Financial and Economic Review, Vol. 24 Issue 1, March 2025, 201–212.

Report on Some of the Sessions of the 2024 HEA Congress*

Ferenc Tóth – Benjámin Nagy – Emese Kreiszné Hudák – Gábor Szarka

On 5–6 September 2024, the town of Nyíregyháza hosted the 62nd Annual Congress of the Hungarian Economic Society (HEA), one of the most important annual conferences for the Hungarian economics community that has significant traditions. György Matolcsy, Governor of the Magyar Nemzeti Bank (MNB), gave a presentation at the opening plenary session. In this report, we provide an account of the roundtable discussions of bank leaders, as well as the Monetary Policy, Competitiveness, and Sustainability and Corporate Competitiveness sessions.

Roundtable discussion of bank leaders

At one of the most prominent, well attended and popular sessions, the *roundtable discussion of bank leaders,*[1] *Pál Péter Kolozsi,* Director of the MNB's Monetary Policy Instruments, Foreign Exchange Reserve and Risk Management, gave a welcome speech as the President of the HEA's Financial Section, highlighting the 100th anniversary of the MNB's establishment. Afterwards, *Barnabás Virág,* Deputy Governor of the MNB, member of the Board of the Competitiveness Section of the HEA and moderator of the discussion, gave an introductory presentation entitled 'The situation of the domestic economy and banking system in the midst of the storms of the 2020s', presenting current economic environment. In many areas of life, he considered the present decade – full of crises and war – to be a decade of great transitions. The key question was who could best respond to the challenges of transition, because the banks, companies and economies that were able to do so would be the successful ones. First, he gave an international macroeconomic snapshot, showing that so far European economies had been the losers in this period of major transitions, while China and the US had returned to trend-like growth more quickly. Regional disparities may persist in the coming years to the detriment of Europe. The global inflation wave seemed to be subsiding, but at the

* The papers in this issue contain the views of the authors which are not necessarily the same as the official views of the Magyar Nemzeti Bank.

Ferenc Tóth: Magyar Nemzeti Bank, Senior Economic Expert. Email: tothf@mnb.hu
Benjámin Nagy: Magyar Nemzeti Bank, Senior Professional Secretary. Email: nagybe@mnb.hu
Emese Kreiszné Hudák: Magyar Nemzeti Bank, Senior Professional Secretary. Email: hudake@mnb.hu
Gábor Szarka: Budapest Stock Exchange Plc., Professional Secretary to the CEO. Email: SzarkaG@bse.hu

[1] The discussion can be viewed here: https://www.youtube.com/watch?v=qUypdgEDWJA&t=316s

same time we were experiencing crises with unemployment at historically low levels, which was a new element. In the 2020s, the situation within Europe had reversed, with growth accelerating in Southern Europe and slowing in the Northern region and Central and Eastern Europe (CEE). Countries integrated into the German production chain were particularly suffering. In addition, CEE faced challenges such as high energy intensity and the aforementioned tight labour market, while access to finance had become more expensive, with each economy having to pay its own risk premium. As Hungary's region was close to the war zone, the premium was higher here than in the 2010s and in more distant regions of the EU. Hungarian economic policy should therefore focus on reducing this premium. His presentation focused on three key issues: inflation and its consequences, consumption developments and the slowdown in investment. Inflation had been brought down for the time being, but we still could not be satisfied; furthermore, a significant proportion of households were not yet feeling any improvement. Consumption figures were in line with regional data, with consumption up by 8 per cent versus 2019, but rising by only 2 per cent in the EU. The big question was how much of this consumption was realised domestically and how much abroad, often through digital channels where there was no VAT revenue. At the same time, Hungary was a structurally low-consumption economy, even for its level of development. There was no economy where you could demand both a high consumption rate and a high investment rate. Investment in Hungary had fallen substantially and was broadly below the regional average over the past year and a half. This trend had to be reversed. The Hungarian economy needed stability, confidence and predictability. The banking system had performed well. In terms of profitability, its return on equity had improved by around 10 percentage points, putting it among the best in Europe, and the share of non-performing loans had declined. Domestic corporate credit dynamics had moderated, but were close to the regional average. Unfortunately, there was a marked jump in terms of fraud in the digital space for both card payments and remittance in 2023. The MNB was actively working to prevent fraud, with the launch of the artificial intelligence-based, real-time, centralised fraud detection system on 1 July 2025. In addition, from 1 September 2024, a completely new, domestic, secure mobile payment solution based on the instant payment system, the qvik, a QR code payment system, had been launched and made available to all consumers, free of charge and free of financial transaction fee, which also offered merchants a significantly cheaper solution than before.

