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# Report on Discussions at the 2021 Annual Congress of the Hungarian Economic Association on Finances, the Euro, Green Finance and Competitiveness*

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On 23–24 September 2021, this time in a hybrid format, the Hungarian Economic Association (HEA) held its 59th Annual Congress, which is one of the most significant annual conferences of the Hungarian community of economists, and also the largest. At the Annual Congress, in addition to the opening and plenary sessions, video recordings of the interesting panel discussions of 22 thematic sections were available on the Internet. The opening plenary addresses were given by *György Matolcsy*, Governor of the Magyar Nemzeti Bank (the Central Bank of Hungary, MNB), *Diána Ürge-Vorsatz*, physicist, climate researcher, professor at the Central European University and vice-president of the third working group of the United Nations Intergovernmental Panel on Climate Change (IPCC), *Kaushik Basu*, former President of the International Economic Association and former chief economist of the World Bank, and *László Domokos*, President of the State Audit Office of Hungary. This report gives an account of the roundtable discussion of bank executives, the exchange of views between the vice-presidents of the central banks on the introduction of the euro, the issue of green finance, and the section meetings on the state providing incentives for competitiveness and sustainability.

Moderated by *Barnabás Virág*, Deputy Governor of the MNB, roundtable discussions were held with senior executives of Hungarian commercial banks. The participants were *Éva Hegedüs*, President & CEO of GRÁNIT Bank Zrt., *László Bencsik*, Deputy CEO of OTP Bank Nyrt., *Radovan Jelasity*, President & CEO of ERSTE Bank Hungary Zrt., President of the Hungarian Banking Association, *Balázs Szabó*, Head of Corporate Business of CIB Bank Zrt., and *Gábor Soós*, Deputy CEO of UniCredit Bank Hungary Zrt., Head of Corporate and Investment Banking Division.

The discussion addressed the Hungarian banking market and international banking trends. By way of introduction, *Barnabás Virág* offered a brief assessment of the

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current situation: one of the general global lessons of the 2008–2009 crisis was that banks tend to behave pro-cyclically, i.e. they increase lending in times of economic boom and reduce lending in the event of problems, aggravating the severity of the crisis. By contrast, in Hungary the experience over the last year and a half has been that both the retail and the corporate credit markets have been particularly important pillars in crisis management, assisting the economic recovery with their activity. *Barnabás Virág* asked the participants about the underlying reasons. In their responses, the participants explained that in 2008 there was a global financial and confidence crisis, and while the epicentre of that was a vulnerable banking system, all sectors were equally affected. The current crisis is structurally different, as it has affected some sectors very negatively, while allowing others to grow considerably, the significant development of digital infrastructure being a case in point. In 2008, Hungary was facing a grave macroeconomic and lending situation, whereas now the fundamentals of the economy were particularly good, and customers were helped by a number of measures, the banking system had a high level of capital and sufficient liquidity, and therefore lending could increase. One key step was the MNB's Funding for Growth Scheme, which provided the banking system with long-term, interest-free funds, contributing to the restoration of trust between customers and banks. As bank managers had learned a great deal from the previous crisis, they were now better prepared, and state guarantees and guarantee schemes also facilitated lending to a large extent. The fact that the health crisis has been managed adequately and the performance of the economy as a whole has been excellent gives grounds for optimism both internationally and from a Hungarian perspective.

*Barnabás Virág* pointed out the existence of a credit expansion in all segments of lending. The credit dynamics of small and medium-sized enterprises remain above 20 per cent. The volume of new housing loans is at a historic high. The volume of loans subject to the moratorium is gradually decreasing, although it is still significant. The question was raised as to expectations in that regard. Banks are unable to provide accurate figures and their estimates are broad in scope. They consider the regulation to be very permissive, allowing borrowers to stay in the moratorium in some cases where this is not justified. At the same time, there is no liquidity problem at the level of the banking system, and given the conservative lending, the healthy functioning of firms and the resulting good credit portfolio, it is thought that fewer and fewer borrowers have problems that would compel them to stay in the moratorium. He pointed out that it was in the interest of those customers who were able to repay their loans to do so as soon as possible. Compared to the past, a major difference with the third moratorium is that it requires customers to opt in and will not apply automatically. Banks are engaged in ongoing communication with their customers and will conclude individual agreements when there are actual problems. In neighbouring countries, moratorium periods have already ended, and international experience has clearly shown that the non-performing loan portfolio has not increased significantly. Banks are optimistic about the evolution of the Hungarian non-performing loan portfolio.

