Medical Research Council (ETT) with government support. Among other things, the mission of NOKK is to set research priorities for clinics and universities, and ultimately improve the nation’s health.

The ELKH Cloud, the enhanced IT cloud system of the Eötvös Loránd Research Network (ELKH) was launched in early 2022; it serves users as one of the largest general-purpose research facilities in Hungary. In early 2023, Hungary’s most powerful supercomputer (Komondor) was inaugurated in Debrecen. A four-year research programme to investigate the reliability of artificial intelligence models was launched in spring 2022 at the University of Szeged with HUF 1.2 billion funding from the Ministry for Innovation and Technology.

9.2.2. Improving the international competitiveness of Hungarian tertiary education

34.	More attractive career path for university professors	3
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The government sees collaborative doctoral education as one of the main tools to help young people enter a teaching career. In this scholarship programme, the student has an academic supervisor and also an external supervisor at the factory hosting their practice work. The government’s intention is to allow in the future for patents filed to replace, in whole or in part, the publication requirements for doctoral degrees. To this end, so-called ‘tech transfer’ offices have been set up at all the universities in recent years to create the foundations for this type of cooperation.

The age limit of 70 for employing lecturers and researchers has been abolished at universities run by religious and private foundations and public-benefit trust funds. The Ludovika University of Public Service has been subject to dedicated rules since the end of 2022. In the future, the University may welcome foreign and domestic experts who do not meet the strict requirements for employment as public-service lecturers, but whose professional career and practical experience justify this.

#	Recommendation	Priority
35.	Ensure that the ranking criteria for tertiary education institutions are taken into account in funding	↑ 3

The 6-year public task funding contracts concluded with the universities changing their models stipulate that 30-50 per cent of the financing for the institutions will depend on certain qualitative parameters such as reducing drop-out rates and progress in international tertiary education rankings. As a result, more and more Hungarian institutions are appearing in these rankings. 11 Hungarian universities are included in the latest THE and QS rankings, and 10 in the Shanghai ranking.

In 2022 the World Federation for Medical Education decided to grant recognised status to the Hungarian Accreditation Committee (MAB) in the international quality assessment of medical education. As a result of this procedure, which had been requested by MAB, qualifications obtained at Hungarian medical and health science universities will be recognised internationally in the future. The recognition by the World Federation for Medical Education is valid until 2032.

36.	Support dual degree programmes	1
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The University of Szeged has become the Eastern European hub of Coursera, which is expanding educational opportunities. Coursera is one of the largest online learning platforms in the world, on which top universities including Yale and the University of Michigan, and companies like Google and IBM offer nearly 4,000 courses in 19 languages. As a result of the cooperation between Coursera and the University of Szeged, students from Szeged can access these course materials and the certificate of course completion for free.

37.	Support publications in English	2
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The number of scientific publications by Hungarian academics in internationally-ranked scientific journals increased by 18 per cent from 2020 to 2021, including by 26 per cent in the highest-ranked journals.

38.	Launch specific postgraduate courses to reverse student emigration	1
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Under an amendment to the law in 2022, universities that already have full accreditation and are already entitled to operate bachelor's degree programmes will be able to launch master's degree programmes without the need for prior authorisation from the Hungarian Accreditation Committee. The quality of the training provided in a new master's degree course is monitored ex-post within three years of its launch. This modification will allow the institutions to respond faster to the ever-changing needs of the market. The government also plans to allow the introduction of 1-year master's courses in the future, which would also contribute to improved flexibility of operations.

9.2.3. Increasing the ratio of tertiary education graduates

39.	Widen the enrolment base of tertiary education	3
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The government's aim in reforming the tertiary education admissions system is to open up the tertiary education system to rural areas, especially disadvantaged regions, and to attract more students from vocational education and training and from among individuals who had completed their secondary education some time ago. In 2023, 27 per cent more students (126,000 in total) applied to Hungarian tertiary education than in the previous year. The number of applicants to smaller rural institutions increased significantly (e.g. John von Neumann University, University of Dunaújváros), and the number of applicants who are over 30 years of age doubled in just one year (to 30,000).

The Path to a Degree sub-programme of the Path to Success Scholarship programme aims to help Roma and disadvantaged students to obtain a tertiary education qualification. The sub-programme consists of living and tuition cost grant components. In the academic year 2022/2023, a total of 377 students received support. In order to increase the number of Roma persons with tertiary education qualifications and to strengthen their social empowerment, a total of 11 specialised tertiary education halls of residence for the Roma are helping more than 300 young people, mainly Roma, in their university or college studies.

#	Recommendation	Priority
40.	Increase the capacity of dormitories	3


Funded by the Hungarian government, the ‘Kollégium Plusz’ (Halls of Residence Plus) programme builds on the activities of, and cooperation between, the education and child welfare sectors, and is a new measure within the policy of promoting convergence. In its pilot programme launched in 2017, existing halls of residence have the opportunity to introduce and implement sustainable features for improving opportunities and access. The model programme currently caters for, on average, 210 children at 8 locations, mainly in the most disadvantaged regions.

The National Academy of Scientist Education (NTA) has created a new dormitory in Szeged by converting a former hotel. The NTA’s programme follows young talent from the age of 16 to 36 with the aim of ensuring that the best students with an interest in science remain in Hungary; it does so by providing high-quality training and appropriate financial support. In addition to 20 single and double rooms, the dormitory also includes a large common room. The Academy will soon expand the capacity of its dormitory, building a new wing next to the existing block, which will house 16 dormitory rooms and a conference room.

41.	Expand merit-based and needs-based scholarship schemes	2
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In 2023, 8 out of 10 students in tertiary education will be able to start their studies with a state scholarship; in addition to state scholarships, there are 33 other scholarships available from the state system, benefiting 180,000 students (60 per cent of the student population) with a total of HUF 72 billion.

In the calls issued for the year 2023 by the New National Excellence Programme (ÚNKP), around 2,000 winners will receive grants for a total of nearly HUF 3.5 billion. In 2023, the National Talent Programme (NTP) has a budget of HUF 4.3 billion to help 300 to 350 thousand children and young people from pre-school age to adulthood. A special feature of the programme is that, in addition to substantial support from the government, its budget is based on taxpayers’ donations of one per cent of their taxes.

42.	Make tuition fees in tertiary education dependent on academic progress	 1
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Since the 2022/23 academic year universities have had the discretion to decide on the criteria for reallocating students between the state-scholarship and the fee-paying categories. Previous rules required the removal of state scholarships below the minimum average performance and minimum number of credits set out by government decree; however, reallocation has been suspended since 2020 due to the pandemic.


45.	Increase opportunities for training abroad	1
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The government is temporarily frontloading funding for domestic students and researchers from the Erasmus+ programme, which has been suspended during negotiations with the European Commission. Since 2022, the Erasmus+ programme has offered higher grants for students participating in part-time study abroad, and placed greater emphasis than before on equal opportunities, hybrid forms of training and green travel.

In 2023 the Central European Exchange Programme for University Studies (CEEPUS) has received more funding from Hungary than ever before (a total of HUF 280 million). Now in its 28th year, the programme involves 16 European countries.

Continuing its international networking, Mathias Corvinus Collegium (MCC) opened a training location in Brussels in the autumn of 2022, while in spring 2023 it acquired a share in Modul University Vienna; it also entered into a partnership with ESMT University of Berlin and The Roger Scruton Legacy Foundation, which will enable Hungarian students to study at some of Europe’s most prestigious universities.

9.2.4. Increasing the ratio of graduates from technical, natural science and ICT faculties

46.	Introduce another science subject in addition to mathematics as mandatory in school leaving examinations	 1
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From 2024 onwards, universities will have the discretion to decide which 5th matriculation subjects they intend to take into account in their admission procedures. This amendment will allow the institutions to set requirements for applicants that are more in line with their own educational profiles. It remains a requirement that the admission procedure take into account the mathematics as well as one other science subject when calculating the score for a student’s secondary school performance.

#	Recommendation	Priority
47.	Reduce the drop-out rate in university courses	↑ 2

From 2023, tertiary education institutions will also have the discretion to decide on the language requirements for the award of a degree. In the future, universities will have to provide education in the foreign language skills necessary for pursuing the careers for which the relevant department qualifies its students. In principle, the new rules will be introduced in a progressive system; nevertheless, students who do not obtain their degree as they have not passed a language exam will also be exempted from the language examination requirement. The language requirements for doctoral degrees will also be relaxed: universities will now be able to decide whether one or more languages are required to complete the course. One of the main objectives of the measure is to reduce the drop-out rate (the proportion of students who do not receive their degree) in tertiary education.

The best way for increasing the proportion of graduates is to increase the completion rate, i.e. reduce the drop-out rate. To this end, GINOP Plus funding will be used to implement services and programmes with a learning focus, supporting the learning environment, developing special training content, preventing early drop-outs, involving mentoring from students and educators as well as other educational assistance staff of tertiary education institutions, with a focus on the priority training areas of the sectoral strategy (medical and health sciences, STEM, agricultural and teacher training).