This was followed by a roundtable discussion, with the participation of *Ádám Egerszegi*, Deputy CEO of MBH Bank Nyrt. responsible for digitalisation and operations, *László Harmati*, Retail Deputy CEO of Erste Bank Hungary Zrt., *Éva Hegedüs*, Chairman and CEO of GRÁNIT Bank Zrt. and Secretary General of the HEA, *Pál Simák*, Chairman and CEO of CIB Bank Zrt., and *László Wolf*, Deputy CEO of OTP Bank Nyrt. and Vice President of the HEA.

The bank executives discussed the issue of lack of demand. This decade was forecast to see the lowest global GDP growth since the Second World War. The current decade was not only about digitalisation, but also about the proper use of artificial intelligence. There were banks where a significant proportion of card transactions were online purchases, and around 50 per cent of this volume was spent at foreign merchants. It was not consumption that has fallen, but domestic trade, and cross-border trade and the turnover of foreign online shops was increasing. Household capital exports had also accelerated. The declining interest rate path had helped to kick-start retail lending growth, with mortgage lending expanding significantly (although it had fallen slightly in recent months, but on average was still approaching earlier peaks in 2024). Overall, the outlook for retail lending was positive. There had been a strong increase in unfunded personal loans, one reason being that digitalisation was much stronger here, which had made it easier to access effectively. The other reason was that there had been a massive, deferred purchase of consumer durables, which was now being financed by loans. Another incentive was to smooth consumption, which could now be done with a much lower interest rate loan. Further improving the credit infrastructure and speeding up credit approval could play a very important role in deepening retail credit market. Growth in corporate lending had been limited, with a strong increase in the share of foreign currency loans, but this had been at a natural collateralisation level. The recovery of corporate lending required confidence and predictability, which was not only a question of interest rates, and the system of guarantees and subsidies should also be rationalised. Overall, credit quality was currently good in all segments, with a low ratio of non-performing loans, no material risks, and only the drought could have some negative impact in the agricultural sector. In respect of savings, it was noted that Hungary had traditionally had a high savings rate. This decade was about the democratisation of investment, with investment banking now managing not only the wealth of the rich, but also smaller savings. Household savings were typically held mainly in mutual funds and to a much lesser extent in deposits. Investing in government bonds was also noteworthy. Here, banks were facing a draining effect, as more and more people were transferring their savings to the Hungarian State Treasury. At the same time, there was a significant layer of people who do not have any real savings. Raising the financial transaction fee and introducing a currency exchange fee involved a significant risk that foreign financial fintech providers could gain a bigger role and that part of Hungarian savings could flow abroad. The Hungarian banking sector could not do anything about this, as it was in an uncompetitive position vis-à-vis foreign service providers. As regards profitability, on the very day of the panel discussion, it was announced that the consolidated profit of the banking system in the first half of the year had amounted to HUF 972 billion. Bank executives believed that the introduction of the financial transaction fee could lead to significant losses in the second half of the year. The extra profit tax would be more burdensome for some banks, but overall the banking sector was still expected to end 2024 with a significant profit. From an economic policy perspective, the high profitability of the banking sector was welcome, as growth and economic development could only be achieved if banks were able to support the expansion of the business sector.

