

Trends and Developments in the Hungarian Pension System: An Assessment of the 2010–2025 Reforms

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Abstract: This study examines the main changes in the Hungarian pension system between 2010 and 2025, focusing on four major reforms: the abolition of the mandatory private pension pillar, the removal of the contribution ceiling, the increase in the statutory retirement age to 65, and the restructuring of pension-related contributions. Using secondary literature, official budgetary and demographic data, and descriptive time-series analysis, the paper assesses the fiscal, demographic, labor-market, and distributional implications of these measures. The findings indicate that several reforms improved the short- and medium-term financial position of the pension system, but their contribution to long-term structural sustainability was more limited. Among the measures examined, the increase in the statutory retirement age had the strongest direct connection to demographic sustainability, while the other reforms mainly affected financing conditions, redistribution, and the contribution base. The results highlight the continuing importance of demographic trends, employment, wage growth, and future policy decisions for the sustainability of the Hungarian pension system.

Keywords: Hungarian pension system, pension reforms, pension sustainability, demographic ageing

JEL Classification: H55; J26; H53; J11

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INTRODUCTION

The period after 2010 brought major changes to Hungary's pension system. The regulations introduced during these years were amended several times within a short period, and the reforms went beyond minor adjustments. In some cases, they marked a fundamental change in the direction of pension policy (Ádám & Simonovits, 2019; Szikra, 2014). The abolition of the mandatory private pension pillar, the removal of the contribution ceiling, the restructuring of pension-related contributions, and the gradual increase of the statutory retirement age to 65 together reshaped several core elements of the system. These measures affected not only how pensions are financed, but also the logic of redistribution and the incentives influencing people's employment and retirement decisions.

These reforms took place in a broader European context, as many countries reconsidered the design of their pension systems after the 2008 global financial crisis. Several Central and Eastern European states, including Hungary, moved away from earlier reform approaches and placed greater emphasis on fiscal sustainability and the role of public pensions (Altiparmakov, 2018; Naczyk & Domonkos, 2016). In Hungary, one of the main aims of the post-2010 pension reforms was therefore to improve fiscal and budgetary stability. The measures were intended to reduce pressure on public finances while reinforcing the central role of the state pension system (Ádám & Simonovits, 2019; László, 2018).

At the same time, the importance of these reforms goes beyond their immediate impact on the state budget. Changes to pension financing can affect future public liabilities, redistribution across income groups, incentives to participate in the labor market, and the long-term link between contributions paid and pension benefits received. For this reason, pension reforms should not be assessed solely on the basis of their short-term fiscal results. A meaningful evaluation must also consider whether the changes support the system's long-term financial and social sustainability. This study examines the effects of four major pension-policy measures observed between 2010 and 2025: the abolition of the mandatory private pension pillar, the removal of the contribution ceiling, the restructuring of pension-related contributions, and the gradual increase in the statutory retirement-age increase to 65.

The analysis pays particular attention to the fiscal consequences of these reforms, changes in the system's implicit liabilities, shifts in redistribution mechanisms, and their effects on incentives within

the pension system (Dedák & Fiser, 2024; Simonovits, 2022).

Methodologically, the study draws on secondary sources, including Hungarian and international academic literature, alongside an interpretation of relevant macroeconomic and demographic data. This approach is complemented by original data collection and descriptive time-series analysis. The empirical analysis uses budgetary data from the Pension Insurance Fund, as well as demographic, employment, and income indicators, to examine how the reforms have affected the pension system over time.

The study does not aim to propose a specific pension reform agenda. Instead, it assesses whether the changes made to Hungary's pension system after 2010 improved its financial and social sustainability, while also identifying areas where important challenges remain unresolved. Special attention is given to the balance between short-term fiscal stabilization and long-term structural sustainability. The following sections begin by reviewing the theoretical and empirical literature on pension-system sustainability. They then outline the main institutional changes introduced in Hungary between 2010 and 2025. Next, the study presents its methodology and empirical assessment of the four reform measures. The final sections discuss the wider implications of the findings and consider the extent to which these reforms have contributed to the long-term sustainability of Hungary's pension system.

LITERATURE REVIEW AND THEORETICAL BACKGROUND

Pension-system sustainability is closely shaped by demographic trends, labor-market conditions, and fiscal developments. In pay-as-you-go systems, the contributions paid by current workers finance the pensions of current retirees. As a result, long-term financial balance depends largely on the ratio of economically active people to those outside the labor market, employment levels, wage growth, and the length of time people spend in retirement (Simonovits, 2009; Varga, 2014). Population ageing, lower fertility rates, and longer life expectancy all place growing pressure on these systems. They reduce the number of contributors relative to pensioners while increasing the length of time for which pension benefits must be paid.

One response to these challenges has been the development of multi-pillar pension systems. In Central and Eastern Europe, the introduction of funded pension components during the 1990s was part of a wider reform wave aimed at improving

long-term sustainability and reducing the risks associated with traditional pay-as-you-go schemes (Augusztinovics, 1997, 1999; Louzek, 2008). The idea behind these reforms was that savings accumulated in capital markets could partly reduce the system's exposure to demographic change and diversify the sources of retirement income. However, moving from a purely pay-as-you-go model to a mixed system also created major short- and medium-term financing challenges. Governments still had to pay current pensions while part of the contributors' payments were redirected into funded individual accounts (Barta, 2001).

The 2008 global financial crisis brought renewed attention to the transition costs of pension reform and the financial risks linked to funded pension pillars. In response, several Central and Eastern European countries reconsidered earlier privatization strategies and placed greater emphasis on public pension provision (Altiparmakov, 2018; Augusztinovics, 2007; Naczyk & Domonkos, 2016). The direction of Hungarian pension reform was also shaped by the broader transformation of social policy during the EU accession process and by the influence of international policy actors, particularly the World Bank (Ferge & Juhász, 2004). Hungary became one of the most prominent examples of this policy reversal. Abolishing the mandatory private pension pillar eased the immediate financing pressure on the public pension system and improved the government's short-term fiscal position. At the same time, it reduced the diversification of retirement-income sources and made future pension obligations more dependent on the public system (Ádám & Simonovits, 2019; Gál, 2004).