*Barnabás Virág* then moved on to the evolution of the corporate credit market. As inflation emerged, the MNB started a tightening cycle and the FGS was phased out. Under these circumstances, what trends do banks expect? The senior bank executives said that the interest rate increase is not the biggest problem for companies. This is due in part to the fixed interest rate on FGS loans, and in part to the fact that problems result from the shortage of raw materials and increases in prices, as well as from workforce-related difficulties. The MNB's Bond Funding for Growth Scheme has given companies enormous liquidity. Despite the increase in the base rate, demand for loans (mainly related to investments) did not decrease; indeed, it even increased as companies remain able to finance their operations at negative real interest rates. Dynamic retail credit growth is expected in the area of families' first home allowance (CSOK). Consumer lending will also be strong thanks to rising wages. Tight competition between banks will also help to ensure that loans do not become too expensive, and bank margins are expected to fall.

The next subject was digitalisation. *Barnabás Virág* said that although Hungary had a developed IT infrastructure, the penetration of internet banking was still relatively low, with only 60 per cent of internet users using it. What could be the reason for that? According to the commercial bank executives, while this is partly an educational issue, the penetration of internet banking is increasing and is higher in Hungary than in the neighbouring countries, and customers are increasingly open to the use of internet banks and mobile banking applications. In addition, the further uptake of digitalisation is also a legal issue in that the legal environment should not prevent the digitalisation of the widest possible range of banking products. In this context, the issue of the entry of BigTech into certain banking sub-markets was raised. Currently, particularly in the European Union, banks are regulated much more strictly than BigTech companies, resulting in a lack of level playing field, which can be dangerous. In particular, the rules on the processing and availability of data should be consistent. The banking system must retain its stability in a rapidly changing world. BigTech companies are not able to compete with banks in all areas, only in certain sub-markets such as payments, but are not suitable for long-term lending.

After that, *Barnabás Virág* mentioned banking consolidation and efficiency due to economies of scale, which was an important message of the 2008 crisis. According to the banks, this process is taking place all over the world, representing a natural direction, and is a necessary step also in Hungary, one example being the Hungarian Bank Holding.

With regard to cryptocurrencies, the bank opinion was that bitcoin, for example, is the money of illegal trafficking (e.g. in humans and drugs) and has taken off on the back of money laundering, because it falls outside the regulatory framework. It is also a speculative and volatile instrument that is not expected to be competitive with legal activities in the long run. At the same time, 86 per cent of the world's central banks are actively conducting analyses in connection with the introduction of a central bank digital currency, and about 60 per cent of them have already reached the phase of pilot projects, indicating that the digital transformation has also reached central banks. The commercial banks said that such efforts should be supported, as CBDC could be a regulated currency, unlike market cryptocurrencies, which are not subject to any regulations, including in terms of investment protection. However, when the technology is used by a central bank, it will create a completely different situation that can contribute to the reduction of cash payments, and this can be a realistic direction as opposed to market cryptocurrencies. *Barnabás Virág* recommended to the participants the book published by the MNB on this subject a few months before.[1]

The session was concluded by a discussion about the green transition, which will determine the operating model of the future. The key to the 21st century is sustainable development, in which banks must participate actively. *Barnabás Virág* noted that the MNB is the first central bank in Europe with a green mandate and has already developed its green strategy, as part of which it launched its Green Mortgage Bond Purchase Programme and its Green Home Programme. Nevertheless, the carbon exposure of the Hungarian banking system remains high and has not decreased in recent years. The commercial banks indicated that they have an adopted strategy and comply with the call in this regard, participate in green finance, and even address the issue of social responsibility, taking sustainability criteria into account. Hungary will have a carbon-neutral bank as early as next year.

In the European Union section, the deputy governors of the central banks of five Central European countries – Croatia, Czechia, Hungary, Poland and Slovakia – expressed their views on the conditions, advantages, disadvantages and risks of introducing the euro, in the panel discussion *Monetary decisions in Central Europe. Euro today, tomorrow or after tomorrow?* attended by *Marta Kightley*, First Deputy Governor of the National Bank of Poland, *Marek Mora*, Deputy Governor of the Czech National Bank, *Michael Faulend*, Vice-Governor of the Croatian National Bank, *Barnabás Virág*, Deputy Governor of the Magyar Nemzeti Bank and *Ľudovít Ódor*, Deputy Governor of the National Bank of Slovakia, and moderated by *Gábor Iván*, Chair of the European Union Section of the Hungarian Economic Association.