Monetary policy section

The Monetary Policy section focused on understanding central banks' responses in the turbulent economic environment of the challenging 2020s.[2] The session was opened by *Előd Takáts,* Chairman of the Monetary Policy Section of the HEA, Advisor to the Bank for International Settlements (BIS), Professor and Rector Emeritus of the Corvinus University of Budapest and Visiting Professor at the London School of Economics and Political Science (LSE). In his opening speech, he stressed that the objective of monetary policy was to create and maintain confidence in money, and as such it was one of the foundations for the proper functioning of society and the economy.

In his opening presentation, *Zoltán Jakab*, Chief Economist at the International Monetary Fund (IMF), examined the extent to which the current high inflationary environment globally had been caused by expansionary monetary and fiscal policies in the United States and the euro area. The results showed that these macro policies, along with steepening Phillips curves, had had a detectable impact on inflation in 2021 and 2022, especially in the US.

The roundtable discussion following the presentations was joined by *Ádám Banai,* co-Chair of the Monetary Policy Section of the HEA and Executive Director of the Magyar Nemzeti Bank, responsible for monetary policy instruments, financial stability and foreign exchange reserves management, and *Piroska Nagy Mohácsi,* Visiting Professor at the LSE and former Head of Department and Advisor to the IMF. The discussion was moderated by *István Madár,* member of the HEA Board and senior macroeconomic analyst at Portfolio.hu.

According to *Előd Takáts*, the world's central banks had been raising interest rates in synchrony in response to the global inflation shock, although he noted that developing countries had reacted faster to rising prices than developed ones. He said that the period in which the inflation-targeting regime was established and the decade before the coronavirus pandemic and its global economic environment differed sharply from the environment that had been emerging in the 2020s. Along with the dominance of the USA, the earlier period was characterised by globalisation, integrated value chains, rising global labour supply and demographic trends pushing down trend inflation, resulting in low inflation. In recent years, these

[2] The session can be viewed here: https://www.youtube.com/watch?v=s6ptKPUxOaE&t=2s

structural trends had reversed, putting upward pressure on inflation globally. Central banks needed to ensure price stability in this changed environment, with its multiple structural challenges, in the face of bloated balance sheets and accumulated losses from previous crisis management. Climate change impacted financial stability through physical and transition risks. The central banks' actions were determined by the mandate, which may require different roles for each country. In addition, he said that the issue of digital central bank currencies could also be worth exploring, in particular how such an innovation could contribute to the fulfilment of central banks' mandates, especially in terms of preserving public confidence in money.

Ádám Banai stressed that in addition to high inflation, the economic effects of the string of crises, the global pandemic, the Ukrainian-Russian war and the energy crisis of recent years had severely undermined business and consumer confidence, which may take a long time to recover. He also expressed that the shocks of recent years had highlighted the need to think much more broadly as a central bank, to monitor not only real economic and financial market developments, but also the risks arising from geopolitical conflicts, commodity market developments resulting from technological change, or the globalisation of commodity markets through online platforms. He stressed that central banks had a responsibility to mitigate the effects of climate change, as increasingly extreme climate events had inflationary effects, for example through food price volatility, and due to the financing need of the green transition, it was necessary to build incentives into the financial system to mobilise resources towards green investments.

Piroska Nagy Mohácsi pointed out that in a turbulent economic environment, with high and volatile inflation, central banks had a credibility deficit to change their monetary framework and move to a higher inflation target. In her view, the Fed's move to average inflation targeting had also contributed to the increase in price dynamics in the US. She also pointed out that, in addition to monetary policy, market structures and the intensity of competition had also influenced price dynamics. She highlighted the negative consequences of central bank asset purchase programmes: central banks had significantly influenced market developments and financing conditions, and had accumulated losses as a result of asset purchases, among other things, which could cause them credibility problems. She suggested that a formal mechanism be established to provide an indication of the market conditions under which a central bank asset purchase programme should be launched and stopped. She expressed concerns about the central bank's targeted green asset purchase programmes, but also highlighted that climate change had implications for financial stability and that financial system participants should be encouraged to manage these new types of risks. She also stressed that central banks should actively work on the development of a stand-alone digital currency, as this would help them to preserve their monetary sovereignty in the future.