The concept of implicit pension liabilities is especially important when evaluating pension reforms. Measures that improve a system's current cash flow may still create or maintain substantial obligations for the future. In a pay-as-you-go system, today's contributions are linked, either directly or indirectly, to future pension entitlements. As a result, higher current revenues do not automatically mean that the system has become more sustainable in the long run (Gál, 2004; Simonovits, 2009). For this reason, it is essential to distinguish between short-term fiscal stabilization and long-term structural sustainability.

The contribution structure is another key element of pension-system design. The link between contributions and future benefits reflects the balance between insurance-based principles and redistribution. Contribution ceilings, progressive features, and benefit-calculation rules all influence how far differences in people's employment income are carried over into their retirement income. Removing contribution ceilings can increase current

revenues, but it may also lead to higher future pension entitlements and less redistribution within the system (Simonovits, 2022). Contribution reforms should therefore be assessed not only in terms of their fiscal impact but also in relation to their effects on income distribution. These distributional effects should also be considered in the broader context of Hungary's post-transition social-security reforms, which altered the balance between insurance principles, redistribution and social protection (Ferge & Tausz, 2002).

Retirement-age policy is another major tool of pension reform. Raising the statutory retirement age can increase contribution revenues and reduce pension spending at the same time, since people remain in work for longer and receive pension benefits for a shorter average period (Polackova, 1999; Simonovits, 2009). However, the effectiveness of this measure depends heavily on labor-market conditions and on whether older workers can stay in employment (Major & Varga, 2013; Varga, 2014). Its social effects can also vary substantially between groups, as life expectancy, health, and working conditions are not equally distributed across society (Bíró et al., 2022; Polackova, 1999).

An alternative to a single, uniform retirement age is a more flexible system. Under this approach, people who retire earlier receive lower pensions, while those who continue working and retire later receive higher benefits. Such arrangements can strengthen the link between contributions and pension entitlements while giving individuals more room to adapt retirement decisions to their own circumstances (Major & Varga, 2013; Simonovits, 2002). From a sustainability perspective, flexible retirement rules may encourage people to remain in the labor market for longer. However, their success depends on the availability of suitable jobs for older workers and on the specific way the pension system is designed.

Labor-market developments are also crucial to the sustainability of pension systems. Lower employer contribution burdens may encourage employment and broaden the contribution base, but this outcome is not guaranteed. Pension financing improves only when lower labor costs lead to more people in work or to a larger share of earnings being officially declared. If contribution cuts simply reduce the cost of jobs that already exist, the pension system's revenue base may not increase significantly (Major & Varga, 2013; Varga, 2014).

Overall, the literature shows that pension sustainability cannot be secured through a single reform measure. Changes to contribution rates, retirement ages, benefit formulas, funding arrangements, and labor-market incentives interact

over long periods of time. A reform may improve the short-term fiscal balance without fully addressing demographic pressures or future implicit liabilities. Conversely, measures aimed at strengthening long-term sustainability may involve considerable adjustment costs in the short term. Pension reforms therefore need to be assessed through their fiscal, demographic, labor-market, and distributional effects at the same time (Dedák & Fiser, 2024; Simonovits, 2022).

PENSION POLICY MEASURES EXAMINED, 2010–2025

Between 2010 and 2025, Hungary's pension system underwent major changes in its institutional framework and financing. The reforms affected both revenues and expenditures, while also changing the relationship between public and private pension provision, contribution payments, retirement conditions, and future pension entitlements. Although the four measures examined in this study were not introduced as one coherent reform package, together they significantly reshaped how the Hungarian pension system operates.

Abolition of the Mandatory Private Pension Pillar

The abolition of the mandatory private pension pillar was one of the most important institutional changes in Hungarian pension policy after 2010. Introduced in the late 1990s, the second pillar was intended to support the transition to a multi-pillar pension system. Under this arrangement, part of the mandatory pension contribution was paid into privately managed pension funds, while the public pay-as-you-go system continued to finance the pensions of current retirees (Augusztinovics, 1997; Barta, 2001; Louzek, 2008; Pandurics & Szalai, 2017).

The global financial crisis of 2008 increased pressure on public finances and intensified the transition financing problem created by the coexistence of the public and funded pillars. In Hungary, the mandatory private pension system was subsequently dismantled, and pension contribution revenues were redirected to the public system. At the same time, the assets accumulated in private pension funds were largely transferred to the state, strengthening the government's immediate fiscal position and creating scope for reducing public debt (László, 2018).

The reform effectively returned Hungary to a predominantly pay-as-you-go pension system and increased the state's role in providing retirement income. Removing the funded component reduced

exposure to capital-market risks, but it also eliminated an important source of diversification in pension financing. As a result, the public pension system became more directly dependent on contribution revenues, budget transfers, and demographic developments (Ádám & Simonovits, 2019; Dedák & Fiser, 2024; Simonovits, 2009).

Abolition of the Contribution Ceiling

Another important reform was the removal of the ceiling on pension contributions. Before this change, individuals paid pension contributions only up to a specified level of earnings. This reflected the insurance-based character of the system and limited the contribution burden on very high incomes.

With the ceiling abolished, pension contributions became payable on total earnings. Higher-income employees therefore had to make additional contributions, which broadened the contribution base and strengthened the pension system's revenue position in the short term (Dedák & Fiser, 2024; Simonovits, 2022).

At the same time, the reform changed the relationship between contributions and future pension entitlements. Because the Hungarian pension system takes earnings and contribution history into account when calculating pension benefits, higher contributions may also lead to higher pensions in the future. The removal of the ceiling therefore had implications not only for financing but also for income distribution. It strengthened the insurance-based element of the pension system relative to its redistributive role (Simonovits, 2022).

Increase in the Statutory Retirement Age

The gradual increase in the statutory retirement age to 65 was one of the most important structural reforms affecting the expenditure side of Hungary's pension system. It was introduced in response to long-term demographic pressures, including population ageing, rising life expectancy, and a shrinking share of the working-age population (Simonovits, 2009; Varga, 2014).

Raising the retirement age affects pension financing in two main ways. First, it can extend the period during which people remain economically active and continue paying contributions. Second, it delays the start of pension payments and may shorten the average time spent receiving benefits. The reform therefore influences both contribution revenues and pension expenditure.

Raising the statutory retirement age also had wider labor-market and social effects. Its success depends on whether the labor market can support older workers in remaining employed, as well as on differences in health, working conditions, and life

expectancy across social groups (Bíró et al., 2022; Polackova, 1999). These factors are especially important when evaluating both the long-term sustainability of retirement-age policy and its social consequences.