According to information published by the government, the drop-out rate in tertiary education institutions in Hungary has fallen in recent years, partly due to the fact that the institutions have laid greater emphasis on student wellbeing (e.g. sports facilities, talent management).

9.2.5. Spreading financial skills		
48.	Deepen financial literacy	2

Held for the 9th time in the spring of 2023, the week-long thematic programme called MoneyWeek was focused on 'Modern Money Management and Digital Security' and 'Think and Do Business'. Almost 144,000 students from more than 1,000 schools participated in the events, with the help of more than 500 volunteers.

In cooperation with the Money Compass Foundation and the Ministry of the Interior, 570,000 textbooks and workbooks were used to help teach financial literacy in the 2022/23 school year. Before the start of the school year, Hungarian secondary schools received 175,000 copies of mathematics and history exemplars intended to improve financial literacy. In addition, schools ordered nearly 400,000 copies of textbooks on basic financial and management skills and workbooks with financial chapters. Schools ordered 60,000 copies of two textbooks introduced in 2022, which include augmented reality (AR) components. The textbook for secondary schools is supported with e-learning material as well. Twenty new animations have been added to the textbook for primary school pupils; as a result, with the new content also included, more than 100 educational short films have now been created to help learners find out about everyday finances and budgeting. Financial education in schools is also supported by the Money Compass Base Schools, at which nearly 3,700 students participated in more than 180 practical sessions in 2022. From September 2022, the Home of Financial Knowledge will offer experience classes in financial education to groups of Year 7-12 students in its schoolrooms across 9 locations nation-wide, up from 6 locations before.

MBH Bank and the National Union of Students in Hungary (HÖÖK) have entered into a strategic partnership to raise financial awareness among young people. Under their cooperation, the parties will provide professional training, workshops, thematic university courses and community programmes for students.

According to a survey by the State Audit Office, more than 90 per cent of teachers consider financial education important. The survey also measured the financial literacy of teachers, and found that 64 per cent of teachers who had received further training in finance versus 54 per cent who had not done so scored well on tests that included both theoretical and practical questions; this was an improvement over previous surveys conducted on different populations.

There are a number of competitions helping students deepen their financial knowledge: the Budapest Stock Exchange (BSE) and the Money Compass Foundation organise their 'BSE Stock Run', while privatbankar.hu runs a regular competition for students entitled 'Become a Junior Financial Expert'.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started ↑	Changed to Partly implemented ↑	Changed to Fully implemented ↑	

10 Research and development and innovation

The priority-weighted implementation of the recommendations in the Research and development and innovation chapter stood at 65 per cent in June 2023, representing a 10-percentage-point rise compared to the implementation level presented in the Competitiveness Mirror published in February 2022. The implementation of three-quarters of the recommendations in the R&D&I chapter has commenced since the publication of the MNB Competitiveness Programme. In 6 of the 8 recommendations policy initiatives and measures have been taken to ensure their implementation since the measurement of recommendations was introduced. 83 per cent of the R&D&I recommendations under implementation were given fully or partly implemented status. Compared to the end of 2021, there were 5 new developments in the implementation of recommendations, in 2 of which the status of the recommendation changed as well: both recommendations achieved fully implemented status.

The John von Neumann Program announced by the Government in May 2023 and the legislative changes related to the development of the Hungarian R&D ecosystem both represent progress. One such change is that the tax base of the social contribution tax credit for a researcher holding or studying for a doctoral degree will be amended uniformly to be equal to the full amount of their salary. The financial costs of SMEs, public tertiary education institutions and research institutes relating to intellectual property rights are reduced as, under the new rules, they have to pay only a quarter of the patent application, research, investigation and grant fees, in line with the MNB's competitiveness recommendation. Also in line with the MNB's recommendation, as part of the John von Neumann Program, the state will reimburse employers for 50 per cent of the cost of doctoral education and allow doctoral training requirements to stipulate taking into account the research utilisation achievements of the doctoral students in the future. Also under this programme, the National Research, Development and Innovation Office will be complemented with an innovation agency to help innovative ideas enter the market as quickly as possible. The John von Neumann Program was adopted by the Hungarian Parliament on 13 June 2023 and codified in the Hungarian legal system in the form of Act XLI of 2023.

#	Recommendation	Priority
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10.1. Providing the necessary human resources for research

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| 1. | Extend the tax allowance for PhD graduates to researchers holding university degrees | 3 |
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Pursuant to the John von Neumann Program for 2023, the tax base of the social contribution tax credit for a researcher with a PhD degree or a researcher in doctoral studies will be amended uniformly to be equal to the full amount of the salary (currently only 50 per cent of this amount is eligible in the case of doctoral students), with the provision that the upper limit of the taxable amount on which the tax relief is based is set at twice the gross minimum wage, instead of a fixed amount (previously it was HUF 500,000 for doctoral degree holders and HUF 200,000 for doctoral students).

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| 3. | Provide state coverage of 50 per cent of the costs of doctorate courses for employees over 30 years of age | ↑ 2 |
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On the basis of Government Resolution No 1242/2023 (VI. 21.) and within the framework of the John von Neumann Program, the state reimburses 50 per cent of doctoral tuition costs to the employer if their employee is pursuing doctoral studies on the basis of a study contract. In addition, within the framework of the John von Neumann Program launched in May 2023, the government intends to allow doctoral programmes to take into account the research utilisation achievements of doctoral students when determining the requirements for the course and the requirements for obtaining the degree. The objective of the measures is to increase the number of persons enrolled in doctoral studies or holding doctoral degrees.

10.2. Increasing research expenditure

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| 4. | Encourage enterprises to raise their R&D expenditures via enhancements to the business environment (reduction of red tape, more benefits for R&D) | 1 |
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Also under the John von Neumann Program, the National Research, Development and Innovation Office will be complemented with an innovation agency in order to help innovative ideas get to market as quickly as possible.

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| 5. | Grant special assistance for companies at the start of their life cycles for their R&D expenditure | 3 |
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In order to bolster the financing of innovative start-ups, the state is introducing the possibility under the John von Neumann Program of determining the amount (share) of the business/ownership stake in return for the capital investment in a subsequent investment round rather than immediately, so that the stake will be acquired at a later date. To this end, a new form of financing, the convertible note, is being created as a special application of the financing instrument for start-ups. Works on drafting the detailed rules necessary for the practical application of this new type of financing has started.

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| 7. | Reduce patent maintenance fees | ↑ 3 |
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The costs of administering intellectual property rights have been reduced under Act XLI of 2023 (John von Neumann Program). Pursuant to an amendment of the Patents Act of 1995, SMEs, public tertiary education institutions and research institutes have to pay only a quarter of the patent application, research, investigation, grant and maintenance fees. Other natural persons and legal entities may request exemption from the application fee or apply for deferral in the payment of maintenance fees for the first to the fifth year of the registered patent. In addition, only 15 per cent of the filing fee will be charged in the event of the electronic filing of intellectual property rights.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started ↑	Changed to Partly implemented ↑	Changed to Fully implemented ↑	

11 Efficient governance

22 of 23 recommendations in the Efficient governance chapter are in at least started status, i.e. the implementation of recommendations has started in 96 per cent of the cases. In June 2023, the priority-weighted implementation of the chapter stood at 62 per cent, compared to 57 per cent in December 2021. The government measures announced between December 2021 and June 2023 affected 16 of the 23 recommendations, of which 4 resulted in a change in the status of the recommendation. Out of the 4 status changes, in 3 cases the recommendation became partly implemented, in 1 case fully implemented.

The majority of the measures introduced are directly linked to digitalisation, which will contribute to improving the competitiveness of our country through the further development of eGovernment. Most of the measures concerned the National Digitalisation Strategy published in December 2022, which aims to significantly improve eGovernment based on EU-DESI indicators. To make electronic administration more user-friendly, the main e-administration portal magyarorszag.hu and the NTCA website will operate in a revised form in the future. Importantly, the electronic VAT return option has been identified as a priority again, its implementation is scheduled for 2024. In addition, the account management services of the State Treasury will be extended; for example, it may be made compulsory for municipalities and state-owned companies in the future. In a difficult economic environment, tax administration is gradually being simplified, and the government has committed to reducing the number of tax types in the coming years as a precondition for access to EU recovery fund resources.