Competitiveness section

The Competitiveness section of the HEA examined the topics of human capital, innovation and productivity.[3] The event was moderated by *Gergely Baksay*, Executive Director of the MNB and President of the Competitiveness Section of the HEA, who said in his introduction that amidst the changed circumstances of the 2020s, a competitiveness revolution was needed in order for Hungary to continue its success from the previous decade. The presentations of the session covered first the training of human capital and then the combination of human and material capital embodied in innovation, i.e. all of the factors of the model of knowledge, talent, technology and capital,[4] defined by György Matolcsy, Governor of the MNB.

György Szapáry, Chief Advisor to the Governor of the MNB, addressed the issue of sustainable teacher supply in public education.[5] Ensuring sufficient numbers of teachers was a challenge for many reasons. On the one hand, the number of students enrolled in teacher education had decreased by about one quarter between 2020 and 2023 compared to previous years, and on the other hand, there were a number of students leaving this career both during and after their training. The age pyramid of teachers was characterised by ageing. Over the past two decades, the proportion of teachers over 50 had doubled (from 23 per cent to 47 per cent), while the proportion of young people starting their careers had fallen from 15 per cent to 7 per cent.

In order to train and retain sufficient numbers of teachers, György Szapáry presented several possible solutions in his presentation. In particular, a fair remuneration system and teacher incomes of stable value, as well as a reduction of the burden on teachers, could contribute to a sustainable increase in their numbers. Past experience showed that a career in teaching was an attractive option for young people, with a predictable salary structure. With the introduction of the teacher career path model in 2013, the number of applicants for teacher training increased significantly, while the number of those choosing to enter the profession had also decreased, as the pay increases had not been implemented. As a result of the wage increases that had been introduced, the salaries of Hungarian teachers had risen significantly: while in 2022 the average salary of a teacher was 58 per cent of that of a general employee with a degree from tertiary education, in 2024 it was 72 per cent. The government had set a target for teachers' salaries to reach 80 per cent of the average graduate salary by 2026. In line with this, continued pay increases,

[3] The session can be viewed here: https://www.youtube.com/watch?v=O2aMOIYUeMM.
[4] https://novekedes.hu/mag/matolcsy-gyorgy-a-4t-modell
[5] The presentation is based on a discussion paper published by the experts of the Magyar Nemzeti Bank, whose authors are György Szapáry, Péter Asztalos, Donát Kim, Nándor Marmoly and Ákos Szalai. The study can be downloaded from: https://mkt.hu/wp-content/uploads/2024/06/Javaslatok-a-pedagogusok-utanpotlasanak-biztositasa-erdekeben_2024_clean.pdf

differentiated pay increases for teachers in the most disadvantaged settlements and fine-tuning of the reward and promotion system could also help to sustainably increase the number of teachers. Additionally, non-financial incentives also played an important role: reducing the workload for teachers, for example by increasing the number of support staff, and better communication between school district centres and schools could also make a real difference in teachers' working conditions.

Péter Szatmári, Deputy Rector for General and Development Studies at Milton Friedman University, presented the changing higher education ecosystem. He noted that there were currently nearly 300,000 students in Hungarian higher education, with 63 institutions under mixed ownership, including 21 model-switching institutions. There were 40,000 foreign students studying in Hungarian higher education. However, the drop-out rate of 15–20 per cent of students was a challenge, with an increasing number of cases of competence problems. New students could be supported on the hand by improving public education, and on the other hand by training of universities in learning methods and other skills for new admissions. Another long-term challenge for higher education, as for public education, was the ageing and replacement of teachers. Career progression structures could play an important role in addressing this: sabbatical leave could be a solution, and in model-shifting institutions, additional rewards could be provided through performance appraisal systems. The graduate career tracking system had an important role to play, and it was also worth finding out whether graduates found employment in their field of study. Regarding the competitiveness of higher education, Péter Szatmári explained that Hungary had seven universities that were regularly included in international rankings, but more institutions should be included in the future.