Restructuring of the Contribution System

The contribution system was also significantly restructured during the period examined. At the beginning of the 2010s, employees and employers paid several different contributions, each linked to a specific social-security purpose. Over time, these payments were simplified, while employers' contribution burdens were gradually reduced.

From 1 July 2020, Hungary introduced a unified social-security contribution rate of 18.5%, combining several previously separate employee contributions into a single payment (Act CXXII of 2019, Section 25(1)). At the same time, the employer-paid social contribution tax was gradually reduced. These measures were intended to simplify the contribution system, lower administrative burdens, and improve labor-market competitiveness. For pension financing, the restructuring changed both the composition and level of labor-related revenues. Lower employer contribution rates can reduce labor costs and may support employment growth; a broader employment base can then strengthen pension-system revenues. However, the financial outcome depends on whether lower rates lead to more employment and a higher volume of officially declared earnings (Major & Varga, 2013; Varga, 2014).

This section is intentionally descriptive. The fiscal, demographic, and labor-market effects of the four reforms are examined separately in the empirical results section.

METHODOLOGY

The empirical analysis covers the period from 2010 to 2025 and examines the observed effects of four major pension-policy measures: the abolition of the mandatory private pension pillar, the removal of the contribution ceiling, the restructuring of pension-related contributions, and the gradual implementation of the statutory retirement-age increase to 65. Its purpose is to assess how these reforms were associated with changes in the pension system's short-term financial position and its longer-term sustainability.

The study uses a descriptive time-series approach based on secondary macroeconomic, demographic, and budgetary data. The quantitative analysis relies mainly on official statistical data from the Hungarian Central Statistical Office (HCSO) and budgetary

data from the Pension Insurance Fund. The 2025 figures are based on the latest available official data and should be interpreted cautiously, as some series may be subject to subsequent revision. The key indicators include Pension Insurance Fund revenues and expenditures, net average earnings, the working-age population, the total dependency ratio, total population, births, and the employment rate. The employment rate refers to the share of people aged 15–64 who are in employment. In this study, the total dependency ratio is defined as the population aged 0–14 and 65 and over relative to the population aged 15–64.

The selected indicators were chosen to capture the main ways in which pension reforms may affect sustainability. Pension Insurance Fund revenues and expenditures show the system's short-term financial position. Earnings and employment indicators help assess changes in the contribution base, while demographic indicators reflect the longer-term pressures created by population ageing and shifts in the size of the working-age population.

For each reform, the analysis compares how the relevant indicators developed before and after the institutional change. It does not attempt to construct a counterfactual scenario or isolate the statistical causal effect of each measure. Instead, it examines whether the observed time-series patterns are consistent with the fiscal, demographic, and labor-market mechanisms that the reforms would be expected to influence.

This distinction matters because the indicators were also affected by many other developments, including economic growth, wage increases, inflation, employment trends, and broader macroeconomic and policy changes (Chłoń-Domińczak et al., 2020). The results should therefore be interpreted as descriptive associations rather than causal estimates. All financial figures are presented in nominal terms. This is important when interpreting Pension Insurance Fund revenues and expenditures, as well as average earnings, because part of any increase may simply reflect changes in the overall price level. The analysis therefore focuses primarily on the evolution of nominal financial flows and their relationship with the reform measures, rather than changes in real purchasing power.

The reforms are evaluated along several dimensions. First, their short-term fiscal effects are considered, including changes in contribution revenues, pension expenditures, and the cash-flow balance of the Pension Insurance Fund. The Fund's cash-flow balance is interpreted cautiously, since recorded revenues may include budgetary transfers and may also be affected by institutional accounting changes, in addition to contribution income. Second, their possible longer-term consequences are assessed in

terms of implicit pension liabilities and demographic sustainability. Third, the analysis considers changes in redistribution and the relationship between contributions and pension entitlements. Finally, labor market effects are examined through employment and contribution-based developments. The analysis therefore combines institutional assessment with descriptive quantitative evidence. This approach makes it possible to distinguish between reforms that primarily improved the short-term fiscal position of the pension system and those that addressed more structural demographic or labor market pressures.

RESULTS AND ASSESSMENT OF THE REFORMS

Abolition of the Second Pillar

The abolition of the mandatory private pension pillar had an immediate effect on how Hungary's pension system was financed. Pension contributions that had previously been directed to private funds were transferred to the public system, while the state's takeover of private pension fund assets improved the government's short-term fiscal position. To examine whether this stabilizing effect continued over time, Figure 1 shows the development of Pension Insurance Fund revenues and expenditures between 2010 and 2025.

Revenues and expenditures of the Pension Insurance Fund generally increased over the period examined, although their relationship changed over time. At the beginning of the 2010s, the two figures were relatively close. In 2010, both were around HUF 3,000 billion, and from 2013 to 2016 the Fund was broadly balanced, with only small differences between revenues and expenditures.

After 2019, however, expenditures began to rise faster than revenues. In 2020, expenditures reached roughly HUF 3,600 billion, compared with revenues of about HUF 3,300 billion. The gap widened further in subsequent years: by 2023, revenues had approached HUF 5,500 billion, while expenditures had increased to around HUF 5,800 billion. Based on the latest available official 2025 data, revenues were approximately HUF 6,500 billion and expenditures were nearly HUF 6,700 billion.

Because these figures are expressed in nominal terms, part of the increase reflects changes in the overall price level. They should therefore be interpreted primarily as changes in the Pension Insurance Fund's nominal cash flows, rather than as changes in real values.

The observed trends are consistent with the view that abolishing the second pillar improved the Pension Insurance Fund's short-term financial position.

However, descriptive data alone cannot separate the size of this effect from other fiscal and macroeconomic developments. Part of the improvement is likely linked to the redirection of contributions to the public system and the transfer of private pension fund assets to the state, both of which had immediate fiscal effects.

The stabilizing effect was not permanent. The return of deficits after 2019 suggests that the reform did not remove the system's underlying structural pressures. Population ageing, changes in the ratio of contributors to beneficiaries, wage developments, and other fiscal factors continue to affect the Pension Insurance Fund's financial balance.