[1] *At the dawn of a new age – Money in the 21st century.* Magyar Nemzeti Bank. https://www.mnb.hu/en/publications/mnb-book-series/at-the-dawn-of-a-new-age-money-in-the-21st-century

The discussion started with a statement by *Ursula von der Leyen*, President of the European Commission (EC), that “the euro is a tangible symbol of European unity, prosperity and solidarity”. The question was to what extent this has been reflected in the results achieved so far and in the lessons learnt from the introduction of the euro. In that context, *Ľudovít Ódor* first reviewed the latest results of the Eurobarometer surveys. 80 per cent of respondents think that the euro is a good thing for the European Union (EU) as a whole, because they believe that its use makes it easier to conduct business. In his opinion, the euro as a single currency reflects European unity. The signs of solidarity were readily apparent even during the sovereign debt crisis, and so they are in the Covid-19 crisis. While there are both good and bad examples in relation to prosperity, he stressed that the most important issue when joining the euro area is to change our mindsets and approaches, along with our policies, because eventually it is not the euro, but our economic policies that may succeed or fail.

*Marta Kightley* began her contribution by saying that European integration is a very important political initiative aimed at improving the economic prosperity of EU citizens by supporting balanced economic growth. That said, in weighing the costs and benefits of euro accession, the balance of the two depends on a number of factors. Convergence in the euro area has stalled over the last ten years; indeed, in some countries divergence and the increasing dispersion of economic cycles can be observed. The euro area was able to respond to the 2020 crisis in a completely different way than to the previous one. In the previous crisis, Poland was better off pursuing an independent monetary policy, which enabled it to avoid a recession as the depreciation of the zloty improved price competitiveness. During the current crisis as well, Poland’s policy-makers responded quickly, and although the country dipped into recession, it was one of the mildest in Europe.

*Michael Faulend* agreed with the EC President, as the euro served and continues to serve as an umbrella for the euro area, especially during the coronavirus outbreak. The euro is clearly the most tangible Community symbol, and European citizens feel European precisely because the single currency has become part of people’s daily lives. In addition, the euro is the second most important reserve currency in the world. Whenever a country adopts the euro, its economic and political reputation immediately improves. The attractiveness of the euro is due to its direct and positive impact on growth potential, to the enhancement it provides in resilience to negative shocks, in cost-effectiveness and in competitiveness, and to the fact that it improves access to international financial markets. This contributes to the growth of investments, employment, and the economy as a whole. As regards solidarity, he stressed that the countries hardest hit by the crisis had received subsidised emergency funding.

*Marek Mora* shared his reservations about the statement of the EC President and explained why Czechia is the most sceptical about the euro. In his opinion, the picture is somewhat mixed when it comes to prosperity and unity. For example, in terms of GDP per capita, the eurozone still lags behind the United States, Japan and the United Kingdom, and in the first decade of the euro GDP per capita growth was weaker than in these countries, although it performed better in terms of the activity rate. Despite the objective, economic convergence has not been achieved in the euro area, while Czechia, which is not a euro area Member State, is steadily converging towards the euro area average, as its monetary and economic policies are functioning properly. The euro area was essentially established with political considerations in mind, which differed significantly from the Maastricht criteria, and this is causing a persistent problem within the euro area due to its structural weaknesses.

*Barnabas Virág* was sceptical and considered that the EC President overestimated the role of the single currency in terms of European unity, prosperity and solidarity. He agreed that in the last decade, significant results have been achieved, whereby the perception of the euro has improved. The fact that the current crisis has been managed much better compared to the previous crisis is another major accomplishment. Nevertheless, a number of areas remain to be improved. Over the last two decades, the share of the euro area in global GDP has declined, and the relative size of GDP per capita has also declined or stagnated in a significant number of euro area Member States, casting doubt on the role of the euro as a symbol of prosperity. The institutional reform of the euro area is still incomplete, despite progress regarding a number of important aspects. Previous current account deficits have been eliminated in the southern Member States of the euro area, but GDP levels in Italy and Greece, for example, still fall considerably short of those seen in 2008. As a country outside the euro area, Hungary faces the task of achieving sustainable convergence in the long run and adequately timing its adoption of the euro.