Bianka Horváth, Senior Adviser to the Governor of the MNB and Associate Professor at METU, presented the value creation potential of the high-tech sector and artificial intelligence (AI). In the 2010s, economic growth had been supported by three factors: rising employment, rising investment rates and productivity improvements. Of these, productivity improvements may have been the most important factor in this decade, and investment in human capital and technology would therefore play an increasingly important role. Companies in high-tech industries were more resilient to crises, more independent of economic cycles and had higher returns than other industries. Spending on innovation and research and development (R&D) was closely correlated with productivity. Nowadays, the highest value-creating capacity was represented by high-tech industries: in Hungary and the regional countries, the pharmaceutical industry, the info-communications sector and the creative industries (including most importantly software development) had the highest labour productivity. However, there was large variation in labour productivity in the leading sectors between countries and between companies within countries. The next wave of productivity improvements was expected to be related to artificial intelligence. The key to success was how effectively and quickly countries and companies could adapt AI technology. The IMF calculated that artificial intelligence could affect up to 40 per cent of jobs in developed countries. AI was not a substitute for, but in most cases a complement to, existing tasks. The professions of the future would require complex skills, creativity and technological knowledge. Therefore, raising the digital skills of the population was an important factor in increasing competitiveness. To reap the benefits of AI, we also needed to be aware of the risks. If cybercrime were a national economy, it would be the world's third largest economy, according to IMF calculations. It was important to look at AI as an opportunity, while identifying risks and constraints.

Magdolna Csath, PhD member of the Hungarian Academy of Sciences, former member of the National Competitiveness Council and Vice-Chair of the Innovation Section of the HEA, reviewed the relationship between innovation and productivity competitiveness. In her introduction, she recalled the Pareto principle, according to which the majority of results, up to 80 per cent, were achieved with 20 per cent of the costs. As the most commonly used competitiveness indicator was a composite index, it was worth focusing on those sub-indicators that had the most impact on Hungary's competitiveness position. GDP per hour worked was substantially lower in the Visegrád countries than in Austria. Hungary's productivity as a percentage of the EU average was the 7th lowest in 2023 and only amounted to 60 per cent of the Austrian average. One of the most important components of productivity was how productive each sector was. In Hungary, the pharmaceutical and chemical industries had high productivity, but accounted for just 0.9 and 1.4 per cent of the total economy, respectively. Productivity and innovation were also low in the sectors that dominate Hungary's economic structure (food, automotive). In terms of productivity, Hungary was less evenly matched across industries than Austria. In Hungary, the highest chemical productivity was ten times that of the lowest value-added hotel and catering sector, while in Austria the difference between the highest and lowest productivity was 5.5 times. In Hungary, the share of innovation and knowledge-intensive jobs was low in the total workforce. Overall, the role of small, but highly productive and innovative sectors in the Hungarian economy should be strengthened in order to boost competitiveness.

In his presentation, *Gergely Baksay* compared the economic growth of the United States and the European Union over the past 25 years. The main conclusion of the presentation was that the source of the persistent US growth surplus compared to the European Union had been faster productivity growth. This was almost entirely driven by digitalisation and the performance of the info-communications sector (ICT). Labour productivity in the ICT sector had increased fivefold in the United States over the past 25 years, while in the European Union it had less than doubled over the same period. Moreover, in the US, not only the productivity of the sector but also the number of employees had grown much more dynamically. The digital revolutions of the last 50 years could be divided into four main parts: the first wave was personal computers, the second wave was driven by the internet, and in the third wave the spread of mobile phones and smart devices was the basis for the technological change. The fourth technological phase, which was now beginning, would bring us the era of artificial intelligence (AI). The EU had missed out on the waves of the digital revolution in the past and the same thing seemed to be happening in the field of artificial intelligence. AI had emerged in the US, and it appeared that US companies may be its beneficiaries. US companies led the ranking of the largest technology companies by capitalisation. The EU did not lag significantly behind the US in ICT investment, and in some European countries (such as Estonia, Sweden and the Czech Republic) it even exceeded the US, but the latter was still much stronger in bringing developments to market, with a much higher penetration of venture capital as a key factor.