Overall, abolishing the second pillar can be seen as an effective measure for short-term fiscal stabilization, but not as a complete solution to long-term pension sustainability. The reform strengthened the public pillar and improved the system's immediate financing position, while the underlying demographic and structural challenges remained largely unchanged. The findings therefore support the distinction in the literature between short-term fiscal stabilization and long-term structural sustainability.

Abolition of the Contribution Ceiling

The abolition of the contribution ceiling broadened the contribution base by making all earnings subject to pension contributions. In the short term, this increased the Pension Insurance Fund's potential revenue base, particularly because higher-income employees had to pay contributions on a larger share of their income. Figure 2 shows the development of net average earnings and Pension Insurance Fund revenues between 2010 and 2025. Net average earnings are used as a broad indicator of household income trends; they do not directly measure the contributory wage base.

Net average earnings and Pension Insurance Fund revenues both rose over the period examined, although they followed different patterns. In 2010, net average earnings were approximately HUF 130,000 per month. They then increased steadily, reaching around HUF 260,000–270,000 by 2020 and nearly HUF 480,000–500,000 by 2025. This means that nominal net average earnings more than tripled over the period.

Pension Insurance Fund revenues were around HUF 2,600–2,700 billion in 2010 and remained relatively stable, with moderate fluctuations, during the first half of the 2010s. Growth became more pronounced after 2017. By 2020, revenues had reached roughly HUF 3,000 billion, rising further to approximately HUF 4,500 billion in 2023 and nearly HUF 6,500 billion by 2025. The 2025 observations are based on the latest available official data and may be revised.

Both series are expressed in nominal terms. Part of the increase therefore reflects inflation, as well as changes in wages, employment, and the contribution base. The comparison should be understood mainly as an illustration of nominal trends over time, rather than evidence of changes in real values.

The data indicate that wage growth was relatively steady, while Pension Insurance Fund revenues increased later and at a faster pace. This pattern is consistent with the possibility that abolishing the contribution ceiling supported revenue growth by broadening the contribution base for higher-income earners. However, descriptive time series cannot isolate a direct causal effect, since revenue trends were also shaped by wage growth, employment, inflation, and other changes to the tax and contribution system.

Higher current revenues should not automatically be seen as an entirely positive sustainability outcome. In an earnings-related pension system, higher contributions can also result in higher future pension entitlements. Part of the short-term revenue gain may therefore appear later as higher expenditure. The reform strengthened the system's immediate financial position, but it may also have increased future implicit pension liabilities.

The reform also had distributional implications. By applying contributions to total earnings, it reinforced the relationship between higher earnings, larger contribution payments, and higher future pension benefits. This may reduce the system's redistributive role, particularly among higher-income groups.

Overall, the abolition of the contribution ceiling can be viewed as a reform with a positive short-term revenue effect but clearer long-term implications for sustainability. It broadened the contribution base and increased current revenues, but its ultimate effect depends on how far higher contributions are reflected in future pension benefits. The measure therefore illustrates the wider tension between short-term fiscal stabilization and the build-up of future pension liabilities.

Retirement Age and Demographic Adjustment

Raising the statutory retirement age to 65 was intended to address the long-term demographic pressures facing Hungary's pension system. Figure 3 shows changes in the working-age population and the total dependency ratio between 2010 and 2025. Unlike reforms that mainly affected revenues, the retirement-age increase influenced both sides of pension financing. It could extend working lives and contribution payments, while also delaying the start of pension benefits.

One of the clearest trends in the data is the decline in the working-age population. It fell from almost 6.4 million people in 2010 to approximately 6.16

million by 2025, based on the latest available official data. Although the year-to-year changes were relatively modest, the overall direction was downward throughout the period.

At the same time, the total dependency ratio increased from 45.7% in 2010 to 54.4% by 2025. This means that the number of dependents grew relative to the working-age population, placing increasing pressure on the pension system's financing base.

These trends provide important demographic context for raising the statutory retirement age. A smaller working-age population narrows the potential contribution base, while a higher dependency ratio increases the relative burden on economically active people. Raising the retirement age can partly offset these pressures by extending labor-market participation and contribution payments. Figure 4 presents the development of Hungary's total population and the number of births between 2010 and 2025.

Hungary's total population declined continuously between 2010 and 2025. The number of live births also followed an unfavorable long-term pattern: although it increased temporarily in the middle of the 2010s, the trend later reversed, with the number of live births falling particularly sharply in the final years of the period.

Low fertility and population decline contribute to population ageing and reduce the future size of the working-age population. At the same time, increases in life expectancy can extend the average period spent in retirement unless they are offset by corresponding increases in the effective retirement age. Together, these trends place increasing pressure on the financial sustainability of a pay-as-you-go pension system.

Against this background, raising the retirement age can be seen as an adjustment measure that affects both sides of the pension budget. By extending working lives, it can increase contribution revenues; by delaying retirement, it can also reduce the number of years for which pension benefits are paid. The reform therefore addressed demographic pressures more directly than measures focused mainly on the contribution side.

However, the data also suggest that raising the retirement age cannot, on its own, solve the underlying demographic challenge. The declining working-age population and rising dependency ratio are structural trends that may persist over the long term. The reform can therefore ease demographic pressure, but it does not remove the need for further adjustment.

The success of retirement-age policy also depends on labor-market conditions. A later statutory retirement age can strengthen pension financing

only if older people are able to remain economically active. Differences in health, working conditions, and employability may limit the extent to which a higher retirement age leads to longer actual working lives.

Overall, the increase in the statutory retirement age appears to be one of the most structurally significant reforms examined in this study. It influenced both pension revenues and expenditures and responded directly to demographic change. At the same time, continuing population ageing and a shrinking working-age population indicate that retirement-age reform is an important adjustment mechanism, rather than a permanent solution to long-term sustainability challenges.

Restructuring of the Contribution System

The restructuring of pension-related contributions affected the financing base of Hungary's pension system mainly through changes in labor costs, employer contribution burdens, and the overall structure of social-security payments. Figure 5 shows how Hungary's employment rate developed between 2010 and 2025. The reform aimed to simplify the contribution system while also improving labor-market competitiveness and supporting employment.

The employment rate rose substantially over the period examined. It stood at approximately 50% in 2010, increased to around 57–58% by 2015, and exceeded 62% by 2018. In the final years of the period, it stabilized at roughly 64–65%.

