



INSURANCE, FUNDS AND CAPITAL MARKET RISK REPORT



2018

'... after mature consideration we have made a decision for the good of the whole country, its peaceful state and for the benefit of its residents...'

(from the 'urban articles' of 1405 of King Sigismund)



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2018

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Pursuant to Act CXXXIX of 2013 on the Magyar Nemzeti Bank, the MNB supervises the financial intermediary system in order to ensure, amongst other things, the smooth, transparent and efficient functioning of the financial intermediary system, to foster prudent operations, to identify undesirable business and economic risks, to protect the interests of users of financial services and to strengthen public confidence in the financial intermediary system. Consistent with those tasks and in accordance with Article 135 (2) of the Act, the MNB has prepared this risk report, which presents the most important characteristics and risks of insurance companies, funds, intermediaries, non-banking group entities and markets of capital market participants.

The Report incorporates input from the Financial Institutions Supervision Executive Directorate, the Consumer Protection and Market Supervision Executive Directorate and the Directorate Methodology.

The Report was approved for publication by Dr László Windisch, Deputy Governor.

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Executive summary

Gross assets of Hungarian households have been growing continuously in recent years, and already exceed twice the GDP. This has a fundamental effect on all the insurance, funds and capital market sectors.

The insurance sector recorded an even higher growth rate than in the previous years; premium income reached a new high, exceeding HUF 1,000 billion. Profitability strengthened further, reaching the pre-crisis level. The capital position of insurers is stable; their capital adequacy, taking the recommendation of the Magyar Nemzeti Bank into account as well, exceeds 150 percent.

The low interest rate environment we have seen for many years represents a continuous challenge for the insurance sector. The soaring equity markets have not diverted insurers to riskier instruments; the composition of insurers' own assets has hardly changed in the past 5 years. Apart from unit-linked reserves, where the risk of price fluctuations is in fact borne by the customer, insurers invest their own assets into low-risk, conservative instruments, mostly in government securities.

The growth in premium income is still primarily attributable to the compulsory motor third-party liability insurance (MTPL). The underlying factors include the rise in the vehicle fleet, but the impact of the increase in the premium per contract was even more significant. The business segment responded to what used to be unsustainably low premiums by raising them further, similarly to previous years, which has now made the sector profitable. The premium increase and penetration of casco are more moderate, and no breakthrough has been observed in the area of property insurance either. Despite the growth in real estate, the retail property insurance portfolio expanded to a small degree only.

As regards life insurance, the introduction of the ethical life insurance concept by the Magyar Nemzeti Bank is an important milestone. The objective of the regulatory measures, which can be deemed progressive even by international standards, is to build long-term, stable contract portfolios based on customer confidence, to promote a fair price to value ratio and to inform customers in a transparent, easy-to-understand manner. The introduction of the concept was preceded by a number of concerns that it may jeopardise market growth; however, the experiences of the first year show that although the number of new contracts declined and one and a half thousand intermediaries disappeared from the market, average premiums rose. In addition to the challenges posed by the ethical regulation, compliance with the new laws entering into force in 2018 (PRIIPs, IDD, GDPR) were identified as key risks of the insurance sector.

For the voluntary funds sector, a further decrease was registered in the number of institutions, and this is expected to continue in 2018 as well. The reorganisation is still driven by economies of scale considerations, as well as by mergers or dissolutions resulting from the decline in revenues.

Owing to the rising membership fee income and the favourable yields, the assets of the voluntary pension funds grew beyond expectations. The individual membership payments, which reached a historic high – last year exceeding HUF 100 billion – compensated for the decline in the employers' contribution to membership fees. The decline in the number of members stopped, but the number of members, the distribution by age and the members' activity level still fall short of expectations. There is also still plenty of room for maximising the tax allowance.

The voluntary pension funds earned significant real yields for members. Investments in Hungarian government securities still account for the largest part of the safety reserve investments, although during the past 10 years we have seen a substantial shift towards indirect investments, in parallel with a decrease in the ratio of government securities.

Although individual payments hit a record high last year in the case of the health and mutual aid funds, the extremely large decline in the employers' contribution meant it was not possible to make up for the shortfall, and thus, on the whole, the operating result was negative, contrary to the previous years. This year the tax rate burdening the payments by employers to the voluntary funds was reduced, and thus a further decline is unlikely. The funds initiated cost-cutting

measures and, with a view to preventing a loss of yield, more active investment strategies, but their impact has not yet been reflected in the operating result. Parallel to the expansion of the health funds' activity, the utilisation of mutual aid fund type disbursements, related to childcare and to household mortgage loans, is on the rise, and members also make use of the two-year deposit option more often.

An analysis of the outstanding receivables of financial enterprises not belonging to a banking group shows that the loan portfolio continued to decline, while there was a moderate rise in the factoring and financial lease portfolio. Profitable operation is also evidenced by the growth in the equity of financial enterprises. Profitability improved moderately compared to the previous year. The concentration of institutions is extremely dense; a mere 5 financial enterprises realised a balance sheet profit in excess of HUF 1 billion, and they account for 80 percent of the profit of the respective sector.

For the pawnbroking financial enterprises not belonging to a banking group, we found that the value of outstanding receivables was once again close to the trough of 2013, which is attributable to the fall in the number enterprises pursuing such activity, to the decrease in pawnable collateral at customers' disposal and to the competition posed by other household loans. Market processes point to the enlargement of the range of eligible pawns; however, compared to the traditional pawns these are characterised by faster obsolescence, which may appear in the market combined with the increasing risk of collateral valuation.

As regards investment service providers – credit institutions and investment firms – capital market turnover increased slightly, and the share of investment firms within total turnover once again started to rise. The customer securities portfolio increased at sector level: compared to previous years there was a surge in the balance on the securities accounts kept in the form of long-term investment accounts, while the number of pension savings accounts decreased in line with the former trend, particularly at the credit institutions.

Contrary to the previous rising trend, the concentration ratio of the prompt market turnover decreased last year. In the past years, the four equities generating the highest turnover were joined by a fifth, thereby also rearranging the turnover-based sequence. The BUX once again achieved outstanding growth at regional level. The Budapest Stock Exchange registered seven private capital increases, two initial public offerings and only two delisting events.

The concentration of investment firms rose in the past year; the coverage ratio of the customer securities portfolio of the top three market participants already exceeds 80 percent, while the income concentration decreased, continuing the previous trend. The further decline in the market share of small investment firms represents a market risk; on a positive note, however, the profitability of the surviving investment firms improved. The after-tax profit of the sector in 2017 exceeded the previous year's result to an unprecedented degree – by almost 50 percent – but this growth is essentially linked to one institution.

As regards the structure of investment funds, the number of real estate funds rose, while that of securities funds declined. On the whole, investment funds were characterised by positive net capital inflows, with outstanding capital inflows to real estate funds.

The growth in the assets managed by investment fund managers accelerated substantially, while the portfolio managed by the investment fund managers, as well as the net asset value of the assets managed in the investment funds, reached separate historic highs as well. Similarly to the previous years, the growth dynamics were essentially accounted for by the pension fund sector; in addition, contrary to the former trend, assets managed in the insurance and other portfolios also registered growth. The expansion in the net asset value of the assets managed in the investment funds is partly attributable to the net capital inflow, but the return on investment realised on the managed assets represents almost the same ratio too.

The number of private capital funds doubled with dynamic growth in liabilities. There was also substantial growth in the subscribed capital of venture capital funds; 5 new funds were established, but at the same time the rate of allocation decelerated.

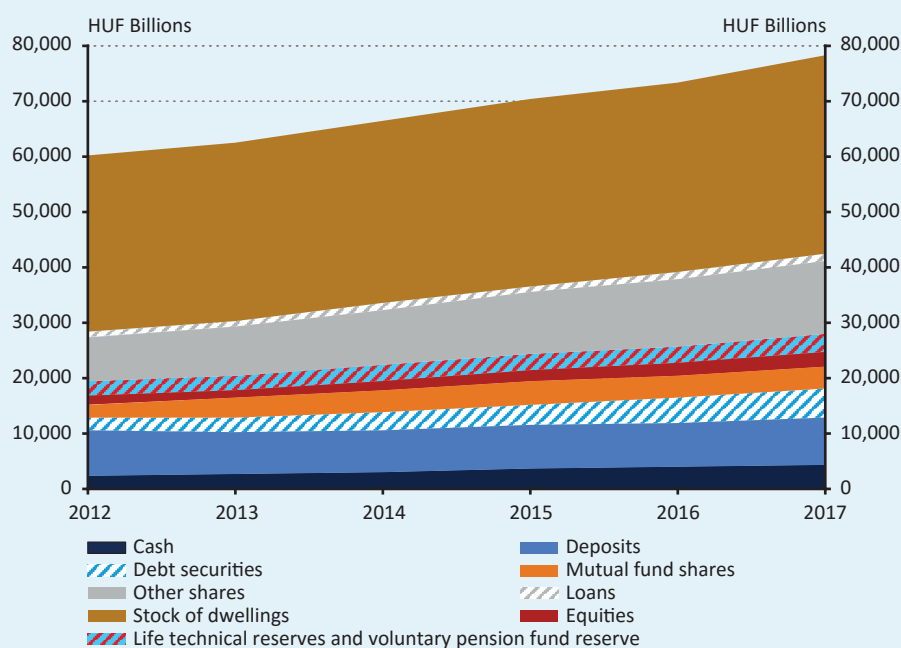
The major challenge for the capital market actors is represented by compliance with the European Union's new single regulation aimed at the protection of investors, i.e. the MiFID II¹ and the MiFIR, as well as integrating these in business processes. Pursuant to the new framework, a broader set of supervisory instruments will be available for the Magyar Nemzeti Bank.

1 Developments in households' wealth

Life insurance and voluntary pension fund assets rise in line with trends of previous years

By the end of 2017, gross assets of households, comprising financial instruments and the stock of dwellings, exceeded HUF 78,000 billion, which represents annual growth of 6.4 percent (Chart 1).¹ The growth is primarily attributable to the rise in the value of the stock of dwellings (by roughly HUF 1,500 billion), while proportionally, the growth rate was more moderate than the average (4.4 percent). The most dynamic rise was recorded in equities and debt securities, at a rate of 17.9 and 17.1 percent, respectively. The largest financial asset category of households, similarly to previous years, is other equity, amounting to 30.8 percent. The second largest category included outstanding deposits, the ratio of which, however, dropped by almost one third compared to the 2012 data.

Chart 1
Developments in gross assets of households



Note: The 2016 and 2017 data related to the stock of dwellings are MNB estimates.

Source: MNB, HCSO

Cash holdings rose to a larger degree than the total volume, and thus their share continued to rise in line with the trends of the past 5 years. So households' demand for the most liquid financial instrument increased slightly in terms of proportion, which may reflect the demand for building up precautionary reserves that is still evident among households. On the other hand, the above-average growth in deposits illustrates the increasingly conscious financial conduct of households. Low-yield deposits are increasingly being replaced by riskier financial instruments with higher yield potential (debt securities, mutual fund shares, equities).

¹ In contrast to our 2017 publication, we took into consideration not only the financial instruments but also the stock of dwellings with a view to providing a better illustration of households' wealth. Within the presented time series, two categories were broken down further to illustrate the changes in a more detailed way: cash and deposits, equities and mutual fund shares. Within financial instruments, other receivables are still excluded as these are items of a technical nature.

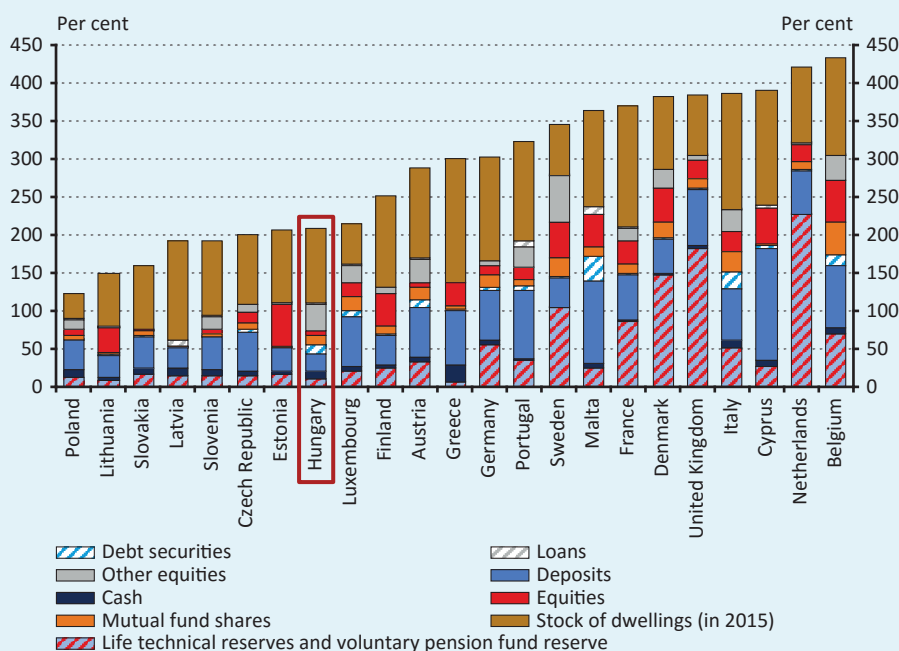
The life insurance provisions and voluntary pension fund reserves, primarily serving as means of long-term wealth accumulation, rose by 6.2 percent in total in 2017. This dynamic is in line with the average recorded in previous years (5.8 percent), but at the same time, it falls substantially short of the growth in the total volume of financial assets. In 2017, life insurance and voluntary pension funds accounted for 7.8 percent of households' financial assets, which falls short of the 8.8 percent recorded in 2012.

In terms of liquidity, households' assets can be allocated into three categories: assets that may be liquidated in the short run, assets that may be liquidated in the medium or long run, and assets of limited liquidity. The first category includes cash and deposits, which had a share of 16.3 percent in 2017 (1.5 percentage points lower compared to the period 5 years ago). Assets that may be liquidated in the medium or long run include debt securities, mutual fund shares, equities, life insurance and voluntary pension fund reserves. The ratio of this asset category rose in recent years (it was only 14.2 percent in 2012, and already 19.5 percent in 2017). The category of limited liquidity assets includes the stock of dwellings, other equity and loans, the ratio of which has dropped by 4 percentage points within the total assets of households since 2012, but still accounts for almost two-thirds thereof (64.2 percent).

The aforementioned processes suggest that the stabilisation after the economic crisis has already come close to the level where the pick-up in investments in life insurance and voluntary pension funds, serving the long-term accumulation of assets, can commence.

By international comparison, the gross assets of Hungarian households amounted to almost 209.8 percent of GDP in 2016 (Chart 2), a mid-range figure in the European Union (arithmetic EU mean: 287.1 percent).² In terms of this ratio, and compared to its own economic development level, Hungary's wealth position is more favourable than that of the other countries of the region (Czech Republic, Poland and Slovakia). On the other hand, this is only half or two-thirds of the level characterising the more advanced member states in Western Europe (e.g. Belgium, United Kingdom, the Netherlands).

Chart 2
Gross assets of EU households as percent of GDP, in 2016



Source: Eurostat

² Upon comparing the net financial worth of Hungarian households as a percent of GDP with groups of countries, we used the arithmetic mean of the countries under review because we want to highlight the difference in attitude rather than the statistical discrepancies. As regards asset accumulation attitude we treat all countries as equal (having equal weight). For the purpose of comparison we used the data on stock of dwellings from 2015.

As regards the GDP ratio of the individual categories, Hungary occupies an extreme position among EU countries when looking at the categories individually. When examining the ratio of other equity and cash, Hungary is ranked 2nd in both categories, while in the case of debt securities it takes 4th place. By contrast, for deposits (ranked 27th), life insurance and voluntary pension fund assets (25th) and equities (24th), Hungary is at the bottom of the categories. Consequently, by international comparison, the financial awareness of Hungarian households deviates from the EU average primarily in the categories of assets that may be liquidated in the medium and long run. According to the data of other countries, Hungarian households fail to make full use of the opportunities provided by the financial system. Looking ahead, improvement in financial awareness may enhance the utilisation of the domestic financial intermediary system, which may take place through a decrease in the ratio of cash, and an above-average increase in life insurance and voluntary pension fund assets.

2 Insurance market and its risks

2.1 OVERALL PICTURE OF THE MARKET

Insurance market in figures

The Hungarian insurance market, including the small insurance unions, has 41 active institutions in total, 25 of which fall under the scope of Solvency II (hereinafter: S2). As regards the breakdown by insurance segment, 7 of the S2 institutions are life insurers, 9 of them are non-life insurers and 9 of them are composite companies. Compared to 2016, there are 2 fewer insurance companies in the market, following their merger with another market participant. In the life segment, premium income was realised in 2017 amounting to HUF 460.8 billion on 2.4 million contracts, while the premium income realised in the non-life segment reached HUF 487.3 billion on 11 million contracts. Thus the premium income of the entire market totalled HUF 950 billion, which is a 7 percent increase compared to 2016. The growth was primarily attributable to the non-life segment, which rose by 9 percent year on year, while the life segment was up 4.4 percent. Capital adequacy compared to the previous year rose by 2 percentage points to 224 percent by the end of 2017. The Hungarian insurers realised a profit after tax of HUF 64.5 billion on total equity amounting to HUF 265.2 billion (Table 1).

	Insurance sector			
	2017			2016
			Total	Total
Number of institutions	Total S2 insurers	25	41	43
	Life	7		
	Non-life	9		
	Composite	9		
	Small insurance union	16		
	Life segment	Non-life segment	Total	Total
Premium income (HUF billion) (including branch offices)	462.8 (483.3)	487.3 (520.5)	950.2 (1,003.8)	888.4 (936.1)
Number of contracts (in thousands)	2,403	11,037	13,441	12,393
Balance sheet total (HUF billion)			2,628.2	2,524.6
Capitalisation level (percent)			224	215
Profit or loss (HUF billion)			64.5	50.4
Technical provision (HUF billion)	1,771.6	256.2	2,027.8	1,915.2
Ratio of government bonds within own assets (percent)			77	76
12-month regular premium of new contracts (HUF billion)	46.4	181.1	227.5	205.3
12-month regular premium (HUF billion)	304.0	457.0	761.1	711.4
12-month regular premium per contract (HUF thousand)	126.5	41.4	56.6	55.0
	Small insurance union			
	2016*			2015
Number of institutions	16			16
Premium income (HUF million)	385.9			351.5
Ratio of government bonds relative to technical provisions (percent)	45.8			43.6
Number of contracts	472			389

* The 2017 data of the small insurance unions is not yet available.
Source: MNB

³ Premium income data is not available in case of branches therefore it was estimated by earned premium.

In February 2018, the MNB published its paper entitled *10-year future of the insurance sector in 7 points* (hereinafter: FIS) on the future trends envisaged in the insurance sector (and partially the voluntary pension funds). Some of the points included in the publication contain desirable trends and objectives formulated as expectations, which – as a sector-level strategic plan – may also serve as a guideline for market participants. Progress towards the target figures presented as a 10-year objective in the publication – depending on the availability of the data in the case of certain indicators – are backtested in this paper.⁴ The comparison of the envisaged trends with the actual figures are presented by topic in the relevant sections herein.

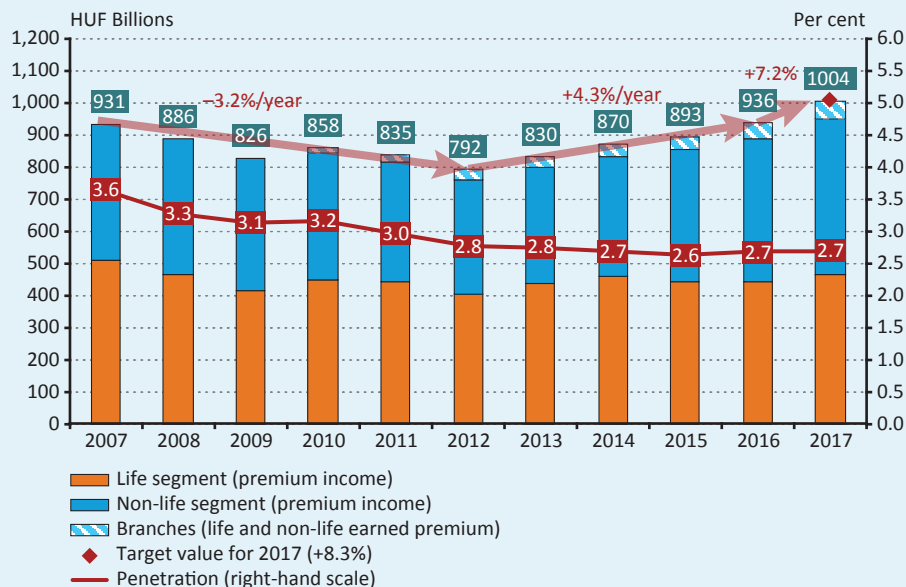
Premium income exceeds HUF 1,000 billion

In terms of consumption, services purchased at branch offices also form part of the insurance sector. For the purpose of statistics it is justified to take them into consideration, since several institutions which used to be insurance companies were transformed into branch offices in past years. This kind of reorganisation would break the time series presented here, yet it does not represent a real change (e.g. shrinkage of the market).

Together with the branch offices, premium income at sector level exceeded HUF 1,000 billion in 2017, which represents a rise of 7.2 percent compared to 2016 (Chart 3). The premium earned by the branch offices rose by 12.5 percent year on year, which was well above the growth of 6.7 percent registered at the supervised institutions. However, the high growth rate should be deemed exceptional rather than constant, as without the domestic insurance company that was transformed into a branch office between 2015 and 2016, the earned premium of branch offices declined annually by 3.1 percent on average between 2012 and 2017.

Over a longer horizon, we get a more comprehensive picture of the entire sector if we examine the institutions subject to domestic supervision and the branch offices together. Parallel to the recovery of the economy, the declining trend that characterised the period 2007-2012 (fall of 3.2 percent per annum on average) was followed by a period of growth (4.3 percent per annum on average between 2012 and 2016), which in 2017 was followed by an even higher growth rate.

Chart 3
Gross premium income and penetration in insurance segment



Note: Gross premium income in life and non-life segments, and gross earned premium for branch offices.

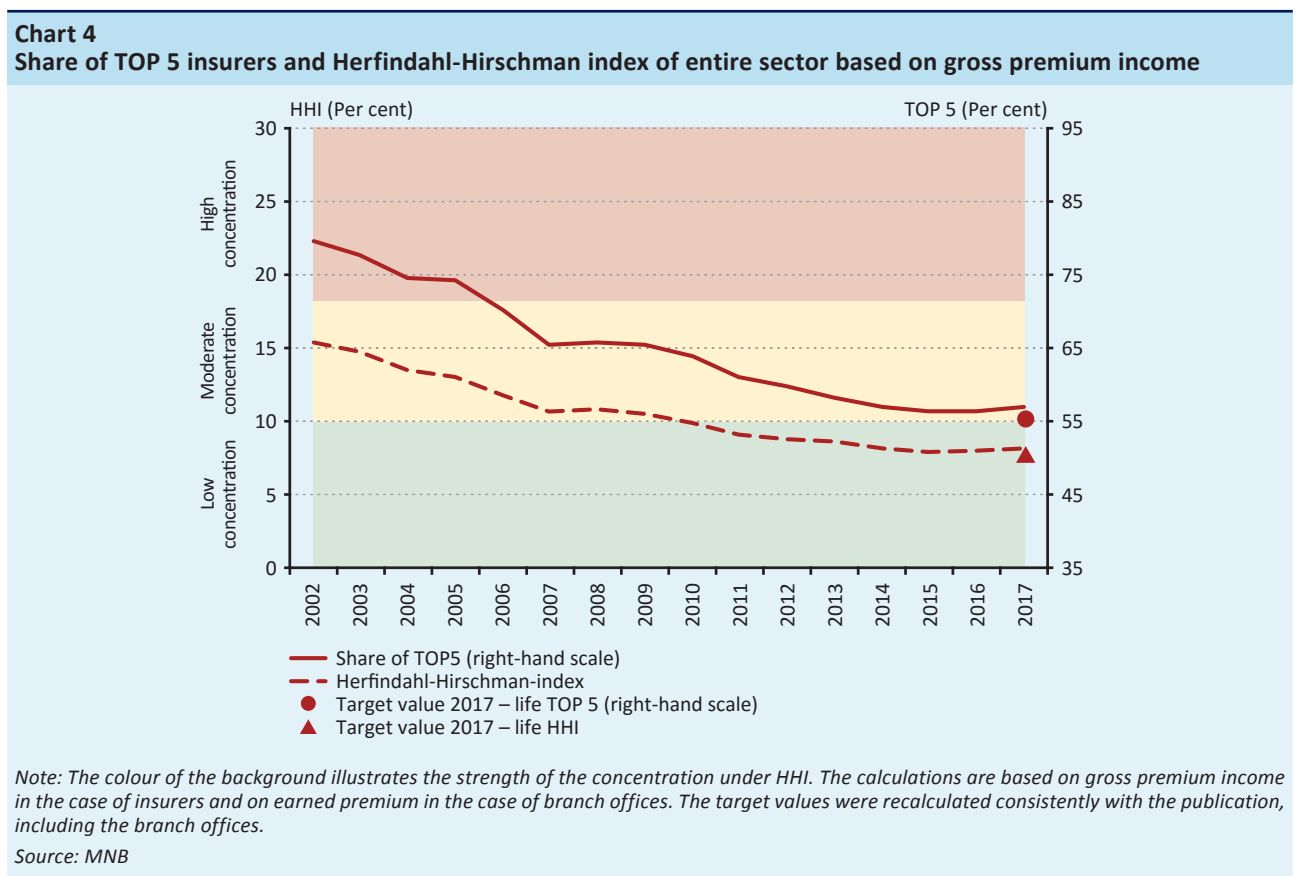
Source: MNB

⁴ For the backtesting we considered the developments in macroeconomic outcomes as well as the derogations arising from institutional changes in the meantime.

The latter fell short of the rate deemed desirable in our FIS publication (8.3 percent)⁵; however, contrary to previous years, it already exceeded the aggregate of GDP growth and inflation. The sector has not yet reached the surplus growth of 3 percent necessary for the penetration target; however, upon further acceleration of growth in the coming years the set target may be realised in the longer run.

Decline in concentration ratio seems to be faltering

According to the Herfindahl-Hirschman-index (HHI), providing a clear idea of the market concentration calculated together with the branch offices, the decline in the concentration ratio we have seen for many years has stopped (Chart 4). The market share of the TOP 5 increased for the first time since 2008, and the HHI value has not been at such a high level since 2014. Both indicators exceeded the values envisaged in FIS in 2017 (the share of the TOP5 by 1.8 percentage points, and the HHI by 0.4 percentage points).

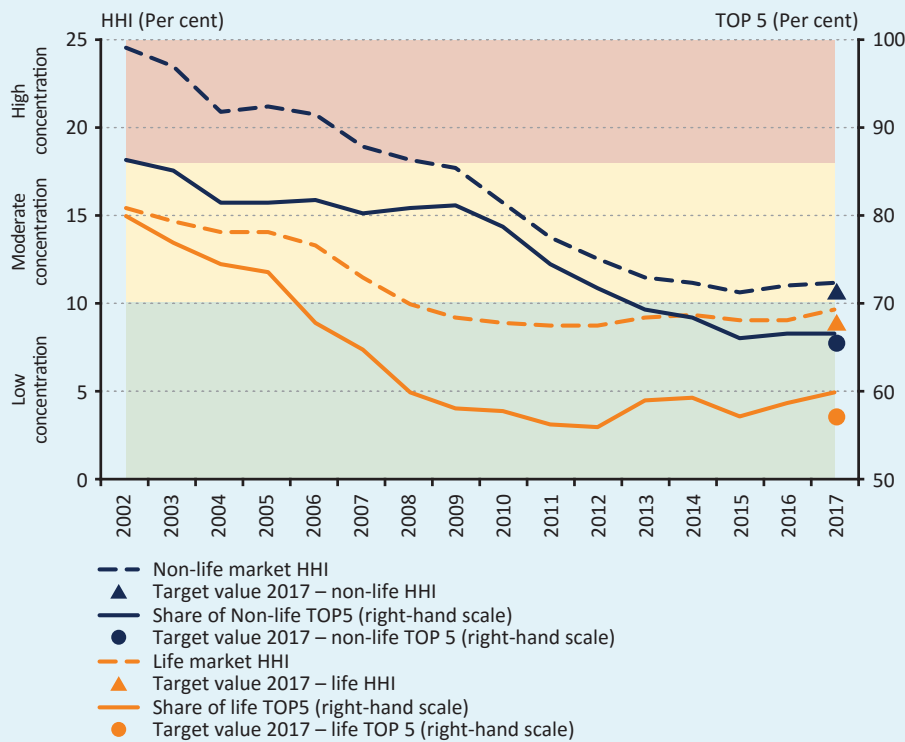


A more detailed picture, broken down by insurance segments, shows similar processes (Chart 5): both the life and the non-life segments showed an increase in 2017, which reversed the declining trend observed in previous years. In the life segment, the HHI revealed its highest value since 2008 (9.6 percent), and in the non-life segment it once again exceeded 11 percent. In the case of life insurance, the market share of the TOP 5 insurers is 59.7 percent, outstripping the 2016 value by 1.3 percentage points. By contrast, no material change was recorded in the market share of the TOP 5 in the non-life segment (up by 0.1 percentage point).