Sustainability and business competitiveness section

Richárd Végh, CEO of the Budapest Stock Exchange and President of the Sustainability Section of the HEA, welcomed the participants at the full-house event.[6] In his keynote speech, he stressed that the success of the green transition depended on technological innovations and their effective deployment, which would require huge financial resources. Capital markets played a key role in financing the green transition and could provide a solution to raise the necessary funds. He estimated that to meet the EU's targets, 8 per cent of GDP should be spent on sustainability every year. Another important role of capital markets was to mitigate risks, which could help green investments to take place. In his introduction, he also stressed the need for listed companies to develop strategies in response to climate change and ESG challenges. To achieve economic sustainability, it was essential for companies to put innovation into practice from a profit-driven perspective. He concluded by pointing out that Europe was lagging behind in the development of capital markets, especially compared to the US and Asia, and that capital market reforms were needed for a successful green transition.

Diána Ürge-Vorsatz, physicist, climate scientist and Vice-Chair of the UN's Intergovernmental Panel on Climate Change (IPCC), began her presentation by stressing that sustainability issues, especially climate change, had a direct impact on our daily lives and competitiveness: the world's infrastructure was built on a climate that no longer existed, and we were experiencing this in our daily lives. Competitiveness and sustainability could not be separated. Climate change was

[6] The session can be viewed here: https://www.youtube.com/watch?v=9fnYfLJzu-0

already having a severe impact on our economies and if we did not act effectively to combat it our competitiveness would continue to deteriorate. The only way to remain competitive was to put in place effective climate protection measures, because climate impacts could significantly limit human life and economic activity in the future. Addressing climate change must be seen not only as an environmental imperative, but also as an economic one. Without innovation and the right climate action, our infrastructure, economy and competitiveness were at significant risk, and thus tackling change could not be delayed any longer.

Csaba Kandrács, Deputy Governor of the Magyar Nemzeti Bank responsible for Financial Institutions Supervision and Consumer Protection, and Member of the Sustainability Section of the HEA, emphasised that in order to raise awareness, it was important to understand the importance of sustainability and for everybody to take steps in their own specialist field. In addition to GDP, new metrics were needed to truly assess sustainability. The Hungarian central bank had also developed sustainable GDP indicators and wanted to see an increase in the share of green financing. In addition to the introduction of new green financial products, the protection of biodiversity was also a priority and efforts to achieve green goals must continue.

Zsófia Beck, Managing Director & Partner, Regional Energy Industry, Boston Consulting Group, highlighted the importance of the energy industry and the energy trilemma, stressing that energy security, sustainability and competitiveness needed to be balanced. The energy crisis and the invasion of Ukraine had created a new situation. Europe had become more focused on security of supply, trying to find solutions at national level, when some issues could have been solved at the European level. Investment in sustainability had not stopped, but the costs had increased dramatically. In addition, the issue of competitiveness had also come to the fore and we needed to consider what was worth investing in. She also showed that significant financial resources – some estimates put the figure at EUR 1,000 billion – were needed to expand the energy mix and renewable sources. Regarding the situation in Hungary, she mentioned the increasing demand for electricity, which was an important factor in the context of both industrial investment and sustainability objectives. Financial and technological commitment, as well as effective infrastructure development, were essential to achieving Hungary's sustainability goals while maintaining its competitiveness.