#	Recommendation	Priority
11.1.	Less red tape	
1.	Audit, rationalise and remove duplications at government institutions	1
	<p>In September 2022, the Digital Hungary Agency (DMÜ) was established; from 4 ministries, 11 state-owned IT companies and one government agency as well as their nearly 5,000 employees have been transferred to the new organisation. In the future, the DMÜ will be responsible for public tasks related to eGovernment, IT, the standardisation of eGovernment and IT development projects, electronic communications for government purposes and ensuring infrastructural feasibility for information technology in public administration.</p> <p>In September 2022, 5 companies under the Ministry of Construction and Investment were merged into it under Government Decree No 362/2022 (IX. 19.); the date of dissolution of the companies was 1 January 2023. The merger of the standalone companies was carried out in order to eliminate duplications.</p> <p>In October 2022, the decision was taken to create the National Capital Holding in order to establish a single structure consolidating the hitherto fragmented state-backed capital funds. The new governance structure covers more than 60 capital funds with a combined total of more than HUF 1,000 billion in resources.</p>	
2.	Raise average wages in public administration and reduce bureaucracy	3
	<p>On 15 May 2023, Government Decree No 180/2023 (V. 15.) was published, which provides for an increase in the salary scales of government officials (e.g. ministry employees). The pay scale for government officials was last modified in 2019, whereas the most recent increase for county and district government officials took place in 2020, followed by an average increase of 10 per cent in 2022. The pay increase, entering into force on the day after publication but with retroactive effect from 1 April 2023, varies according to grade. There is an increase by 14-67 per cent in the top band at ministries, and by 21-54 per cent at other entities. To fund the pay rise, the government intends to reduce the number of positions by 10 per cent.</p>	
11.2.	Digital public administration	
5.	Adopt the Estonian model to ensure that all matters dealt with in government one-stop shops may also be processed online	3
	<p>The former e-administration information page of the magyarorszag.hu portal was permanently closed down on 16 December 2022 and replaced by the revamped magyarorszag.hu page. The new platform has been available since February 2020 and, according to the National Infocommunications Service, it is now the primary website for eGovernment. On average, 7.2 million people visit the portal every month; between the beginning of 2020 and the end of 2022, more than 50 million cases were handled through the online platform.</p> <p>On 30 November 2022, the Government adopted the National Digitalisation Strategy, which sets out the digitalisation objectives for the period 2022-2030 and the measures required for their implementation. One of the measures in the area of the digital state is the implementation of paperless, fully electronic back-office operations, and the further development of specialised computer systems. The aim of the measure is to support the transition from paper-based to electronic operations. As a related measure, central eGovernment services will be developed further.</p>	
6.	Interlink the databases of administrative organisations	2
	<p>The <i>National Digitalisation Strategy</i> defines several measures in this area. Priorities include the further enhancement of interoperability in public administration and an improvement of databases. As part of this, data governance is planned to be introduced to support the cost-efficient functioning of public administration. Under the once-only principle, the automatic exchange of data between different databases will be implemented in the future, relying on the Central Governmental Service Bus. Other measures aim to improve the interconnectivity of local communities and create conditions for cross-border administration in addition to central government.</p>	

#	Recommendation	Priority
7.	Enhance mobile applications for simpler processing	1

One of the measures of the *National Digitalisation Strategy* is to ensure that all citizens are able to officially identify themselves via their mobile phones. This requires the development of a single centralised mobile platform. On the other hand, Hungarian eGovernment platforms prioritise the optimisation of access to their services using mobile devices. Finally, the further enhancement of the Kormányablak (Government Office) mobile app is also an objective, with the aim of reducing customer congestion and waiting times by allowing appointment booking and remote queue management.

8.	Increase the share of auto-populated information in electronic forms and datasheets	1
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The *National Digitalisation Strategy* sets a target of increasing the automatic completion of forms from 59.7 points in 2021 to 90 points in 2030, as set out in the EU-DESI indicators. This is supported by the recommendation to provide and generally enhance smart form technology. The measure will overhaul certain frequently used administrative services, in particular those that do not have a dedicated structured smart form or a standalone Personalised Administration Interface (SZÜF) applet.

9.	Carry out regular online satisfaction surveys for public services	1
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The *National Digitalisation Strategy* includes measures to improve the overall customer experience in e-administration in Hungary. In the future, the measure is also expected to include conducting focus group surveys and individual interviews with users. A better understanding of user needs can also have an impact on the development of services.

11.3. Customer-friendly tax authority

10.	Develop the tax authority and increase its efficiency	3
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The National Tax and Customs Administration (NTCA) is further improving its efficiency through the increasing use of artificial intelligence. Thanks to online cash registers, the electronic road transport control system (EKÁER) and online invoicing, the tax authority now has access to practically every invoice, and has also started to use artificial intelligence in order to process the huge amount of data and detect fraud patterns.

Its improvement goals include the transformation of the personal income tax return, changing it from its current form into a sort of questionnaire, which would make it even easier for the citizens to check and finalise their tax returns. Similarly, the introduction of e-receipts is aimed at increasing the efficiency of the system, and the tax authority is examining the possibility of gathering paper receipts and vouchers into a single digital collection point. E-receipts are also included in the pledges made for the purpose of drawing down resources from the Recovery and Resilience Facility (RRF).

The increasing efficiency of the tax authority is also demonstrated by the fact that Hungary ranked 7th among the OECD countries in the 2022 international tax competitiveness rankings of the Tax Foundation.

11.	Implement the scheme for corporate tax and value added tax returns produced by the NTCA	3
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The introduction of the e-VAT system was temporarily suspended during the COVID-19 pandemic; in March 2023, the Ministry of Finance stated that electronic VAT returns would be offered to businesses starting from 2024. E-VAT is also included in the pledges made for the purpose of drawing down resources from the Recovery and Resilience Facility (RRF). In a significant divergence from the original plans, the tax authority has chosen a different solution for automating VAT returns, the machine-to-machine link. In this arrangement, the taxpayer's accounting software and the computers that store NTCA data communicate with each other to jointly produce the tax return.


12.	Develop a taxpayer-friendly, transparent website, provide online processing for a wider range of matters	 1
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As of 15 January 2022, the NTCA's website has been completely overhauled, with the nav.gov.hu portal getting a completely new, user-friendly look. The website adapts to the device on which it is displayed and can be customised, for example by creating a myNAV interface. The site has been made more transparent; for instance, there is a feature allowing to limit page contents to information relevant to private individuals.

#	Recommendation	Priority
15.	Reduce administrative burdens	2

From 1 January 2022, the social contribution tax rate was reduced from 15.5 per cent to 13 per cent. In force since 1 January 2023, Act XLV of 2022 has introduced a number of changes to the tax system to benefit businesses by reducing their administrative burden. The proposals for amending tax legislation included making it easier to opt for flat-rate taxation. In addition to the simplification of rules, the administrative burden will also be reduced, as contribution returns will need to be submitted four times a year instead of twelve. The rules on local business tax have also been simplified, with the new preferential multi-band tax system available for small businesses up to HUF 25 million per year; for example, the smallest businesses with annual revenues below HUF 12 million will pay only HUF 50,000 per year. The introduction of e-receipts in Hungary, the first country in the European Union to do so, will contribute to whitening the economy in the future. Paperless receipts mean less administration, simplicity of use and cost reduction for businesses, as well as being a more environmentally and epidemiologically friendly way of issuing receipts.

Promulgated on 14 July 2023, Act LIX of 2023 provides for a streamlining of tax administration in several respects. For example, car tax must be paid by a single deadline each year, but taxpayers unable to meet this deadline can pay in five monthly instalments. Self-employed can benefit from simpler procedures when they suspend their activity: they will not need to calculate pro-rata contributions, as the contribution rules now only apply to full months of self-employment.

11.4. Reduce the extent of tax evasion		
17.	Continue the roll-out of online cash registers	 3

The proposal is a step in the same direction as the three-stage introduction of online invoicing, which started in 2018 and has now resulted in the tax authority having electronic access to virtually all invoices. At the same time, the online cash register system is operating at a high rate of efficiency and with a wide coverage. With these two factors combined, it may now be concluded that the objective of the recommendation has been achieved through a set of instruments, and that the status of the recommendation has therefore changed to fully implemented. The rise of digital technologies, and thus of the whitening of the economy, is well illustrated by the narrowing of the gap between potential VAT revenue and the VAT revenue actually collected. In the December 2022 estimate by the European Commission, the relevant figure stood at 5.1 per cent for Hungary for the year 2020, which was the 9th lowest in the EU, and the 4th largest contraction in the VAT gap between 2010 and 2020.

18.	Phase out the financial transaction levy	1
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On 4 June 2022, Government Decree No 197/2022 (VI. 4.) on extra-profit taxes was published, and included changes to the regulation of the financial transaction levy. The most significant changes are: the maximum amount of the financial transaction levy increased from HUF 6,000 to HUF 10,000 and the tax has been extended to cross-border services and the purchase of securities. Under Act LIX of 2023, promulgated on 14 July 2023, the measure will be permanently incorporated into the legal system.

Act XLV of 2022, published on 23 November 2022, also amended the regulation of the financial transaction levy so that banks do not have to pay the levy in two important scenarios (QR code instant payment, request for payment). The aim of the measure is to allow innovative payment methods based on instant payments to become widespread with time, while also ensuring that the waiving of the levy has a minimal budgetary impact.


20.	Reducing illicit activity in the construction industry	2
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Introduced with effect from 1 January 2022, the National Construction Industry Monitoring and Data Reporting System called the 'Glass Gate' is a platform for ensuring that companies involved in the implementation of public procurement contracts for construction and investment for over HUF 700 million provide the tax authority with daily, personalised employment data.