⁵ The path deemed desirable in the publication was determined for a 10-year horizon, based on annual additional growth of 1.8 percent necessary to achieve the penetration goal of 3 percent, set on the basis of real GDP growth and inflation derived from the MNB’s forecast. We recalculated the growth rate underlying the comparison with the actual macroeconomic figures, which, on the whole, exceeded the forecasts.

In the FIS we envisaged a lower concentration ratio, separately for both segments, than the actual figures.⁶ The larger difference between the target values was observed in the life segment, where the market share of the TOP 5 fell short of the actual ratio by almost 3 percentage points (totalling 59.7 percent instead of 56.9 percent). The difference in the non-life segment was smaller (the actual figure is 66.4 percent instead of 65.1 percent). Due to the rising concentration levels it will be necessary to stimulate competition in the longer run in certain segments to achieve the target values.

Chart 5
Share of TOP 5 insurers and Herfindahl-Hirschman index of sector based on gross premium income, by segment



Note: The colour of the background illustrates the strength of the concentration under HHI. The calculations are based on gross premium income in the case of insurers and on earned premium in the case of branch offices. The target values were recalculated consistently with the publication, including the branch offices.

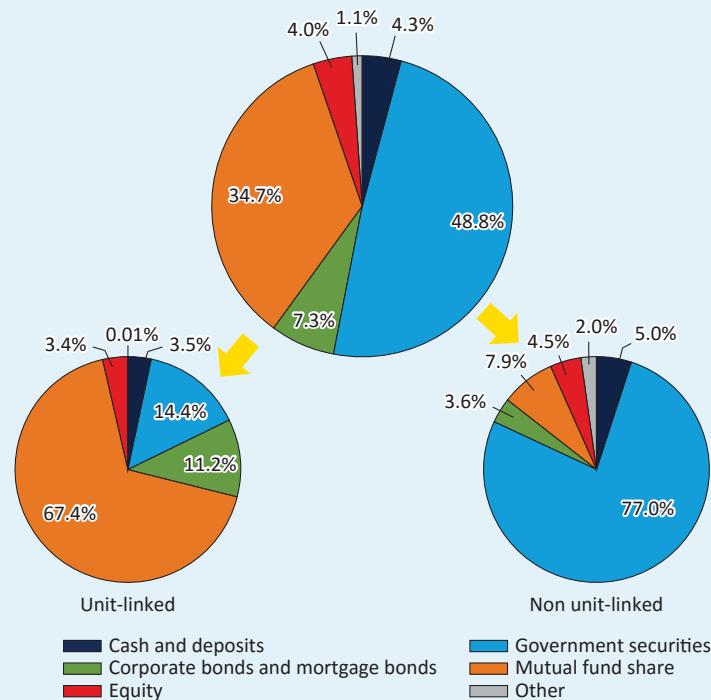
Source: MNB

“Yield hunting” attitude not typical for insurers’ investments

By the end of 2017, the value of domestic insurers’ total assets exceeded HUF 2,600 billion, of which HUF 1,200 billion cover unit-linked life insurance provision, while the remaining part comprises instruments underlying traditional life insurance and non-life insurance, as well as the institutions’ own assets. (Chart 6) The institutions invested more than half of the total assets directly in low-risk, conservative instruments (government securities, cash and deposits), while the remainder mostly consists of mutual fund shares, equities and corporate bonds (structured bonds, mortgage bonds). The composition of the assets underlying the unit-linked provision is dominated by instruments with a higher risk profile in the case of unit-linked insurance, the risk arising from the change in the price of the underlying instruments included in the asset funds – while direct government securities investments account for less than 15 percent of the provision. Almost 80 percent of the investments underlying the provision for policies other than unit-linked insurance comprise government securities, which is an outstanding ratio, even by European comparison.

⁶ The initial and target figures presented in the publication were determined without considering the branch offices, i.e. only for the insurers subject to domestic supervision. To ensure the consistency of this backtesting, we recalculated the 2017 figures.

Chart 6
Asset composition of insurance sector

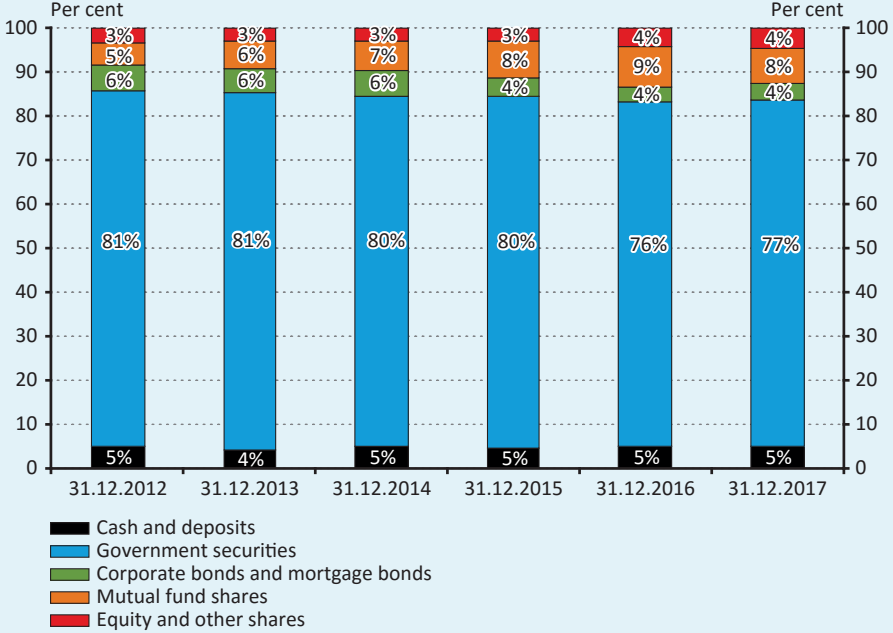


Source: MNB

The low interest rate environment seen for many years challenged the insurance sector as well. Chart 7 illustrates the composition of insurers' assets underlying the non unit-linked provision, retrospectively to 2012. No major realignment can be observed, i.e. the "yield hunting" and the soaring equity markets did not divert the sector towards riskier instruments. The ratio of the cash and deposit portfolio stabilised around 5 percent, while the share of government securities dropped by a few percentage points after the S2 changeover, but the portfolio value still remained above HUF 1,100 billion. The sector increased the portfolio by roughly HUF 70 billion in 2017 alone. The growth in the ratio of mutual fund shares is partly attributable to the headway made by real estate funds: to benefit from the upturn in the real estate market, the sector increased the portfolio of mutual fund shares issued by real estate funds by 613 percent between 2012 and 2017. The ratio of equities and other equity was a stable 3 percent until the end of 2015, followed by a one-percentage-point rise from 2016, which was primarily attributable to the fact that owing to the S2 valuation method – market value instead of accounting value – the shares of insurers in other enterprises appreciated substantially. When examining this asset category, it should be noted that in the S2 tables presenting the asset composition from 2016, the institutions reported participations in other enterprises in the equity category. At the end of 2017, these illiquid, difficult-to-value instruments accounted for 48 percent of the total equity portfolio.

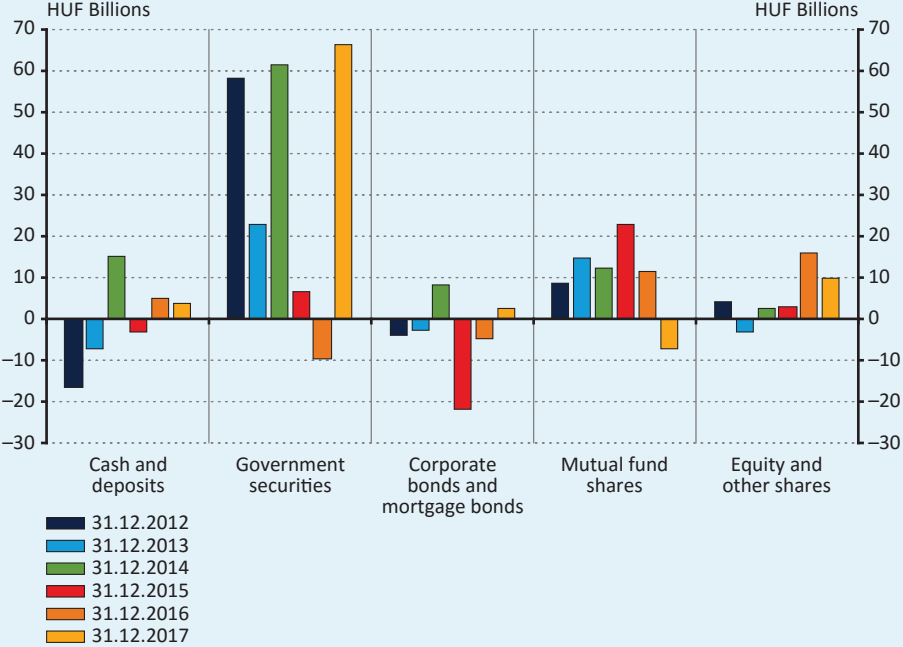
Chart 8 presents the start-of-year and end-of-year balance of the individual asset classes within the assets underlying the insurers' provision, other than unit-linked reserves. From 2012, i.e. from the start of the cycle of interest-rate cuts, the insurance sector steadily increased the ratio of government securities under assets underlying reserves other than unit-linked provision, as a result of which the exposure rose by 15 percent in 5 years to HUF 1,127.5 billion. In addition to the government securities, the mutual fund share portfolio also rose dynamically; institutions increased their exposure in mutual fund shares by 88 percent in 5 years. Although the declining interest rate environment did not result in a major portfolio realignment, a material yield could only be realised on riskier assets in recent years. Accordingly, insurers turned to investment funds, since through those they can reach both the domestic and the international equity markets – they invested almost 30 percent of the total stock in equity funds – and with a properly diversified mutual fund share portfolio, risks can also be kept at an optimal level.

Chart 7
Composition of insurers' assets underlying reserves other than unit-linked reserves



Source: MNB

Chart 8
Changes in balance of assets underlying reserves other than unit-linked reserves, by asset category



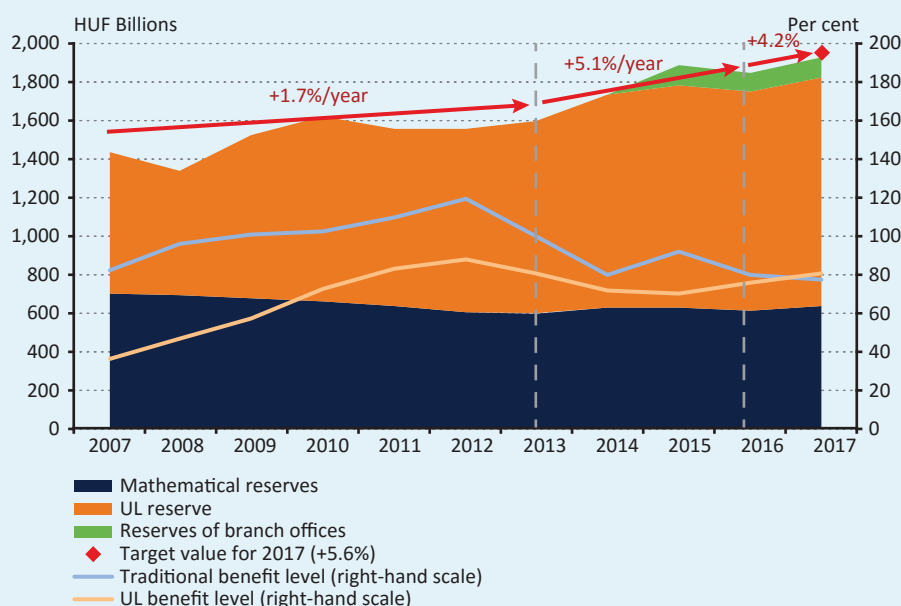
Source: MNB

2.2 LIFE SEGMENT

Declining growth in life insurance reserves

The volume of technical provisions of accountancy in the life segment (hereinafter: life insurance technical provision) amounted to HUF 1,924 billion by the end of 2017, which is growth of 4.2 percent compared to the end of 2016 (Chart 9). The smaller portion (5.3 percent) of the sector-level life insurance reserves relates to the Hungarian branch offices, while the HUF 76 billion growth in the remaining part, in annual terms, stems primarily from the 5 percent growth of the unit-linked provision vagy unit-linked technical provision. 65 percent of the growth in the unit-linked reserves recorded in the reporting year can be linked to 4 institutions, 3 of which belong to the TOP 5 market-leader institutions based on the gross written premium (hereinafter: premium income). The unit-linked reserve of the remaining one institution rose due to the new acquisition of single-premium contracts in the fourth quarter of 2017. Mathematical provision at sector level rose by 3 percent on an annual basis (by more than HUF 19 billion), almost 80 percent of which appears at 2 insurers.

Chart 9
Developments in life insurance reserves



Note: Benefit ratio were calculated on the basis of the data submitted by the insurers, without the branch offices.

Source: MNB

When examining the changes in the life insurance reserves based on the time series, we can observe three phases. In the first phase, between 2007 and 2013, the growth in the volume of life insurance reserves was hardly noticeable (annual average growth rate: 1.7 percent); the growth was hindered by the withdrawal of funds resulting from the early repayment of the foreign currency loans at the preferential exchange rate between 2011 and 2012. In the post-crisis years, between 2013 and 2016, the volume of reserves started to rise, supported by the introduction of pension insurance in 2014 (annual average growth rate: 5.1 percent). From 2014, due to the transformation of a life insurer into a branch office, the expansion of the life insurance market can be analysed by considering the technical provision reported for the branch offices. From 2016 a moderate rise in the life insurance reserves can be observed. In FIS, according to one of the potential future paths of self-care provision (*international trend*), the growth rate projected from the end of 2016 for 2017 would be 5.6 percent, while the life insurance reserve projected for the end of 2017 would be HUF 1,949 billion. The growth rate of 4.2 percent, observed in the reporting year, falls short, albeit only slightly, of the envisaged target value.

The ratio of claim payments and insurance benefits relative to gross premium income is a good representation of the developments in life insurance reserves. The insurance benefit ratio related to traditional life insurance rose dynamically between 2007 and 2012 and steadily exceeded 100 percent between 2009 and 2013 due to the surrendered traditional

life insurance contracts. During observation period, the benefit level of unit-linked insurance was less volatile; it reached its peak at 83-88 percent during the early repayment of the foreign currency loans in 2011-2012. Since 2016, the insurance benefit ratio declined in both segments, stabilising at around 80 percent. The volume of claim payments and insurance benefits in the reporting year (HUF 366 billion) rose by 11 percent compared to 2016, primarily as a result of unit-linked insurance terminated due to expiry or surrender. Surrendered contracts account for almost 60 percent of the claim payments and insurance benefits in 2017; expiry and surrender together account for 90 percent of the payments at sector level. The trend of insurance benefit payments between 2012 and 2015 was characterised by a decline, which turned in 2016, and since then has been rising at an accelerating rate.

Box 1

Long-term guarantee (LTG) measures

The statement of the individual items in the balance sheet at market price is an essential element of the Solvency II scheme. Since insurers' assets typically do have a market price, the effect of a change in the market prices is reflected in the asset value. By contrast, no market price can be linked to the technical provisions, accounting for the vast majority of the liabilities, and thus their value reflects the effect of the change in the market prices only to a limited degree. Due to the different valuation models, under volatile market prices the size of the solvency capital may also become volatile; the long-term guarantee measures were elaborated to address this effect.

The volatility adjustment means applying the modified risk-free yield curve established by the European Insurance and Occupational Pensions Authority (EIOPA). EIOPA determines a representative portfolio for each currency, which provides a good description of the assets of the insurers functioning in the respective currency, and specifies the adjusted yield curve for that.

The matching adjustment sets out from the cash flow structure of the insurer's assets and liabilities, and calculates the adjustment from the deviation of those. The adjustment must be calculated by the insurer, while the application is subject to the authorisation of the supervisory authority.

The transitional measures, the purpose of which is to ensure that the transition by the insurers from the Solvency I scheme does not cause a big shock, are similar to the long-term guarantee measures. However, none of the Hungarian insurers have resorted to this instrument, and it is not used widely in Europe either.

At European level, one quarter of all insurers (783 from a total of 2,945) use some sort of long-term guarantee measure or transitional adjustment; however, in terms of the reserve holdings these insurers account for 74.2 percent of the entire stock. In Hungary, this ratio is 7 insurers out of 25, accounting for 57.8 percent of the reserve holdings. The most often used adjustment is the volatility adjustment; at European level it is used by 730 insurers, while the matching adjustment is applied by only 38 insurers. In Hungary, the aforementioned 7 companies only use the volatility adjustment. The matching adjustment is not used by the Hungarian insurers due to the high resource requirement of the calculations and the supervisory authorisation, and also due to the strict application conditions.

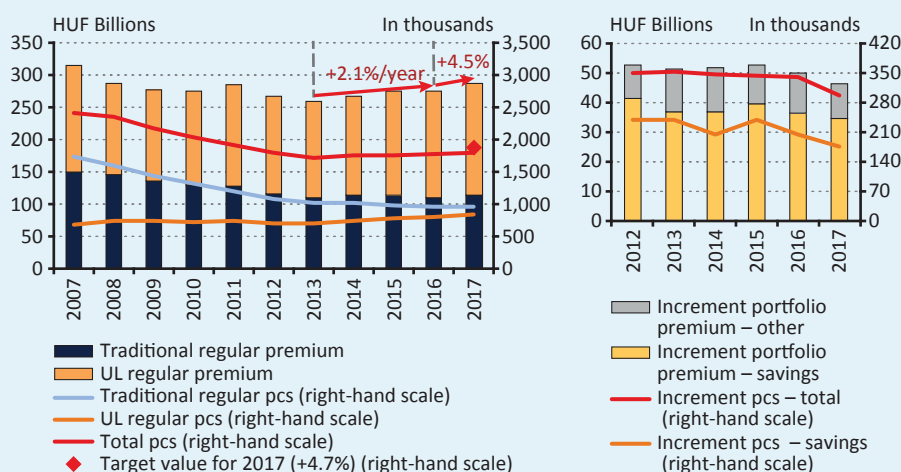
The effect of the adjustments and the transitional measures on the European insurance sector is material, since if these are ignored, the capitalisation level across Europe would fall by 69 percentage points among the affected insurers (45 percentage points in the entire sector); reserves would decrease by EUR 215 billion in total, the solvency capital requirement would be up by EUR 72 billion, while the available capital would drop by EUR 168 billion. In some countries the capitalisation level of the entire sector would fall below 100 percent. In the case of Hungarian insurers, the impact is substantially smaller: the capitalisation level of all respective insurers would only drop by roughly 2 percentage points – from 183 percent to 181 percent, even without the volatility adjustment, while the capitalisation level of the entire sector would change by only 1 percentage point, from 217 percent to 216 percent.

Introduction of ethical concept causes no shock – growth rate higher

In accordance with the relevant regulation, the MNB expects insurers to comply with the requirements related to the ethical life insurance concept from 1 January 2017. Before the introduction of the concept, there were concerns about its impact on the life insurance sector, primarily with regard to potentially jeopardising market expansion. However, based on the data from 2017 it is clear that the fears about the decline in sales did not materialise; the ethical concept caused no shock. Although the number of new savings-type life insurance contracts fell by 14 percent compared to 2016, the 12-month regular premium per contract rose to HUF 207,000 (+12 percent).

As regards the regular premium life insurance market, the number of contracts has been growing since 2013 at a slow (below 2 percent), but steady rate; at the end of 2017, their number amounted to 1.8 million (Chart 10). The rate of portfolio loss declined continuously between 2012 and 2014, and thus in 2014 the volume of new acquisitions already outstripped the expiring portfolio. However, the surplus in the increment relative to the number of expiring contracts is sufficient only for modest growth in the portfolio. The number of regular premium contracts concluded in 2017 (roughly 284,000) exceeds the portfolio loss in the same year by only 16 percent, the ratio of which relative to the entire portfolio is 3 percent. In the case of the regular premium portfolio, the contracts terminated in the reporting year due to expiry and surrender account for 62 percent of the portfolio loss, and the trend is increasing. Pension insurance is a major driver behind new acquisitions, accounting for one quarter of the regular premium policies concluded in 2017. The rise in the unit-linked portfolio, the key driver of growth in regular premium insurance, is also attributable to pension insurance, accounting for almost 40 percent of the increment in the reporting year. The decline in the traditional life insurance portfolio, observed in the past 10 years, stopped in 2017. In FIS, assuming the dynamics with regard to one of the potential future developments of life insurance and pension fund penetration, the growth rate of the life insurance contracts from the end of 2016 to 2017 would be 4.7 percent, according to which the portfolio would come close to 1.9 million contracts. However, the 1.6 percent increase in annual terms, observed in the reporting year, falls short of the projected value for the time being.

Chart 10
Premium income from regular premium contracts in life segment and growth trends



Source: MNB

The premium income in 2017 (HUF 289 billion) from the regular premium life insurance across the sector rose by 4.5 percent due to the unit-linked portfolio, continuing the growth observed since 2014⁷. The ratio of the unit-linked portfolio rose both in terms of premium income and number of contracts, as 60 percent of the premium income comes from contracts accounting for almost 47 percent of the regular premium life insurance portfolio. The premium income earned

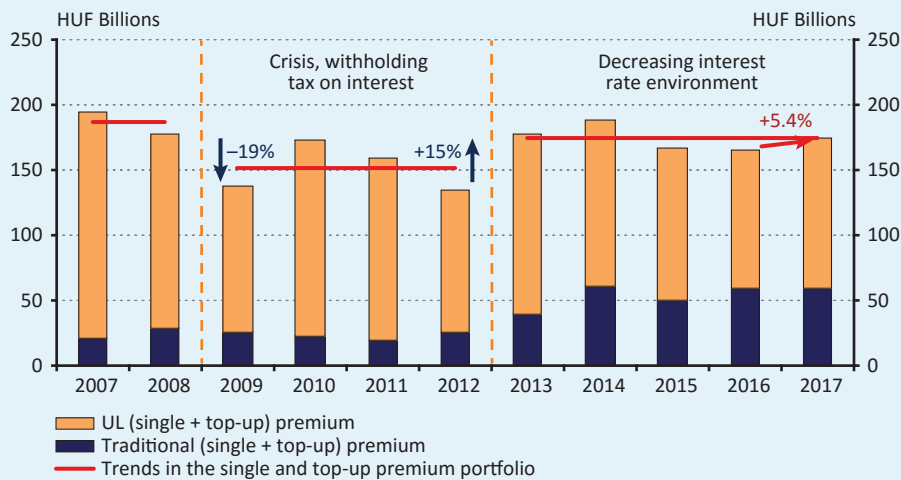
⁷ By 2016, the number of institutions supervised by the MNB shrank by one due to its transformation into a branch office; accordingly, the declines from 2015 to 2016 in the time series are partly attributable to the data of the institution removed from the supervision. The elimination of the data of the respective insurer with regard to the pre-2016 years results in 3 percent growth in the sector-level premium income from regular premium contracts from 2015 to 2016.

on the regular premium traditional contracts rose by almost 4 percent in annual terms, after the temporary stagnation observed in the past two years⁸. 63 percent of the premium income from regular premium unit-linked contracts of the current year (HUF 174 billion) is distributed among 5 institutions, while the same ratio of the premium related to the traditional portfolio is shared only among 4 institutions.

Predictable performance in single premium market

By the end of 2017, the amount of the single and top-up premium income came close to HUF 174 billion, rising in annual terms by more than 5 percent as a result of the single premium income (Chart 11). In 2017 the top-up premium amounted to almost HUF 60 billion, representing a fall of 6 percent compared to 2016. 66 percent of the single and top-up income comes from unit-linked contracts. The volatility of the single premium market is well illustrated by the fact that the change in premium income compared to 2016 varies in a wide band (-79 percent – 307 percent) at institution level. In the reporting year, almost 70 percent of the premium income from single premium contracts was earned by 3 institutions. In 2017, the insurer with the 3rd highest single premium income generated almost 100 percent of the change in the single premium income at sector level, with its single premium income, quadrupled on an annual basis, linked to the unit-linked portfolio.

Chart 11
Changes in single and top-up premium income in life segment



Source: MNB

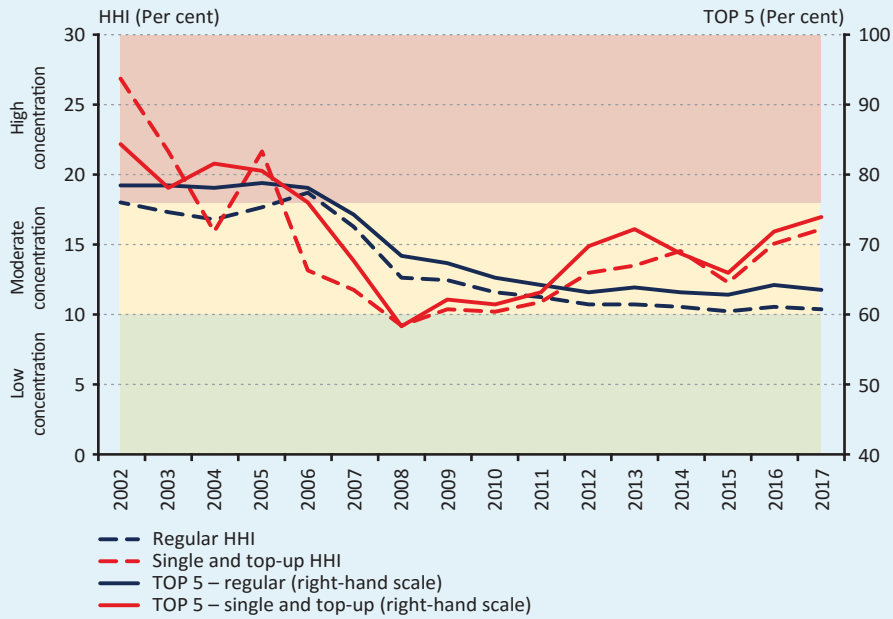
Concentrated single premium market

The 2017 concentration ratio of the regular and single premium life insurance market is in line with the trend observed since 2015 (Chart 12). The concentration ratio of the regular premium market has been steadily declining since 2006, and from 2012 has converged on the upper limit of the low concentration (10 percent of HHI), which testifies to adequate market competition. Based on the regular premium income, each of the 5 largest market participants (TOP 5) has at least an 8 percent market share. The range and sequence of the TOP 5 institutions has not changed since 2013.

The concentration of the single and top-up premium market shows an increasing trend since 2008, apart from a few minor downturns. The current-year HHI value of the single premium market rose compared to 2016, which was primarily caused by the four-fold increase, on an annual basis, of one insurer's single premium income. The concentration of the single and top-up premium market is shown by the fact that based on gross premium income, the market share of each of the three largest institutions exceeds 15 percent, while the share of the institution ranked 4th is merely 5 percent. In the past year the range of the TOP 3 institutions has not changed, while the institutions ranked second and third switched places compared to 2016.

⁸ Chart 10 reflects a 2.5 percent drop in traditional premium income between 2015 and 2016; however, if we ignore the data of the insurer that was transformed into a branch office in 2016 (HUF 2.5 billion), the traditional, regular premium income did not change between 2015 and 2016.

Chart 12
Concentration of regular and single premium market



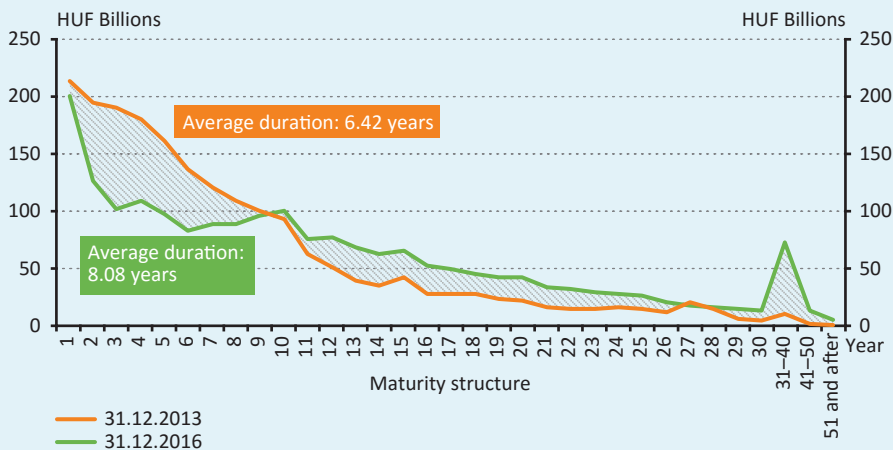
Note: The colour of the background illustrates the strength of the concentration under HHI.