This trend is relevant to pension-system sustainability because higher employment can broaden the contribution base and increase the number of active contributors. In principle, lower employer contribution burdens may support employment by reducing labor costs and improving incentives for firms to hire.

However, the observed rise in employment cannot be attributed directly to changes in the contribution system. Employment was shaped by many macroeconomic and labor-market factors, including economic growth, wage development, labor demand, and other policy measures. The descriptive data therefore cannot identify the separate effect of contribution reforms on employment.

From a sustainability perspective, the key question is whether lower employer contribution burdens generated a sufficiently broad increase in employment and officially declared earnings to compensate for the potential short-term loss of contribution revenue. If this mechanism worked effectively, it could have strengthened the pension system's financing base over the longer term. If the reform mainly lowered labor costs without creating additional employment, however, its contribution to

pension sustainability would have been more limited.

The introduction of the unified social-security contribution in 2020 also simplified employee contributions. By bringing several previously separate payments together at a single rate, the reform improved administrative transparency and made the contribution system easier to understand. However, this simplification did not change the pension system's fundamentally pay-as-you-go character.

No automatic mechanism was introduced to adjust contribution rates or pension entitlements in response to demographic change. The system therefore remained dependent on employment levels, wage growth, and discretionary policy decisions.

Overall, the restructuring of the contribution system appears to have played a supportive rather than transformative role in pension sustainability. It helped streamline social security financing and coincided with a substantial rise in employment, but the available descriptive evidence does not establish a direct causal link between these developments. Its long-term contribution to pension sustainability therefore depends mainly on whether higher employment and officially declared earnings create a sufficiently broad and stable contribution base.

DISCUSSION

The four pension-policy measures examined in this study affected Hungary's pension system through different mechanisms and over different time horizons. Although each measure contributed in some way to the system's operation or financing, their effects on long-term sustainability were not the same. A common feature was that several reforms strengthened the system's short-term fiscal position more clearly than they addressed its underlying demographic and structural challenges.

The abolition of the mandatory private pension pillar had the most immediate fiscal effect. Redirecting pension contributions to the public system and transferring accumulated private pension assets to the state quickly improved the government's financing position. However, this improvement mainly resulted from a change in the financing structure rather than a reduction in the pension system's underlying exposure to demographic risks. The reform therefore provided short-term stabilization, but it did not remove the public system's long-term dependence on contribution revenues, employment, and demographic developments.

The abolition of the contribution ceiling also strengthened the revenue side of the pension system. By broadening the contribution base, it increased current contribution revenues, especially among higher-income earners. Its long-term effect is less clear, however, because higher contributions may also result in higher future pension entitlements. This reflects a central feature of pay-as-you-go systems: measures that improve current revenues can also create or reinforce future liabilities. The reform also affected the system's distributional balance by strengthening the relationship between earnings, contributions, and future pension benefits. Among the reforms examined, raising the statutory retirement age appears to have had the strongest structural connection to demographic sustainability. Unlike measures that mainly changed the financing structure or increased contribution revenues, a higher retirement age affects both sides of the pension system. It can extend the period during which people pay contributions while reducing the average time spent receiving pension benefits. This makes retirement-age policy an especially important adjustment mechanism in the context of population ageing and a declining working-age population.

At the same time, the effectiveness of a higher retirement age cannot be separated from labor-market conditions. If older workers are unable to remain employed, the expected increase in contribution payments may not fully materialize. Differences in health, life expectancy, and working conditions also mean that later retirement may affect social groups unequally. The reform therefore combines relatively strong structural sustainability effects with potentially important social and distributional consequences.

The restructuring of the contribution system had a less direct effect on pension sustainability. Its potential benefits operate mainly through the labor market. Lower employer contribution burdens may support employment and broaden the contribution base, but this depends on whether lower labor costs create additional jobs and increase officially declared earnings. Although employment rose during the period examined, the descriptive analysis cannot establish that this change was caused by the contribution reforms.

The four reforms can be grouped according to the main channels through which they affected pension sustainability. Abolishing the second pillar primarily changed the financing structure and improved the system's short-term fiscal position. Removing the contribution ceiling mainly increased current revenues, while also affecting future liabilities and redistribution. Raising the retirement age addressed demographic pressures more directly and influenced both revenues and expenditures. Restructuring

contributions operated mainly through labor-market incentives and changes in the size of the contribution base. Table 1 summarizes these differences.

Taken together, the reforms did not create an automatic adjustment mechanism that could respond to future demographic and economic changes. Contribution rates, retirement conditions, and pension entitlements still depend largely on discretionary policy decisions (Dedák & Fiser, 2024). As a result, the system remains exposed to the same fundamental pressures identified in the literature: population ageing, changes in the working-age population, employment trends, and wage developments.

Overall, the findings support the distinction between short-term fiscal stabilization and long-term structural sustainability. Several reforms improved the pension system's immediate financial position, but only some addressed the underlying causes of long-term imbalance directly. Raising the retirement age appears to have had the strongest structural effect, while the other measures primarily influenced financing conditions, redistribution, or labor-market incentives.

From a policy perspective, the findings suggest that no single reform measure is likely to ensure long-term sustainability on its own. A more comprehensive approach would need to combine demographic adjustment, higher labor-market participation, appropriate contribution design, and the management of future pension liabilities. This interaction is especially important in a pay-as-you-go system, where current policy decisions can have fiscal effects that extend over several decades.

CONCLUSIONS

The pension-policy measures examined in this study significantly affected Hungary's pension-system financing, contribution rules, retirement conditions, and the relationship with the labor market during the period from 2010 to 2025. The analysis of the four selected measures shows that they differed considerably in both their immediate fiscal effects and their implications for long-term sustainability.

The abolition of the mandatory private pension pillar and the removal of the contribution ceiling strengthened the public pension system's short-term financing position, but their longer-term effects were less clear. In both cases, higher current revenues did not necessarily mean a permanent reduction in future pension liabilities. The restructuring of the contribution system also supported the financing base, although its effect depended largely on labor-market developments and on whether lower

contribution burdens were associated with higher employment and officially declared earnings.

Among the reforms examined, raising the statutory retirement age was the most direct response to demographic pressure. By extending working lives and delaying pension payments, it affected both the revenue and expenditure sides of the system. However, the continuing decline in the working-age population and the rise in the total dependency ratio suggest that retirement-age adjustment alone cannot resolve the underlying demographic challenges.