#	Recommendation	Priority
11.5.	Competitive treasury system	

22. Provide treasury account management for local governments and state-owned enterprises  2

One of the aims of Act LIII of 2023, promulgated on 6 July 2023, is to expand the account management services of the Treasury. The Public Finance Act now requires that institutions listed in the Act, such as regional development councils, county governments and certain state-owned companies must hold payment accounts with the Treasury. In the future, the National Media and Infocommunications Authority, the Media Services Support and Asset Management Fund, MNV Zrt., the Student Loan Company and the Residual Asset Utilisation Private Limited Company will also have to hold their accounts with the Treasury. Management bodies that are not budgetary bodies will be required to open a Treasury account and transfer to it the funds they have been holding with other financial institutions by 15 October 2023 at the latest.

23. Improve the Treasury's customer relations, particularly in the sale of retail government securities  1

In February 2023, the website of the Hungarian State Treasury, allamkincstar.gov.hu, was renewed, making it more customer-friendly and easier to use. The institution is undergoing a digital transition, as part of which the government securities services are being completely overhauled. In the distribution of government securities, online account opening and communicating will be possible; Web Treasury and Mobile Treasury are now operational, so that the number of online account openings per year is expected to almost double, with the share of these transactions approaching 80 per cent of the total. Future plans include the development of fully automatic account opening and the introduction of biometric signature management.

Legend

<i>Not started</i>	<i>Started</i>	<i>Partly implemented</i>	<i>Fully implemented</i>
<i>Changed to Started</i> 	<i>Changed to Partly implemented</i> 	<i>Changed to Fully implemented</i> 	

12 Modern infrastructure and efficient energy use

Implementation of 100 per cent of the recommendations has at least started, and thus the status of the chapter's implementation, weighted by priority, rose from 48 per cent in December 2021 to 49 per cent. Progress has been made in each of the recommendations related to the improvement of transport infrastructure, the development of the telecommunications and electrical networks that meet the needs of the Fourth Industrial Revolution, the efficient use of energy, and the green economy. Since December 2021, the status of 1 recommendation has changed and there has been progress in a further 18 recommendations.

The development of rail transport continued in 2022 and the first half of 2023, but on a smaller scale than in previous years. In summer 2022, the Százhalombatta-Pusztaszabolcs railway line was completed, so that speeds of 160 km/h are now possible on some stretches. In February 2023, all 40 KISS double-decker trains entered service, and MÁV Hungarian Railways launched a programme to modernise the 59 FLIRT trains purchased between 2006 and 2010. In April 2022, the railway company signed a framework agreement for the purchase of 115 new locomotives. There have been no major events in the development of road transport since the publication of the last Competitiveness Mirror.

The implementation of all of the recommendations supporting a telecommunications and electric network that meets the needs of the Fourth Industrial Revolution has started since the previous Competitiveness Mirror was published. The last recommendation in the chapter still awaiting its implementation, namely the improvement of the insulation of the electricity grid, will be assisted by the fact that the state is investing HUF 160 billion in developing the electricity grid and improving its resilience. The importance of the development lies in the fact that it enables the transmission and distribution network to transmit the electricity generated by the growing capacity of renewable energy (mainly PVs) and to connect the growing number of digital devices. The development of the telecommunications infrastructure is also made possible by several points in the National Digitalisation Strategy 2022-2030 adopted by the government at the end of 2022: the connection of educational institutions, hospitals and prisons not yet integrated into the fibre network, the expansion of the 5G capacity of fibre-optic cables, 5G/6G technical standardisation, and the set-up of a 5G Centre of Excellence.

Energy policy developments in 2022 and the first half of 2023 has been shaped by the current energy crisis. The sharp rise in energy costs has highlighted the need for long-term adaptation, in addition to short-term energy saving measures. The MNB's recommendation to increase the efficiency of energy use by companies has been facilitated by the fact that, in the last quarter of 2022 and the first quarter of 2023, the state provided own-funds financing, capped at 15 per cent, to energy-intensive SMEs taking out energy efficiency investment loans. The Factory Rescue Programme provided HUF 150 billion in non-repayable grants to large companies for energy efficiency and energy production investments. The green investment pillar of the Gábor Baross Reindustrialisation Loan Programme may also increase the number of green investments.

Greening the economy is facilitated by the fact that, between 1 January 2022 and 1 June 2023, installed solar capacity increased by 1,900 MW in Hungary, reaching nearly 5,000 MW, which is 80 per cent of the government's original 2030 target. Progress is also made in the use of geothermal energy in domestic heating systems, for example in Szeged, where around 50 per cent of district heating is being converted to geothermal. However, a legislative amendment to allow the installation of new wind energy plants was not adopted.

The energy crisis has accelerated the transformation of the water utility sector, with many formerly municipally owned companies taking part in the state integration process. In April 2023, the government gave the Minister for Energy a mandate to draft a plan for the comprehensive overhaul of water utilities. From 1 July 2023, the waste management system has undergone a fundamental change, with the main player being the concession winner instead of the state. Under the Recovery and Resilience Facility (RRF), HUF 43 billion will be available for the development of waste management. In terms of the development of irrigation infrastructure, an important step forward was the extension of the deadline for several key funding applications (water management development, irrigation communities), to 1 October 2023. Under the RRF, HUF 58 billion of funding will be available for water management, most of it for the construction of main water supply systems and new networks.

#	Recommendation	Priority
12.1.	Faster railway traffic	

2.	Ensure travel speeds of at least 160 km/h on all principal railway lines	3
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The feasibility study for the Hungarian section of a Budapest-Warsaw/Vienna regional high-speed railway line has been completed. By the end of 2023, the environmental preparatory activities necessary for the construction of the railway line are being carried out at a cost of HUF 2.9 billion (85 per cent of which is EU fund); the aim of which is to earn the relevant environmental permit. In the summer of 2022, the reconstruction and complete modernisation of the Százhalombatta-Pusztaszabolcs railway line was completed, which allow for speeds of 160 km/h.

3.	Replace or modernise railway engines and passenger wagons	2
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In February 2023, all 40 newly acquired KISS double-decker trains entered service and MÁV Hungarian Railways has launched a programme to modernise the 59 FLIRT trains purchased between 2006 and 2010. This will be financed by (mostly EU) funds of HUF 12.5 billion and rely on the domestic workforce. In April 2022, MÁV signed a framework agreement for the purchase of 115 new locomotives. The purchase of the locomotives is made possible by Government Decision No 1435/2022 (IX. 7.), which earmarked a credit line of HUF 70 billion. In order to improve rolling stock, 92 IC+ passenger carriages have been manufactured in Hungary by the end of 2022.

4.	Establish an intermodal hub in every county seat and develop railroad freight terminals	2
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The Bicske intermodal hub has reached the construction phase financed by around HUF 15 billion of EU funding. Also, the government is working on developing the legal and regulatory framework for intermodal hubs. Several railway stations have been or are being renovated (several station buildings on the southern shore of Lake Balaton, the stations at Veszprém and Celldömölk, etc.).

12.2.	Excellent road network	
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5.	Upgrade the motorways M1 and M7 to three lanes	2
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The M7 motorway between the M0 motorway and Balatonvilágos, and towards the capital between Balatonvilágos and Székesfehérvár may be widened to three lanes in the future, the Fejér county manager of Magyar Közút Zrt. said at a presentation in March 2023. The exact timing of the projects is not known, however.

12.3.	A telecommunications and electric network that meets the needs of the Fourth Industrial Revolution	
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8.	Develop 5G technology by opening higher frequency ranges and providing state subsidies for the development of smaller cell sizes	3
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According to the National Digitalisation Strategy for the period 2022 to 2030 adopted by the Government at the end of 2022, despite the tenders supporting the deployment of uplink networks (GVOP 4.4.1., GOP 3.1.2., GINOP 3.4.1.), 1,800 of Hungary's 3,200 settlements do not have the capacity to use 5G even if they have fibre-optic cables. The Strategy proposes to supply these missing capacities, because the coverage of network endpoints would be pointless otherwise. The new Digitalisation Strategy stresses the importance of complementarity between fibre and 5G network development. In addition, the Strategy includes regulatory intervention at the standardisation level of 5G/6G technical regulation among its measures, and proposes the implementation of 5G pilot projects (e.g. for agricultural and healthcare purposes, and drone development). The measures set out in the Strategy also include the development of a 5G Centre of Excellence. The objectives of the Strategy include increasing 5G coverage in Hungary to 67 per cent by 2025 (from 18 per cent in 2022); this is to be achieved via the further development of the 5G infrastructure.