Source: MNB

Increasing volume of expiring contracts in life insurance market

Chart 13 shows the expected undiscounted cash flow of savings-type life insurance by year at sector level, as well as the change in the maturity structure between 2013 and 2016. It is clear that the course of the cash flow expected for 2016 became more balanced compared to the end of 2013; the distribution of the annual cash flows shifted to the right. In 2013 some 80 percent of the (discounted) cash flow of the savings products ran off by the 9th, and 90 percent by the 13th year, while in 2016, according to expectations, 80 percent of the cash flow will run off only by the 13th and 90 percent thereof by the 18th year. Based on the expected cash flows, the weighted average remaining maturity of the liabilities at sector level was 6.4 years in 2013; in 2016⁹ this number already exceeded 8 years, thereby reaching the bottom of the band announced in connection with the introduction of the ethical scheme (8-10 years).

Chart 13
Anticipated retention period of life insurance



Source: MNB

⁹ Based on the S2 reporting regime

2.3 NON-LIFE SEGMENT

MTPL remains the driver of non-life market

Compulsory motor third-party liability insurance (MTPL) is still the key driver of the dynamic, unfaltering growth seen since 2012. The 14.8 percent growth registered in 2017 – together with the 20.2 and 24.3 percent improvement recorded in the previous years – resulted in unprecedented premium income in the business segment, and exceeded the threshold of HUF 150 billion (HUF 150.9 billion). Compared to the HUF 81 billion of 2013, regarded as the local trough, this means growth of 86 percent in merely four years (Chart 14).

The growth in premiums is partly attributable to the expansion of the vehicle fleet, as a result of which the number of vehicles affected by the MTPL rose steadily in the past three years, by an annual 4.9 percent on average. The passenger car fleet increased particularly dynamically, at an accelerating rate of 5.3 percent per annum on average. Although the number of cars put into service for the first time in Hungary has risen dynamically since 2010, by 2.4 percent annually, the growth rate has been declining since 2014. The accelerating growth in the MTPL car portfolio is attributable to the decline in turnover: while in 2014 there were 61 terminations for each 100 “new”¹⁰ vehicles, in 2017 this figure was only 37.

The premium per contract had a much larger effect on the growth in premium income. For example, 58 percent of the previously mentioned 86 percent growth in premiums is attributable to the rise in tariffs. In 2017 a price hike¹¹ of 8 percent was recorded. The premiums of passenger cars increased by 11.2 percent. The more moderate price increase related to non-passenger cars – 3.9 percent – is attributable to lorries, where a decline of 7.2 percent was observed.

There is a strong correlation in the change of the casco and MTPL premiums related to land vehicles (94.7 percent). However, in the past three years the increase of 6.8 percent on average in the casco premiums lags materially behind that of MTPL. The rate of portfolio development is also somewhat slower (3.7 percent on average in the last three years). The lag compared to the 5 percent growth rate of MTPL is partly attributable to the fact that the majority of passenger cars put into service in Hungary for the first time are second-hand cars¹², where casco penetration is materially lower. However, the more moderate growth in casco premium income is due much more to the change in the average premium income per contract. In the last three years, the casco average premium rose by 4.7 percent on average, compared to the 14.1 percent increase in MTPL premiums. The lag is understandable: on the one hand there was not such great pressure on the profitability of casco as in the case of MTPL (see later), and on the other hand, the online comparison of casco premiums only became available much later on; in addition, the regulatory environment caused no slackening of competition in the area of casco.

Even the credit expansion has generated no breakthrough in the area of retail property insurance (primarily household insurance). Last year’s (outstanding) rise of 6.2 percent in premium income could not be repeated in 2017. The average growth of 3.5 percent is attributable, roughly half-and-half, to the portfolio increment and inflation-based indexation.

On the basis of premium income and among the other product categories, general and professional liability insurance (4.9 percent), credit and suretyship insurance (3 percent) and travel insurance (2.2 percent) have relatively high market shares.¹³ These three categories, separately, rose at a rate in excess of the market average in 2017: by 12.3, 13.3 and 9.3 percent, respectively. As regards the number of contracts, in the case of travel insurance the portfolio loss was also taken into consideration, as the majority of the contracts have maturities of less than one year. With this adjustment, travel insurance had the highest market share in 2017 of the afore-mentioned three product categories, with 1,133,000 contracts, which is down by 7.5 percent compared to 2016.

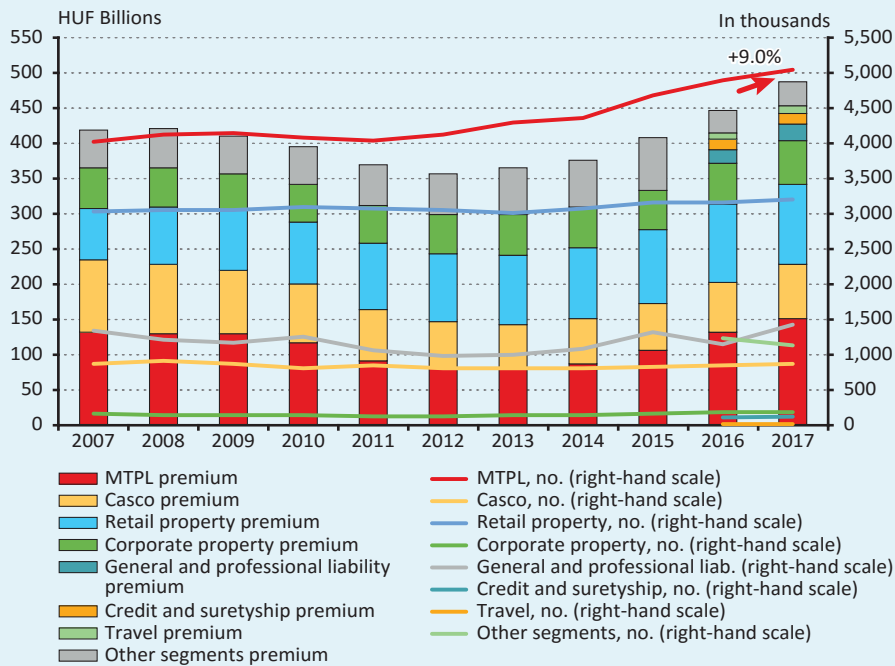
¹⁰ The majority of cars put into service for the first time are second-hand imported cars.

¹¹ Growth in 12-month regular premium per contract.

¹² Source: HCSO

¹³ In previous publications, these 3 product categories were referred to as “other segments”. However, their increasing share justified – while the product-based data reporting introduced from 2016 facilitated – showing these products separately from the other non-life insurance products.

Chart 14
Changes in premium income and number of contracts of non-life segment



Note: The product category's portfolio loss was also added to the number of travel insurance contracts as the parties usually conclude the contracts for a period of less than one year.

Source: MNB

Room for stimulation of competition

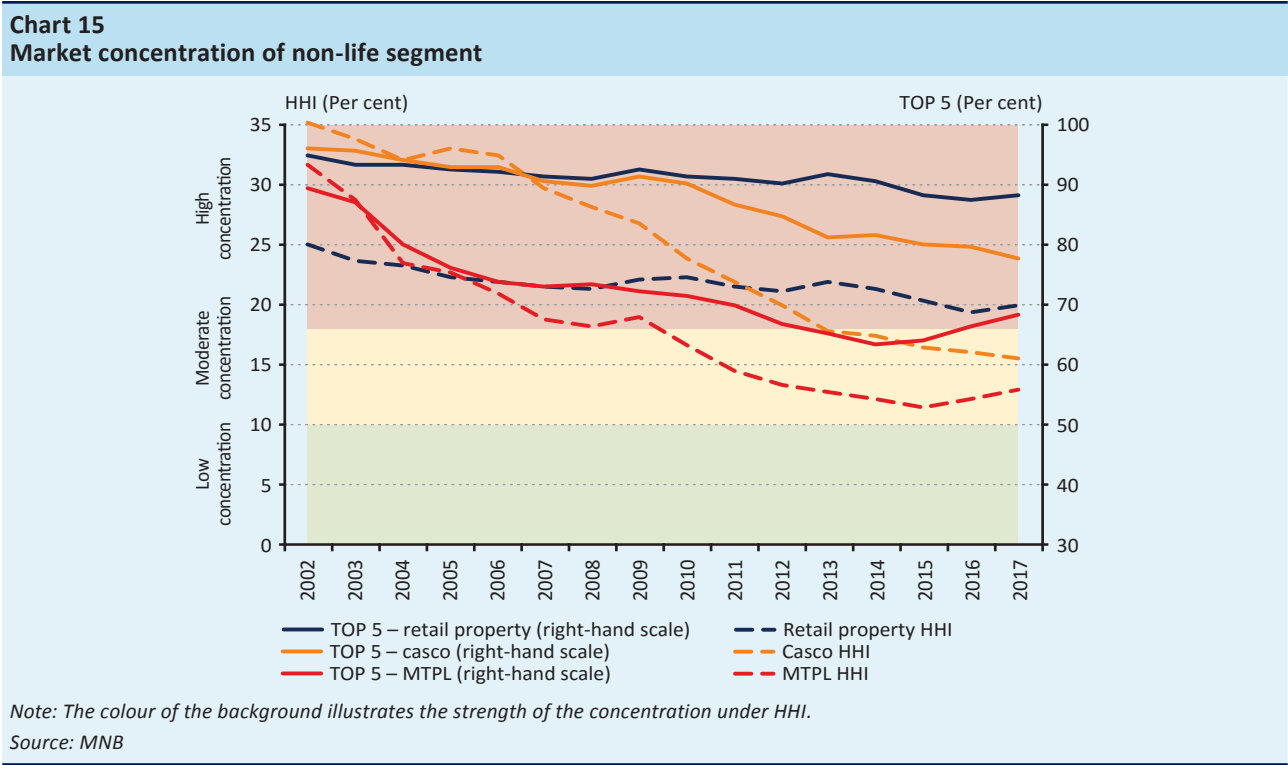
In a business segment where the customers decide based on the price rather than on the anticipated quality of the service, and the competition is strong, a natural levelling-off process is normal¹⁴. The turnaround in 2016 in the steadily declining concentration ratio of the extremely price-sensitive MTPL segment seen since the crisis shows that this natural levelling off process no longer makes its impact felt with such high intensity (Chart 15); the turn in the trend signals a slackening of competition. Here, three factors should be mentioned. On the one hand, with the cancellation of the mandatory year-end insurance renewal from 2011, the number of contracts affected by the year-end campaign for changing insurers declined, and accordingly, the campaign also became less intensive. As a result of the media hype, substantially more vehicle owners looked for cheaper contracts than in the case of the contracts with mid-year renewal dates not affected by the campaign. On the other hand, from 2013 MTPL tariffs may only be announced once a year, and thus the individual tariffs lost the key significance they used to have. Thirdly, the premium level of the business segment dropped to an unsustainable level by 2012-2014, while the claims per policy rose, and thus raising premiums became unavoidable. The premium increase process has currently more than met its objectives and the business segment has become profitable; despite the afore-mentioned factors, competition may still intensify in the future.

For casco, competition has strengthened in recent years as a result of the price comparison applications provided by online brokers. Thus the levelling-off effect continues to prevail despite the fact that the anticipated quality of service and the brand are important factors here. The stagnating loss ratio does not imply a change in the intensity of competition.

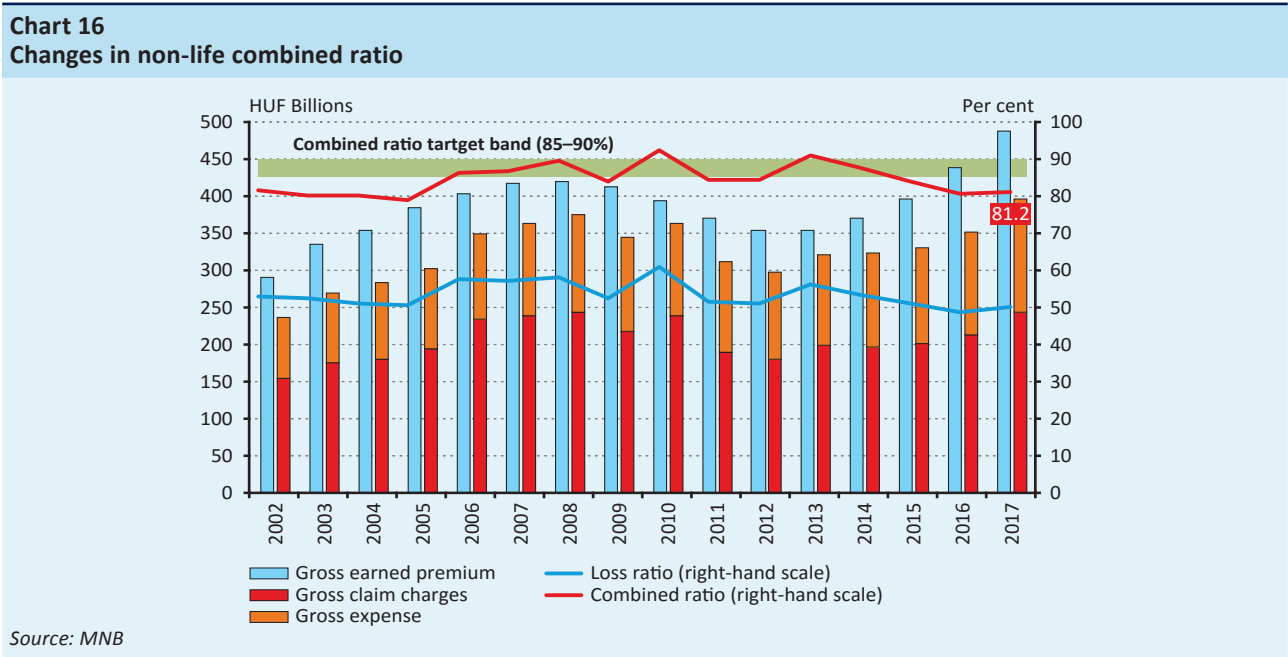
The level of the index is unchanged for the retail property insurance segment, sitting in the band signalling high concentration; moreover, in 2017 the concentration rose even further. The loss ratio of around 36 percent signals an extremely profitable business segment, and thus many insurers would like to enter this segment; however, the renewal of the retail property insurance contracts does not receive the same attention as MTPL or casco. The general public simply

¹⁴ If two insurers announce fully identical tariffs, roughly the same ratios of their portfolios will find a cheaper solution that is worth switching to. However, they can acquire new contracts from the same range of customers, i.e. those who change insurer. Accordingly, the larger insurers presumably lose a higher portfolio in absolute value, while they may acquire roughly the same volume of new contracts as the small insurers.

fails to realise that it might be worth checking the offers regularly to obtain a more favourable contract. Although after a steady decline since 2012 the loss ratio rose by 2 percentage points in 2017 (from 32.9 percent to 34.9 percent), based on the concentration ratios this is not attributable to the stronger competition.



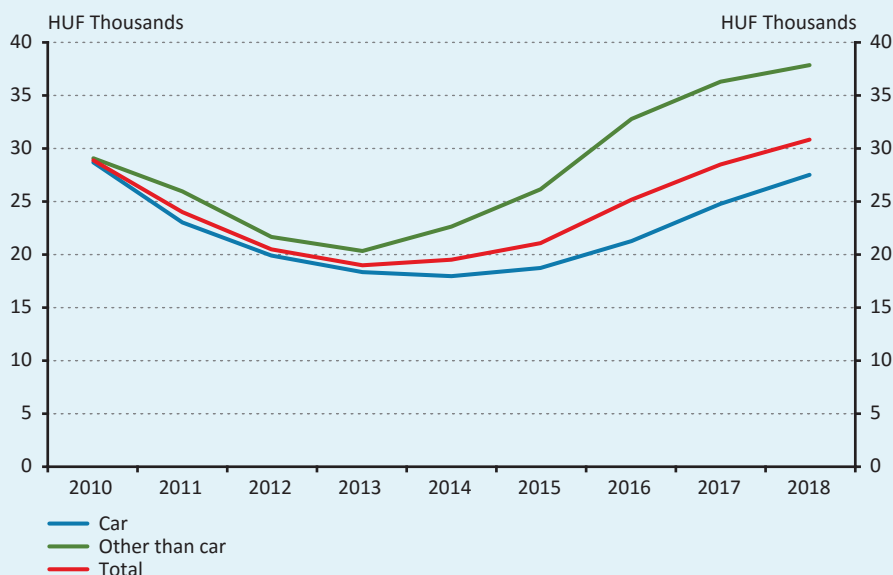
After 2016, the combined ratio of the non-life segment rose moderately (by 0.6 percentage points) to 81.2 percent in 2017 (Chart 16). Claims rose moderately, but faster than costs, as a result of which a marginal shift took place in their weight relative to each other (to 50:31.2). The growth in claims and costs was mapped by the change in earned premiums, which resulted in moderate growth in the combined ratio. The declining trend of the previous years seems to be faltering, which is in line with the expectations outlined in FIS, according to which a steady combined ratio of 85-90 percent would be desirable in the non-life segment. Looking ahead, in the coming years we expect the target band to approximate the actual figure at a faster rate than in 2017.



MTPL premiums return to level observed 7 years ago

In the period 2012-2014, MTPL premiums fell to a level that jeopardised the sustainability of the segment, and thus raising premiums became unavoidable. The growth in tariffs observed since 2013 was also supported by the competition-decreasing factors outlined above.

Chart 17
12-month regular premium per contract in individual vehicle categories



Note: On 1 January of the respective year.

Source: MNB

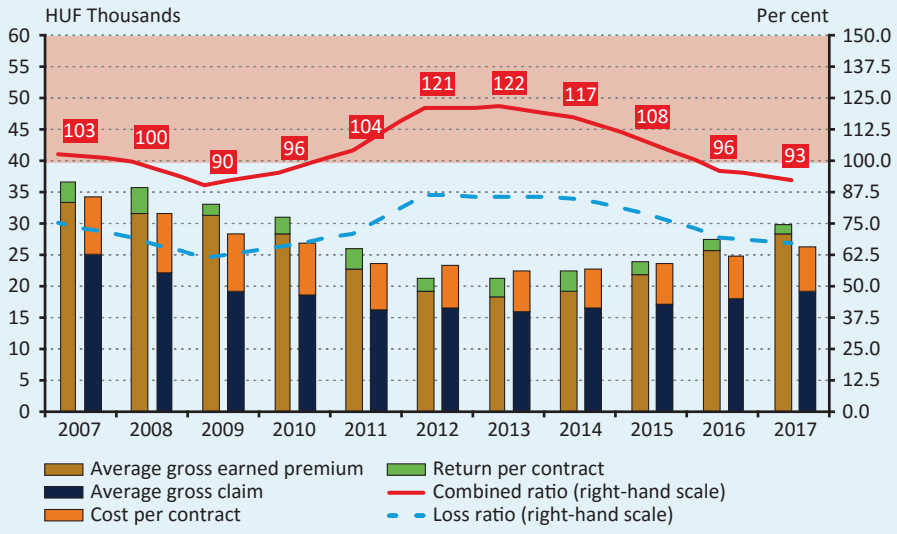
The 12-month regular premium per contract has been rising since 2015, albeit at a decelerating rate; however, this is primarily attributable to the special risk conditions of heavy goods vehicles (lorry, bus, truck, trailers). In the case of passenger cars, which may be regarded as the primary field of price competition, steady growth in tariffs has been observed since 2015 (Chart 17).

The risks (loss ratio per contract) rose from the trough of 2013 by 3.8-4.6 percent annually until 2016 (Chart 18). The premium income (earned premium) per contract rose much faster than that (e.g. by 18 percent in 2016), while the loss ratio and the combined ratio declined sharply. The segment emerged from its unsustainability zone; the more moderate growth (10.2 percent) in premium income recorded in 2017 consolidated this status, ensuring stable profitability. No further premium increase is justified, and thus it is reasonable to expect a major decline in additional tariff increases. However, risks soared in 2017, the claim ratio per contract rose by 6.6 percent compared to the previous year's 3.8 percent. When announcing their tariffs for 2018 it is questionable whether the insurers have given and indeed give priority to portfolio acquisitions as a result of the improving profitability, or to prudence as a result of the continuing deterioration in the claim trend.

Until 2015, improved cost efficiency supported the MTPL business in its efforts to become sustainable and profitable; the breakthrough in 2016-17 was purely attributable to the premium increases. Setting out from the assumption that acquisition costs are proportionate (through commissions) with premiums received, while administration expenses are rather proportionate with the number of contracts in the portfolio, the cost efficiency of MTPL has not improved, even despite the dynamic growth in the contract portfolio.

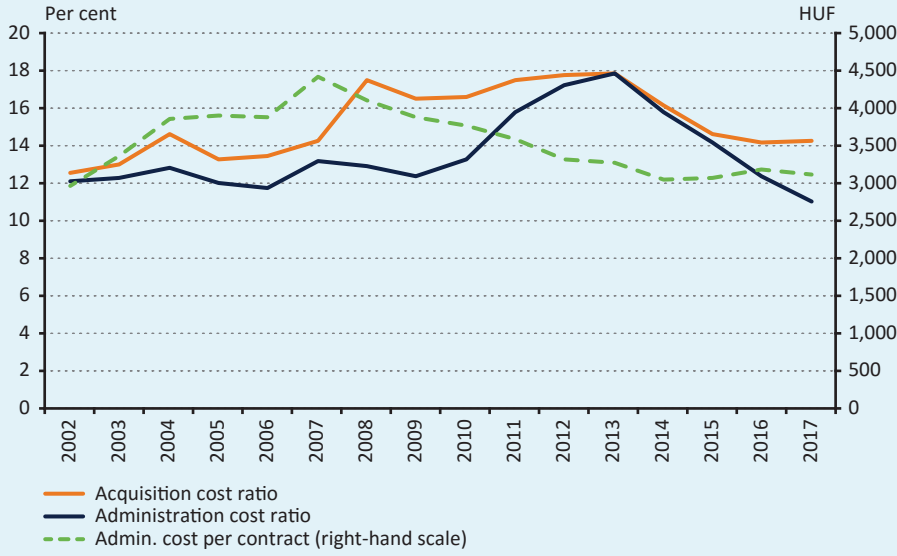
Although the administration cost ratio declined as a result of the vigorous growth in the premium income, the decrease in the cost per contract stopped in 2014, and it was able to continue only one year after cutting the acquisition costs (Chart 19).

Chart 18
Changes in combined ratio of motor third-party liability insurance in Hungary



Source: MNB

Chart 19
Changes in cost indicators of motor third-party liability insurance in Hungary



Source: MNB

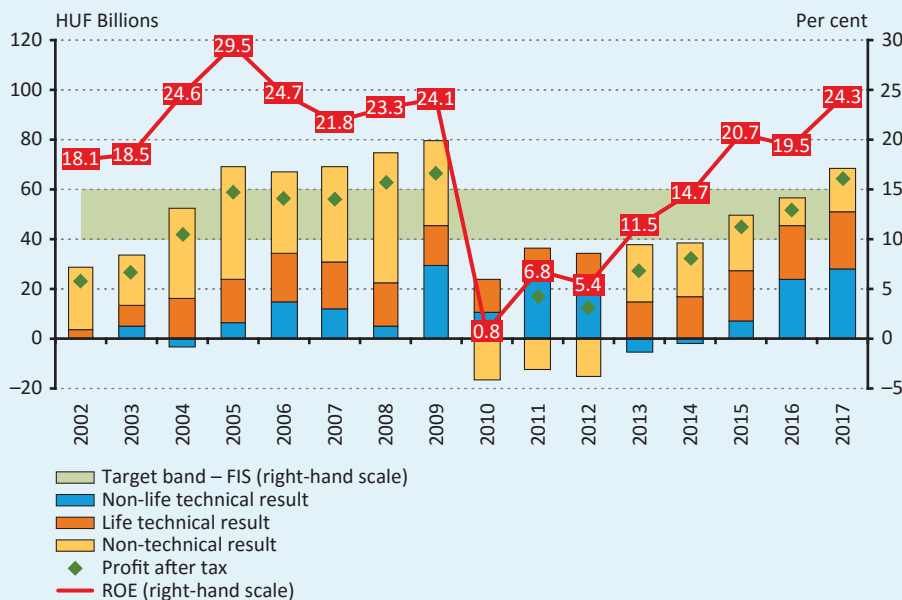
2.4 PROFITABILITY AND CAPITAL POSITION

After-tax profit of HUF 64 billion reaches pre-crisis levels

After the crisis, the insurance sector’s return on equity (ROE) started to exhibit growth from 2010, and currently stands at 24.3 percent, i.e. the level of 2007-2009. The shift toward the target band specified in FIS did not commence in 2017. Based on the 2017 Q4 data, the after-tax profit of the sector is close to the highest result of the past 15 years, which was HUF 64.5 billion. The market’s average return on premium (ROP) also continued the growth trend observed since 2010. We see pre-crisis profitability levels in the case of both indicators.

The growth in profitability was caused by the major rise in non-life insurance results. While in 2013-14 the result of the non-life segment was negative, at present it accounts for 41 percent of the profit (HUF 28 billion). The change is mostly attributable to the improving profitability of MTPL. The technical results of the life business also show a continuous improvement; in the past two years, growth rates of 6 and 5 percent were observed (currently HUF 22 billion). (Chart 20)

Chart 20
Profitability of Hungarian insurance sector and its composition

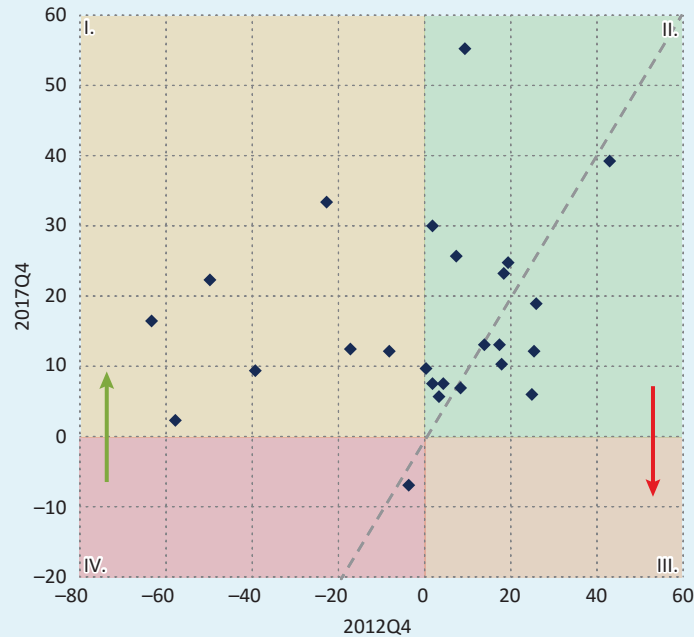


Note: The sector-level ROE values (with the exception of 2017) were calculated on the basis of the annual audited data reporting, where equity contains the current year’s dividend.

Source: MNB

The individual insurers’ return on equity shows a different picture at institutional level. Of the 25 institutions only one realised a loss, and in the case of the same institution a smaller loss was observed 5 years earlier. In addition, 7 insurers managed to turn their end-2012 negative return on equity into a positive figure by 2017 Q4 (Chart 21), while no contrasting movement was observed at any of the insurers. Based on these shifts, the profitability trends provide a very positive picture of the individual institutions as well as of the sector as a whole, as a result of which market competition may pick up in the near future.

Chart 21
ROE value of Hungarian insurers



Source: MNB

Increasingly stable capital position

In the Solvency II regime, insurers are required to accumulate substantial capital for a number of risks that did not appear explicitly in the pre-2016 solvency capital requirement (SCR) calculation; the purpose of the new regime was to introduce a risk-based approach instead of the linear historic data. Counterparty, market or operational risks are among the risks that were not usually assessed for the purpose of capital requirement calculations in the past.