Overall, the findings indicate that the post-2010 reforms were more successful in improving short- and medium-term financial stability than in creating a self-adjusting framework for long-term sustainability. Hungary's pension system remains strongly dependent on demographic trends, employment, wage growth, and future policy decisions.

Long-term sustainability will therefore require the coordinated management of several closely related factors, rather than reliance on a single reform measure. Future pension policy will need to balance fiscal sustainability, adequate income security in old age, labor-market participation, and intergenerational equity. The central challenge is not only to maintain the system's financial balance in the short term, but also to ensure that today's policy choices do not create disproportionate obligations for future generations.

This study relies on descriptive time-series analysis and therefore does not isolate the causal effects of individual reforms. Future research could build on this work by using counterfactual models, microsimulation, or scenario-based projections to estimate more precisely the long-term fiscal and distributional effects of alternative pension-policy measures.

REFERENCE LIST

- [1] 2019. évi CXXII. törvény a társadalombiztosítás ellátásaira jogosultakról, valamint ezen ellátások fedezetéről [Act CXXII of 2019 on Entitlement to Social Security Benefits and the Funding of These Benefits]. (2019). National Legislation Database.
- [2] Ádám, Z., & Simonovits, A. (2019). From democratic to authoritarian populism: Comparing pre- and post-2010 Hungarian pension policies. *Acta Oeconomica*, 69(3), 333–355. doi:10.1556/032.2019.69.3.2
- [3] Altiparmakov, N. (2018). Another look at the causes and consequences of pension privatization reform reversals in Eastern Europe. *Journal of European Social Policy*, 28(3), 224–241. doi:10.1177/0958928717735053
- [4] Augusztinovics, M. (1997). *Nyugdíjrendszerek és reformok: Nagy-Britannia, Magyarország, Olaszország, Lengyelország, Svédország: A zárójelentés rövid összefoglalása* [Pension systems and reforms: Great Britain, Hungary, Italy, Poland, Sweden: A brief summary of the final report]. Budapest: Magyar Tudományos Akadémia Közgazdaságtudományi Intézete. (Műhelytanulmányok, MT-DP 50.)
- [5] Augusztinovics, M. (1999). *Nyugdíjrendszerek és reformok az átmeneti gazdaságokban* [Pension systems and reforms in transition economies]. *Közgazdasági Szemle*, 46(7–8), 657–672. Retrieved from <https://m2.mtmt.hu/api/publication/180762>
- [6] Augusztinovics, M. (2007). Elmulasztott lehetőség – nyugdíjreformok Közép-Kelet-Európában [Missed opportunity – Pension reforms in Central and Eastern Europe]. In C. Lentner (Ed.), *Pénzügypolitikai stratégiák a XXI. század elején* [Financial policy strategies at the beginning of the 21st century] (pp. 245–256). Budapest: Akadémiai Kiadó.
- [7] Barta, J. (2001). *A magyar nyugdíjrendszer reformja, különös tekintettel a rendszer második pillérét képező magánnyugdíjpénztárakra* [Reform of the Hungarian pension system, with particular regard to the private pension funds constituting the second pillar of the system] (Doctoral dissertation, University of Miskolc, Deák Ferenc Doctoral School of Law). Retrieved from <https://m2.mtmt.hu/api/publication/2185720>
- [8] Bíró, A., Branyiczki, R., & Elek, P. (2022). The effect of involuntary retirement on healthcare use. *Health Economics*, 31(6), 1012–1032. doi:10.1002/hec.4493
- [9] Chłoń-Domińczak, A., Strzelecki, P., & Łatkowski, W. (2020). Pension reforms or consequences of the economic crisis? Measuring the changes of pension incomes in selected EU countries using APC approach. *The Journal of the Economics of Ageing*, 17, Article 100131. doi:10.1016/j.jeoa.2017.09.002
- [10] Dedák, I., & Fiser, N. (2024). Pension reforms in Hungary: Have they gone too far? *Journal of Pension Economics and Finance*, 23(3), 438–453. doi:10.1017/S1474747224000052
- [11] Ferge, Z., & Juhász, G. (2004). Accession and social policy: The case of Hungary. *Journal of*

- European Social Policy*, 14(3), 233–251. doi:10.1177/0958928704044621
- [12] Ferge, Z., & Tausz, K. (2002). Social security in Hungary: A balance sheet after twelve years. *Social Policy & Administration*, 36(2), 176–199. doi:10.1111/1467-9515.00278
- [13] Gál, R. I. (2004). Járulék és hozam a felosztó-kirovó nyugdíjrendszerekben [Contributions and returns in pay-as-you-go pension systems]. In D. Helmich & Z. Szántó (Eds.), *Metodológia, társadalom, gazdaság* [Methodology, society, economy] (pp. 355–368). Budapest: Közgazdasági Szemle Alapítvány.
- [14] László, C. (2018). A magánnyugdíjpénztári rendszer „elszámolása” [“Reckoning up” the private pension system]. *Közgazdasági Szemle*, 65(9), 861–902. doi:10.18414/KSZ.2018.9.861
- [15] Louzek, M. (2008). Pension system reform in Central and Eastern Europe. *Post-Communist Economies*, 20(1), 119–131. doi:10.1080/14631370701865789
- [16] Major, K., & Varga, G. (2013). Parametrikus nyugdíjreformok és életciklus-munkakínálat [Parametric pension reforms and life-cycle labor supply]. *Közgazdasági Szemle*, 60(11), 1169–1207. Retrieved from <https://m2.mtmt.hu/api/publication/2520648>
- [17] Naczyk, M., & Domonkos, S. (2016). The financial crisis and varieties of pension privatization reversals in Eastern Europe. *Governance*, 29(2), 167–184. doi:10.1111/gove.12159
- [18] Pandurics, A., & Szalai, P. (2017). A második és a harmadik nyugdíjpillér szerepe a magyar nyugdíjrendszerben [The role of the second and third pension pillars in the Hungarian pension system]. *Pénzügyi Szemle/Public Finance Quarterly*, 62(2), 214–233. Retrieved from <https://m2.mtmt.hu/api/publication/3249870>
- [19] Polackova, H. (1999). Retirement age considerations for Central Europe. *Economics of Planning*, 32(1), 1–21. doi:10.1023/A:1003453518463
- [20] Simonovits, A. (2002). Rugalmas nyugdíjkorhatár és optimális lineáris járulék-és járadékfüggvény [Flexible retirement age and the optimal linear contribution and benefit function]. *Közgazdasági Szemle*, 49(9), 713–724. Retrieved from <https://m2.mtmt.hu/api/publication/1056212>
- [21] Simonovits, A. (2009). Népeségöregedés, tb-nyugdíj és megtakarítás – parametrikus nyugdíjreformok [Population ageing, social security pensions and savings – Parametric pension reforms]. *Közgazdasági Szemle*, 56(4), 297–321. Retrieved from <https://m2.mtmt.hu/api/publication/182502>
- [22] Simonovits, A. (2022). Nyugdíjstratégiai alternatívák, 2023–2029 [Pension strategy alternatives, 2023–2029]. *Közgazdasági Szemle*, 69(7–8), 902–928. doi:10.18414/KSZ.2022.7-8.902
- [23] Szikra, D. (2014). Democracy and welfare in hard times: The social policy of the Orbán government in Hungary between 2010 and 2014. *Journal of European Social Policy*, 24(5), 486–500. doi:10.1177/0958928714545446
- [24] Varga, G. (2014). Demográfiai átmenet, nyugdíjreformok és munkakínálat az együtt élő korosztályok modelljeiben [Demographic transition, pension reforms and labor supply in overlapping-generations models]. *Külgazdaság*, 58(9–10), 70–95. Retrieved from <https://m2.mtmt.hu/api/publication/2876752>