#	Recommendation	Priority
9.	Subsidise the spread of fibre optic cables	1
<p>Based on the National Digitalisation Strategy for 2022-2030 adopted by the Government at the end of 2022, the number of interconnections between the optical network of the electricity system and other public optical networks (e.g. road, rail) is steadily increasing as a result of the developments that have been implemented in recent years or are currently underway, while the parts of the optical capacity developed under the Superfast Internet Programme available for state uses are also becoming available. The measures of the strategy include the connecting of educational institutions, hospitals and prisons into the optical network that have not yet been integrated, and the implementation of the necessary network improvements. However, the strategy cites as a difficulty that, in underdeveloped, geographically disadvantaged areas, it is not market-viable to deploy high-speed (fibre) networks and there is a high proportion of settlements with only one fibre network, leaving the owner of the network in a strong bargaining position vis-à-vis local operators and users due to the lack of competition. However, the resolution of these weaknesses is not addressed in the strategy.</p>		
10.	Improve insulation across the power grid	 1
<p>The state is investing HUF 160 billion in developing the electricity grid and improving its resilience. The importance of the development lies in the fact that it enables the network to transmit the electricity generated by the growing renewable energy capacity (mainly PVs).</p>		
12.	Provide subsidies for increasing the number of higher-amperage connections in households	1
<p>The state is investing HUF 160 billion in developing the electricity grid and improving its resilience. Under RRF call no. 6.3.1-23, energy companies with a distribution network licence will receive HUF 20 billion in non-reimbursable funding to support the purchase and installation of smart electricity meters.</p>		
13.	Upgrade the capital and all county seats into smart cities	2
<p>The Smart City Marketplace website, created under the Digital Welfare Programme 2.0 facilitate the matching of supply and demand for smart city solutions from the beginning of 2022 by subjecting the quality of the solutions offered to a preliminary evaluation. A Smart City Strategy and Action Plan was also completed for Sárvár in May 2023.</p>		
12.4. Efficient energy use		
15.	Grant tax benefits to improve corporate energy efficiency	3
<p>Under the measures adopted by the government, energy-intensive SMEs (whose energy costs represent 3 per cent of their turnover, or 2 per cent under subsequent legislation) could receive up to 15 per cent of their own contribution towards the cost of their energy efficiency investment loans in the form of a top-up grant in the last quarter of 2022 and the first quarter of 2023. In addition, according to the government's announcement in February 2023, a one-off sum of HUF 230 billion is allocated to supporting the energy efficiency of large companies in order to reduce their energy costs, which have increased due to the extraordinary developments on the energy markets. Within the framework of the Factory Rescue Programme, the state provided non-reimbursable grants to large companies for energy efficiency and energy production investments with a budget of HUF 150 billion; this was complemented by the HUF 100 billion Factory Rescue Investment Loan Programme. The latter is available to medium and large Hungarian companies for their energy efficiency and renewable energy investment projects with HUF-denominated interest rate of 5 per cent. The Gábor Baross Reindustrialisation Loan Programme offered around HUF 400 billion in investment loans, part of which will be used in the form of Green Investment Loans. The aim is to ensure the availability of finance for the new and the existing energy efficiency and renewable energy production projects of companies, and the upgrading of their technologies linked to energy modernisation. The Gábor Baross Loan Programme was available for a maximum term of 10 years at a 5-per cent HUF-denominated interest rate.</p>		
18.	Continuously assess opportunities for further reductions in regulated energy prices	1
<p>In December 2022, the 2x400 kV transmission line connecting the electricity transmission networks of Hungary and Slovenia was inaugurated. In addition, in order to diversify its sources of natural gas, Hungary has agreed with Azerbaijan and Qatar on future gas imports from these countries.</p>		

#	Recommendation	Priority
19.	Add high-capacity power storage facilities to the power grid	3

Hungary has more than 25 MW of installed battery electricity storage capacity. In the METÁR tender of March 2022, around 27 MW of battery storage capacity was awarded. Progress on a larger scale is expected from the planned call for tenders RRF-6.5.1-23, under which HUF 62 billion of non-reimbursable funding would support energy market players in the installation of 885 MWh (about 440 MW of installed capacity) of grid energy storage by 2026. In addition, another tender is already underway: in June 2023, system operators and distribution companies could submit their bids for the HUF 58 billion earmarked for them. The developments, which will be completed by the summer of 2025 at the latest, will have a total storage capacity of 146 MWh. Furthermore, as one of the first steps of hydrogen production in Hungary, Hungarian Gas Storage Ltd installed a 2.5-megawatt electrolysis system and the associated hydrogen gas processing technology at the Kardoskút underground gas storage facility in May 2023. Projects to produce green hydrogen are also underway. One is the building of a 1 MW capacity electrolysis plant at the Bükkábrány Energy Park, the other is the construction of a plant capable of producing 1,600 tonnes of green hydrogen per year in Százhalombatta.

12.5. Green economy		
20.	Allocate HUF 50 billion in subsidies for wind and solar power plants	3

Between 1 January 2022 and 1 June 2023, solar capacities in Hungary increased by 1,900 MW, reaching an aggregate volume of 4,857 MW as of 1 June 2023. 38 per cent of this was constituted by small-scale domestic power plants and 62 per cent by industrial-scale photovoltaic power plants. Licences have been issued for a further 5,000 MW of industrial-scale solar capacity, so that nearly double the government's target of 6,000 MW of installed solar capacity may be achieved by 2030. As a result of the METÁR tender in March 2022, 271 MW of new solar capacity to be built received renewable energy support. However, a legislative amendment to allow the installation of new wind energy plants was not adopted. Progress is being made in the use of geothermal energy in domestic heating systems, for example in Szeged, where around 50 per cent of district heating is being converted to geothermal.

21.	Allocate HUF 25 billion in subsidies for SMEs' environmental protection investments	3
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The Gábor Baross Reindustrialisation Loan Programme offered around HUF 400 billion in investment loans, part of which will be used in the form of Green Investment Loans. The aim is to ensure the availability of finance the new and existing energy efficiency and renewable energy production projects of companies, and the upgrading of their technologies linked to energy modernisation. The financing is available for a maximum term of 10 years at a 5-per cent HUF-denominated interest rate. In addition, the European Investment Fund (EIF) and UniCredit Banking Group signed an agreement in May 2023 for a EUR 1 billion investment loan for small and medium-sized enterprises in seven Central and Eastern European countries, including Hungary. Under this scheme, around 2,500 SMEs will have access to loans on favourable terms, including for environmental sustainability investments.

22.	Modernise and equip water utilities with smart meters	1
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The amendment of Act CCIX of 2011 on water utility services in June 2021 allows municipalities and the water utility service providers they own to voluntarily participate in an integration process by transferring their water utility assets to the state. Integration accelerated after the operating environment for water utilities deteriorated significantly in recent years, ultimately due to the energy crisis. On the state side, the ownership rights are exercised by the national waterworks company Nemzeti Vízművek Zrt., which currently holds stakes in 14 companies.

As of 8 February 2023, a separate State Secretariat was created within the Ministry of Energy to oversee the water utilities sector. In April 2023, the Government gave the Minister for Energy the mandate to propose a comprehensive plan for the renewal of water utilities, worth around HUF 1,000 billion, and to move towards a uniform pricing system. Based on Government Decree No 1177/2023 (IV. 28.), a major water utility infrastructure development project worth a total of nearly HUF 109 billion will be launched in Debrecen. Preparation and implementation is planned for 2023-2026.

#	Recommendation	Priority
23.	Enhance the sewerage infrastructure in localities with fewer than 2,000 inhabitants, and increase the number of wastewater treatment plants	1
<p>The impact of the partial change of ownership of water utilities from municipality to state in the last two years is also reflected in this recommendation, as companies tend to combine the provision of drinking water services with wastewater management operations. The change of ownership and the comprehensive water utility system upgrade announced in April 2023 are expected to affect the wastewater infrastructure.</p> <p>There is a gradual expansion of wastewater treatment plants across the country. For example, the construction of a new wastewater treatment plant in Jászszentlászló started in October 2022 with a HUF 1.5 billion investment, of which HUF 1.35 billion will be financed by the EU. In December 2022, the new wastewater treatment plant in Rábasömjén was inaugurated; the project received a HUF 735 million grant under the GINOP programme.</p>		
24.	Increase the share of recycled waste and introduce the deposit and return system	2
<p>The Hungarian waste management system was radically transformed as of 1 July 2023, with the central role shifting from the state to the private company winning the concession and replacing the state as entity responsible for the public waste management in the future. The European Union has set a target of recycling 65 per cent of municipal waste and landfilling only 10 per cent of waste by 2035.</p> <p>Extended producer responsibility (EPR) and a mandatory deposit return scheme (DRS) are also important parts of the newly launched system. The significance of the ERP is that, from 1 July 2023, the manufacturer – or the first domestic distributor in the case of imported articles – will be responsible for waste management at the end of the life cycle of the product. The DRS system, a deposit return scheme for products subject to mandatory deposit charges that are sold on the Hungarian market, will be launched nation-wide on 1 January 2024. The exact details of the rules are still being worked out.</p> <p>One of the main objectives of the Recovery and Resilience Facility (RRF) is the transition to a circular economy, with a planned cost of HUF 43 billion financed under the RRF. The financing will be used entirely to improve the waste management system in Hungary. The investment will enable the chemical recycling of at least 40 thousand tonnes of waste.</p>		
25.	Strengthen support for electric vehicles	1
<p>Volánbusz and its consortium partner Mobiliti Volánbusz Ltd. successfully applied for funding for the purchase of 100 electric buses and the related charging equipment in 2021 in the Green Bus Programme coordinated by HUMDA, the Hungarian Mobility Development Agency Ltd. The first 40 vehicles were put into service in the Budapest metropolitan area in spring 2022, followed by 12 e-buses in Székesfehérvár in summer and autumn 2022. In spring and summer this year, 48 buses in five further county towns made the local fleets more environmentally friendly; the charging infrastructures were also expanded. 10 vehicles were put into service in Szolnok, while 11 electric buses arrived in Zalaegerszeg, 13 in Győr, 8 in Szeged and 6 in Eger.</p>		