The next question by the moderator was whether the CEE region was sufficiently competitive and whether it has succeeded in achieving the level of convergence required for the introduction of the euro. *Marta Kightley, Deputy Governor from Poland*, said that Poland and the region as a whole have done a lot to catch up over the past 20 years, but much remains to be done. Although the country has integrated into regional value chains and has increased its share of world trade, Polish development is based on cheap labour and is less innovative than in countries of the euro area, while the structure of its economy is also different from that of the euro area.

According to *Michael Faulend, Vice-Governor from Croatia*, the euro area's problems are not due to the euro, but to the flawed economic policies of some countries, in particular fiscal and wage policies, and the limitations of monetary and exchange rate policies must be taken into account. Croatia is a small euroised economy, and as such it has a vested interest in joining the euro area as soon as possible. The level of convergence achieved or the criterion for an optimal currency area are not appropriate indicators against which to take an accession decision.

*Marek Mora, Deputy Governor from Czechia*, said that they had addressed the issue of accession annually since 2008, and that on each occasion they had concluded that accession was not yet needed. In his opinion, the country meets almost all of the conditions and could accede to the euro area at any time and would easily stand its ground subsequently, but accession is essentially a matter of political will. In fact, he advises against accession because of the major structural weaknesses of the euro area.

According to *Barnabás Virág, Deputy Governor from Hungary*, the most important lesson of the euro area is that improving the competitiveness of a country or solving its structural problems is a much more difficult task within the euro area than outside it, especially in a crisis situation, and this may slow down the convergence process. The additional inflation resulting from convergence could be too high. If the financial system is not sufficiently developed, the introduction of the euro will be undermined in terms of both financial stability and monetary policy. About two years ago, the MNB developed a new, broader set of criteria for the assessment of euro readiness, based on which it concluded that joining the euro area would be premature. In pursuit of a sustainable convergence path, the MNB is committed to the safe and successful introduction of the euro, which is conditional on optimal timing.

*Ľudovít Ódor, Deputy Governor from Slovakia*, was of the opinion that joining the euro area is a very complex issue, which is influenced by the institutional background of the country, its exchange rate system, the structure of its economy, and even public opinion. In fact, all a candidate country needs is a strong leader who dares to take some risks, because there is no full guarantee of success. In his view, the Visegrád countries outside the euro area could adopt the euro at any time and would manage well if they applied appropriate policies. Member States, both within and outside, need a successful euro area. At the same time, he pointed out that depreciating exchange rates could not solve the problems around competitiveness. Countries that are used to this will have a very difficult time in the euro area, where this option is not available. Slovakia had to complete a major structural reform package before its introduction of the euro. An EU Member State seeking to join the euro area must adjust its mindset rather than waiting for everything to be perfect. The closest attention should be paid to fiscal, macroprudential and labour market policies. Unfortunately, Slovakia has been unable to make progress in terms of structural indicators over the last decade, and currently seems to be struggling with the trap of middle income.

The next question to be discussed was whether the price of the solidarity and stability mechanism is commensurate with its benefits. According to the *Vice-Governor from Croatia*, the benefits so far have definitely outweighed the costs, and he considers the mechanism to be very important for the euro area as a whole. What is involved is a huge, low-cost and long-term lending capacity and significant transfers, which ensures resilience and stability in times of crisis, provides for budgetary savings, and helps to prevent negative spill-over effects.

From the *Czech side*, concerns were expressed about the consistency of this mechanism with the Maastricht Treaty and the fact that this mechanism to cushion the crisis, as well as the European Central Bank's policy of seeking to push down risk premiums, could lead to the postponement of the structural reforms that would otherwise be necessary. This, in turn, raises the issue of moral hazard, while non-competitive countries will still fail to make any progress despite the huge transfers.

The *Hungarian side* voiced the view that it is early to judge how the advantages and disadvantages of the solidarity and stability mechanism are balanced, but the balance was nevertheless much better now than it was ten years ago. Meaningful progress has been made, for example, with the creation of the banking union, although the deposit insurance scheme has not yet been established. However, many problems remain unresolved, as illustrated by the issues of the fiscal union or internal imbalances.