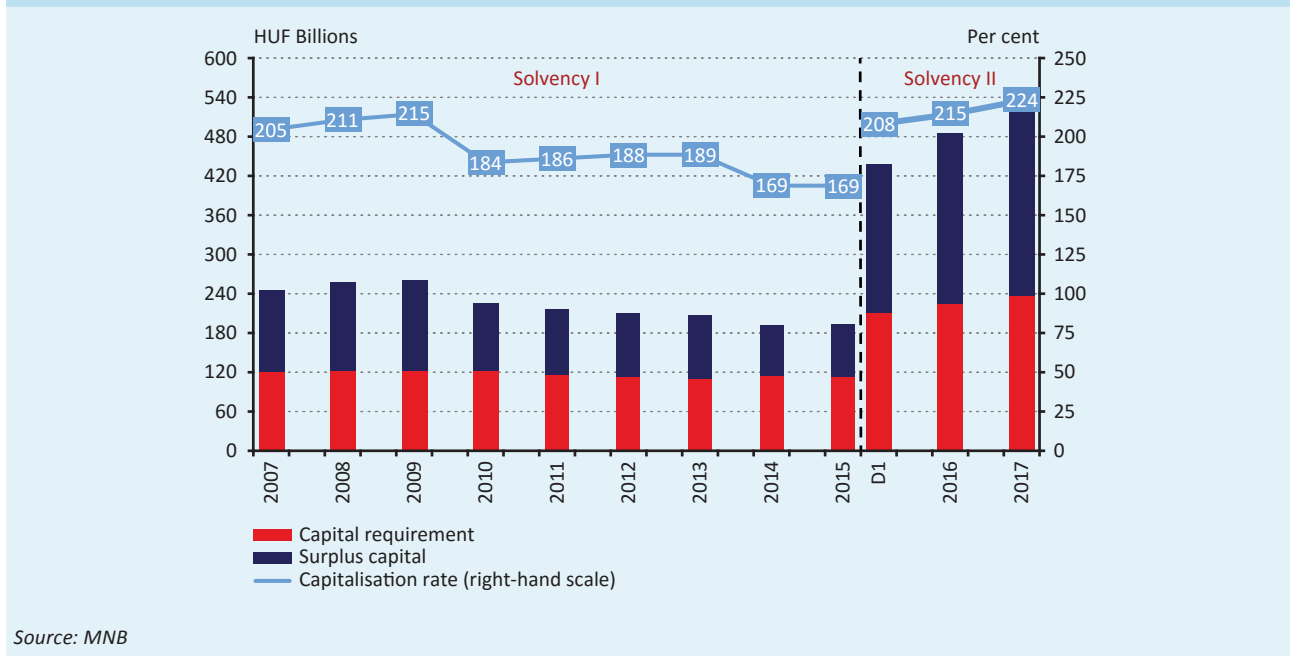
Box 2 Solvency capital requirement calculation

The solvency capital requirement calculated with the standard formula is the value that shows the level of solvency capital the insurer must maintain to be able to cover major losses (a loss occurring once every 200 years) within a specific period (in the next 12 months).

The calculation using the standard formula is a modular approach, which breaks down the solvency capital requirement into risks and sub-risks, while the individual risks are measured using scenarios and shocks. Then it sums up the solvency capital requirement of the sub-modules and modules, taking diversification effects into account. MNB Recommendation 6/2016 is designed to reduce short-term volatility and the uncertainty arising from the regime, targeting a 90 percent safety level, by maintaining a volatility capital buffer at a rate substantiated by the insurer, or in the absence thereof, at 50 percent.

Capitalisation at sector level after the changeover shows growth of 16 percentage points, currently standing at 224 percent. However, the solvency capital requirement only has to be calculated once a year, and thus the latest solvency capital requirement will only appear in the annual data reporting for the end of 2017. Accordingly, the capitalisation values shown in Chart 22 may change slightly.

Chart 22
Capitalisation rate at sector level



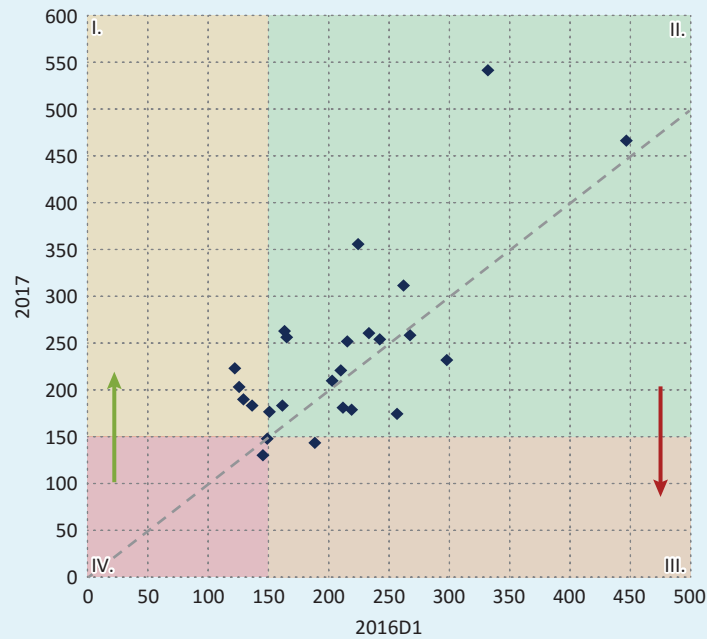
Recommendation on volatility buffer becomes benchmark

When examining the individual data of insurers we can get a much more diverse picture. All institutions reached the statutory minimum of 100 percent, both in the 2016 opening figures and in the 2017 Q4 data reporting. In the 2016 opening data supply the capitalisation rate of 6 institutions was below 150 percent, while now only three insurers are below the threshold. Two of the three insurers were below the threshold at the beginning of the previous year as well, falling from the former adequacy of 187 percent to below 150 percent. However, it should be noted that despite the capitalisation rate of one of the institutions being below 150 percent, it did not breach the MNB’s recommendation on the volatility capital buffer, given that its capital requirement is determined by the minimum capital requirement¹⁵. However, Chart 23 shows the mostly positive trend, since the capitalisation rates of the institution above the diagonal all show improvement, as well as compliance with the 150 percent level, and maintaining this is deemed desirable by the MNB in the coming years as well (see FIS). The market share of the three actors with capitalisation rates below 150 percent is less than 10 percent.

The chart already shows the planned dividends; insurers reported planned dividends of HUF 40.4 billion in the Solvency II table; however, this amount may differ from the actual dividend payment and the annual data supply; accordingly the data may change in the future.

¹⁵ If the capital requirement of an insurer is determined by the minimum capital requirement (MCR) rather than by the SCR, the MNB expects the institution to keep solvency capital at an amount that exceeds 50 percent of the MCR and the SCR, as a minimum.

Chart 23
Individual capitalisation rates of insurers (2016D1 and 2017)



Source: MNB

Box 3 Review of the Solvency Capital Requirement methodology





One of the key innovations of the Solvency II regime, introduced from 1 January 2016, was the risk-based calculation of the solvency capital requirement (SCR). EU laws prescribe a regular review of the SCR methodology; for this purpose, an EIOPA working group was set up in 2016. The MNB also actively participated in the working group; in preparation for this work, in February 2016 it started to collect the topics where it was necessary to modify or simplify the methodology. In this regard, the MNB gathered the opinions of Hungarian market participants and the respective professional organisations on the topics they would raise, and forwarded these, supplemented with its own proposals, to the EIOPA. The European Commission's Call for Advice, proposing a number of areas for review, was received concurrently with the collection of the topics. The MNB's recommendations included the catastrophe risk sub-module among other things, as in the case of floods the country risk factor was outstanding by European comparison as well, while the German and Austrian claims during the floods of recent years were well above the Hungarian level. In addition, in the case of the interest rate risk sub-module the MNB proposed reviewing the interest rate risk: in the present low yield environment, due to the (relative) shocks defined as a percentage of the yield, we can assume undercalibration.

After determining the topics subject to review, the EIOPA started to collect the necessary information, soliciting the national supervisory authorities for data in seven rounds. The MNB fulfilled all requests for information, in cooperation with the domestic insurers. With the approval of the EIOPA BoS, the working group divided the recommendation to the European Commission into two packages. During the review of the various areas, the working group processed the calibration and methodological proposals through weekly discussions over the phone and a number of personal consultations, and it also performed an impact assessment of the proposed amendments. The finalisation of both recommendations was preceded by an eight-week public consultation, where the market participants had the opportunity to comment on the draft recommendation; several observations were received














from the Hungarian market as well. The deadline for submitting the first and second package was 30 October 2017 and 28 February 2018, respectively, which was duly met by the EIOPA¹⁶.

In addition to the specific recommendations of the European Commission, the most important aspects of the review included simplifying the methodology and ensuring its risk-proportionate complexity, preventing procyclicality and material issues, as well as considering topics and substantiations submitted by several supervisory authorities. Bearing the above in mind, the recommendation includes proposals related to the loss-absorbing capacity of deferred taxes, the applicability of simplifications, the simplification of the principle of review and a number of other areas. In the minor segments of the non-life segment, the premium and reserve risk was recalibrated as more data were already available than at the initial calibration, which could be used to clarify the factors (*Assistance, Legal expenses insurance, Credit and suretyship insurance, Workers' compensation insurance, Medical expense insurance*). The review of the man-made and natural catastrophe risks are both in the focus of the paper, and it also includes the degree of the interest rate shocks. One major success for Hungary is that the reduction of the former excessively high flood risk factors in Győr and in Csongrád county, as well as the windstorm catastrophe risk, were included in the Hungarian natural catastrophe sub-module. After the anticipated approval by the European Commission, the change, entering into force from next year, may also contribute to stimulating household insurance competition, which – in line with the MNB's competition-boosting efforts – may reduce the premiums of household insurance by a few percent.

2.5 RISKS OF INSURANCE MARKET

Risk category	Risk groups	Risk rating	Risk prospects	Evaluation in words
Business model	Environment Strategy, Business plans, Profitability			<p>– The developments in gross domestic product and inflation continue to provide a favourable business environment for the institutions.</p> <p>– The business models applied by the market participants and the strategies based on them are adequate relative to the size of the institutions and the complexity of their activity.</p> <p>– The profitability of insurers strengthened further in 2017 Q4 (ROE: 24.3%).</p> <p>The change in the legislative environment (IDD, product oversight and governance rules, PRIIPS, GDPR) pose challenges for the sector.</p> <p>Similarly to the previous period, the risk rating remains moderate: in general, the business model and profits of the institutions are stable; no trends deteriorating the outlooks in the near future can be identified.</p>
Corporate governance	Exercise of owner's rights			<p>– The structure of the institutions' corporate governance system is adequate; however, the IDD, the compulsion to adjust to the change in the regulatory environment, generates major tasks for the insurers' governance and control systems, particularly in connection with product oversight and governance requirements. The resulting challenge may be regarded as a SIGNIFICANT COMPLIANCE (and in connection with this operational) RISK at sector level as well.</p> <p>– In the case of certain insurers, phenomena questioning organisational and personal independence were identified at certain components of the internal control system.</p> <p>With a view to adapting to the changing legislative environment, the institutions have made and continuously make major efforts. As a result of these efforts, and of the enhanced supervisory focus and activity, we anticipate a major decline in risks at sector level.</p>

¹⁶ EIOPA's first set of advice to the European Commission on specific items in the Solvency II Delegated Regulation https://eiopa.europa.eu/Publications/Consultations/EIOPA-BoS-17-280_First_set_of_Advice_on_SII_DR_Review.pdf
 EIOPA's second set of advice to the European Commission on specific items in the Solvency II Delegated Regulation https://eiopa.europa.eu/Publications/Consultations/EIOPA-18-075-EIOPA_Second_set_of_Advice_on_SII_DR_Review.pdf

Risk category	Risk groups	Risk rating	Risk prospects	Evaluation in words
Financial and operational risks	Insurance risk Market risk Credit risk Operational risk Other material risks			<p>Within the insurance risks the main risk is represented by the yield environment, but it is also important that in the case of MTPL, the most significant non-life segment, no improvement in cost efficiency can be observed.</p> <ul style="list-style-type: none"> – The SIGNIFICANT MARKET RISK is the consequence of the present low yield environment, given that a major part of the insurers' investments comprise instruments exposed to interest rate risk. A potential interest rate increase may have a significant negative impact on the market value of those. For the time being, no major shift can be seen in the institutions' portfolio towards riskier investments promising a higher yield; however, if this changes in the future, it will increase the importance of the regulation of investment decisions and the adequacy of controls. – At present, the institutions mostly invest in Hungarian government securities, and thus their credit exposure may be deemed moderate. If there is a shift towards riskier assets later on, as a result of the pressure to realise higher yields, this may be a factor pointing towards growth in risk. – The "SIGNIFICANT" CLASSIFICATION OF THE OPERATIONAL RISK is justified by two factors: On the one hand, the inspection experience gained so far, revealed the inadequate operation – hindering legal compliance – of the IT systems, and particularly the portfolio management and registration systems, at the majority of the institutions. On the other hand, the risk of the successful implementation and functional operation of the IT systems – to be developed in the future with as yet unknown content – necessitated by the insurers' solutions responding to the legislative changes (primarily the GDPR) and by the strengthening digitalisation pressure, is significant. – The liquidity risk, valued among the other essential risks, is generally managed properly by the insurers. <p>We expect the high level of financial and operational risks will remain in the long run in the persistently low yield environment.</p>
Capital and reserve risk	Capital Reserves			<p>The sector-level capitalisation rate, currently rising, is 224 percent, and the capital adequacy of 22 institutions reached 150 percent.</p> <ul style="list-style-type: none"> – As a special feature of the Solvency II regime, volatility is expected to increase, which warrants the holding of a volatility capital buffer. – The MNB identified shortcomings in the capital and reserve calculation at several insurers. <p>The aggregate market-level data comprise individual values that are also favourable at the level of institutions, and thus no deterioration can be expected in the moderate risk rating at present.</p>
Market entry risk	Products Customers			<p>– The consumer protection risks identified in connection with the products, and the nature and number of the infringements identified during the comprehensive audits show no deterioration compared to the previous risk level. On the other hand, for the time being it is not possible to assess the quality of the institutions' responses to the regulatory changes that support the enhanced protection of customers' interests (PRIIPS, IDD). This uncertainty represents a SIGNIFICANT CLIENT RISK in terms of oversight.</p> <p>According to the current information, institutions make serious efforts to ensure compliance. Since the regulatory changes extending the insurers' need assessment and information obligation during the conclusion of the contract and thereafter are factors that strengthen the customers' position, we expect a decline in client risk upon their successful implementation.</p>
<p>Magyarázat:</p> <p>Degree of risk high  significant  moderate  low </p> <p>Direction of risk increasing  stagnant  decreasing </p>				

As regards the **external market and regulatory environment** to be considered upon assessing the **business models**, we can state that the Hungarian economy grew by 4.4 percent year on year in 2017 Q4, while on the whole the volume of GDP increased by 4 percent during the year compared to 2016. Based on the forecast included in the MNB's December Inflation Report, in the coming years we anticipate growth close to 4 percent and then, under the assumptions of the current forecast, growth will gradually decelerate from 2019. Taking an annual average, GDP is expected to rise by 3.9 and 3.2 percent in 2018 and in 2019, respectively. At the beginning of the forecast horizon, the strengthening of domestic demand will continue to play a major role in growth, with the increase in investments and household consumption being determining factors.

In 2017 Q4 inflation and core inflation stood at 2.3 and 2.7 percent, respectively. Their change was influenced primarily by the price developments of industrial goods and – in the case of inflation – of fuels (partly due to base effects). Indicators capturing longer-term inflation trends (the inflation of demand-sensitive and sticky-price products) were around 2 percent, and thus they fall short of core inflation. In the short run, price developments in market services point to moderate processes, which, however, are expected to be offset by the rise in fuel prices – the latter may be caused by the substantial rise in oil prices observed in the past period. Based on the projection in the MNB's Inflation Report, inflation in 2018 (by annual average) is expected to be around 2.5 percent, and it will reach the central bank's 3 percent inflation target in a sustainable manner from 2019 Q2.

The afore-mentioned factors create a favourable market environment and conditions for actors on the insurance market. In regulatory and supervisory terms, the key tasks of, and accordingly, compliance risks for insurers include the already effective elements of the ethical life insurance concept, as well as compliance with the requirements related to the proper application of the PRIIPS² regulation, effective from 1 January 2018. The Insurance Distribution Directive (IDD), which formulates expectations with regard to distribution and sales, and the European Union's General Data Protection Regulation (GDPR) also entered into force in 2018.

The thorough examination and assessment of the **strategies** applied by the institutions active in the insurance market shows that insurers consciously align their business model with their key features and opportunities. Upon selecting the product range offered to customers and the channels used for selling such products, the vast majority of the institutions strive for the greatest possible diversification. However, certain institutions consciously admit the one-sidedness of the product or distribution mix. In their case, the institution usually aims at capitalising on the sales advantage provided by a dominant sales partner or channel, consciously accepting the exposure to the given partner (usually managing the counterparty risk by concluding an exclusive, strategic sales agreement). However, the one-sidedness of the product mix, i.e. the case when a determinant part of an insurer's portfolio comprises one product (or a group of products including very similar risks) can be managed by an agreement between two parties to a much lesser degree. In this case, the profound knowledge of the products and underlying risks, as well as quality of the related risk management methodology gain substantial importance. Accordingly, in terms of the business model, the one-sidedness of the product portfolio may be regarded as a particularly important risk and point of vulnerability.

The **profitability** of insurers can be considered particularly strong; according to preliminary data it has even strengthened further. Based on the unaudited data, the insurers' return on equity (ROE) was 24.3 percent in 2017. For the only loss-making institution, the lack of profitability is attributable to economies of scale problems. The substantially weaker than average profitability of a few institutions is also attributable to inefficient operations.

Similarly to the previous period, the risk rating arising from the business model is moderate, the institutions' business model and business result is stable, and no trends deteriorating future prospects can be identified.

The structure of the institutions' **corporate governance system** is adequate; however, the IDD, the compulsion to adjust to the change in the regulatory environment, creates major tasks for the insurers' governance and control systems, particularly in connection with product oversight and governance requirements. The resulting challenge can be regarded as a **significant compliance** (and in connection with this operational) **risk** at sector level as well. As regards the **regulation of internal control systems**, in the case of officers and organisational units meant to control the management and activity of insurers from a risk and legal perspective, the comprehensive audits by the supervisory authority revealed phenomena in several cases that raise doubts about their organisational and personal independence. These phenomena can primarily be identified when officers who should be independent based on legal requirements are in a subordinated relation with

and may receive instructions from managers whose activity they are meant to control. In this case, we often encounter a situation – hampering the control of proper quality – where the officer controlling the entire institution can obtain information or comment on issues affecting the entire insurer, not directly but through his superior. Another disquieting solution is when the person performing the authorised control function also has duties that are not subject to authorisation. In this case the controller and the controlled person may be same, which obviously leads to a conflict of interest.

With a view to adapting to the changing legislative environment, the institutions have made and continuously make major efforts. As a result of this work, and of the enhanced supervisory focus and activity, we anticipate a major decline in risks at sector level.

Looking at the **financial and operational risks**, a factor impacting **insurance risks** in the non-life insurance market is the higher case reserve for motor insurance, which resulted in an increase in the level of premiums applied in the market. At the same time, the potential further deterioration in the claim trends and the failure to improve cost efficiency also represent a risk. In the life insurance segment, due to the technical interest promised on traditional savings products, the risk generated by the low yield environment is still significant.

The low yield environment also represents material **market risks** in both segments: in the life segment it jeopardises the generation of the guaranteed interest, while in the non-life segment it reduces the profit realised on the invested assets. In the low yield environment the regulation of the institutions' investment decision-making processes and the proper operation of related controls are crucially important.

Although the institutions continuously look for opportunities to realise higher yields, the data available at sector level show no signs, for the time being, of the insurers' investment portfolio being diverted significantly towards riskier assets, which would point to a rise not only in market risk but also in **credit risk**. These processes may still be regarded as key areas for on-site and off-site oversight.

The considerable level of operational risks is caused by two factors. On the one hand, the inspection experience gained so far, which at the majority of institutions revealed the inadequate operation – hindering legal compliance – of the IT systems, and particularly the portfolio management and registration systems. On the other hand, the risk of the successful implementation and functional operation of the IT systems – to be developed in the future with content as yet unknown – as necessitated by insurers' solutions responding to the legislative changes (primarily the GDPR) and by the strengthening digitalisation pressure, is significant. These processes are further strengthened by the increasing importance of the new trends related to market innovations (Insurtech).

Insurers manage **liquidity risk** – assessed among the other important risks – adequately in general, and they need to do so since a potential shift from the low-yield environment and a devaluation of interest-bearing assets upon a maturity mismatch of liabilities undertaken and invested assets, hedging the former, may become a risk jeopardising the insurers' capital position.

We expect the currently high level of financial and operational risks will remain in the long run in the persistently low yield environment.

The aggregate market capital adequacy ratio, showing the sector level **capitalisation rate**, and trending upwards, is 224 percent. Some relatively large deviations aside, the favourable average value is the result of benign phenomena at individual level too. The eligible solvency capital of all institutions exceeds their capital requirement, thereby complying with the statutory regulations. Only 3 institutions failed to reach the 150 percent mark as set forth in the MNB's capital buffer recommendation (but they exceeded 130 percent).

As a special feature of the Solvency II regime specifying the methodology for calculating the solvency capital requirement, the level of expected solvency capital may be volatile during the year, which warrants holding a capital buffer as outlined in the recommendation.

Shortcomings related to the capital and reserve calculation methods and identified as risks were observed in the case of certain institutions.

Owing to the substantial additional capital, the capital risk may be deemed stable and moderate, and based on present information, no deterioration in the risk rating is expected.

The – primarily consumer protection – risks identified in connection with the **products** sold by the insurers, and the nature and number of the infringements identified during the comprehensive audits show no deterioration compared to the previous risk level. On the other hand, it is not yet possible to assess the quality of the institutions' responses to the regulatory changes designed to enhance the protection of customers' interests (PRIIPS, IDD). This uncertainty represents a **significant client risk** in terms of oversight.

The actors of the insurance sector make serious efforts to comply with the regulatory requirements. Since the regulatory changes extending the insurers' needs assessment and information obligation during the conclusion of contracts and thereafter are factors that strengthen the customers' position, we expect a decline in client risk upon successful implementation.

Box 4

InsurTech: A new trend in insurance?

The satisfaction of needs through digital channels will be self-evident for society in all areas, and thus new technologies may cause major changes in the insurance sector as well. Although the actors of the insurance market are typically more conservative than financial enterprises, i.e. they respond to the challenges of disruptive technologies more slowly, based on international experiences InsurTech (i.e. the use of technological innovations in the area of insurance) plays an important role within FinTech solutions. Digitalisation is not a novelty in the insurance sector since for many years it has been possible to compare the premiums of compulsory motor third-party liability insurance or travel insurance and conclude contracts over the internet. However, the purpose of the new technologies is to reduce costs and enhance efficiency, develop fully digitalised workflows, and to integrate artificial intelligence-based (AI) decisions in operations. Further objectives include the involvement of the community, which improves the accessibility and usability of information and data. The tools revolutionising non-life insurance may include the management of client data in a virtual space using blockchain technology, smart contracts, or the automation of claim assessments by smart devices. In the area of life insurance, improving communication with clients and the real time accessibility of medical data may help enhance efficiency in the market.

At the beginning of 2018, the MNB performed a comprehensive FinTech survey, where it surveyed Hungarian insurers' attitude to innovations as well as the challenges and expectations related to the development of the regulatory environment. The majority of the larger Hungarian insurers already have dedicated FinTech/InsurTech strategies and they have developed some sort of cooperation with FinTech/InsurTech companies; in addition, most of the institutions regularly define clear innovation objectives that support their general strategy. The innovations already implemented primarily focus on the possibilities of digital liaison and digital payments, but there are also examples in the market for the use of telematics, chatbots and applications developed for smart phones.

Insurance is a highly regulated market, which for the time being has not been overturned by innovative technologies; however, the potential penetration of technology-driven innovations is also prompting the regulatory authorities to act. According to international practices, the relation between the regulatory and supervisory authorities and domestic InsurTech actors may be created by setting up an Innovation Hub. The Innovation Hub is a platform provided by the regulatory and supervisory authority, where the innovator companies and the traditional market participants can receive guidance in legislative and operational issues related to innovation. Recognising the potential of this solution, the MNB has operated its Innovation Hub¹⁷ since March 2018, which also offers solutions for the actors of the insurance sector and enquiries have been received from this sector as well.

¹⁷ <http://mnb.hu/innovation-hub>

The need for cooperation between market participants is strengthened by the expectations¹⁸ that the market of companies offering InsurTech solutions may grow at an annual average rate of over 10 percent until the end of the decade. A large number of these companies build their activity on helping the revival of incumbent service providers using modern technology, i.e. they offer products and services to insurers and reinsurers to improve business processes and the quality of customer services. However, in the international market there are already a few InsurTech companies emerging in the insurance market as direct competitors. According to the study by Roland Berger¹⁹, the fundamental transformation of the insurance market may be achieved by InsurTech companies working with artificial intelligence and smart sensors (Internet of Things - IoT), but there is also great potential in InsurTech companies engaged in automation and data analysis.

¹⁸ Global Insurtech Market 2016-2020 (<https://www.technavio.com/report/global-miscellaneous-global-insurtech-market-2016-2020>)

¹⁹ https://www.rolandberger.com/en/Publications/pub_insurtechs_and_the_digitization_of_insurance.html

3 Financial and insurance intermediaries

3.1 OVERALL PICTURE OF FINANCIAL AND INSURANCE INTERMEDIARIES

Over 1,000 supervised institutions in intermediary sector

450 licensed institutions operate in the insurance intermediary market, 405 of which are independent insurance intermediaries (brokers) and 45 are tied insurance intermediary multiple agents; through them, 14,000 natural persons broker insurance. As a result of the amendment of the Insurance Act with effect from 1 January 2016, multiple agents were reclassified as tied intermediaries. For the purpose of the report, we refer to the categories of broker and multiple agent together, in a simplified form, as intermediary. In the financial market, of the 561 independent financial market intermediaries, activities are performed by 398 multiple agents, 8 brokers and 150 hire purchase intermediaries. According to the new financial market intermediary data reporting, introduced from 2017, at the end of 2017 almost 10,000 natural persons were engaged in the selling of financial market products. The MNB pays special attention to the supervision of intermediaries; as a new element, in 2017 it combined their prudential and consumer protection supervision in a single area. The legislative development, prescribing data reporting of a proper quality and frequency, as necessary for enhanced supervision, has been completed, and thus from 2018, similarly to financial intermediaries, insurance intermediaries are also obliged to report data semi-annually (instead of annually), which they will have to submit to the MNB for the first time for 2018 H1 by the end of August 2018. As a result of this, the turnover data for insurance intermediaries currently relate to the end of 2016 (Table 2).

Table 2				
Key data of intermediaries				
	Financial market		Insurance	
	2017	2016	2017	2016
Number of institutions	561	605	450	448
<i>Broker</i>	8	7	405	395
<i>Multiple agent</i>	398	443	45	53
<i>Multiple special intermediary</i>	5	5	-	-
<i>Hire purchase intermediary</i>	150	150	-	-
Number of natural persons	9 926	- *	15 431	14 092
Commission income (HUF billion)	21,9	- *	- **	63,4

Note:
 * Financial market intermediaries are obliged to submit regular data from 2017
 ** Insurance intermediaries are obliged to submit semi-annual data from 2018
 Hire purchase financial market intermediaries are not obliged to supply data
 Source: MNB

3.2 FINANCIAL INTERMEDIARIES

New loans of HUF 450 billion placed through intermediaries

From the beginning of 2017, independent financial intermediaries are also obliged to submit regular, semi-annual reports, and thus sector-specific data can be included for the first time in this year's report (Table 3). Intermediaries are active primarily in building society sales and mortgage lending to households, as well as in the intermediation of corporate loans. The volume of loans placed through intermediaries almost reached HUF 450 billion in 2017, while mediated household mortgage loans amounted to HUF 187.1 billion and corporate loan contracts through this sales channel were concluded in a similar volume,

i.e. HUF 173 billion. As regards the number of transactions, the highest number of mediated contracts are on the other loans line; the vast majority of these are low-value hire purchase loans taken for the purchase of durable consumer goods.

Table 3
Sales data of independent financial market intermediaries

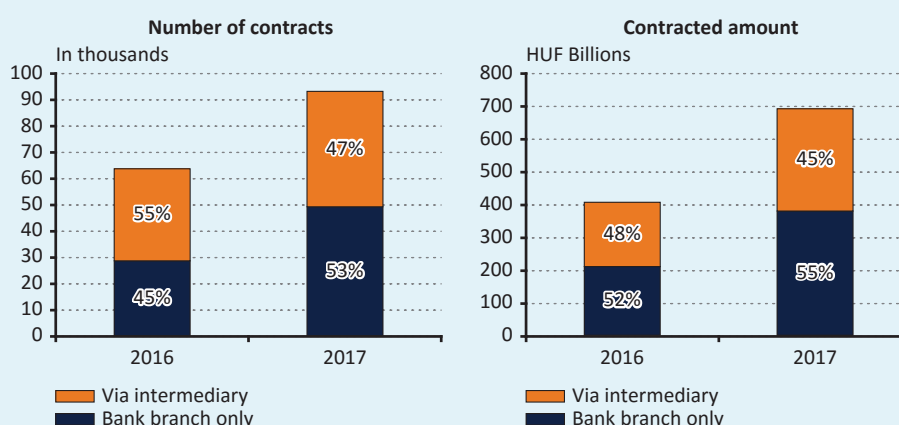
17.12.31	HUF billion	No.
Total loans	446.1	344 663
<i>Mortgage loan</i>	<i>187.1</i>	<i>22 359</i>
<i>Car loan</i>	<i>1.5</i>	<i>29 196</i>
<i>Personal loan</i>	<i>31.7</i>	<i>5 543</i>
<i>Credit card</i>	<i>39.2</i>	<i>43 463</i>
<i>Other loan</i>	<i>13.6</i>	<i>224 998</i>
<i>Corporate credit and loan</i>	<i>173.0</i>	<i>19 104</i>
Financial lease	122.9	80 323
Deposit and payment account	-	210 218
Building society	247.6	56 746

Source: MNB

Every second mortgage loan arranged by an intermediary

The importance of financial intermediaries is increasing parallel to the surge in mortgage lending. It is an interesting phenomenon that they have become determining factors in the mortgage loan market; 55 percent of mortgage loans in 2016 and 47 percent in 2017 were arranged by tied and independent financial intermediaries (Chart 24). As the number of bank branches decreases, they may help increase the availability of mortgage loans and stimulate competition. The increased volume necessitates a stronger supervisory focus. In light of this, in addition to the introduction of reporting requirements, the MNB performs thematic audits at the mortgage loan intermediaries, in order to ensure compliance with commission caps.