#	Recommendation	Priority
26.	Improve the agricultural irrigation infrastructure	2

The deadlines have been extended for several rounds of the 'Development of the agricultural water management sector' and 'Support for cooperation between irrigation communities' calls for proposals, announced under the Rural Development Programme. According to the latest amendment, the deadline for submitting applications was 1 October 2023. The call for capital expenditure project proposals will provide farmers with support mainly for the construction of reservoir areas, new water intakes, the installation of new irrigation equipment and pipelines and the replacement of obsolete irrigation systems. The call for proposals 'Support for cooperation between irrigation communities' invites applications regarding the operation of existing common-interest irrigation plants and the preparation of new irrigation investment projects. In addition to the HUF 50 billion already granted, the Ministry of Agriculture is expected to allocate a further HUF 70 billion for irrigation development in the future.

Several important changes were made in the CAP Strategic Plan in 2022 that contributes to water conservation. Firstly, the Good Agricultural and Environmental Condition (GAEC) requirements connecting to basic payments have been modified to increase water conservation. Secondly, areas with an agro-ecological function that are taken out of production will become eligible for support from 2023 onwards, and receive the same amount of support as areas under agricultural production. Thirdly, the newly launched Voluntary Agroecological Programme (VAP) will contribute to water conservation, such as tillage without rotation and micro-irrigation.

One of the main objectives of the Recovery and Resilience Facility (RRF) is water management, for which a total of HUF 58 billion has been earmarked. Out of this amount, HUF 44.5 billion will be invested in the construction of water supply systems for the main waterworks, new networks and systems. In addition, a HUF 10 billion monitoring system will be set up, comprising, firstly, the building of local systems connected to the main waterworks and, secondly, construction of a separate nation-wide system.

Legend

<i>Not started</i>	<i>Started</i>	<i>Partly implemented</i>	<i>Fully implemented</i>
<i>Changed to Started</i> ↑	<i>Changed to Partly implemented</i> ↑	<i>Changed to Fully implemented</i> ↑	

Summary table on the implementation of the 330 competitiveness recommendations

Description of recommendation	Implementation
1. New financial model	
1. Develop a 'reverse' suretyship procedure	
2. Ease exclusion ('KO') criteria in a targeted manner	
3. Seek banks' commitment to increase credit portfolios that qualify as additional	
4. Offer more flexible guarantee rates (70 to 90 per cent)	↑
5. Redesign bank processes related to higher risk taking	
6. Make concerted marketing efforts to promote institutional guarantees	
7. Extend the tax benefits for 'business angels' to enterprises that have been running for more than 3 years	
8. Facilitate co-investment opportunities through government assistance	
9. Mitigate interest rate risks for customers	↑
10. Increase financial awareness	
11. Continue to promote Certified Consumer-Friendly products	
12. Reduce lead times for loan refinancing	
13. Reduce administrative burdens and charges related to early repayment	
14. Enable the mandatory sharing of positive credit histories	
15. Establish the continuous querying of credit histories	
16. Enable simple, user-friendly bank account switching	
17. Increase the comparability of bank account plans	↑
18. Develop and promote bank account products to help pensioners and socially disadvantaged persons in their banking	↑
19. Adopt standardised bank account statements	
20. Establish a standardised loan application interface for small businesses	
21. Optimise branch networks	
22. Improve the coverage of POS terminals and other electronic payment solutions	
23. Provide a tax benefit on the financial transaction levy to encourage the upgrade or replacement of obsolete IT systems, and developments related to the instant payment system	
24. Develop and deepen the digital transformation	
25. Provide a tax benefit to encourage the development of mobile payment applications	
26. Support digital developments related to the instant payment system	
27. Incentivise banks to introduce package pricing in retail payment services	↑
28. Simpler and faster online contracting and e-signature	
29. Enable credit institutions to submit electronic queries for the income statements held by the National Tax and Customs Administration	

30. Reduce the notarial fees associated with housing loans	
31. Replace notarial certification with a central digital platform	
32. Establish full online processing for taking out unsecured loans	
33. Set up a central appraiser database	
34. Automate the land registry information system (TakarNet) while ensuring continuous availability	
35. Increase the share of mortgage and consumer loans granted through digital channels	
36. Ensure that administrative and operational requirements are proportional to the risks that are being addressed	
37. Provide wider access to available information sources for new entrants to the market	
38. Facilitate close cooperation between innovators and the regulator through the Innovation Hub	
39. Grant preliminary operating licences in the Regulatory Sandbox framework	
40. Enhance the Regulatory Sandbox with the capability to grant exemptions from regulatory provisions	
41. List state-owned enterprises through a stock ownership plan for small investors	
42. Provide incentives for listing of banks	
43. Establish a modern corporate bond market	
44. Ensure state participation in the development of the domestic equity market	
45. Grant tax exemption on long-term investment accounts holding newly listed shares	
46. Launch a specialised trading platform tailored for SMEs	
47. Ensure the deductibility of listing expenses from corporate income tax	
48. Ensure consistency between capital market rules and general EU practices	
49. Improve access to digital platforms	
50. Appoint a government or ministerial commissioner for stock exchange development	
51. Increase the product value to customers in non-life insurance	
52. Provide legal and technological means to facilitate changing insurers	
53. Enhance the system of the Annual Cost Rate (ACR) and extend it to the pension funds sector	
54. Develop the digital links between the insurance and banking sectors	
55. Increase CASCO in motor insurance penetration	
56. Develop the system of guarantees in the insurance and the health and pension fund sectors	
2. Activation of household savings	
1. Increase maturity of bonds and redesign the product structure	
2. Encourage the transition from cash savings to government securities	↑
3. Use technical innovations and convenience services for retail government securities purchasing	
4. Redesign the arrangements for granting tax benefits, rethink the concept of long-term investment accounts	
5. Develop sales channels	
6. Grant tax exemption on stock dividends	
7. Provide incentives for employee stock ownership programme	
8. Establish welfare funds through a combination of pension and health savings	
9. Extend dividend tax exemptions to pension savings accounts	

3. SME strategy	
1. Reduce the investment limit from HUF 500 million to HUF 100 million for the development tax benefit available to SMEs	
2. Enable the immediate deductibility of investments in the corporate tax base	
3. Ensure the deductibility of investments from the local business tax base	↑
4. Provide assistance for SME wage increases subject to investment commitments	
5. Support acquisitions and mergers	
6. Make liquidation proceedings simpler and faster	
7. Provide a 2-year dividend tax waiver for companies undergoing a generation change in management	
8. Increase the innovation management capacity of SMEs by establishing a non-profit advisory centre	
9. Support the operation of clusters	
10. Support the emergence of clusters and other forms of networks	↑
11. Communicate state-sponsored programmes and opportunities on a broad base	
12. Support the operation of mentor networks	
13. Provide preferential grant application and borrowing options for young and female entrepreneurs	↑
14. Increase the number of co-working offices in large cities	
15. Increase the number of accelerators sponsored by large corporations	↑
16. Support university incubators and spin-offs	
17. Organise and support relevant startup conferences and meetups	
18. Grant a corporate tax exemption for aspiring entrepreneurs in their first three years	
19. Reduce the social contribution tax further for SMEs	
20. Enter into strategic partnership agreements with innovative SMEs	
21. Provide digital courses conditional on achievements	
22. Make company websites mandatory	
23. Develop digital infrastructure in rural areas	
24. Tighten rules for the management of ICT risks	
25. Establish the John von Neumann Fund to support firms' ICT developments	
26. Give preference to knowledge-intensive industrial services in EU aid criteria	
4. Foreign trade	
1. Strengthen export of services (besides export of goods)	
2. Exploit the benefits offered by China's Belt and Road Initiative	↑
3. Support the entry into fast-growing new markets with stable institutions	
4. Support foreign traders in Hungary, introduce a new trading house concept	
5. Enable market-ready companies to operate temporarily in international co-working offices	
6. Separate country, sector and product promotion and corporate brand building	
7. Channel public development funds to manufacturing sectors that are knowledge-intensive or well embedded domestically	
8. Provide incentives for strongly subsidised enterprises to use Hungarian suppliers	
9. Give priority to supporting productive investments on the services side when programming for the next EU programming period	