The *Deputy Governor from Slovakia* pointed out that the attitude whereby only the balance of financial costs and benefits is examined in connection with the operation of a system is flawed in his opinion. The issue is about a kind of insurance mechanism rather than a profitable investment. On the other hand, a number of very important elements of the European institutional system, which would be essential for success, are still missing. Unfortunately, for example, there is no ex-ante sovereign restructuring mechanism, there is no clear schedule for greater fiscal integration, a vicious circle remains between the banks and the state, specific examples being the lack of concentration limits and sovereign risk premia.

According to the *Deputy Governor from Poland*, the European Stability Mechanism and the banking union are very positive developments, but, for example, a single deposit insurance fund is absent. In terms of benefits, utility in the broader sense should be taken into account. As regards costs, consideration must also be given to the need to pay for the transfer of powers to the European level where this makes the policies to be implemented less suited to the needs of the local financial system.

The last topic was the future of the common monetary policy. For *Croatia*, the common monetary policy appears to be clearly beneficial due to the country's strong integration into the euro area both financially and commercially. In addition, there is a high level of euroisation, which is a key factor in the issue of joining the euro area, because the applicability of exchange rate and interest rate policies is limited as a result. The monetary policy of the ECB appears to be appropriate for Croatia. In addition, the Vice-Governor underlined that the synchronisation of economic cycles has improved.

From the perspective of *Poland*, the economic cycles are not yet sufficiently harmonised with those of the euro area, while the growth rate, inflation and long-term interest rates in Poland are also much higher than in the euro area, and the temporary depreciation of the zloty continues to represent an advantage in the case of external shocks.

It is also important for *Czechia* that the monetary policy of the euro area is successful, irrespective of whether it is a member of the euro area or not, as this affects all EU Member States. However, the euro area still suffers from fundamental structural weaknesses stemming from its composition. It is a big question how crisis-proof the current architecture of the euro area is. Creating a common fiscal capacity could play a stabilising role, but it could also entail the risk of permanent transfers from competitive Member States to less successful ones, which is very difficult to manage politically.

According to the *Deputy Governor of the MNB*, the common monetary policy faces significant challenges. Inflation is rising globally, although it is not yet known whether this is temporary. However, it is at levels around 1 per cent in some Member States of the euro area, meanwhile reaching up to 5 per cent in other Member States. How the ECB will respond is a big question. The other important factor is the green revolution, which has become a trend with the world's central banks and is expected to be followed by the ECB. The third factor is digitalisation and digital means of payment, which is a very topical issue at the global level. In the 21st century, the countries winning the competition in the field of digital currency will also gain a significant advantage in the real economy.

According to the *Deputy Governor from Slovakia*, digitalisation and the green aspects present both opportunities and challenges. He was less concerned about inflation, which has been very low over the past ten years in the euro area. He considers it desirable for inflation to remain close to its target in the long term. At the same time, caution should be exercised to avoid an environment of uncontrolled inflation. It is a major challenge that European monetary policy has had to deal not only with monetary policy issues, but also with those that more appropriately belong to the domain of fiscal policy. The other key issue is that the euro area focuses too much on its internal problems and loses sight of the global picture.

Overall, it was a very enjoyable and thought-provoking panel discussion, during which a number of thoughtful topics emerged, enabling the audience to gain a comprehensive understanding of central banks' views on the major questions and challenges expected in the near future.

This year, the sustainability section offered four presentations and a panel discussion. In his presentation, *Csaba Kandrács*, Deputy Governor of the Magyar Nemzeti Bank and a Board Member of the Sustainability Section of the HEA, addressed the evolution of the Green Programme launched by the MNB in 2019 and the supervisory steps taken in accordance with it. In a brief assessment of the situation, the Deputy Governor of the MNB explained that, based on a survey on climate risks, low preparedness is accompanied by high risk in the case of Hungarian banks; moreover, the exposure of some institutions may also pose a stability risk. He also underlined that the domestic bond market is rapidly greening, even though the uptake of green financial products has not been sufficient to date. He then moved on to present the Green Programme, its three pillars and its practical implementation. As part of the first pillar – measures affecting the financial system – the supervisory arm of the MNB had prepared a Green Recommendation for credit institutions, introduced a Green Preferential Capital Requirement Programme to kick-start green financing, while a sustainable capital market strategy document and a climate stress test are also being developed.

Next, Deputy Governor *Csaba Kandrács* briefly presented the MNB's educational and networking activities, comprising the second pillar of the Green Programme, and finished off with the presentation of the steps taken as part of the third pillar: the MNB seeks to cut emissions by 80 per cent in its own operations in 5 years and neutralise the remaining part with its tree planting programme, and will also publish a financial report on climate change, the so-called TCFD report.