Chart 24
Distribution of mortgage loan contracts among sales channels



Source: MNB, data supply by banks

Box 5**Intermediaries comply with commission rules in financial market as well**

As a result of the amendment to the Credit Institutions Act in March 2016, the mortgage loan intermediation commission of independent financial market intermediaries (with the exception of brokers) must not exceed 2 percent of the principal amount disbursed in the respective loan contract. Previously, intermediary commissions of 3-4.5 percent also existed on the market, and thus the amendment made it possible to reduce the client costs of the mortgage loan contracts. According to the relevant government decree, the agent may get 80 percent of the commission, at most, upon concluding the contract, while the remaining part – depending on the maturity – may be paid two years later at the earliest as a retention commission.

In order to find out whether the mortgage loan intermediation fees and commissions of multiple agents are in line with legislative provisions, the MNB launched thematic inspections at 11 intermediaries. The thematic inspections conducted by the central bank revealed no significant problems. The inspected intermediaries and the financial institutions engaging them essentially comply with the requirements related to fees and commissions, and do not charge fees to clients to make up for the lost commission income.

That said, although in a negligible number of cases, the mandating bank providing the mortgage loans made extra payments to the intermediaries, in addition to the commission, on other grounds (venue rental, trade conference, organisation of professional consultation events), and in one case the contractual registration of the multiple agent was erroneous.

According to the MNB's findings, certain intermediaries did not modify their previous agency contract with their partner credit institutions, or only with some delay (after the effective date of the law amendment that decreased the commission), which thus still stipulated a higher commission. In one case an agency contract containing an infringing commission rate was concluded even after the law entered into force. Although the multiple agents involved did not actually arrange any mortgage loan contracts based on these agency contracts, the MNB expects the respective intermediaries to do everything in their power to ensure compliance with the legislative provisions.

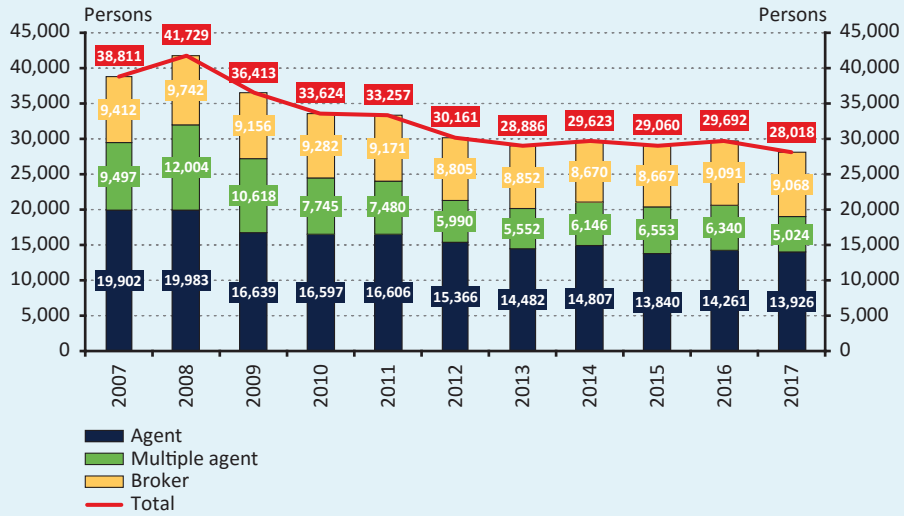
As a result of the foregoing, the MNB obliged the respective intermediaries to ensure compliance with the legislative provisions pertaining to the rate and payment of the agent's commission, and to keep their records in accordance with the requirements. The MNB will regularly inspect compliance with the laws in the financial market and insurance market, both at the principals and intermediaries, in the future as well.

3.3 INSURANCE INTERMEDIARIES

20 percent fewer multiple agents as a result of ethical regulation

Earlier, between 2012 and 2016, there was no major change or reorganisation in the number of intermediaries; after the previous major decline, their number stabilised around 29-30,000. In 2017, 1,600 intermediaries disappeared, and the number of natural person intermediaries dropped to 28,000 (Chart 25). The decline mostly affected the multiple agents, as their number dropped by more than 20 percent. The main reason for this could be that multiple agents realise the majority of their income on the sales of life insurance, and the ethical concept (by regulating the cost and surrender limits) resulted in a major fall, as high as 20 percent, in life insurance commissions. It should be noted that before the introduction of the ethical concept, market participants anticipated a more painful outcome, expecting a higher decline.

Chart 25
Changes in number of natural person insurance intermediaries



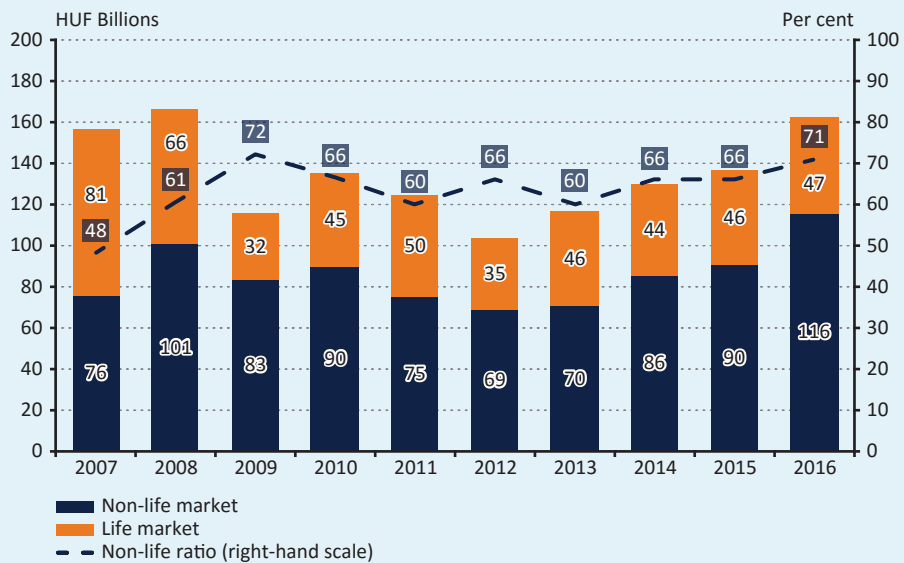
Source: MNB

Output of intermediaries reaches pre-crisis level

With a 33 percent decline in the headcount, the sales volume has reached the pre-crisis level. The non-life output was the engine behind the growth, the main driver of which has been the steady rise in MTPL premiums since 2012.

In 2007, life sales by multiple agents was still the determining factor; since then, with minor volatility, the intermediary activity was realigned to the benefit of non-life insurance. In 2016, more than two-thirds of the new sales of HUF 162.8 billion originated from the intermediation of non-life insurance (Chart 26).

Chart 26
Changes in insurance premiums mediated by brokers and multiple agents



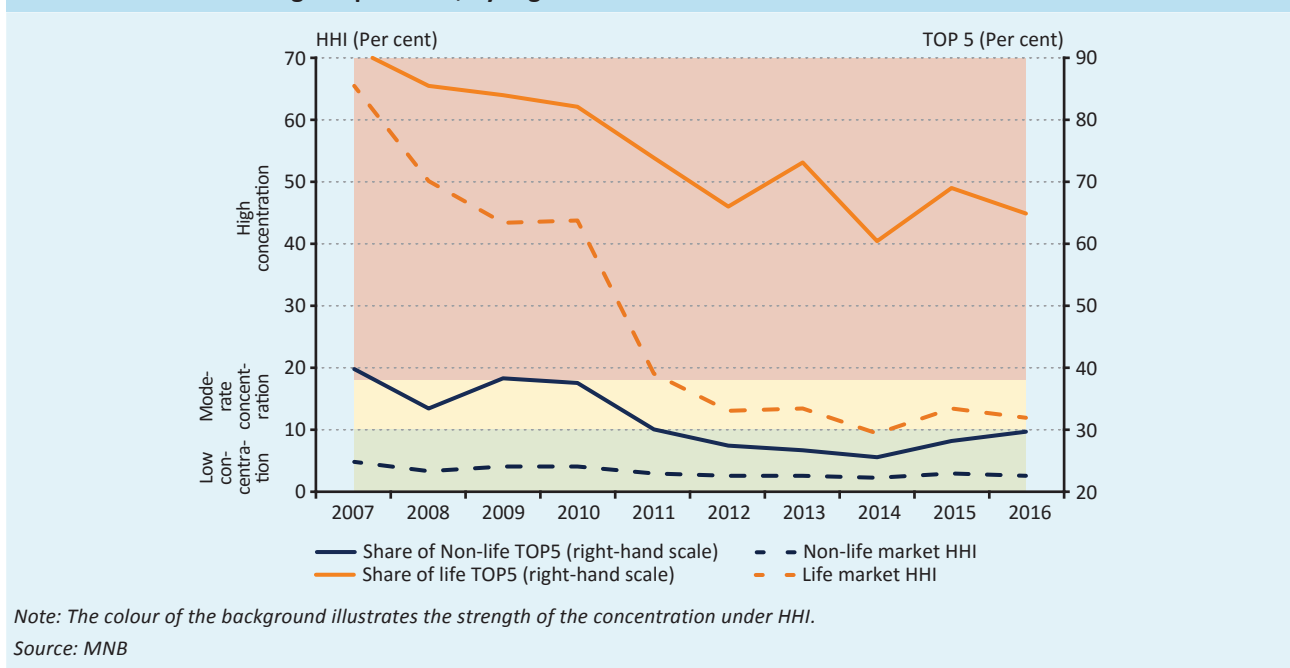
Source: MNB

Moderate decline in concentration ratio of life sales

The concentration ratios (HHI and TOP 5 share) calculated on the basis of 12-month regular premiums and premium incomes of the contracts sold in the current year, showed a moderate decrease in life insurance (Chart 27). The HHI dropped by 1.5 percentage points in 2016, which was accompanied by a decline in the share of market-leader participants. The market share of the TOP 5 actors was almost 4 percentage points lower (65 percent) compared to last year. For non-life insurance, the HHI value essentially remained unchanged, and no substantial change occurred in the market share of the TOP 5 actors either (+ 1.3 percentage points).

Intermediaries distributing non-life insurance face strong competition, also clearly reflected by the low values of the ratio in the past 9 years (HHI below 5 percent, TOP 5 share below 40 percent). The minor declines in concentration indicate that there is less and less room for manoeuvre to stimulate market competition. By contrast, in the area of life insurance, the share of the TOP 5 actors was around 90 percent back in 2007. The declining value of the market HHI after 2010 shows the acceleration of competition, while the value of the ratio stabilised at 10-13 percent. This is presumably attributable to the fact that the weight of the largest intermediaries declined to a much lesser degree than the HHI. Looking forward, the concentration ratio may decline further in the area of life insurance too – approximating non-life levels – which, at the same time, depends heavily on the sales performance of the TOP 5 market participants.

Chart 27
Share and Herfindahl-Hirschman index of TOP 5 independent insurance intermediaries based on gross premium income and 12-month regular premium, by segment



Brokers favour 2-3 insurers

The duty of brokers is to analyse and compare as many offers as possible, occasionally the full offering of insurers, for their clients. Chart 28 below highlights the fact that brokers may apply a strong pre-filtering procedure, which – in addition to positive effects – may also jeopardise the independence of brokers.

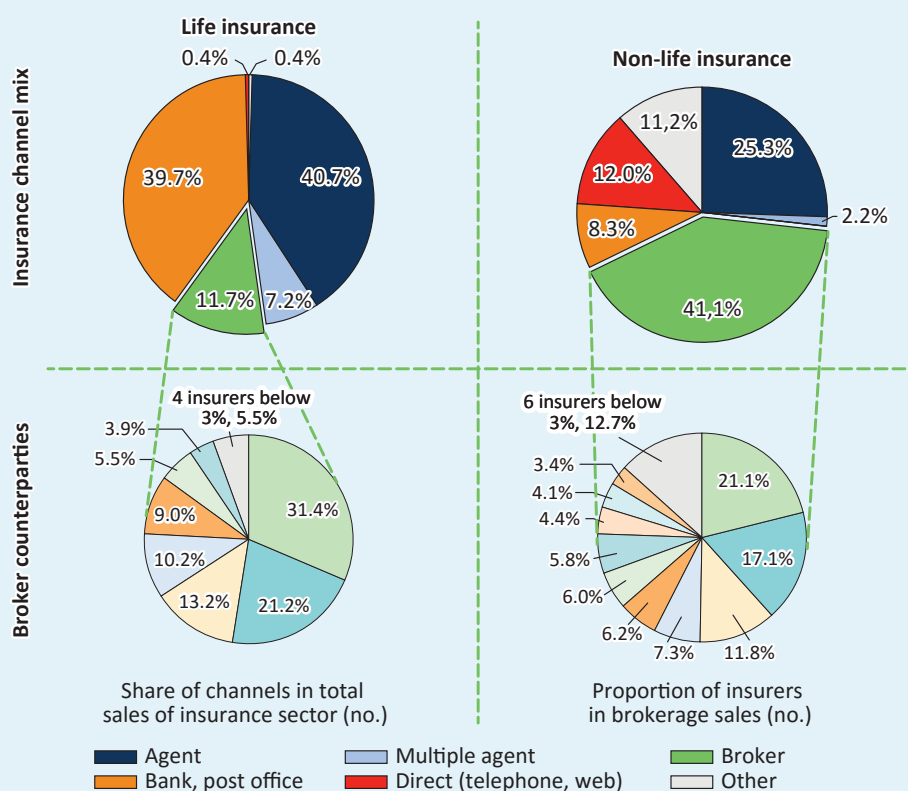
The life insurance market is dominated by sales via banks and post offices, as well as by the tied agent networks; brokers, with a share of 11.7 percent, do not play a critical role, but the trend is increasing. However, we see that 65 percent of the intermediation by brokers boils down to 3 insurers (the share of the first two preferred insurers exceeds 50 percent). Intermediaries often argue that only 2-3 insurers offer products with adequate value for money characteristics that satisfy the requirements and needs of most clients.

In the case of non-life insurance the majority of the contracts (41.1 percent) are concluded via brokers. The insurer preference for brokers is less concentrated, but we can also see here that half of the contracts are referred to 3 preferred insurers.

Owing to the new European regulation (IDD), which entered into force this year, several of the requirements have been tightened, which may help strengthen the independence of brokers, develop a higher quality professional approach and eliminate conflicts of interest, e.g. the client may pay the intermediary's commission directly. If the broker acts without a conflict of interest to the benefit of clients with due professional expertise, this represents strong added value for the client.

Chart 28

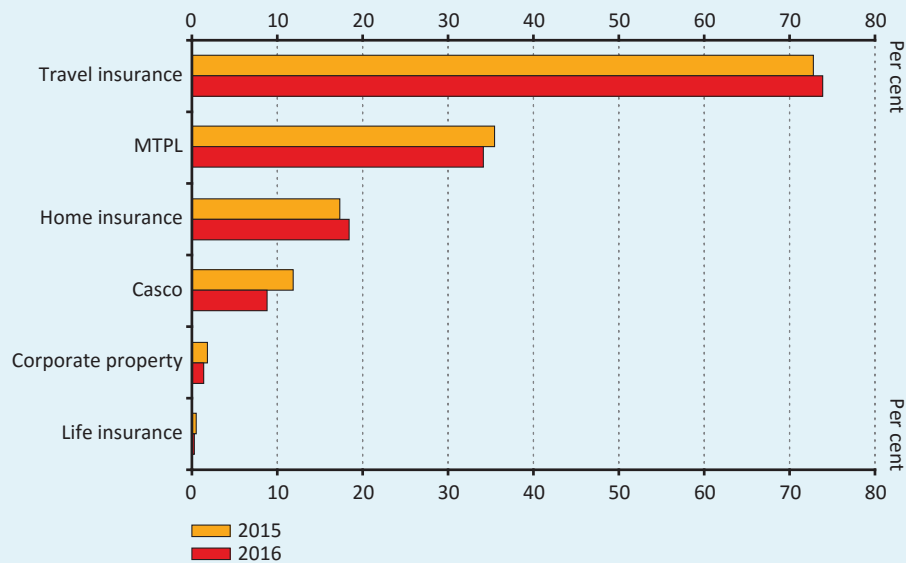
Life and non-life insurance channel mix



Source: MNB, data supplied by insurers and intermediaries

About one third (36 percent) of the roughly 2 million non-life insurance contracts sold by intermediaries were concluded through electronic channels in 2016 (Chart 29). The largest number of e-contracts were concluded by consumers in the MTPL category; the ratio of this form of contract conclusion was almost the same as the non-life segment's average (35 percent). Based on the number of contracts, the second largest number of e-sales – almost half compared to the MTPL – took place in the travel insurance product category, which, at the same time, represents a 74 percent ratio compared to the total mediated portfolio. Significantly fewer contracts were concluded online in the case of home insurance, commercial property insurance and casco insurance – in these categories the ratio of e-contracts was below 20 percent. Compared to 2015, there was a rise in travel insurance and home insurance in terms of e-contracts, while the other, more significant non-life categories registered a moderate decrease. The ratio of e-contracting also declined in the area of life insurance (to 0.2 percent), where the penetration of e-contracts was negligible (0.5 percent) back in 2015 as well.

Chart 29
Ratio of contracts arranged electronically (based on number of contracts)



Source: MNB

Box 6

European regulation (IDD, PRIIPs) goes live, laying foundation for stronger insurer and intermediary oversight

As a result of the new European regulation applicable to insurance sales, effective from 23 February 2018, the insurance and intermediary markets are undergoing a significant transformation.

The Hungarian ethical regulation was an advanced concept in the insurance sector even before the directive, and was further strengthened by the regulatory regime imposed by the directive. The ethical concept regulates the designation and number of costs related to insurance products, while the new European rules add greater transparency to this, e.g. the accurate, comparable definition of costs.

The purpose of the directive is to standardise the rules applicable to life and non-life insurance products, simplify the contracts and make them more understandable and extend the scope of the rules to all potential services and service providers. The regulation prohibits the offering of inducements to intermediaries that conflict with clients' interest. It prescribes that costs paid by clients must be transparent, i.e. clients must know in advance the amount of commission they pay directly to the intermediary and the costs incurred in relation to their insurance. A proper needs assessment is crucially important in intermediary procedures, i.e. the services actually needed by the client should be determined based on objective criteria. In addition to the training prescribed as a precondition for entering the market, intermediaries must attend in-service training of 15 hours per year, which must be tailored specifically to the product and sales area.

The lengthy preparation of the European regulation left little time for the market to get ready. Due to the tight deadline, the diversity and the volume of the regulation, no single interpretation or practice have yet emerged in relation to a number of elements of the new legislation. If any uncertainties arise about the application of the law, the MNB assesses the solutions applied by the institutions on a case-by-case basis, and initially, if circumstances permit, it takes action using diversion tools.

PRIIPs, i.e. the new EU regulation applicable to packaged retail and insurance-based investment products, entered into force on 1 January 2018, as a result of which a uniform image will be developed for the life insurance products in all Member States of the European Union. For these products, the PRIIPs prescribe the use of a key information document (KID) as mandatory, which facilitates the transparency of costs, and the comparability and transparency of the individual products. The document, which should not be longer than three pages, must contain – among other things – the data of the investment product and the manufacturer, the (non-legal) summary description of the product, its key features, risks, costs, the complaint forums and, in the case of complex investment products, warnings to this effect. In addition, it should make reference to related investor protection guarantees, the mandatory contracting and cancellation period, the conditions of early termination, and all other information that must be provided to the investor before or after concluding the contract. The clear objective of the regulation is to ensure that the information makes it easier for consumers to compare products and thereby contributes to informed investment decisions.

The product prospectus must be prepared by the product manufacturer, the investment fund manager, the insurer, the bank and the stock exchange before the product appears on the market. The prospectus is delivered to the client by the seller of the product. It should be noted that a person modifying an existing product (e.g. changing the risk profile or the costs related to the product) also qualifies as a product manufacturer. Since the document must be delivered to investors upon selling the product, unless the product is sold by the manufacturer this is the obligation of the person selling the product or providing related advisory services.

Box 7

MNB sanctions unfounded change of insurer

The MNB imposed a penalty of HUF 52.2 million on an insurance multiple agent, primarily in view of its intermediary practice aimed at cancelling certain life insurance client contracts and taking out new ones.

The purpose of the inspection was for the central bank to get a view of the risks in the operation of the intermediary and to inspect compliance with statutory regulations related to tied – and previously independent – insurance intermediation activity.

Due to the shortcomings revealed during the inspection, in its resolution the MNB emphatically called upon the multiple agent to always provide its clients with detailed information – substantiated by calculations – on the costs and characteristics of cancelling their existing savings-type life assurance and taking out new life insurance for the same purpose at the same time. Upon determining the penalty amount, the central bank considered it an aggravating factor – among other things – that the intermediary breached one of its most important obligations by not providing its life insurance clients with professionally substantiated information on the advantages and disadvantages of cancelling contracts and taking out new ones. This information was not provided for a long time. While this may have been contrary to the clients' interest, it represented a pecuniary advantage for the insurance intermediary.

Upon selling savings-type life insurance the MNB also expects multiple agents and brokers – referring occasionally to the products of cross-border insurers too – to primarily offer consumers schemes that comply with the maximum Annual Cost Rate (ACR) limits specified in the central bank's recommendation. Deviating from this may only be regarded as professionally prudent if no pension insurance is available on the Hungarian market that meets the client's needs and complies with the recommendation.

The MNB and the legislator introduced a comprehensive ethical regulation in the life insurance market, one of the key objectives of which is to suppress undesirable intermediary practices and ensure the transparency of products at a higher level than before.

4 Funds market and its risks

4.1 OVERALL PICTURE OF THE MARKET

At the end of the year 63 funds operated in the voluntary fund sector, compared to the 70 institutions registered at the end of the previous year. During the year, several institutions decided on a merger or dissolution due to economies of scale considerations or declines in income. In 2017 H2, several smaller institutions commenced merger negotiations, and thus in 2018 the number of institutions is expected to decrease further. In the voluntary pension fund sector, the decline in the number of members stopped, while in the case of the health and mutual aid funds, the fall in the number of members was mostly the result of exclusions due to non-payment and to the fact that a large part of the non-payers opted to leave the fund (Table 4).

	Pension funds		Health and mutual aid funds	
	2017	2016	2017	2016
Number of institutions	38	41	25	29
Number of members (in thousands)	1 138,0	1 138,2	1 037,4	1 053,3
Of them: non-payers (in thousands)²⁰	542,1 (48%)	538,3 (47%)	513,5 (49%)	448,7 (43%)
Total funds portfolio (HUF billion)	1 392,0	1 263,9	62,1	63,9
Of this: Coverage reserve (HUF billion)	1 373,3	1 247,4	57,2	58,6
Asset value per contract (HUF thousand)	1 206,7	1 095,9	55,2	55,7
Sum of annual membership fee payments (HUF billion)	105,6	96,1	47,6	55,4
Of this: Annual membership fee payments allocable to safety reserve (HUF billion)	100,9	91,8	44,6	51,5
Payments affecting safety reserve Benefits, payments after expiry of waiting period (HUF billion)	64,2	65,1	51,2	54,2

Forrás: MNB

Despite fears, membership fee income does not fall at sector level

As a result of the higher tax burden on employers' membership fee contributions – which may be applied for as a fringe benefit – effective from January 2017 there was a risk that membership fee payments to the fund may decline substantially. However, according to the reported data and despite the expectations, membership fee incomes in the voluntary fund sector did not decline, as the fall in the employers' membership fee contribution was offset by the growth in individual contributions. In 2017, the membership fee payments allocable to the safety reserve already exceeded HUF 100 billion at the voluntary pension funds, while owing to the membership fee payments and yield incomes, by the end of 2017 the aggregate balance of the voluntary pension funds' individual accounts came close to HUF 1,400 billion; in one year, the asset value per contracts rose by more than 10 percent.

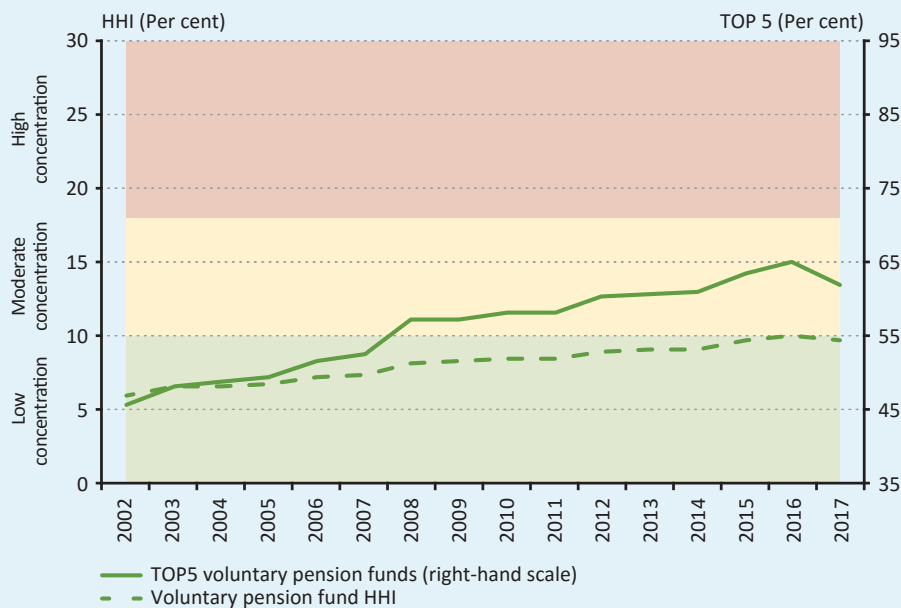
²⁰ In the case of voluntary pension funds, members with over 6 months' arrears in the compulsory membership fee

4.2 VOLUNTARY PENSION FUNDS

Decline in voluntary pension funds' concentration ratio

In the voluntary pension fund sector, the number of active funds declined by three by the end of the year; in addition, the merger or dissolution of several pension funds also commenced in 2017. Similarly to the previous year, the general meetings of the institutions decided to terminate individual operations primarily due to the decline in employers' commitment in 2017 as well. At several institutions it was found that employers either stopped paying the voluntary fund membership fee contribution for their employees, or they did not agree to continue providing operating support for their funds.

Chart 30
Changes in voluntary pension fund concentration



Note: The colour of the background illustrates the strength of the concentration under HHI.

Source: MNB

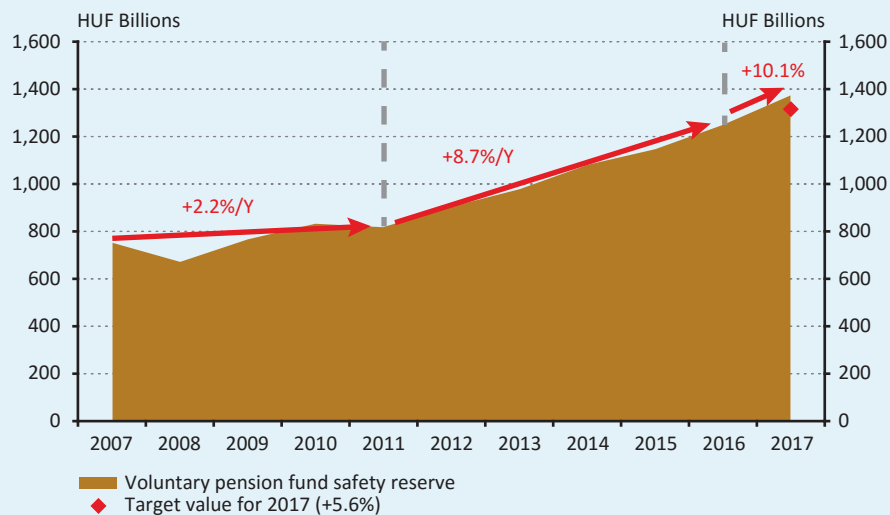
The value of the Herfindahl-Hirschman index (HHI), measured on the basis of the membership fee payments, decreased slightly compared to 2016 in the case of the largest (TOP5) funds (Chart 30). This is attributable to the fact that in the voluntary pension fund sector, the volume of membership fees received rose substantially in one year at many institutions; however, at the smaller funds, with assets of HUF 25-40 billion, the growth rate of the membership fee income is higher than at the TOP 5 funds. At these institutions the commitment of the members and the employers with regard to the payments is typically stronger.