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Table 1.

Comparative Assessment of the Four Pension Reforms

Reform	Main short-term effect	Main long-term implication	Dominant sustainability channel
Abolition of the mandatory private pension pillar	Improved fiscal position and public-pillar revenues	Reduced financing diversification; demographic exposure remained	Financing structure
Abolition of the contribution ceiling	Increased contribution revenues	Possible higher future pension entitlements and weaker redistribution	Revenue and distribution
Increase in the statutory retirement age	Higher contributions and lower pension expenditure over the relevant period	Stronger adjustment to population ageing, conditional on labor-market integration	Demographic and expenditure adjustment
Restructuring of the contribution system	Lower labor costs and simplified contribution structure	Depends on employment and declared earnings	Labor market and contribution base

Source: own compilation based on the results of the analysis.

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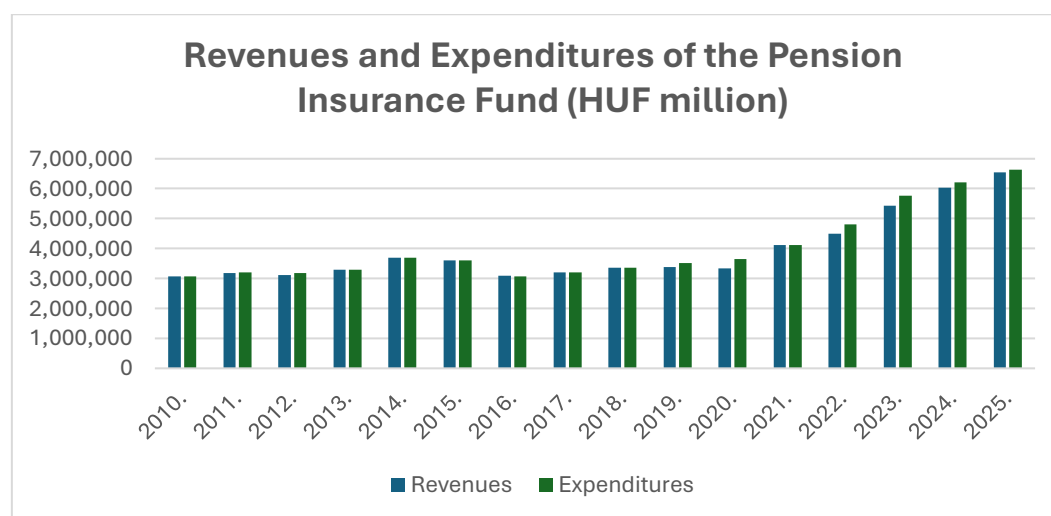
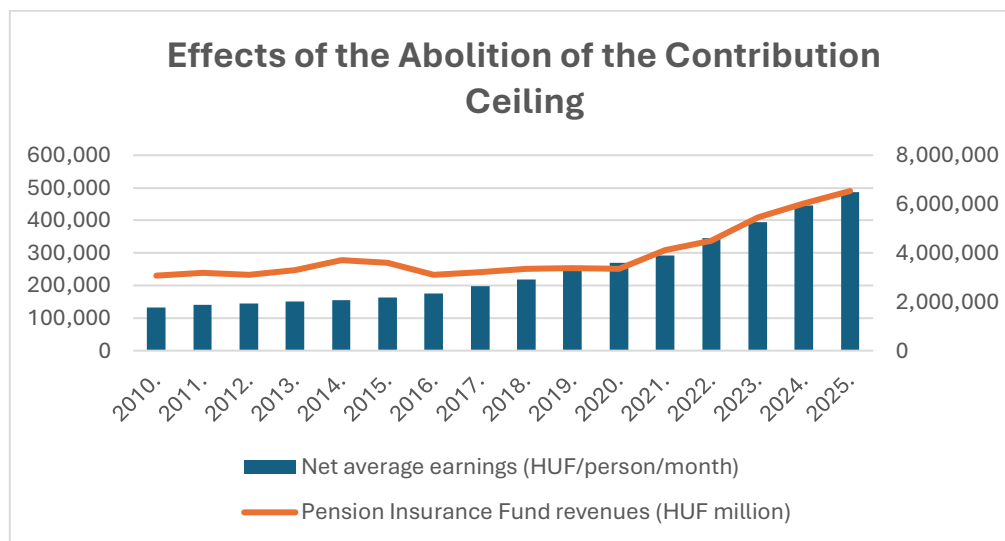