After an overview of 21st-century megatrends, *Pál Péter Kolozsi*, Director of the Monetary Policy Instruments, Foreign Exchange Reserves and Risk Management Directorate, explained why the action of central banks in relation to climate change and environmental sustainability is justified. He stressed that sustainability is closely linked to the traditional mandates of central banks, i.e. the achievement and maintenance of price stability, the stability of the financial system and support for the real economy. This is confirmed by the fact that the world's leading central banks are also actively addressing the issue. MNB has been a pioneer in greening among central banks, and in spring 2021 it received a sustainability mandate from the Hungarian parliament. Another important milestone was the July 2021 creation and publication of the MNB's green monetary policy toolkit strategy, which shows the directions for greening monetary policy after the previous, mostly supervisory green measures. After the description of the vision and mission set out in the strategy document, he concluded his presentation with two designated and already implemented directions of greening the central bank instruments. Accordingly, he presented the Green Mortgage Bond Purchase Programme, which started in August 2021, its objectives and parameters, and finally the concept of greening collateral management.

*Sándor Vízkeleti*, CEO of Amundi Asset Management, Chairman of the Board of the Hungarian Association of Investment Fund Managers and Asset Managers (BAMOSZ) and a Board Member of the Sustainability Section of the HEA, delivered his presentation entitled "*Sustainability and what is behind it*" in Q&A form. He emphasised the increasing importance of sustainability criteria in investment decision-making. While previous efforts sought to incorporate these criteria subjectively in the evaluation of companies, a toolkit has now become available in the form of the ESG methodology, which is based on the United Nations' 17 Sustainable Development Goals and helps investors in decision-making. Citing Volkswagen Group's diesel scandal as an example, he noted that while many companies initially experienced ESG as an extra burden, many have realised the importance of investor opinion. Driven by the uptake of ESG criteria, many companies now prepare a sustainability strategy, taking into account the views of different stakeholders. He also underlined that, seen from the investors' side, ESG criteria are increasingly becoming a part of investment strategies, and that demand is growing for impact products, which are dedicated to sustainability. Finally, he presented the aspects related to the customer information obligation as set out in the EU Sustainable Finance Disclosure Regulation (SFDR).

*Máté Lóga*, Director of the Structured Finance Strategy Directorate of the Magyar Nemzeti Bank, gave a presentation on green bonds and the possibilities for their issuance in the Bond Funding for Growth Scheme (BFGS). First, he reported briefly on the results of the BFGS so far with regard to green bonds and then presented in detail the two leading international standards on green bonds, the ICMA Green Bond Principles (GBP) and the Climate Bonds Standard of the Climate Bonds Initiative (CBI). In relation to the two standards, he also explained the certification processes, the types of external reviews and the differences between the two standards. He then moved on to present the advantages of green bond issues, including positive marketing value, reaching ESG investors and the MNB's Green Preferential Capital Requirement Programme. Finally, he provided an overview of sustainability-linked bonds and their differences from green bonds.

In addition to the four presentations, a panel discussion was also featured in the sustainability section this year. The discussion was moderated by *Richárd Végh*, CEO of the Budapest Stock Exchange and Chair of the Sustainability Section of the HEA; the panel comprised *Attila Chikán, Jr.*, CEO of Alteo Plc. and a Board Member of the Sustainability Section of the HEA, and *Attila Vajda*, founder, owner and managing director of Vajda Papír Plc. First, the two executives described the operations of their companies briefly, then moved on to discuss the effects of the pandemic, among which *Attila Chikán* highlighted that executives had to try a new kind of trust in their colleagues, while soft criteria earned higher esteem among employees. In agreement with this, *Attila Vajda* emphasised a strengthened environmental awareness and the importance of their knowledge gained by virtue of their Norwegian headquarters. In response to the question about supply chains, *Attila Chikán* noted that the optimum is being sought in the combination of operational safety, cost-effectiveness and sustainability, in line with the needs of the partners. He then highlighted the popularity of decentralised energy production and the fact that the pandemic had led companies to rethink their energy strategies. According to *Attila Vajda*, the great challenge of the future will be whether there will be enough employees in the production sector and how they can be trained, and how robotisation will affect operations. Moving on to financing aspects, he explained that Vajda Papír Kft. was the first production company in Hungary to issue a green bond.