Steady growth in assets since 2012 owing to increasing membership fee incomes and favourable yields

At the end of 2017, the safety reserve of the voluntary pension funds was HUF 1,373 billion, which exceeds the value measured at the end of the previous year by more than 10 percent and also outstrips the asset growth of 5.6 percent projected by the MNB in *FIS* (Chart 31). At the end of 2017, the sum of the individual accounts receivable of members entitled to payment within one year during the accumulation period already exceeded HUF 1,100 billion. It is positive that a considerable number of the members entitled to payment have not yet decided to use their pension fund savings, but rather intend to continue augmenting them in the funds scheme. In addition to the favourable investment yield, this may be because, following the legislative change effective from 2016, members reaching retirement age can decide to continue paying the membership fee even after using the pension benefit.

In 2017, similarly to the previous year, the Hungarian money and capital markets were characterised by low interest. The yields of government securities were between 1 and 2 percent, depending on the maturity and the duration, while the return on bank deposits was close to 0 percent. However, the capital market performed well; the BUX index, representing domestic equity investments and accounting for 6 percent of the funds' investments, realised a yield of 23 percent and the CETOP index, reflecting equity investments in Central Europe, also rose to a similar degree.

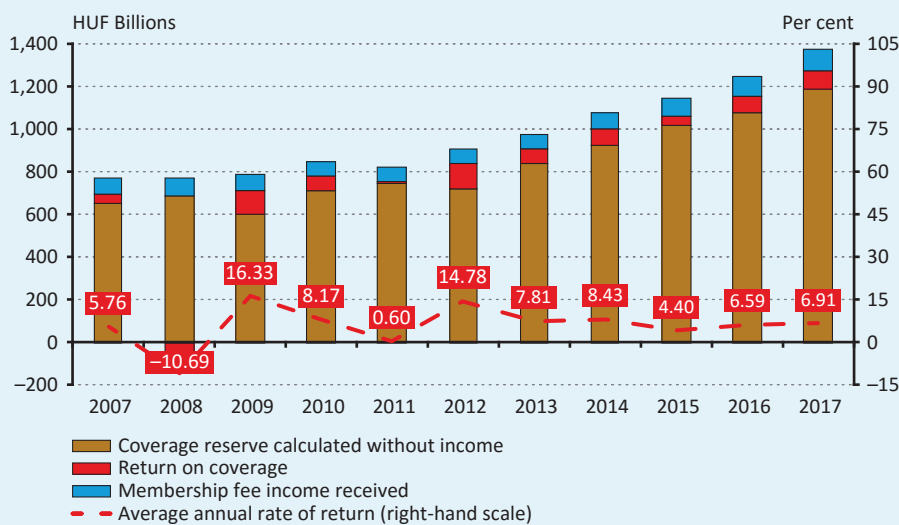
Chart 31
Developments in voluntary pension fund safety reserves



Source: MNB

In 2017, the voluntary pension funds realised an asset-weighted average net yield of 6.91 percent at sector level (Chart 32). The average yield exceeds the 2016 yields by 0.3 percentage points. Based on the HCSO data, the December 2017/December inflation rate was 2.1 percent, and thus the voluntary pension fund savings earned a substantial real yield for the members in 2017. However, there may be major difference between the yields of the individual funds and the optional fund portfolios; there were also examples of funds and optional portfolios that realised a net yield in excess of 15 percent. During 2017 the higher-risk growth portfolios and the medium-risk balanced portfolios performed better;

Chart 32
Developments in voluntary pension fund safety reserve, membership fee income, volume of yields and annual average rate of return



Source: MNB

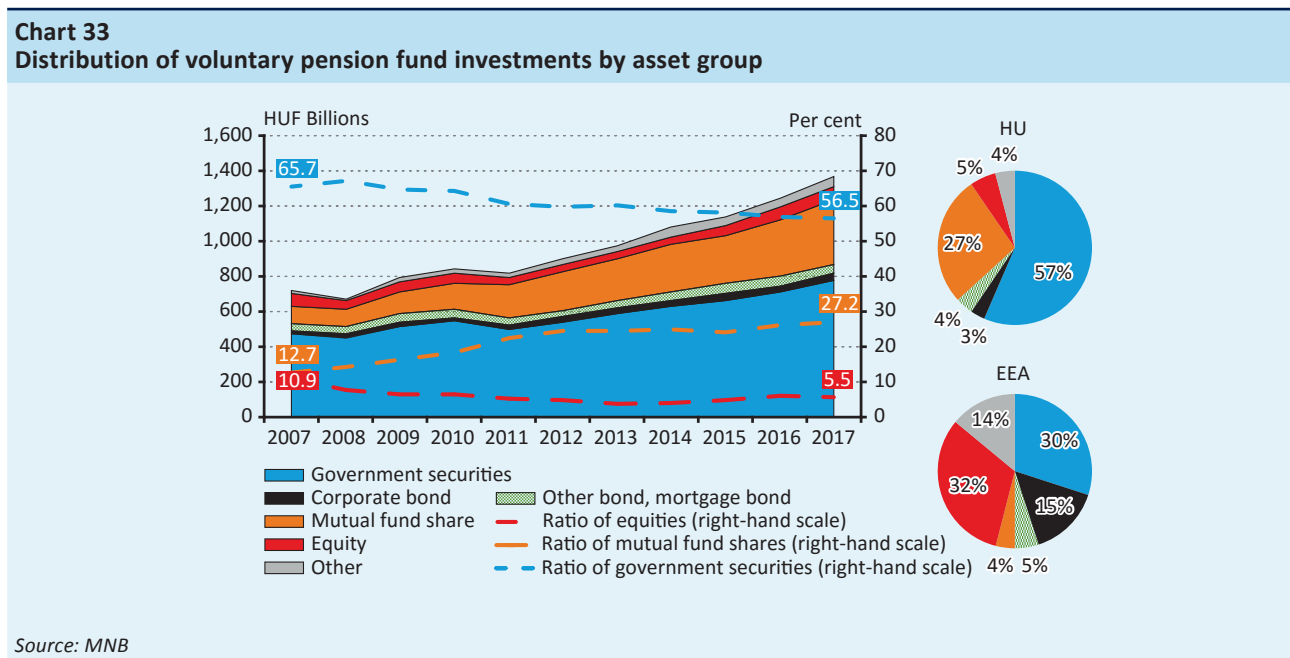
the favourable annual performance was mostly attributable to the substantial rise in the price of long-term Hungarian government securities and the top equities of the CEE region.

Based on data supplied by the funds the MNB has published the pension funds’ 15-year average rates of return for three years now. In view of the pension nature of fund savings it is worth comparing the performance of the individual institutions and portfolios on a longer horizon too. The average asset-weighted rate of return at sector level, calculated from the average 15-year yield rates, is 7.26 percent, which represents a real yield of almost 3.45 percent²¹ above the 15-year average December/December inflation rate of 3.68 percent.

High ratio of indirect investments by European comparison

Hungarian government securities still account for the largest part of safety reserve investments for voluntary pension funds. In 2017 no material change was registered in the direct government securities exposure, which stood at 56.5 percent at the end of the year. Funds invest part of their assets in domestic mutual funds, and if we add the estimated government securities exposure included in the Hungarian mutual funds – accounting for roughly 17-18 percent of the mutual funds’ asset value – the actual level of the total government securities holding in the voluntary pension funds’ portfolios is around 60 percent. The ratio of direct equity investments is 5.5 percent. The indirect equity exposure of the funds is higher than that since the funds usually reach the international equity markets through collective investment vehicles. The decomposition of the underlying assets of the investment funds – with the exception of foreign and real estate funds – shows that equities account for more than half of the holding, as a result of which the total equity exposure within the safety reserve rose to the pre-crisis level by the end of 2017. Almost one fifth of the decomposable mutual fund share holding comprises government securities, less than 10 percent is accounted for by corporate bonds, mortgage bonds and other bonds, and hence the total exposure of these asset categories does not change substantially.

The ratio of mutual fund shares is 27.2 percent, and within that foreign mutual fund shares represent an increasing ratio in the funds’ portfolios. On the whole, it is clear that the ratio of mutual fund shares, and thereby of indirect investments, doubled in 10 years, while the direct equity holding was halved, and the ratio of the government securities also declined; accordingly, a major shift toward indirect investments was registered (Chart 33).



²¹ The real yield of 3.45 percent is calculated from the 15-year average yield rates of the funds operating at the end of 2017, while the real yield mentioned in Box 5 also contains the data of the funds already dissolved in the previous years.

Box 8

Increasing real yields in past 10 years

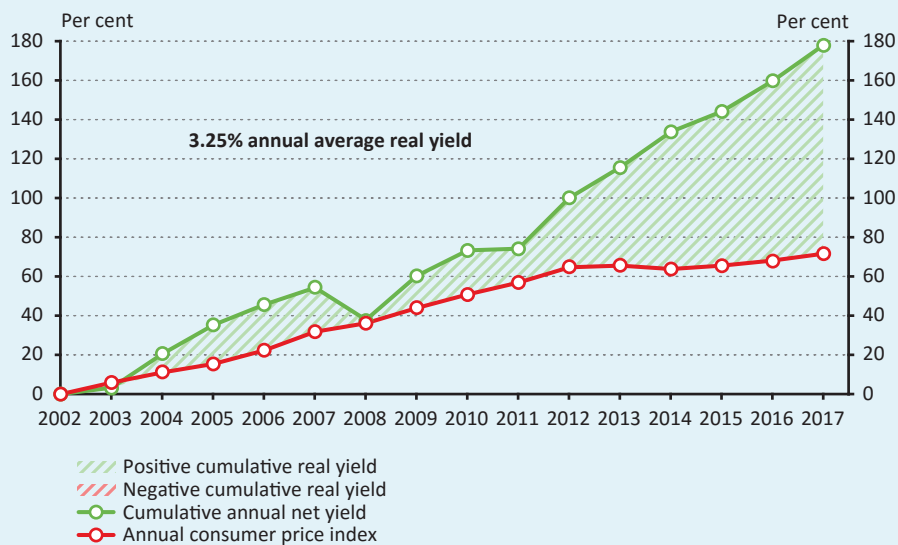
Funds' yields substantially determine the rate of supplementary pension benefits, and thus it is crucially important whether the realised yields are able to exceed inflation, thereby providing members with a real yield.

After the legislative changes in 2016, the funds now also publish long-term – 15-year – average rates of return.

From 2002, the asset-weighted cumulative (net) yield of the individual accounts shows steady growth at sector level, and with the exception of one year, it exceeded the cumulative annual inflation rate. Even during the economic crisis in 2008, the average cumulative yield did not fall below the cumulative inflation rate. Due to the combined result of the steadily increasing cumulative net yield and the drastically falling inflation, resulting from the change in the monetary policy, the real yield has substantially increased, and thus in the period 2002-2017 the pension fund sector realised an average real yield of 3.25 percent.

In the case of the funds operating a optional investment portfolio system, the portfolio yield varies substantially, and thus the yields at fund level also depend on the ratio of individual portfolios selected by the members. The older the members are, the more they tend to select portfolios of a lower risk and – parallel to this – a lower yield. Upon assessing the yield, we must bear in mind that while members with small assets select portfolios promising higher yields, affluent members place their savings in portfolios with a lower yield, but which are safer.

Chart box 1
Annual consumer price index and real yield at voluntary pension funds

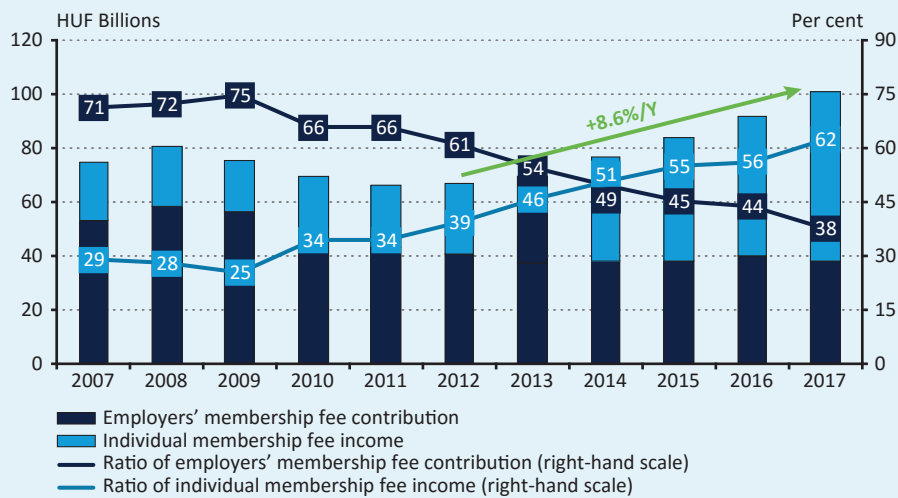


Source: MNB

Membership fee income at historic high, exceeding HUF 100 billion

Due to the vigorous growth in individual membership payments, the payments allocable to the safety reserve exceeded HUF 100 billion in 2017, with individual payments dominating the receipts. Growth in the individual membership fees has been steady since 2011, despite the fact that the number of fund members declined substantially between 2007 and 2016. Due to increased tax burdens resulting from the change in fringe benefit rules, the level of employers’ contribution declined substantially in the period 2011-2017, although within that, as a result of the tax changes affecting fringe benefits, the ratio of the employers’ membership fee contribution decreased in 2017 to a lesser degree than expected compared to 2016, by roughly 6 percent (Chart 34).

Chart 34
Membership fee income credited to voluntary pension funds’ safety reserves, broken down by payer



Source: MNB

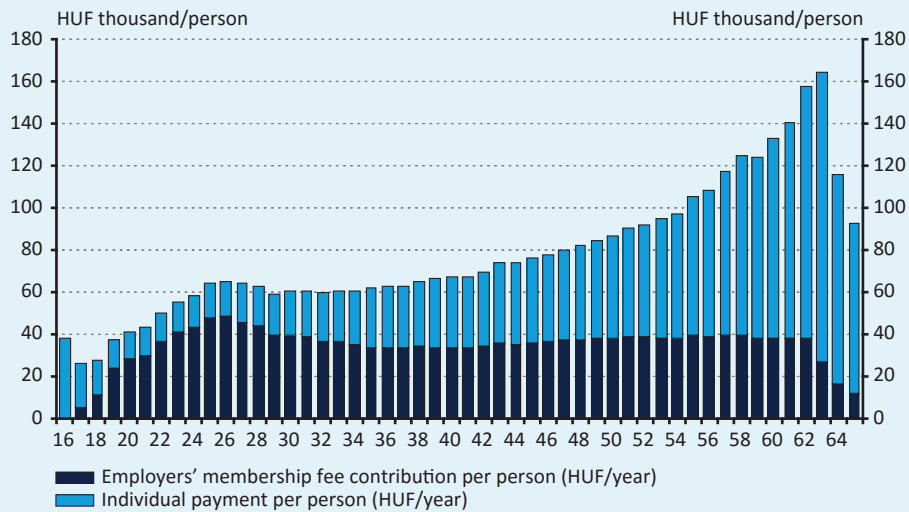
As a result of legislative changes effective from 2018, employers’ contributions received by the funds will be burdened by a lower tax; yet due to the size of the decrease it is unlikely that the extent and ratio of the employers’ membership fee contribution will return to their previous levels in the short run.

Membership fee payment per person starts to rise over age of 40

In the voluntary pension fund sector, the annual payment per person starts to rise dynamically over the age of 40. The level of employers’ membership fee contributions may be deemed relatively steady from the age of 30 until retirement age; according to the reported data, the willingness to make individual membership fee contributions rises over the age of 40.

Employers’ contributions dominate at a younger age, while individual membership fee payments have a lower weight. It may be attributable to the special features of the individual financial lifecycle (e.g. increasing income in the higher age brackets, increase in part of income allocable to savings) and to the strengthening of pension awareness that the role of individual membership contributions gradually exceeds that of employers’ contributions from the age of 40. The highest membership fee contributions were made by the age groups close to retirement age, i.e. 62 and 63 years (Chart 35). Given that the maximum tax allowance is available for an individual annual contribution of HUF 750,000, the average contributions made by the 62-63 years age group are not high. Funds usually remind their members of the individual membership fee contribution close to the year-end, which may result in additional growth in membership fees in the future through raising individual awareness.

Chart 35
Voluntary pension fund individual membership fee contribution per person by age



Source: MNB

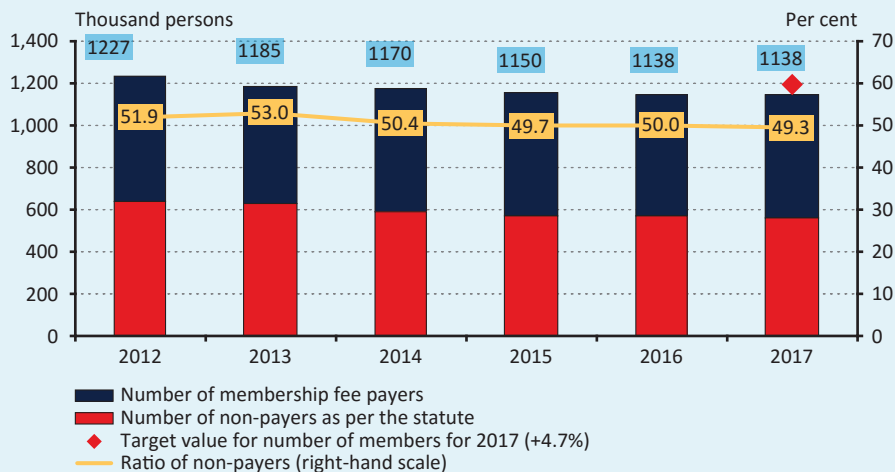
No substantial decrease registered in number of non-payers – additional contributions made by regular payers of membership fees

The ratio of members classified as non-payers based on the statute declined only to a small degree (Chart 36). Exclusion due to non-payment is still not typical for voluntary pension funds, as membership may be terminated only after the expiry of the waiting period, while so far the yield deduction from the individual account of non-payers has made a substantial contribution to operating revenues.

The major growth in total membership fee contributions and comparisons of the membership fee payment structure imply that a large number of members still fail to fulfil their membership fee payment obligation or fulfil it only partially. The members making the surplus contributions usually come from among the regular membership fee payers.

The growth in the membership fee contributions at sector level is a positive factor, but at the same time it is also important to address the non-payers and encourage their activity. The number of members remained broadly unchanged compared to the previous year, which is an improvement compared to the declining trend observed in prior years, but lags behind the path outlined in FIS.

Chart 36
Changes in number of non-payers of voluntary pension fund membership fee



Source: MNB

The ratio of non-payers at the voluntary pension funds peaked at 51 percent in 2013 before starting to decline; by the end of 2017 the non-payer ratio had stagnated compared to previous years. Based on the data reported by the funds, exclusions due to non-payment were higher in the period 2012-2015, and thus the members' activity statistics have improved.

The ratio of the non-payment of membership fees has been declining since 2013; however, the ratio of around 49 percent is still high and represents a risk for the operation of the funds. According to the business model of the voluntary funds, the operating expenses must be covered by the amount deducted from the members' payments. Yet this way the non-payers do not contribute to operations in the usual way, and in the case of the voluntary pension funds it is not possible to exclude members before the expiry of the 10-year waiting period.

To cover operating expenses the law permits the funds to deduct from the yield realised on the savings of non-paying members, up to the part that may be deducted from the minimum membership fee for operation. This solution helps finance the operation of the fund and enables non-paying members to contribute to operating expenses as well; however, this does not cover the full risk derived from non-payment of the membership fee. Namely, if the yield realised on the savings of non-paying members is insufficient – because the balance of the member's individual account is too low or the realised yield is too small – the fund cannot deduct even the minimum part for expenses.

The majority of the funds make attempts to motivate non-paying members in a positive manner – i.e. with reminders, notices and promotions – to pay the membership fee, so some of the passive members may possibly become paying members.

Box 9

The early bird...

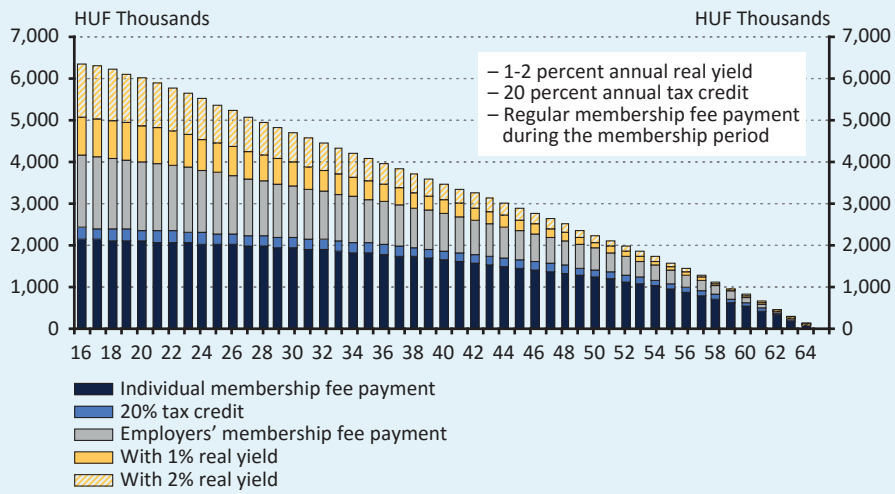
There are a number of calculators on the internet designed to prepare estimates – based on a few parameters (regular monthly contribution, saving horizon, estimated yield) – for the amount of an anticipated future pension supplement. Using empirical data available, the MNB also prepared a projection – based on age of entry – on the change in the present value of the savings that may be accumulated on average until the age of 65. Based on empirical data we determined the average annual amount of the individual membership fee contributions by the various age groups (16-65 years), the amount contributed by employers to employees and the amount of the tax refund paid by the tax authority (NTCA) to the individual accounts. Based on the principle of prudence and to estimate the yield on the investments, we assumed an annual real yield credit of 2 percent. Furthermore, for the purpose of the model we assumed that the 20 percent tax credit remains available for savers in the future as well, and that at the age of 65 life expectancy is 16.5 years. We highlighted two of the various age-groups; those entering the scheme at the age of 25, who have 40 years left until their retirement age, and those entering at the age of 45, with only half of that, i.e. 20 years until retirement. According to the model, those who start saving at a young age for their years in retirement, as career starters, may be able to pay 20 percent less every month in the accumulation period to accumulate almost double the savings, which obviously also means twice the amount of annuity supplements.

Table box 1

"Pension-supplement rate": ratio of annuity derived from self-provision savings compared to average pension

Entry age	25-year ("Early Bird")	45-year
Average contribution	HUF 7,600/month	HUF 9,500/month
Average payment as a percent of the net average wage of the period of January-December 2017	3,85%	4,81%
Savings until the age of 65	HUF 5,357,000	HUF 2,865,000
(initial) monthly annuity	HUF 27,138	HUF 14,514
"Pension supplement ratio"	24,25%	12,97%

Chart box 2
Average saving that may be accumulated until the age of 65, by age of entry



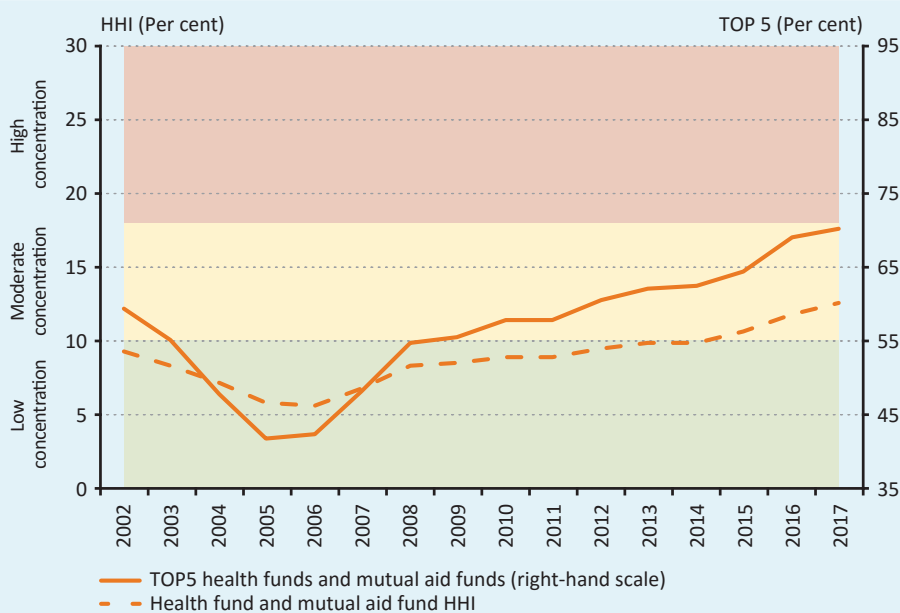
Source: MNB

4.3 HEALTH AND MUTUAL AID FUNDS

Share of TOP5 reaches 70 percent

The concentration level has risen in the health and mutual aid fund sector as well, and further growth may be expected in 2018. At the end of 2017 several institutions, specialised in individual services, decided to close their operations, while a few smaller and one larger institution wishing to terminate their independent operations opted to merge into larger funds (Chart 37).

Chart 37
Changes in health and mutual aid funds concentration



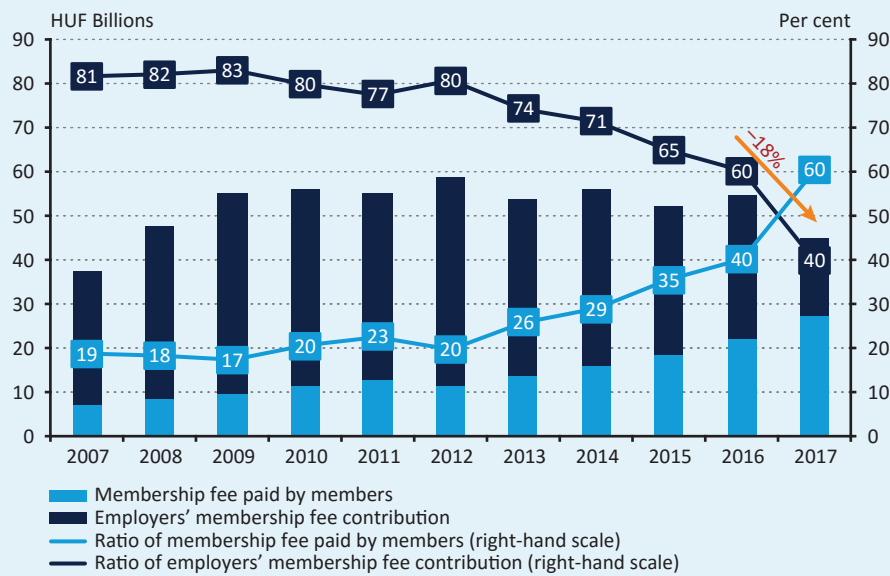
Note: The colour of the background illustrates the strength of the concentration under HHI.

Source: MNB

Record high individual contributions

The legislative change in 2017, increasing the public dues on contributions that may be paid by employers as a fringe benefit, had a major impact on membership fee incomes of the health and mutual aid funds. As a result of the modified rules, the level of employers' contributions declined by almost 42 percent compared to 2016; however, it is encouraging that individual contribution payments rose by almost 27 percent in one year (Chart 38). The membership fee payments are still distributed unevenly during the year between the individual quarters; employers' contributions show lower volatility in the individual quarters, while about half of the individual annual payments are still only received by the health and mutual aid funds close to the year-end. According to the information obtained during the prudential discussions conducted with the funds, some members have started to take a more conscious attitude owing to the funds' efforts and marketing campaigns to foster self-provision, which explains the surge in individual membership fees.

Chart 38
Membership fee income credited to health and mutual aid funds' safety reserves, broken down by payer



Source: MNB

Decline in employers' contributions means ratio of non-payers on the rise

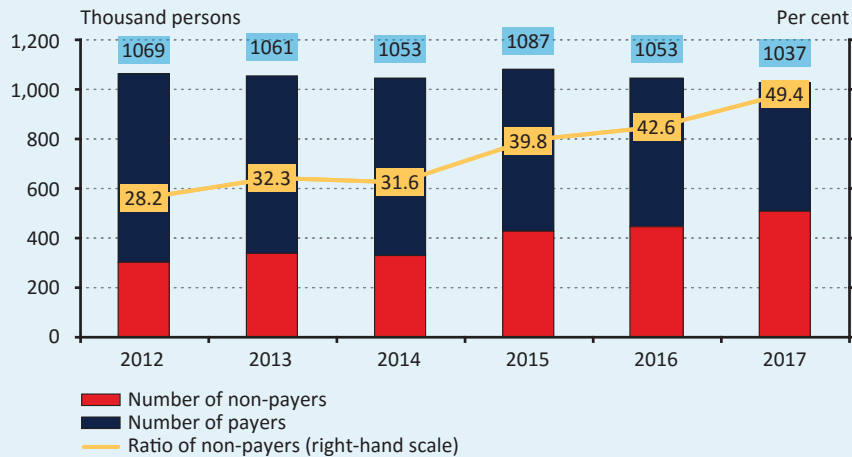
The ratio of members not paying the membership fee rose by almost 7 percentage points by the end of 2017 (Chart 39). The reason for this is that a large part of the members make no individual payment to the fund over and above the employers' membership fee contribution. The burdens imposed on non-payers for their omissions and the consequences of non-payment (restriction of fund's services, deduction from the yield of minimum membership fee portion usable for operation purposes) are defined in the individual funds' statutes. Several funds believe it is not worth keeping non-payer members with a low balance in such a way that the costs related to them are financed from the membership fees paid by the active members; if their statute permits it, they terminate the membership of these members.