5. Labour market	
1. Fostered worker wages to be paid by the state for a certain period if the employer continues employing them for at least the same length of time	
2. Increase the difference between the wages paid for public work and the minimum wage	
3. Raise the permitted ceiling on earnings for persons employed below the retirement age or while receiving a pension	
4. Provide additional incentives for atypical forms of employment to encourage capacity building and organisational development	↑
5. Expand the category of elementary occupations of the Job Protection Action Plan	
6. Extend the Job Protection Action Plan to employees' contributions	
7. Extend the Job Protection Action Plan up to the minimum wage	
8. Extend the Job Protection Action Plan in the form of sector-specific allowances based on criteria for reducing the shadow economy	
9. Provide an incentive for the employment of pre-retirees by granting a tax exemption on employers' voluntary pension fund contributions	
10. Introduce a counter-cyclical labour market contribution	
11. Promote targeted work time reduction with full or partial social contribution tax compensation and/or public wage compensation in vulnerable groups	
12. Continue the reduction of taxes on labour	
13. Attract digital nomads	
14. Increase wages paid in high-demand jobs in the public sector	
15. Increase awareness of family support elements, run campaigns to raise awareness of the educational and health care system supported by the state	
16. Support Hungarian companies' recruitment abroad by deducting expenditures and tax benefits	
17. Simplify the recognition of degrees obtained abroad	
18. Introduce output criteria and independent examination centres in the system of adult education and training	↑
19. Ensure that first qualifications may be obtained free of charge in adult training	
20. Develop digital and language skills in senior generations	
21. Provide incentives for lifelong learning by allowing education expenses to be deducted from the corporate income tax base	
22. Introduce a mandatory further training minimum for companies	
23. Reimbursement of fees for successful examinations for the most renowned international standard certifications	
24. Support the retraining of labour released as part of reducing red tape, by covering costs and granting allowances	
25. Incorporate entrepreneurship skills into public and tertiary education	
26. Run domestic and foreign media programmes for the promotion of entrepreneurship	
6. Regional convergence	
1. Support labour market mobility by providing incentives for commuting	↑
2. Support labour market mobility by supporting change of residency status	
3. Provide mobility incentives to supplement the employment benefits granted to fostered workers	

4. Improve interurban passenger transport	
5. Introduce coupon benefits based on the Polish model	
6. Ensure strong reliance on the sectoral and technological specialisations of economic centres outside Budapest	
7. Ensure the favourable treatment of tenders based on local suppliers and resources	
8. Introduce a territorial compensation mechanism to counterbalance the labour drain	
9. Introduce a compensation mechanism for teachers taking up employment in less developed regions	
10. Incorporate territorial differentiation into the Széchenyi Card Programme	
11. Provide a combination of capital and funding via banks	
12. Provide a wider range of benefits in Free Enterprise Zones	
13. Increase the absorption of funds from the European Investment Bank (EIB)	
7. Family-friendly programme	
1. Raise the ceilings applicable to the infant care allowance (CSED) and the childcare allowance (GYED)	
2. Raise the amount of the one-off maternity allowance subject to an employment relationship (introduce a progressive allowance amount for additional children, depending on the number of children)	
3. Introduce an initial capital scheme for young returnees who undertake to have children in Hungary	
4. Provide a one-off health fund allowance to cover the expenses of childbirth care	
5. Support parenting by higher-education students	
6. Ensure a constant review of the elements of the family support system and analysis of their efficiency	↑
7. Promote parenting (by awareness, advertising of family support, and support for preparatory training)	
8. Ensure the prevention and treatment of diseases that hinder parenting	
9. Run an information campaign on insulin resistance and provide free insulin resistance screening for women of reproductive age	
10. Provide more active support for artificial insemination	
11. Provide a wider range of subsidised examinations during pregnancy	
12. Reduce number of foetal deaths through improvements to prenatal care	↑
13. Reduce vaccine prices	
14. Align consulting hours to working hours	
15. Ensure that the employment-related elements of the family support benefits track the dynamic wage growth (e.g. family tax base allowance)	
16. Reform the family tax base allowance by allowing negative taxation	
17. Grant full tax exemption for mothers in large families on a broader base	
18. Increase the family tax base allowance for the children of mothers giving birth under 30 years of age	↑
19. Ensure infant nursery care is available for all Hungarian children between 2 and 3 years of age	
20. Increase nursery school capacities to enable admissions to mini groups from the age of 2.5 years	
21. Support the use of private nurseries through public contributions to charges	
22. Make family-friendly improvements to the public education system	
23. Support the re-entry of women into the labour market following childbirth	
24. Create a family-friendly workplace environment and provide incentives for day care in the workplace	

25. Support summer camps for children	
26. Clarify the legal status of babysitters	
27. Set up a public-school bus system	
28. Make family-friendly improvements to the services of the financial system	↑
29. Extend eligibility for grants under the family housing benefit scheme (HPSHPSHPS) as an incentive for birth of second children	
30. Adjust the figures specified in the HPSHPSHPS rules so that the scheme may effectively track developments in the property market	
31. Remove the HUF 35 million cap on the HPSHPSHPS available for the purchase of used homes	
32. Tighten the rules applicable to the purchase of homes for investment	
33. Develop new district concepts to improve the territorial allocation of housing developments	
34. Utilise vacant public housing	
35. Increase the duty allowance on first home purchases	
36. Arrange for the continuous review of the duty allowance on new home purchases	
37. Increase the construction workforce	
38. Scheduled market entry of public investments	
39. Ease administrative barriers to home construction	
40. Acknowledge the number of children raised in assessing the initial amount of pension	
41. Consider the family tax allowance in pension calculation	
42. Membership in supplementary pension funds by subjective right	
43. Support employers' contributions to supplementary pension funds	
44. Increase the effectiveness of state subsidies in supplementary pension funds	
45. Increase investment and cost effectiveness, and security	
46. Ensure welfare funds provide a range of family-friendly services and support home purchases	
8. Healthy society	
1. Promote healthy eating habits through information and tax benefits	
2. Incorporate basic health knowledge into public education curricula	
3. Extend the public health product tax	↑
4. Increase the excise duty on spirits	↑
5. Increase the excise duty on tobacco products to reduce smoking and the costs of related diseases	
6. Provide opportunities for regular sports activities	
7. Offer grant schemes to support the creation of quality work and home environments	
8. Strengthen the functions of the general practitioner system	
9. Support regular physicals and screening tests	
10. Set up a National Health Database	
11. Develop and systematically implement a comprehensive mental health package	
12. Strengthen the system of emergency medical services	
13. Extend funding methods based on patient cooperation	
14. Strengthen rehabilitation care	

SUMMARY TABLE ON THE IMPLEMENTATION OF THE 330 COMPETITIVENESS RECOMMENDATIONS

15. Increase capacities for long-term and home care by strengthening cooperation between health care and social care systems	
16. Establish a public funding system based on actual costs	
17. Ensure that administration and controlling on a case-to-case basis is implemented at health care institutions	
18. Review the application of performance volume limits	
19. Introduce a financing method across levels of care	
20. Extend the application of pay-for-performance financing methods	
21. Set up a professional feedback system for patient treatment histories	
22. Establish a transparent remuneration system	
23. Increase the number of health care personnel and staff	
24. Elaborate the conditions for a system of supplementary private health insurance	
25. Guaranteed membership in health funds and provision of targeted incentives for in and out payments	
26. Extend support to prevention and service invoices	
27. Provide tax benefits on corporate health care packages	
28. Provide tax benefits on private health insurance	
29. Ensure that minimum requirements, professional and financial guidelines and protocols are regularly reviewed and updated	
30. Develop a clear definition of the care package covered by social security	
31. Strengthen professional and financial control	
32. Ensure standardised measurement and publication of the performance of health care institutions and patient satisfaction	
33. Increase the reporting obligations of private health providers	
34. Introduce a management assessment system at government institutions	
35. Increase the capacity for active same-day care	↑
36. Reallocate and reduce pharmaceutical expenditures on a professional basis	
37. Treat the pharmaceuticals trade as a strategic industry	
38. Develop telemedicine	
39. Increase reliance on innovative technologies to simplify care management	
9. Knowledge-based society	
1. Introduce a grounding grade 0 in primary schools on demand	
2. Elaborate a National Core Curriculum focusing on skills development and practical knowledge	
3. Improve the methods and forms of teaching and learning	
4. Ensure standardised measurement and publication of the performance of educational institutions and the satisfaction of stakeholders	↑
5. Introduce a basic examination at the end of primary school studies	
6. Increase the weight of sciences and information technology in secondary school admission examinations	
7. Improve career guidance and promote increased awareness in career planning	