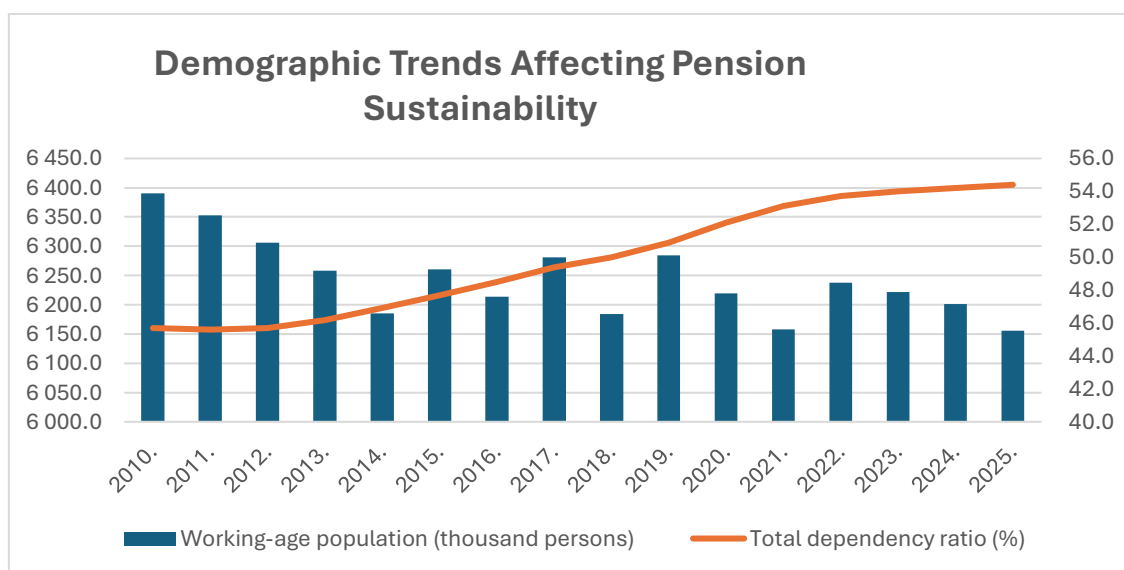
Figure 1.

Revenues and Expenditures of the Pension Insurance Fund

Source: own compilation based on data from the Hungarian Central Statistical Office (HCSO).

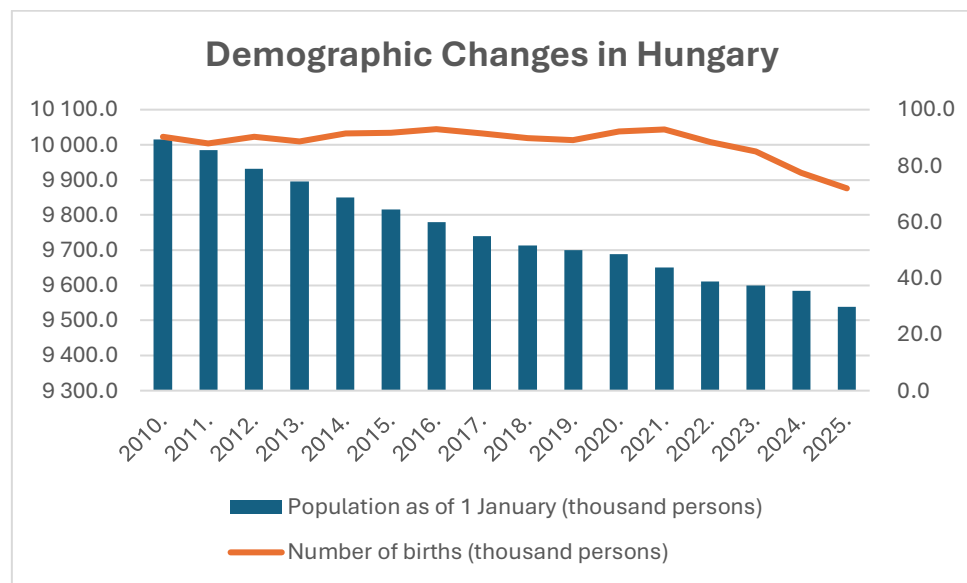
**Figure 2.**

Effects of the Abolition of the Contribution Ceiling

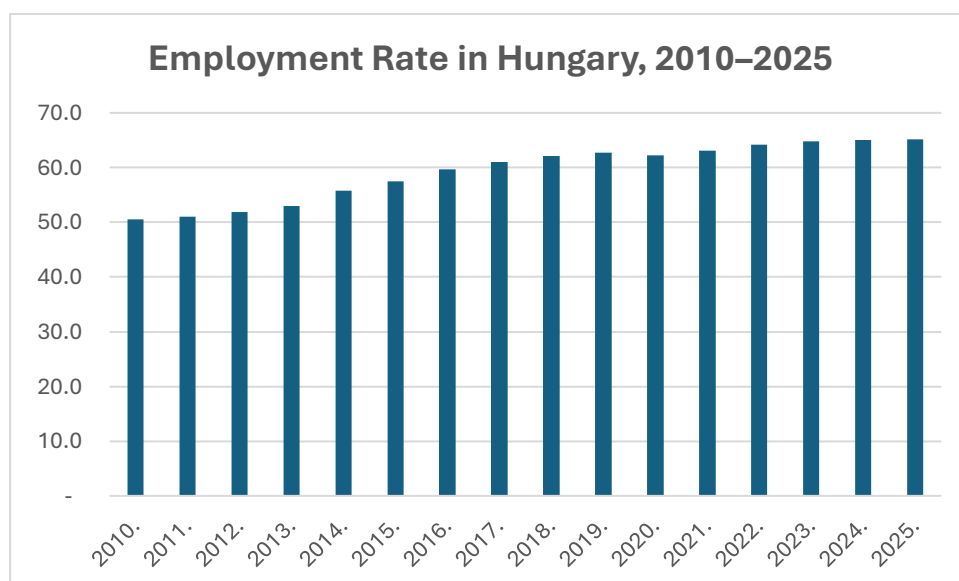
Source: own compilation based on data from the Hungarian Central Statistical Office (HCSO).**Figure 3.**

Demographic Trends Affecting Pension Sustainability

Source: own compilation based on data from the Hungarian Central Statistical Office (HCSO).

**Figure 4.**

Demographic Changes in Hungary

Source: own compilation based on data from the Hungarian Central Statistical Office (HCSO).**Figure 5.**

Employment Rate in Hungary, 2010-2025

Source: own compilation based on data from the Hungarian Central Statistical Office (HCSO).