Last year several funds opted for exclusion due to non-payment; nevertheless, the membership fee payment ratio deteriorated further. In 2014-2015, the deterioration in the ratio of non-payers was mostly attributable to the fact that some of the larger funds tightened the non-payers' classification in their statute. From 2016, the members' willingness to pay deteriorated, despite the fact that the sum of the individual membership fee incomes reached a record high. Some of the members became more aware and they now make substantial surplus payments over and above the minimum membership fee. However, the balance of a vast part of the members was increased only by the employers' membership fee contributions in the previous years, and in 2017 the members failed to make up for the part lost due to the changes in fringe benefits with their individual payments. In 2017 this group of fund members steadily depleted their individual account balance, without paying any membership fee, and thereafter they will terminate their membership. The growth

in individual membership fees across the sector may be regarded as a positive trend; but in terms of the breakdown of members it also carries a risk, as it may lead to the polarisation thereof. Thus in the future, the institutions should continue to place great emphasis on motivating this group of members.

Experience shows that in respect of managing non-payers the funds also take into consideration that non-payers may start to pay membership fees once again as a result of changes in their income, health and family situation, which later on may have a positive effect on the fund's operation.

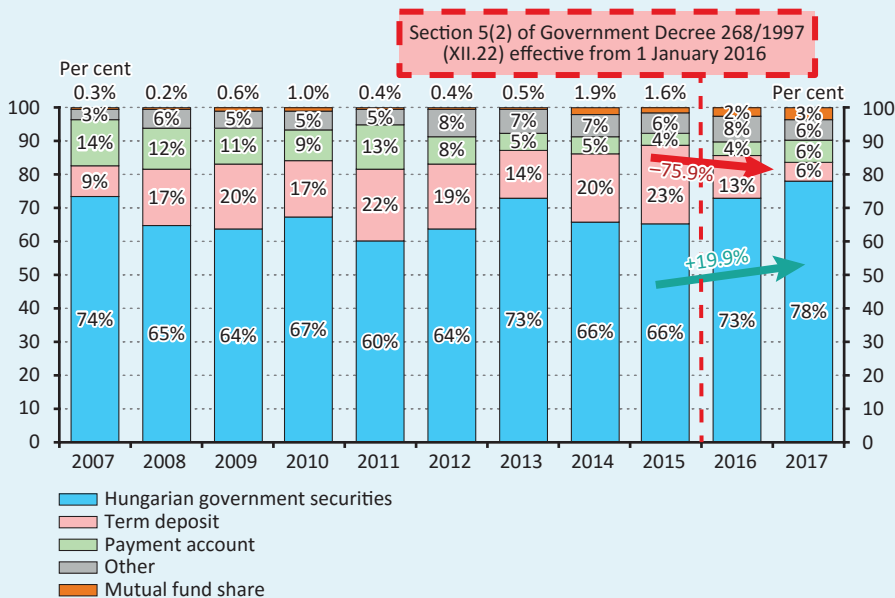
Chart 39
Changes in number of members not paying health and mutual aid fund membership fee



Source: MNB

Investments of health and mutual aid funds still dominated by government securities

Chart 40
Changes in composition of health and mutual aid funds' investments



Source: MNB

While the assets of health and mutual aid funds seem to have stabilised in the past five years at HUF 50-60 billion, the members are increasingly making use of the opportunity to make two-year deposits. In the past five years the volume of time deposits has risen by 28 percent on average. The yield on short-term investments, typical in the funds' investments,

declined substantially as a result of the economic environment, and thus the tax refund available on the two-year deposit appreciated; moreover, fund members also became more conscious in terms of allocating reserves for higher-value medical intervention and health services. The steady level of assets equally implies that incomes are able to cover benefit payment expenses on a continuous basis.

The investments of health funds are still dominated by Hungarian government securities; at the end of 2017 their ratio was close to 80 percent after growth of 5.8 percent. The second most typical form of investment, i.e. bank accounts and time deposits, has a share of 14.2 percent after a fall of 30 percent, in line with money market movements. We see some strong internal reorganisation: while the ratio of payment accounts rose substantially, the funds' assets invested in time deposits were halved. In 2017 the funds were often only able to place their savings in banks with a negative interest rate. After the law tightened in 2016, the funds are obliged to diversify their time deposits by institution to a higher degree, and thus they have to hold accounts with several credit institutions, which further reduces the profitability of the investments (Chart 40).

The equity exposure is still very low within the health funds' investments, fluctuating around 0.5-0.7 percent in the past five years. This is an adverse phenomenon since it was possible to realise a significant yield on Hungarian equity investments. Even the weight of direct real estate investments exceeds the Hungarian equity exposure with a ratio of close to 1 percent.

There was a rise in the portfolio of Hungarian mutual fund shares, but with a ratio of 3-4 percent it is still not a determining factor in the health and mutual aid funds sector.

The law applicable to health fund investments prescribes that funds with assets exceeding HUF 1 billion must prepare an investment policy from 2016. The legislator wanted to draw the funds' attention to the importance of having purposeful and targeted investments. Among other things, it would be desirable in the case of two-year deposits to treat longer-term investments with a different attitude.

Changes in health and mutual aid funds' benefit payments

In Hungary, the health system is financed from the central (general government) and local government budget, the budget of the Health Insurance Fund, households' direct payments and from payments of voluntary healthcare financing sub-sectors. The largest part of the voluntary healthcare financing sub-sectors is represented by the healthcare expenditures of the voluntary health funds and the mutual aid funds, operating since 1993.

Until 1 January 2016, the voluntary health funds and the mutual aid funds could operate separately; from this date onwards, a new fund type appeared on the market, which can render both health fund and mutual aid fund services, and thus the health fund and mutual aid fund services became available within a single institution. Due to the organisational changes made as a result of the legislative changes, 17 of the funds holding an activity licence operated as health and mutual aid fund, 4 as a mutual aid fund and 4 as a health fund at the end of 2017. Almost all of the larger funds with nationwide coverage became mixed funds; the institutions operating solely as health funds or mutual aid funds were mostly specialised in a limited range of services.

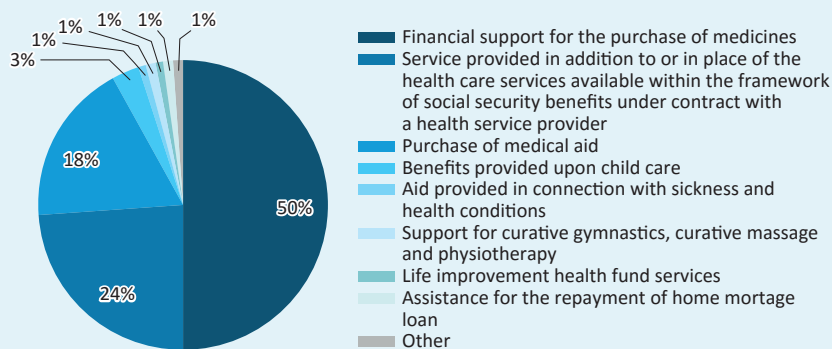
Eligible health and mutual aid fund benefit payments can be divided into two large groups, i.e. supplementary health insurance services and life improvement health fund services.

The largest part of the health and mutual aid fund benefit payments still include financial support for the purchase of medicines, followed by healthcare services accounting for 24 percent, and the purchase of medical aid with a share of 18 percent. Parallel to the expansion of the health funds' range of activity, growth can be observed in mutual-aid-fund type benefit payments related to child care and assistance for the repayment of home mortgage loans. These services are expected to grow further in 2018. The use of life-improvement services (e.g. purchase of sports equipment, natural healing services) is taxable and thus less popular with members (Chart 41).

Some of the funds, mostly those with an insurer background, added the payment of premiums for services financing health insurance (sickness insurance) to its services. In return for an insurance premium, the fund's contracted insurance company partner undertakes to provide the insurance benefits specified in the insurance terms and conditions upon the occurrence of the claim events.

Chart 41
Breakdown of health and mutual aid funds' benefit payments in 2017 Q1-Q4

(based on cumulative data)



Source: MNB

Development of new service structure at larger health and mutual aid funds

A new service structure is starting to spread among the largest health and mutual aid funds. As part of this, strategic cooperation is being developed between the funds and the healthcare providers. The fund directs individuals to the contracted healthcare provider institution, where as a result of their fund membership they can benefit from services and treatment at reduced prices. This structure is also the start of the development of a new private healthcare scheme. As part of the cooperation, the healthcare institution may also provide the fund with customer service and marketing activity.

According to the laws applicable to voluntary funds, the funds are subject to strict investment limits; if they also wish to buy such a healthcare institution for their portfolio, they can essentially only use the operating reserve to finance the purchase of full ownership²². The majority of the health and mutual aid funds have no operating reserve of a size to implement such an investment, or if they purchased other equity in previous years charged to the operating reserve, it usually involved undertakings rendering less investment-intensive healthcare services (e.g. occupational health services). As a result of the cooperation between the funds and the healthcare providers, funds may be able to negotiate more favourable health service and healthcare provision fees for their members than those charged to them when using the hospital's privately financed services directly; moreover they may also participate in periodic screening and preventive examinations. In addition to the fund members, the supplementary health services are also available to the family members registered as service beneficiaries; accordingly, we expect in the future that part of the fund members will liaise with the healthcare provider through their funds. It should also be noted that the existing service financing through the funds represents guaranteed sources of income for the healthcare institution too.

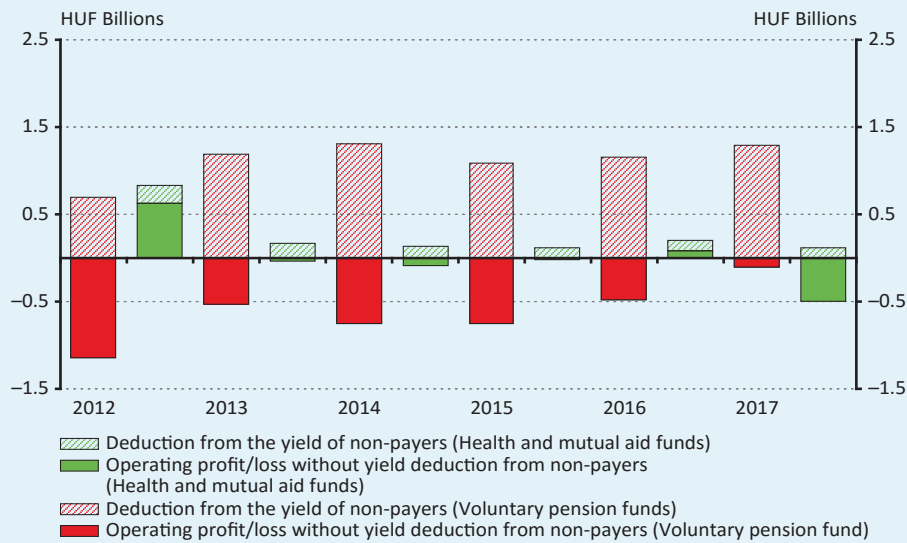
Health and mutual aid funds' result turns negative

In 2017, the voluntary pension funds generated a positive result at sector level, exceeding that of previous year, also considering the amounts deducted from non-payers' yields for operation. Membership fee incomes rose in 2017 compared to the previous year, and thus the higher operating membership fee incomes were almost sufficient to cover operating expenses. The deductions from the yields of non-paying members – partly due to the higher yields realised by the funds and partly due to the increased minimum membership fees at some of the funds – exceeded the deductions made in the previous year, and thus the funds were able to finance their operating expenses safely, even without reducing their operating reserves.

In the case of the health and mutual aid funds, the sector's annual operating result, also considering the yields deducted from non-paying members, showed a considerable loss compared to 2016 due to the major decline in the employers'

²² Section 37 (5) of Act XCVI of 1993 on Voluntary Mutual Insurance Funds: (5) The fund shall not acquire – with the exception of its affiliated auxiliary undertaking, and the ownership share in the organisation performing the investment and management of the fund's assets, property development, property operation, property management, administrative and registration, or the payment of annuities, acquired to the debit of its operating reserve – whether through the investment of the fund's assets or through donations, a direct ownership share of a size that exceeds 10 percent of the company's subscribed or nominal capital for a period exceeding one year. The Supervisory Authority shall be notified of the temporary acquisition of any such interest within 15 days from the date when the interest was acquired.

Chart 42
Changes in operating profit/loss of voluntary pension funds, health and mutual aid funds



membership fee contributions. In response to this, the funds initiated cost-cutting measures, but the impact of these has not yet appeared in the operating result (Chart 42).

4.4 RISKS OF THE FUNDS MARKET
















Owing to the favourable market and business environment, the amount and percentage ratio of the individual payments are increasing in the voluntary fund sector. In addition, it is positive that the rate of the public dues burdening the employers' contribution to the voluntary funds is moderately decreasing from 2018 as a result of the regulatory change, from 43.66 percent to 40.71 percent. According to our expectations, **the ratio of the employers' contribution will not decline further in any of the sectors and the individual membership fees will play a dominant role in both the health and mutual aid funds sector.**

The internal governance systems of the funds are operating properly and the board of directors fulfils its duties. However, there are a few shortcomings; the governing bodies do not always comply with the duties resulting from the legislative changes. In the case of the contracts concluded with external fund partners, the accountability for the agreements is still not always guaranteed and certain invoices for services are paid without confirmation of fulfilment.

Within the category of the exercise of **ownership** rights, the inspection of the delegate scheme still identified the lack of proper regulation as a problem; during the comprehensive audits it was found in several cases that the structure of delegate districts is disproportionate, and the members' attendance and activity at the delegate election meetings and the delegate general meetings is still low.

In the case of the voluntary pension funds, upon reaching retirement age still only a small part of the members opt for the annuity benefit; the online pension calculators, already applied by some of the funds, may help to strengthen this trend. Of the **product and service types** offered by the health and mutual aid funds, the purchase of medicines and therapeutic equipment, as well as the use of healthcare services, still account for the largest part. However, several benefits available from the health and mutual aid funds are still not well known; in respect of these, the institutions launched various marketing campaigns and are developing collective services offered at preferential prices. However, a more intensive supply of information to members is essential for use of the new services.

With a view to avoiding a yield loss the health and mutual aid funds started to implement more active investment strategies; they are contemplating the purchase of riskier investment instruments, and in their asset management and custodian contracts they are trying to achieve more favourable cost levels.

Risk category	Risk groups	Risk rating	Risk prospects	Evaluation in words
Environment	Sectors			<ul style="list-style-type: none"> - The developments in gross domestic product and inflation continue to provide a favourable business environment for the institutions. - From 2018, the tax rates burdening the employers' membership fee contributions to pension and health funds decreased (from 43.66 percent to 40.71 percent). Outlooks: no further decrease in the ratio of the employers' contribution is likely to take place in either of the sectors. According to expectations, the voluntary fund sector will continue to be dominated by the individual membership fees.
Corporate governance	Exercise of owner's control Strategy Internal governance Internal control system			<ul style="list-style-type: none"> - The functioning of the internal governance systems (board of directors/management) is essentially adequate; however, they do not always monitor the tasks arising from the legislative changes. - The verifiability of the fulfilment of contracts concluded with external parties is not always guaranteed in full; there are cases when invoices for services are paid without confirmation of fulfilment. - Exercise of owner's control: the operation of the delegate scheme still raises concerns; the election of delegates is not always regulated, the structure of delegate districts is disproportionate and the change in the number of members is not mapped with the change in the delegate districts; the delegate scheme, elaborated due to the low attendance at the general meetings, brings about no material improvement in the representation ratio. - Shortcomings related to the internal control systems persist. The documentation of the audit activity of the Audit Committee is inadequate or incomplete; there is no continuous follow-up of internal audit findings. Outlooks: the activity of the members in the operation of the funds is still limited.
Market entry risk	Products Customers Fraud management			<ul style="list-style-type: none"> - The larger health and mutual aid funds offer new services and benefit payment schemes to their members, whilst amending their regulations and expanding the scope of services. - Funds must communicate with their members more intensively, with a view to strengthening the pension fund annuity and promoting the services available at the health funds beyond the purchase of medicines and therapeutic equipment. - The larger funds, with nationwide coverage, offering a wider range of services, provide innovative solutions: real time balance enquiries, pension calculator, group insurance, individual discounts negotiated with healthcare providers, possibility to pay membership fees by bankcard, optional investment portfolio scheme, annuity benefit. - Consumer protection complaints are very rare in the sector; however, minor shortcomings related to customer service and complaint management regulations still exist. Outlooks: there is still no major risk related to the benefit payments; due to the new health fund benefit types, communication towards members should be strengthened.
Business processes and capital	Financial market and operational risks Capital and profitability			<ul style="list-style-type: none"> - Credit institutions offer deposit schemes with close to zero or negative interest to the institutions. Consequently, primarily the larger health funds intend to implement more active investment strategies, which may entail an increase in the ratio of riskier investment instruments (purchase of equity, real estate). - The health and mutual aid funds manage the loss of yields with temporary measures: e.g. reallocation from liquidity or operating reserves to the individual accounts. - Several funds renegotiate the asset management and custodian agreements with a view to increasing net yields. Outlooks: due to the prevention of the loss of yields, the ratio of riskier instruments may increase in the funds' portfolios.
<p><i>Explanation:</i></p> <p><i>Degree of risk</i> high  significant  moderate  low </p> <p><i>Direction of risk</i> increasing  stagnant  decreasing </p>				

5 Financial enterprises not belonging to a banking group, and their risks

This analysis is based on the data of financial enterprises that held an MNB licence at the end of 2017 and are not belong to a banking group, i.e. are not subject to consolidated supervision. The analysis does not contain the data of the financial enterprises dissolved in 2017.

During the year, 5 financial enterprises were dissolved or merged, while an activity licence was issued to 4 new financial enterprises, mostly to pursue lending and workout activity.

Based on the outstanding receivables of the institutions under review as stated at the end of 2016 and 2017, table 5 below presents the activity currently performed by the institutions and the distribution of the outstanding receivables from the various activities as well as the pre-tax profit/loss realised by them.

Based on unaudited end-2017 data we can see that the activities pursued by financial enterprises not to a banking group are still dominated by credit and loan receivables (47 percent), followed by financial leases (30 percent), workout (18 percent) and current factoring (5 percent).

Table 5
Composition of gross outstanding customer receivables and profit/loss of financial enterprises not belonging to a banking group, by activity type at end-2017

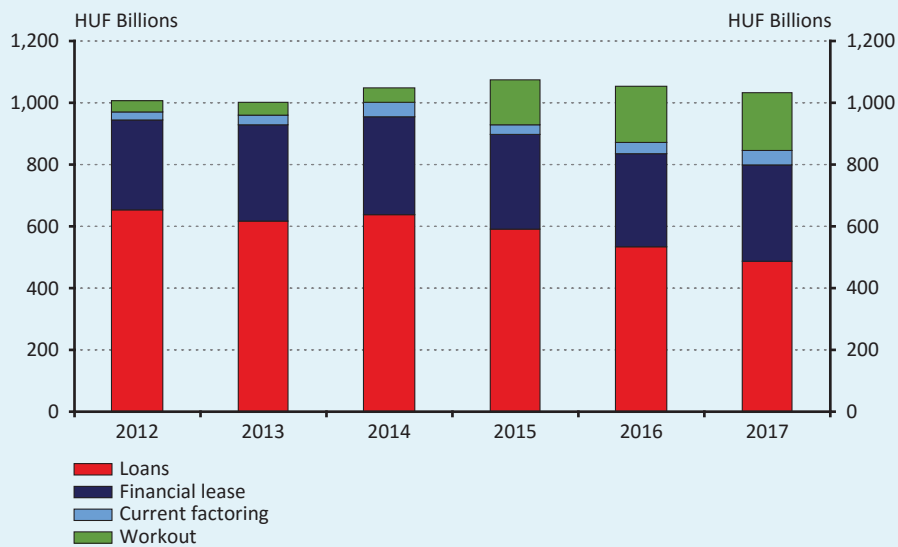
	Outstanding receivables (HUF billion)		Number of institutions also pursuing this activity		Outstanding receivables of institutions only pursuing this activity (HUF billion)		Number of institutions only pursuing this activity		Pre-tax profit or loss of institutions only pursuing this activity (HUF billion)	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Loan	535.42	488.30	128	126	319.29	299.85	53	54	9.17	5.21
– of which, pawn loan	26.49	17.26	24	23	17.68	15.11	18	15	0.64	1.01
Financial lease	298.13	309.90	37	38	58.35	66.17	9	11	1.96	0.03
Current factoring*	38.33	46.50	27	28	28.24	34.25	9	9	1.1	0.46
Workout	179.58	187.97	102	102	148.68	160.55	53	58	4.93	30.39

** Data of one institution pursuing special activity eliminated due to distorting effect*
Source: MNB

The analysis of the outstanding receivables of the respective institutions shows a further decrease in outstanding lending, and, compared to the previous years, minor additional growth in the case of factoring purchased for workout, current factoring and financial lease portfolios (Chart 43).

The decrease in lending activity can be attributed to the contraction in credit institutions' refinancing funds resulting from the financial crisis, as well as to the freezing of EU funds "mediated" by the financial enterprises. One typical effect of the crisis was that several financial enterprises suspended their lending activity – or applied for a licence for other financial services activities – and only managed their existing portfolio. Several institutions sold their portfolio and initiated the withdrawal of their activity licence. This process is expected to continue in 2018 as well.

Chart 43
Composition of gross outstanding customer receivables of financial enterprises not belonging to a banking group, by activity type



Source: MNB

As regards workout activity, following the portfolio cleaning processes at financial institutions it was found that new financial enterprises engaged in the purchase of overdue receivables appeared in the market, and the portfolio of financial enterprises that pursued this activity before also shows an increasing trend.

In the case of the financial enterprises concerned, the vast majority of the financial lease portfolio comprises non-household receivables, as a result of which the growth in the turnover from passenger car sales in the market is negligible.

Given the future new refinancing funds, also available to financial enterprises, lending to SMEs is expected to grow, and due to the continued portfolio cleaning activity of financial institutions and as a result of the higher return realisable by the workout activity amidst the low interest rate environment, further growth in the purchase of overdue receivables can be anticipated.

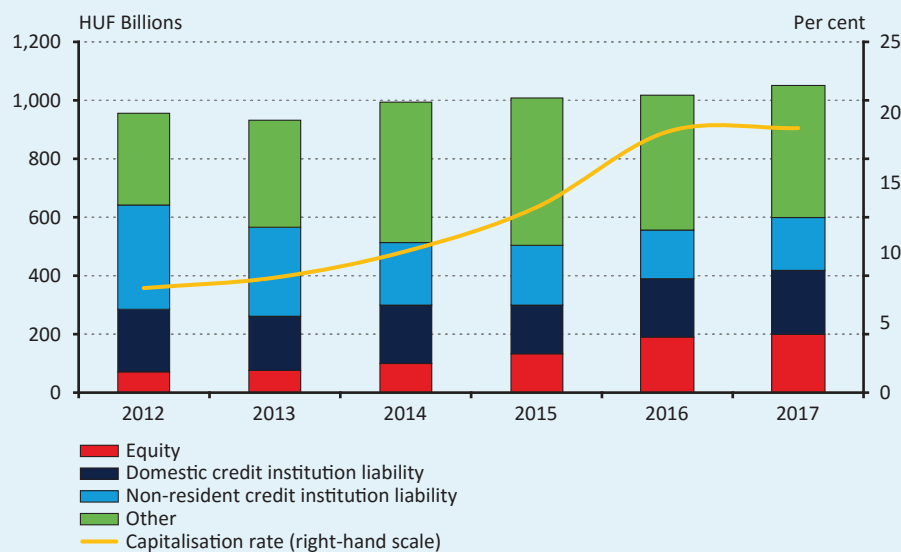
Refinancing funds provided by credit institutions rise, accompanied by deceleration in equity growth

The decline in the importance of refinancing funds provided by credit institutions, characterising the previous period, stopped in 2017; minimal growth was observed in credit institution funding – primarily in respect of the financial enterprises pursuing workout activity – supplemented by the use of own financing funds. The growth in credit institution funds impacted both domestic and foreign refinancing funds; compared to 2016, the volume of domestic and foreign refinancing funds rose by 9.5 and 7.5 percentage points, respectively (Chart 44).

After eliminating the institutions pursuing other, special activity, growth can also be observed in the equity of the financial enterprises not belonging to a banking group, which is based on the profitable operation of the financial enterprises mostly engaged in retail lending and workout. For 2017 it should be noted that the findings are based on preliminary, unaudited data, and thus they do not reflect the impacts of the 2017 dividend payments.

The previous years' accumulated loss of the institutions under review has been continuously decreasing since 2015, which was also reflected by the growth in equity.

Chart 44
Developments in liability structure of financial enterprises not belonging to any banking group

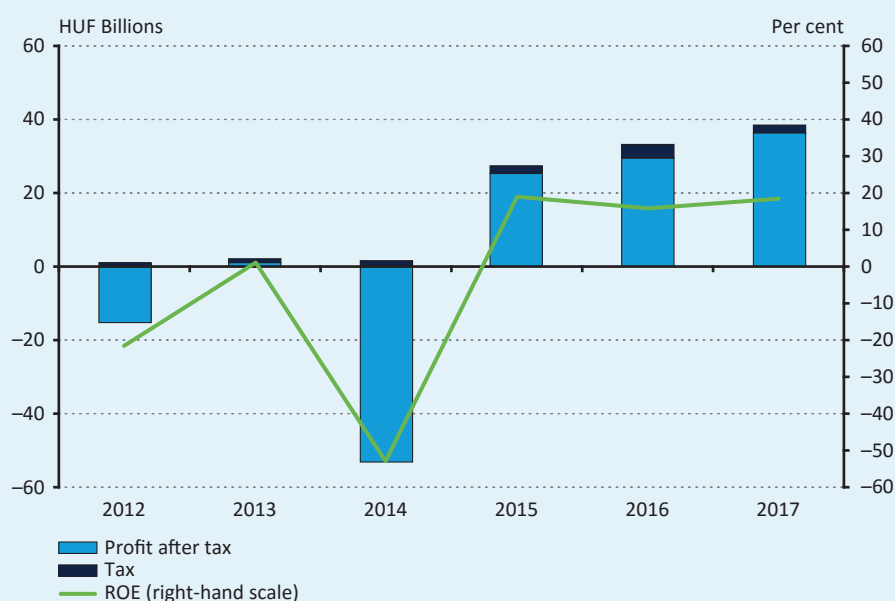


Source: MNB

Moderately improving profitability, high concentration ratio

After eliminating a one-off transaction not related to the core business of the financial enterprises, profitability moderately improved compared to the previous year. In addition, the number of institutions realising a profit before tax also rose, accounting for 79 percent of the institutions under review in 2017 (Chart 45). However, the 2017 balance sheet profit/loss of the financial enterprises not belonging to a banking group still shows a high concentration. Only 5 of the financial enterprises under review realised a balance sheet profit over HUF 1 billion. At the end of 2017, the 5 institutions that realised the highest balance sheet profit account for 80 percent of the profit of the sector under review. A significant part of the pre-tax profit was realised by financial enterprises engaged in workout activity, while the highest losses were suffered by financial enterprises engaged in lending.

Chart 45
Changes in profit/loss and return on equity of financial enterprises not belonging to a banking group



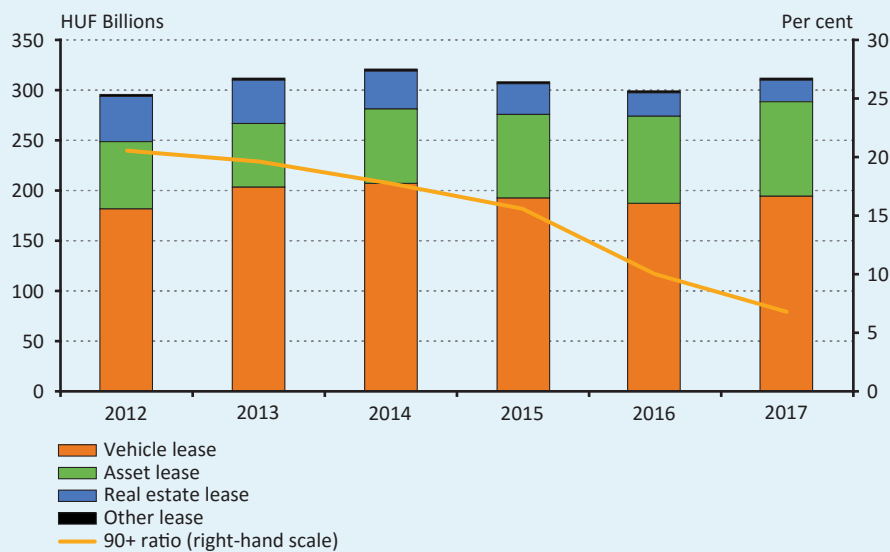
Source: MNB

Moderate upturn in financial leasing and further portfolio cleaning among financial enterprises not belonging to a banking group

In the case of lease activity, the growth by 2017 is mostly the result of an increase in the portfolio of financial enterprises with non-retail portfolios.