8. Implement curriculum reform in the secondary school system	
9. Apply output criteria and more flexible curricula	
10. Strengthen dual vocational training	
11. Strengthen the links between vocational training schools and market actors	
12. Ensure flexible switching between various forms of education	
13. Reduce students leaving without a qualification	
14. Allocate more public and private funds to education	
15. Increase the number of primary school teachers and teaching assistants	
16. Provide regular further training for teachers	
17. Improve the social esteem of teachers, kindergarten teachers and nursery nurses by extending and enhancing the career path model	
18. Redesign language examination requirements and align school programmes accordingly	
19. Provide public support and premises for extra-curricular foreign language activities and language exam preparatory courses	
20. Provide the option to take secondary school admission and secondary school leaving examinations in English	
21. Promote more active participation in exchange programmes with other countries	
22. Provide incentives for foreign students to stay in Hungary	
23. Provide bi- and multilingual education in each Hungarian county	
24. Promote subtitled films and series	
25. Develop and maintain information technology instruments in schools and vocational training centres	
26. Develop digital learning materials	
27. Integrate programming into the teaching of mathematics	
28. Create a competitive environment in tertiary education	
29. Develop the infrastructure and equipment of tertiary education institutions	
30. Strengthen links between tertiary education and companies	
31. Channel market needs and private capital into education	
32. Raise R&D expenditure in tertiary education to 0.5 per cent of GDP	
33. Provide opportunities to lease university infrastructure	
34. More attractive career path for university professors	
35. Ensure that the ranking criteria for tertiary education institutions are taken into account in funding	↑
36. Support dual degree programmes	
37. Support publications in English	
38. Launch specific postgraduate courses to reverse student emigration	
39. Widen the enrolment base of tertiary education	
40. Increase the capacity of dormitories	
41. Expand merit-based and needs-based scholarship schemes	
42. Make tuition fees in tertiary education dependent on academic progress	↑
43. Redesign the course structure in tertiary education	

SUMMARY TABLE ON THE IMPLEMENTATION OF THE 330 COMPETITIVENESS RECOMMENDATIONS

44. Increase student activity	
45. Increase opportunities for training abroad	
46. Introduce another science subject in addition to mathematics as mandatory in school leaving examinations	↑
47. Reduce the drop-out rate in university courses	↑
48. Deepen financial literacy	
49. Provide further training for financial professionals	
10. Research and development and innovation	
1. Extend the tax allowance for PhD graduates to researchers holding university degrees	
2. Raise the number of assistant staff in research and development through further wages increases	
3. Provide state coverage of 50 per cent of the costs of doctorate courses for employees over 30 years of age	↑
4. Encourage enterprises to raise their R&D expenditures via enhancements to the business environment (reduction of red tape, more benefits for R&D)	
5. Grant special assistance for companies at the start of their life cycles for their R&D expenditure	
6. Reduce employers' contributions for SMEs implementing R&D investments	
7. Reduce patent maintenance fees	↑
8. Favourable accounting treatment of patent revenues	
11. Efficient governance	
1. Audit, rationalise and remove duplications at government institutions	
2. Raise average wages in public administration and reduce bureaucracy	
3. Promote wage bill management and performance measurement instead of headcount management	
4. Measure the efficiency of state-owned enterprises and of services provided by state agencies	
5. Adopt the Estonian model to ensure that all matters dealt with in government one-stop shops may also be processed online	
6. Interlink the databases of administrative organisations	
7. Enhance mobile applications for simpler processing	
8. Increase the share of auto-populated information in electronic forms and datasheets	
9. Carry out regular online satisfaction surveys for public services	
10. Develop the tax authority and increase its efficiency	
11. Implement the scheme for corporate tax and value added tax returns produced by the NTCA	
12. Develop a taxpayer-friendly, transparent website, provide online processing for a wider range of matters	↑
13. Discontinue the use of supplements to the advance corporate tax	
14. Gradually shift the corporate income tax to 'cash-based taxation'	
15. Reduce administrative burdens	
16. Extend tax obligations to digital multinationals	
17. Continue the roll-out of online cash registers	↑
18. Phase out the financial transaction levy	
19. Make it mandatory for specific merchant groups to accept electronic payment methods	

20. Reducing illicit activity in the construction industry	
21. Consolidate and improve the efficiency of the Treasury system	
22. Provide treasury account management for local governments and state-owned enterprises	↑
23. Improve the Treasury's customer relations, particularly in the sale of retail government securities	↑
12. Modern infrastructure and efficient energy use	
1. Provide electric railway access to every town with at least 30,000 inhabitants and to the Northern Balaton region	
2. Ensure travel speeds of at least 160 km/h on all principal railway lines	
3. Replace or modernise railway engines and passenger wagons	
4. Establish an intermodal hub in every county seat and develop railroad freight terminals	
5. Upgrade the motorways M1 and M7 to three lanes	
6. Promote the construction of motorway feeder roads bypassing localities	
7. Highways enabling the use of self-driving cars	
8. Develop 5G technology by opening higher frequency ranges and providing state subsidies for the development of smaller cell sizes	
9. Subsidise the spread of fibre optic cables	
10. Improve insulation across the power grid	↑
11. Increase the share of underground power cables	
12. Provide subsidies for increasing the number of higher-amperage connections in households	
13. Upgrade the capital and all county seats into smart cities	
14. Develop Hungary's information security software industry	
15. Grant tax benefits to improve corporate energy efficiency	
16. Allocate public funds to support the introduction of energy audits	
17. Improve household energy efficiency through more intensive subsidisation of renovations	
18. Continuously assess opportunities for further reductions in regulated energy prices	
19. Add high-capacity power storage facilities to the power grid	
20. Allocate HUF 50 billion in subsidies for wind and solar power plants	
21. Allocate HUF 25 billion in subsidies for SMEs' environmental protection investments	
22. Modernise and equip water utilities with smart meters	
23. Enhance the sewerage infrastructure in localities with fewer than 2,000 inhabitants, and increase the number of wastewater treatment plants	
24. Increase the share of recycled waste and introduce the deposit and return system	
25. Strengthen support for electric vehicles	
26. Improve the agricultural irrigation infrastructure	

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started ↑	Changed to Partly implemented ↑	Changed to Fully implemented ↑	

Albert Szent-Györgyi

(Budapest, 16 September 1893 – Woods Hole, Massachusetts, 22 October 1986)

Albert Szent-Györgyi, Nobel Prize winner Hungarian physician, biochemist.

Between 1904 and 1911 he attended the Presbyterian Secondary Grammar School in Lónyay Street, then continued his studies at the Medical Faculty of the Budapest University. He participated in World War I as a medical officer on the Eastern Front. Risking his life, he helped to rescue the wounded, for which he received the Silver Medal for Valour. After World War I he continued his studies in Bratislava, Prague, Berlin, Leiden and Groningen in the fields of biology, physiology, pharmacology, bacteriology and then physics and chemistry.

During his studies, he identified a new material in the adrenal of animals; later he succeeded in extracting the same material from cabbage and orange. The material with the molecular formula $C_6H_8O_6$ was named hexuron acid. In 1927 he defended his doctoral thesis written about discovering the hexuron acid at Cambridge University, and became a doctor of chemical sciences.

On 1 October 1928 he was appointed to professor of Szeged University, where he started his research and teaching activities as a professor of the medical chemical institute in 1931. As of 1931, he dealt with the research of vitamin C, whose exact composition was still unknown. However, Szent-Györgyi proved that the hexuron acid found in the adrenal and vitamin C is the same material. Following that, he succeeded in producing significant quantity of vitamin C from green pepper. His further researches covered, inter alia, biological oxidation, the examination of certain parts of the citrate cycle, which was not completely known at that time, and the exploration of the protein chemical background of mechanical muscular movement.

In 1937 he received the Nobel Prize in Physiology or Medicine for his research related to vitamin C, 'for his discoveries in connection with the biological combustion processes, with special reference to vitamin C and the catalysis of fumaric acid'. He offered the medal he received with the Nobel Prize to those who suffered from the Finnish war that broke out at that time. Later this medal was bought by Wilhelm Hilbert, a company director in Helsinki, who, in 1940, presented it to the Hungarian National Museum, where it is still preserved. In 1938 he became a member of the Hungarian Academy of Sciences.

In 1947 he left the country, and settled in Woods Hole, near Boston, where first he was the director of the Marine Biological Laboratory, then a professor of Dartmouth College. He devoted the last two decades of his life to cancer research. His important observation was the realisation of the role of free radicals in the development of cancer and the realisation of the radical catching role of vitamins (such as vitamin C). In 1972 he founded the National Cancer Research Foundation. In the 1960s he started to deal with politics as well. He wrote numerous articles in which he criticised the nuclear arms race, and in 1970 he also protested against the Vietnam War. In 1978 he was a member of the delegation that brought the crown jewels back to Hungary.

Albert Szent-Györgyi remained mentally and physically fit in his old age as well. He died in his home due to renal insufficiency on 22 October 1986. He was buried in the garden of his house on the shore of the Atlantic Ocean.

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