In connection with the equity market, *Attila Chikán* explained that in major markets the value of companies with better ESG ratings has been significantly higher in the past years. With regard to bonds, he noted that their two issues, implemented under the auspices of the MNB BFGS, were oversubscribed. He also said that the integration of ESG criteria was not only a duty, but could also provide a competitive advantage, and that access to funding may be easier for a company complying with ESG criteria; indeed, this could even be a condition for the company's survival over time. *Attila Vajda* added that any company can do something for sustainability, and the savings that can be derived from the use of water and electricity, for example, constitute a significant competitive advantage for them. Finally, in another reference to employees, he stressed that sustainability is an important factor in the competition for workers and that young generations are much more sensitive in this respect.

In 2021, the Hungarian Economic Association's Annual Congress convened its Competitiveness Section Meeting for the sixth time. Hosted by the Competitiveness Section of the HEA, it focused on the post-coronavirus period and examined the *key issues of competitiveness and sustainability* in an opening presentation and a roundtable discussion. The opening presentation, entitled "*The Incentive State for Competitiveness and Sustainability*", was delivered by *Bianka Parragh*, member of the Monetary Council of the MNB and research and development adviser at the University of Public Service. The roundtable discussion of the section was entitled "*Key issues of competitiveness and sustainability after the coronavirus pandemic*", and the panellists were *Magdolna Csath*, university professor and member of the Competitiveness Council, *László Lovászy*, ministerial commissioner for strategic government research, and *Levente Jánoskuti*, McKinsey's managing partner. The wide-ranging discussion, featuring representatives of the public, academic and corporate sectors, was moderated by MNB's Executive Director *Gergely Baksay*.

In her presentation, *Bianka Parragh* explained in detail how the incentive state model can promote long-term competitiveness and sustainability. Only a strong state can create an effective incentive system that *compels other market participants to cooperate on a permanent basis*. This incentive state model was also successful in Hungary in the 2010s, first in the field of tax reform, then in the monetary policy reforms starting in 2013, and even in the response to the coronavirus pandemic, which contributed to Hungary's rapid economic recovery. The incentive state model assumes an active role, striking a balance between purely market-based coordination and bureaucratic state regulation through the active use of positive incentives and constructive market cooperation with stakeholders.

In Hungary, a particularly successful example of how the incentive state operates was the *conversion of foreign currency loans*, carried out as part of cooperation between the government, the central bank and the Banking Association in 2014–2015. Another successful example is the central bank's *Funding for Growth Scheme*, which provided loans to Hungarian SMEs under favourable terms. This Scheme proved effective in reviving the frozen credit market. The most prominent result of the government measures was produced by the tax reform starting in 2010, in particular the introduction of the *flat-rate personal income tax*, which effectively encouraged employment and contributed decisively to the employment of around 850,000 more people by the end of the decade than in 2010.

The instruments of the incentive state have also proved successful in response to the unprecedented health and economic challenge of the coronavirus crisis. During the pandemic, policy-makers had to find solutions in three areas simultaneously: *protecting the health of the population*, *mitigating the economic crisis* and *avoiding excessive financial imbalance*. The presenter illustrated the effectiveness of crisis management with the MNB's Pandemic Treatment Index (PATRIX). The central bank's index captures each area affected by the crisis (health, real economy, financial balance) in a complex approach incorporating nine indicators.[2] In most areas, Hungary's crisis management of 2020–2021 outperformed the average of the other Visegrád countries. The Hungarian vaccination programme was one of the fastest in the Union, and unemployment was kept to one of the lowest levels. Furthermore, thanks to the MNB's programmes and the credit moratorium, during the crisis Hungary recorded the fastest growth in the European Union in lending by the banking system to the private sector. Summarising the performance in terms of the indicators of the central bank's index, to date, Hungary ranks 7th in the effective management of the Covid crisis in the EU, *Bianka Parragh* pointed out.

[2] The nine indicators of the MNB's Pandemic Treatment Index are (1) number of patients, (2) combined indicator of Covid deaths and excess deaths, (3) population vaccination rate, (4) change in GDP compared to the end of 2019, (5) change in the number of employees compared to the end of 2019, (6) unemployment rate, (7) general government deficit, (8) current account balance, and (9) change in credit institutions' loan portfolio.