Anikó Raisz, State Secretary for Environmental Affairs and the Circular Economy at the Ministry of Energy, focused on the social importance of sustainable development and the circular economy. She stressed that achieving sustainability between social, economic and environmental interests was a huge challenge, relevant for present and future generations alike. Moving to a circular economy, she noted that, given the permanence of materials, the exponential increase in waste was unsustainable and had become a global problem. She mentioned that there were also positive steps towards sustainability in Hungary, such as waste collection and recycling of secondary materials. A shift to a circular economy was essential and the costs of waste management for future generations should not continue to be borne by taxpayers. Coordination at national level and the involvement of the private sector were essential to achieve the sustainability goals. At the end of her presentation, she mentioned that the creation of industrial symbiosis areas, where one company's waste could be another's raw material, might represent be an important step towards improving sustainability and competitiveness.

The panel discussion following the presentations was moderated by *Rita Szalay*, Director of ESG Services at PwC Hungary. The panellists were *Attila Chikán Jr.* (Chairman and CEO of Alteo Nyrt.), *Károly Mátrai* (CEO of MVM) and *Szabolcs Tóth* (Deputy CEO of Waberers Nyrt.).

Participants stressed that sustainable development was an important task not only for governments, but also for individuals and companies, and that all stakeholders had to take responsibility for protecting the environment. Last year, MVM Zrt. had adopted a new strategy, one of the central pillars of which was the green transition. The goal was to achieve carbon neutrality in their production by 2035, and to this end the company was planning to spend around EUR 34 billion on green investments over the next decade, including digital switchover and grid development. ALTEO Zrt. had been addressing sustainability issues since its foundation two decades ago, which was not only an obligation but also a competitive advantage. As a market leader in logistics, Waberers had a significant environmental footprint in the transport sector. The company was continuously investing to reduce its emissions and offer alternative, zero-emission solutions to its customers. Customer interest in such green services was low and prices could be higher, limiting the spread of green investments.

The second question of the panel discussion looked at the changes in sustainability practices and industry shifts in the recent past. Achieving ESG certification was a key objective for MVM, which was why the company had taken significant steps towards a green transition. MVM already produced 87 per cent of its electricity carbon neutrally and had set ambitious targets for increasing the use of renewable energy sources. For Alteo, in addition to improving its ESG rating, the issuance of green bonds had also enabled a significant expansion of renewable capacity. Technological progress created huge opportunities but also challenges, such as emission reduction obligations. The transport sector was responsible for significant emissions, but with a focus on sustainability, Waberer's offered alternative, zero-emission solutions. In addition to current innovative technologies, traditional methods also played an important role, and improving operational efficiency was a priority to reduce environmental impacts.

The panellists agreed that sustainability efforts were necessary not only for companies, but for all levels of society. A commitment to sustainability was not only an obligation, but also a competitive advantage in today's market environment. Responding to ESG challenges would be essential for companies in the future, with technological advances and responsible business behaviour as key drivers.

The panel concluded by asking where companies felt the greatest pressure to move towards sustainability and the costs of compliance or non-compliance. The pressure was coming from many directions: regulators, consumers and investors. The biggest problem, however, was the financing side, as some banks had already indicated that they would not finance certain fossil investments, such as natural gas-based projects, after 2030. Natural gas was essential for the stability of the energy system, especially in balancing renewable energy sources. It was therefore important that the financial sector continue to support these investments. Obtaining ESG certification not only brought prestige, but also generated investor interest, which had a positive impact on the company's share price. In addition, compliance with the EU taxonomy was an advantage in loan financing. In the transport sector, electric vehicles were not yet widespread, as technological breakthroughs alone were not sufficient; a market environment was needed where they pay off. The increase in external costs such as fuel prices or road tolls could be a key driver for the wider spread of sustainability solutions in the near future. Overall, all three participants agreed that the pressure for sustainability was increasing from all directions and that there could be business benefits from compliance, but that in some sectors, such as energy and transport, financing and market conditions also played a critical role, alongside technological solutions.