Finally, the presenter also addressed the potential challenges facing the Hungarian economy. Already before the outbreak of the coronavirus, it had become clear that to increase productivity, investments were needed in competitiveness factors such as the promotion of research and development and the development of human capital. According to *Bianka Parragh*, the *transition to a knowledge and technology-intensive growth path* is one of the most important long-term breakthrough opportunities for the Hungarian economy. However, the crisis caused by the epidemic has also brought new challenges to the surface. She pointed out that to be a winner in the next decade, it is no longer enough to pursue economic growth or financial balance alone, but that the economic model must become *sustainable* in all its aspects. Simultaneous improvements in sustainability and competitiveness can be attained primarily through the *greening and digitalisation of the economy*. Both processes require significant state incentives, such as the issuance of green government bonds to achieve a circular economy, while digitalisation involves supporting the digital transformation of SMEs or the development of public e-government. In the future, the incentive state should continue to strengthen the economic incentives for sustainable convergence.

In the roundtable discussion following the opening presentation, Gergely Baksay's first question was whether competitiveness is related to the effectiveness of the control of the epidemic. According to Professor *Magdolna Csath*, this result should not be linked to competitiveness. She said that she would rather attribute the speed of recovery to the structure of the economy (the proportion of non-cyclical, i.e. crisis-proof sectors) and to economic policy responses. However, the role of healthcare competitiveness is not negligible, as the health status of the population greatly influenced the course of the pandemic in each country.

In his answer, *Levente Jánoskuti* highlighted that specific factors of competitiveness may have played a role in the effectiveness of crisis management. Indeed, according to a McKinsey survey, digitally better prepared countries were more successful in weathering this period. Ministerial Commissioner *László Lovászy* stressed the importance of institutions' competitiveness and efficiency, which play a particularly significant role in tackling major challenges such as epidemics and climate change. Accordingly, he welcomed the 330-point publication of the Magyar Nemzeti Bank, which substantially helped cooperation between the state, the MNB, and professional and scientific organisations in the field of competitiveness.

The discussion continued by addressing whether the order of importance and weight of competitiveness factors has changed compared to the pre-pandemic period before the pandemic. According to Professor Csath, on the one hand, much will depend on whether companies follow up on changing customer needs in their business models (digitalisation, experience-driven customer relationship). On the other hand, soft factors such as how much a society values performance have earned higher recognition. McKinsey's managing partner considered that this is not about changes in the components of competitiveness, but rather about accelerating the development processes. This acceleration is well illustrated, for example, by the fact that Hungary has caught up with Western European countries in the usage of digital services. In its analysis of American companies, McKinsey found that companies that were able to invest in innovation during the Covid-19 pandemic and had higher R&D spending did not see their sales drop during the pandemic. The ministerial commissioner stressed the trend of artificial intelligence, automation and technological innovation taking on a more prominent role, transforming many jobs. This prominent role is also reflected in the increase in Hungary's exports of high value-added products in recent years.

The discussion largely hinged on the idea that forward-looking technological innovations are useless without people to operate them. Panellists agreed that simpler and lower-skill jobs could best become automated or replaced by artificial intelligence. Accordingly, they considered it important that the highest possible value-added jobs dominate the industries. It was also pointed out that around 50 per cent of workers will be forced to change careers. In the discussion, all participants considered it essential to increase the level of qualifications, especially in the field of STEM.[3] In addition to developing education and digital skills, it was also considered necessary to increase the resources devoted to R&D to adapt to global trends.

Finally, *Gergely Baksay* asked about the relationship between competitiveness and sustainability. *Levente Jánoskuti* said that sustainability has now become part of competitiveness, which is also due to regulatory, social and capital market pressures. One possible example of the latter could be the intensity and speed with which capital markets respond to green announcements. *László Lovászy* also agreed that these two concepts go hand in hand, adding a reminder that not all of the solutions assumed to be sustainable are necessarily so. According to the calculations of the International Energy Agency, new renewable energy technologies may have a significant mineral requirement of up to six times higher than today's before reaching the 2050 carbon neutrality target. For example, the mineral requirement for wind power generation (due to mineral intensive blades in turbines) can be 3 to 4 times higher than the same energy obtained from nuclear power. *Magdolna Csath* emphasized that competitiveness is as long-term of a concept as sustainability, and thus creating a circular economy is essential, which also requires an attitude change in society. The final thought concluded that it is essential to have a clear vision and a long-term strategy in the face of huge economic, social and technological changes.

[3] Acronym for Science, Technology, Engineering and Mathematics in higher education.