In 2017 there was a minor increase in the outstanding receivables of financial enterprises not belonging to a banking group and pursuing leasing activity, as a combined result of the growth in motor vehicle and asset leases, while the ratio of real estate leases is still negligible (Chart 46).

Chart 46
Composition of financial lease portfolio of financial enterprises not belonging to a banking group and the ratio of receivables overdue by more than 90 days



Source: MNB

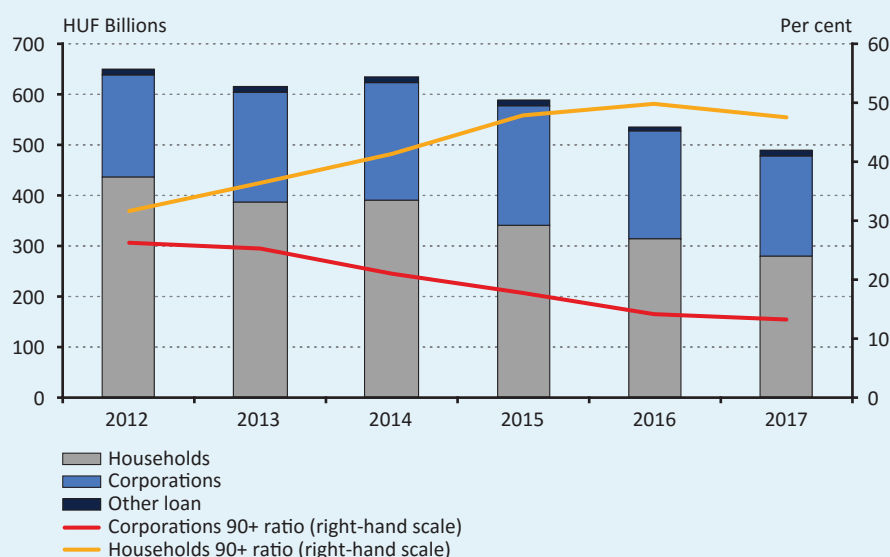
In 2017, the financial enterprises not belonging to a banking group had motor vehicle (63 percent), asset (30 percent) and real estate (7 percent) lease portfolios. Both motor vehicle and asset leases are characterised by high concentration; in the case of the motor vehicle leases, 93 percent of the outstanding transactions were provided by 8 companies, and in the case of asset leases, 98 percent by 6 companies.

After the deterioration in the financial lease portfolio stemming from the crisis, the previous years were characterised by portfolio cleaning; by 2017, clients with payments overdue by more than 90 days, typically in the portfolios of non-financial corporations, declined substantially.

Outstanding lending decreases substantially due to contraction of refinancing funds available to institutions pursuing such activity

After eliminating a one-off transaction not related to the core business of the financial enterprises, the outstanding lending of financial enterprises not belonging to a banking group is illustrated by Chart 47.

Chart 47
Composition of loan portfolio of financial enterprises not belonging to a banking group and ratio of portfolio overdue by more than 90 days



* Due to their negligible share, other past due loans are not shown

Source: MNB

The decline in outstanding lending is attributable to the contraction of refinancing funds available to financial enterprises not belonging to a banking group and pursuing lending activity, and, in addition to the low interest environment and interest rate margins, to the lenders' prudent conduct. In line with the trends of previous years, a fall in outstanding lending can be observed in 2017 as well, primarily affecting the household sector. Despite the fact that outstanding lending to households and the credit institution refinancing funds of a financial enterprise not belonging to a banking group and having a major market share increased substantially in 2017, the extent of the growth was unable to offset the setback for financial enterprises not belonging to a banking group stemming from the lack of refinancing funds. In the period under review, the steady decline in outstanding lending is also reflected by the continuous fall in the number of financial enterprises not belonging to a banking group and which pursue lending activity.

Simultaneously with the decline in outstanding lending, the ratio of household loans overdue by 90+ days decreased as a result of the continuation of the slow portfolio cleaning previously commenced. In addition to the outstanding retail debt, outstanding corporate loans also improved as a result of the portfolio cleaning activity.

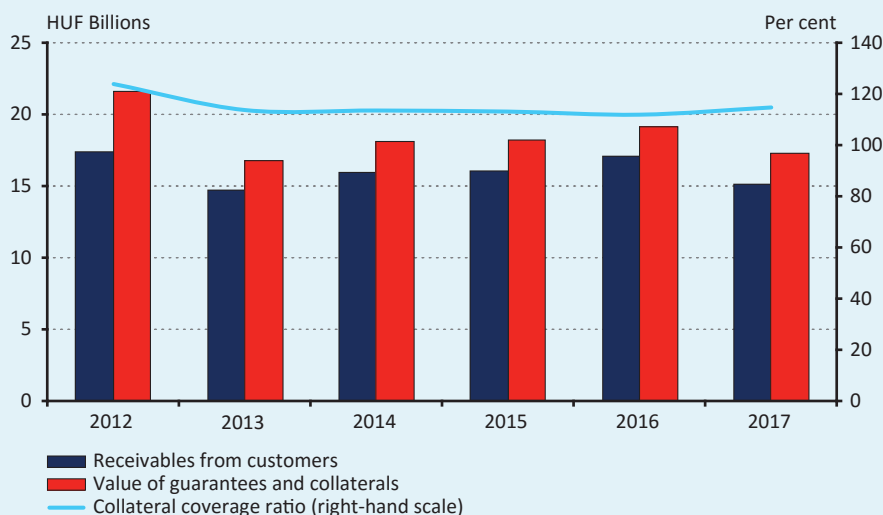
Continuous expansion in pawn broking activity from previous years falters

The analysis is based on data of financial enterprises not belonging to a banking group and only pursuing pawn broking activity at the end of 2017. The ratio of pawn loans compared to the outstanding customer receivables of all financial enterprises not belonging to a banking group is negligible, at merely 2 percent.

For financial enterprises not belonging to a banking group and only engaged in pawn broking we can say that the continuous growth in outstanding receivables – observed after the trough recorded in 2013 – stopped and substantially declined in 2017; at the end of 2017, the value of outstanding receivables was once again close to the trough observed in 2013 (Chart 48). The continuous decline is partly attributable to the fall in the number of financial enterprises engaged

in pawn broking, the decrease in pledgeable collateral at the disposal of customers relying on pawn broking and the competition posed by other financial services activities engaged in granting retail loans. Market processes point to the greater range of eligible pawns, and thus in addition to traditional pawns, other articles may also be accepted. Compared to traditional pawns, such eligible pawns are characterised by faster obsolescence, which may appear in the market combined with the increasing risk of collateral valuation. Due to the changes taking place in the sector, from 2018 the Magyar Nemzeti Bank is paying special attention to monitoring the risks inherent in the composition of collateral.

Chart 48
Changes in portfolio and collateral coverage ratio of non-banking group financial enterprises engaged solely in pawnbroking



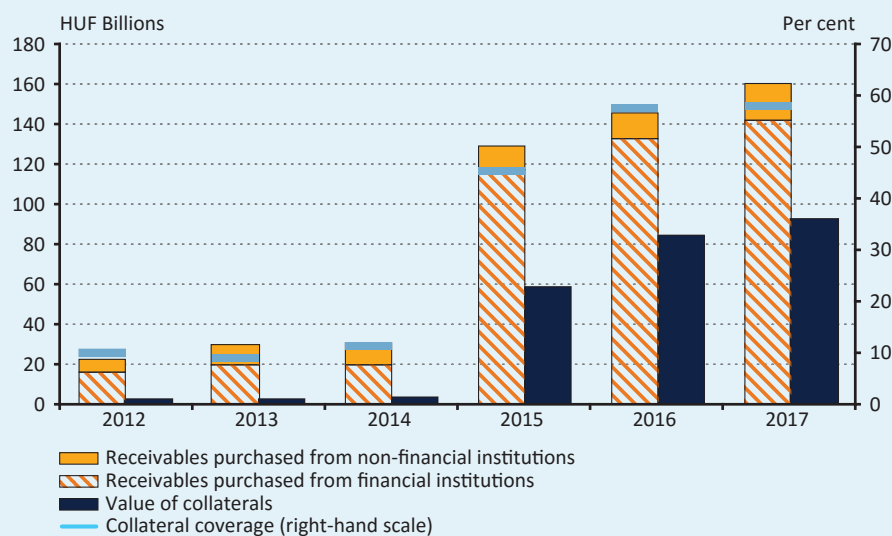
Source: MNB

The major decline in the portfolio at the end of 2017 can also be observed in the number of contracts. Despite the decline in outstanding receivables, the turnover data show that the market activity of financial enterprises not belonging to a banking group and engaged solely in pawn broking is still significant, which is attributable to the special features of the pawn loans, i.e. small amount, short maturity. In the period under review, the total value of available collateral underlying the portfolio exceeded the amount of the outstanding customer receivables; in each of the inspected periods the collateral coverage ratio exceeded 110 percent, but – in light of the above – the composition of the collateral may have a material effect on the sector's risk.

Portfolio of factoring purchased for workout increases further, with higher number of market participants and growing competition

The portfolio of the non-banking group financial enterprises engaged solely in the purchase of overdue receivables shows additional growth. In 2017, growth was observed in the overdue receivables purchased from non-financial institutions (mostly without collateral) and from financial institutions (Chart 49). The decelerating trend in the growth rate, compared to the dynamic increase registered in 2015 and 2016, and the rise in the number of financial enterprises engaged in workout activity, imply intensifying competition, which, together with the property market boom, may increase the price of receivable packages secured by collateral.

Chart 49
Changes in portfolio and collateral coverage ratio of non-banking group financial enterprises engaged solely in purchase of overdue receivables



Source: MNB

The market under review is still characterised by high concentration in outstanding overdue receivables; 78 percent of the portfolio in 2017 was managed by four financial enterprises. Due to the strengthening competition, the purchased receivables must be managed actively, i.e. the financial enterprises must realise the highest possible return within the shortest possible time, whilst at the same time complying with the Magyar Nemzeti Bank's consumer protection requirements.

The 2017 turnover figures show that less than 10 percent of the receivables purchased in 2017 totalling more than HUF 80 billion appeared as a portfolio increment since a large number of receivables were closed.

6 Capital market and its risks

At the end 2017, 35 investment service providers were active in the Hungarian capital market. While the number of credit institutions rendering investment services remained unchanged (21), the number of investment firms with a registered office in Hungary continued to decline: the number of institutions fell in 2015 to 17, in 2016 to 15 and by the end of 2017 to 12. The number of investment firms operating as a branch office declined by 1 year on year; at the end of 2017, 2 foreign branch offices pursued activities in Hungary. The volume of customer securities managed by the investment firms continued to rise: the holding of HUF 32,455 billion registered in 2017 – of which HUF 29,598 billion is with credit institutions and HUF 2,857 billion is with investment firms – exceeds the 2016 value by 10.2 percent. At the end of 2017 the number of active clients was 1,372,000, which constitutes minor growth – 0.8 percent – compared to the 1,361,000 active clients registered at the end of last year. The growth was attributable to the rise in the number of investment firm clients. In this segment, at the end of 2017, the number of active clients outstripped the 2016 value by 3.9 percent; in the case of credit institutions the growth rate was negligible in 2017.

Table 6
Key data of investment service providers

Investment service sector	2016			2017		
	Credit institutions	Investment firms	Total	Credit institutions	Investment firms	Total
Number of institutions	21	18	39	21	14	35
Customer securities portfolio (HUF billion)	26 966	2 488	29 454	29 598	2 857	32 455
Number of active customers (in thousands)	1 110	251	1 361	1 111	261	1 372
Number of securities accounts managed (in thousands)	1 640	291	1 931	1 621	299	1 920
Capital market turnover (HUF billion)	262 808	28 318	291 126	266 002	30 077	296 079
Profit after tax (HUF million)		4 049			5 972	
Capital adequacy ratio (percent)		16,50%			25,30%	

Source: MNB

The assets managed by the 39 fund managers continued to rise sharply in 2017: the portfolio of HUF 9,570 billion registered in December 2017 exceeds the 2016 value by 9.7 percent. Proportionately, the largest increase in assets was observed at the pension fund portfolios in 2017; this segment recorded growth of 19.8 percent, reaching HUF 1,597 billion by the end of 2017. The assets amounting to HUF 6,313 billion managed in the investment funds closed at a historic high (after steady growth) at the end of 2017 – annual growth reached 8.1 percent. The funds of HUF 52 billion available at private capital funds at the end of 2017 represents dynamic growth compared to the paid-in capital of HUF 42 billion registered at the end of 2016. In 2017 the funds paid in by the capital fund shareholders of the venture capital fund managers rose from HUF 157 billion to 202 billion, while the amount already allocated from this (either in the form of a capital investment or loans) increased by only HUF 11 billion. Accordingly, the ratio of the funds already allocated compared to the funds paid in declined substantially in 2017, from the previous 73.7 percent to 62.9 percent.

Table 7
Key data of fund managers

Fund management sector	2016			2017		
	Investment fund managers	Venture capital fund managers	Total	Investment fund managers	Venture capital fund managers	Total
Number of institutions	37	31	68	39	32	71
Number of funds managed	595	42	637	598	47	645
Volume of assets managed (HUF billion)	8 723			9 570		
Funds allocated (HUF billion)		156			166	
Profit after tax (HUF million)	23 491	1 020	24 511	26 486	1 059	27 545

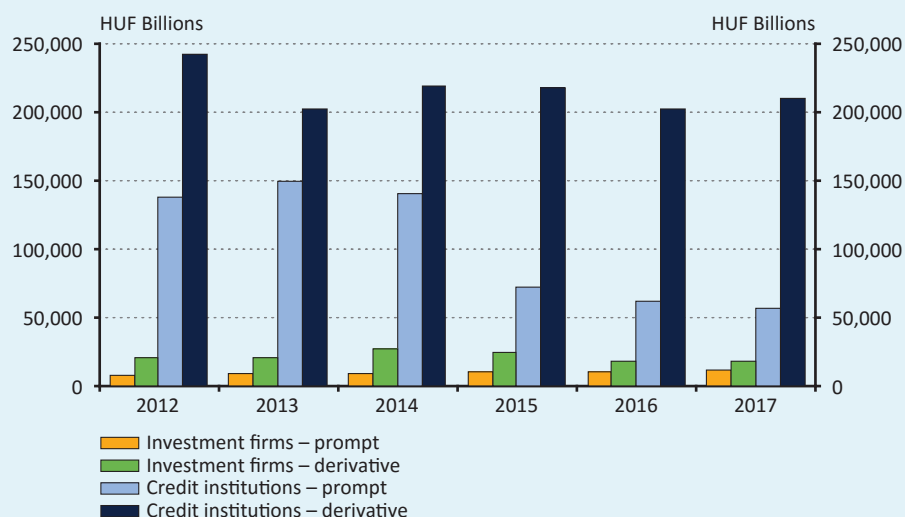
Source: MNB

6.1 INVESTMENT SERVICES MARKET: TURNOVER AND BALANCES

Contrary to previous year, capital market turnover of investment service providers rises moderately in 2017

In 2017 the investment service providers – i.e. the credit institutions and the investment firms – realised a total turnover of HUF 296,100 billion, which exceeds the total turnover registered in 2016 by 1.7 percent (Chart 50). In the case of credit institutions, the turnover rose by 1.2 percent, while investment firms registered growth of 5.9 percent in total turnover compared to 2016 (2016: HUF 28,403 billion; 2017: HUF 30,077 billion). Accordingly, the share of investment firms within total turnover started to rise again, similarly to the previous years (before 2016); the share of the investment firms' turnover was 7.9 percent in 2013, 9.2 percent in 2014, 10.9 percent in 2015, 9.7 percent in 2016 and once again over 10 percent in 2017.

Chart 50
Developments in capital market turnover



Source: MNB

The turnover of the prompt segment of the capital market's organised market²³ (hereinafter: stock exchange), and the derivative segment of the over-the counter market rose in 2017 compared to the previous year: stock exchange prompt

²³ Organised market turnover means the data included in the data supply of institutions pursuing investment services activity sent to the MNB, which also include – apart from the BSE – other recognised stock exchanges (regulated markets), multilateral trading facilities (MTFs) and organised trading facilities (OTF).

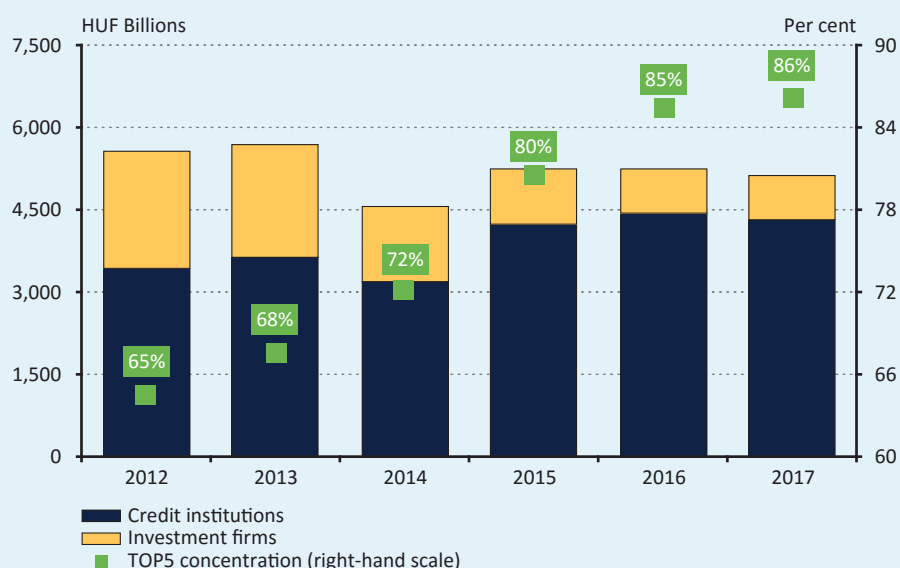
the derivative segment of the over-the counter market was up 10.9 percent in total in 2017 – investment firms’ stock exchange prompt turnover of HUF 4,722 billion and credit institutions’ HUF 1,103 billion in prompt turnover exceed the values registered in 2016 by 6.6 percent and 33.5 percent, respectively. The over-the-counter derivative turnover – typically (95 percent) realised at banks – increased by 4.4 percent in total. By contrast, the stock exchange derivative turnover and the over-the-counter (OTC) prompt turnover dropped by 11.7 and 6.5 percent, respectively, in 2017. The growth of HUF 4,900 billion in capital market turnover was determined primarily by the rise in OTC derivative turnover (HUF + 9,200 billion) and the decline in the OTC prompt transactions (HUF -4,300 billion). Stock exchange derivative turnover fell short of that registered in the previous year by HUF 886 billion, while stock exchange prompt turnover rose by HUF 571 billion in 2017.

The increase in the turnover of credit institutions and investment firms appeared in different segments. The 1.2 percent growth in credit institutions’ capital market total turnover (the total turnover registered in 2016 was HUF 262,800 billion, and HUF 266,000 billion in 2017) is mostly attributable to the 4.1 percent growth in OTC derivative turnover. Although the growth rate does not appear to be too high in nominal terms in the case of the credit institutions’ stock exchange prompt transactions, proportionally the growth is much higher (33.5 percent) compared to the 2016 turnover. As regards credit institutions’ prompt OTC turnover, following the decrease registered last year the trend did not change this year either; prompt OTC turnover in 2017 dropped to HUF 55,100 billion from the HUF 60,700 billion registered in 2016. The HUF 1,674 billion – 5.9 percent – growth in the investment firms’ total capital market turnover compared to the previous year is attributable to the rise in turnover of prompt OTC transactions: investment firms’ prompt OTC turnover of HUF 6,779 billion in 2017 outstripped the previous year’s value by 22.5 percent.

Share of investment firms in stock exchange turnover decreases in 2017

The rise in the share of investment firms, as seen in previous years, came to an end in both the prompt and the derivative markets. The share of investment firms in stock exchange prompt turnover was 63.9 percent in 2013, 70.3 percent in 2014, 80.4 percent in 2015, 84.3 percent in 2016 and 80.7 percent in 2017. The concentration of stock exchange prompt turnover increased slightly again in 2017: the share of the top five investment service providers transacting the highest stock exchange prompt turnover rose from 85 percent of 2016 to 86 percent by 2017 (Chart 51).

Chart 51
Stock exchange prompt capital market: turnover and concentration

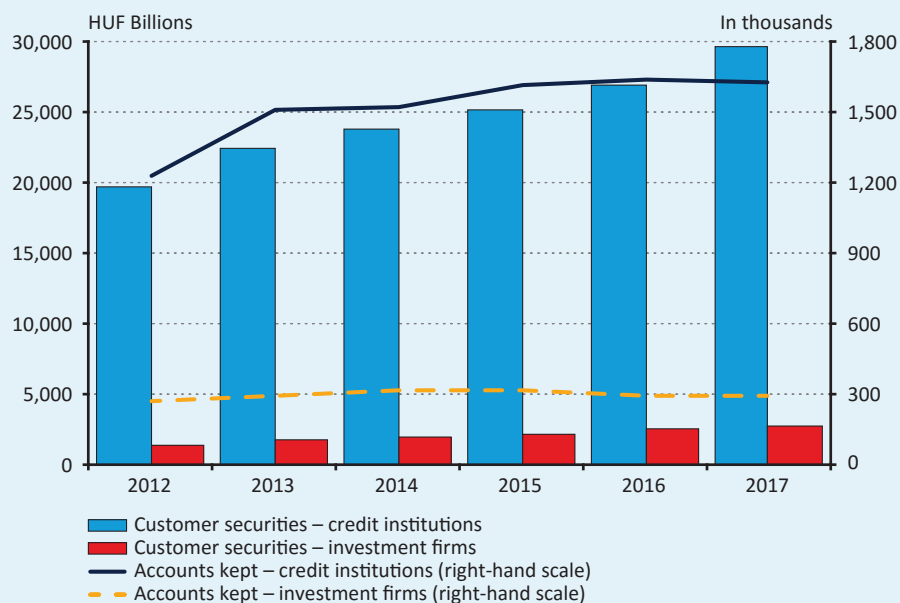


In the stock exchange derivative turnover, the share of investment firms and credit institutions was roughly the same until 2015 (47 and 53 percent in 2013, 51 and 49 percent in 2014, 48 and 52 percent in 2015); however, in 2016 the credit institutions' share started to rise, reaching 59 percent. This rise continued in 2017 as well, and thus the share of credit institutions in the respective segment is already 70 percent. The decrease in the share of investment firms in stock exchange derivative turnover is attributable to the fall in turnover generated by the investment firms in this segment, which is related to the negative effect of the capital market frauds in 2015, while there was no substantial change in the credit institutions' stock exchange derivative turnover in 2016. The concentration of the stock exchange derivative turnover increased in 2017: the share of the top five investment service providers transacting the highest stock exchange derivative turnover rose from 75 percent in 2016 to 88 percent by 2017. The top five institutions with the largest turnover are the same as last year; the rise was primarily attributable to the growth in the turnover of one large investment service provider. The OTC prompt market is still dominated by credit institutions, covering 89 percent of OTC prompt turnover, which represents a moderate decline compared to the 91.6 percent registered in 2016. The concentration of the OTC prompt capital market turnover remained practically constant in 2017: in 2017 the top 5 market participants covered 69.9 percent of the prompt OTC turnover, while this ratio was 69.7 percent in 2016. Contrary to the previous years – when the top five market participants included only credit institutions – an investment firm also joined the top five group in 2017. As regards asset classes, the OTC capital market prompt turnover, similarly to previous years, was dominated by government securities in 2017 as well, with a share of 84 percent, followed by mutual fund shares with a 10 percent ratio.

Portfolio of customer securities increases at sector level

In 2017 the growth in the portfolio of customer securities at market value managed by investment service providers – credit institutions and investment firms – continued; the December 2017 portfolio of HUF 32,455 billion exceeded the end-2016 portfolio of HUF 29,598 billion by 10.2 percent. At the end of 2017 the customer securities portfolio of HUF 29,598 billion managed by credit institutions and the HUF 2,857 billion managed by investment firms, showed a year-on-year increase of 9.8 and 14.8 percent, respectively. Similarly to the former trend, the growth in the share of the customer securities portfolio managed by investment firms within the total portfolio continued in 2017 as well, albeit at a decelerating rate; in 2017 it reached 8.8 percent. This ratio was 8.4 percent in 2016, 8.0 percent in 2015 and 7.6 percent in 2014. The growth of HUF 369 billion in the investment firms' customer securities portfolio, accompanied by a rise of HUF 117 billion in the nominal stock of government securities (+25.2 percent), is essentially attributable to the HUF 183 billion growth (+15.3 percent) in mutual fund shares. The number of customer securities accounts kept by investment service providers decreased to a minimum degree in 2017, i.e. by 0.5 percent, after the negligible (0.2 percent) growth registered in 2016. While the number of customer securities accounts kept by credit institutions decreased by 19,000 (-1.2 percent) to 1,621,000 by the end of 2017, the investment firms registered growth of 9,000 accounts, and thus the closing portfolio of 299,000 accounts at the end of 2017 represents a year-on-year increase of 2.9 percent. The decrease observed at the credit institutions is essentially related to a single institution. (Chart 52)

Chart 52
Customer securities portfolio

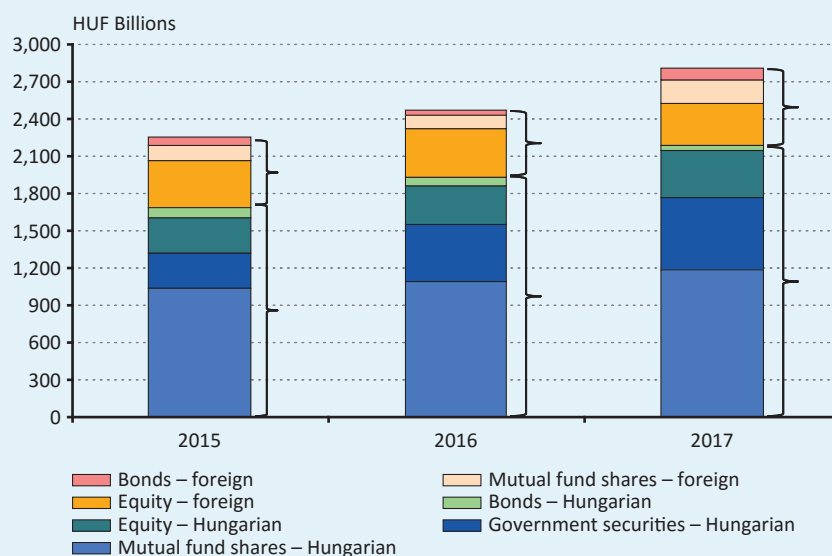


Source: MNB

Growth in customer portfolio mostly attributable to demand for government securities

The largest share of the investment firms' end-2017 customer securities portfolio of HUF 2,857 billion is accounted for by mutual fund shares (48.3 percent), followed by equity assets (25.7 percent), government securities (20.6 percent), and the corporate bond asset class (4.4 percent) ranked fourth. In line with the former trend, the largest growth among asset classes included in the investment firms' customer securities portfolio in 2017 was registered for government securities: the government securities portfolio of HUF 578 billion at the end of 2017 exceeds the HUF 462 billion portfolio in 2016 by 25.2 percent. This was followed by 15.3 percent growth in mutual fund shares (2016: HUF 1,198 billion; 2017: HUF 1,381 billion), and 12.1 percent growth in corporate bonds (2016: HUF 111 billion; 2017: HUF 124 billion) – the latter can essentially be linked to one institution. The equities held by customers of investment firms practically stagnated in 2017. On the whole, the growth in the investment firms' customer securities portfolio in recent years is essentially related to the rise in the portfolios of government securities and mutual fund shares. Similarly to previous years, and within the government securities asset class, Hungarian government securities accounted for 98.4 percent of the entire government securities portfolio. Mutual fund shares were dominated by Hungarian mutual funds to almost the same degree: in 2017 the ratio of mutual fund shares issued by Hungarian fund managers in the total mutual fund share portfolio reached 85.9 percent. The share of domestic issuers is also high in the equity portfolio of investment firms: in past years the share of domestic issuers – 2015: 43.3 percent; 2016: 45 percent; 2017: 53.7 percent – exhibited a continuous rise. (Chart 53)

Chart 53
Customer securities portfolio by asset class

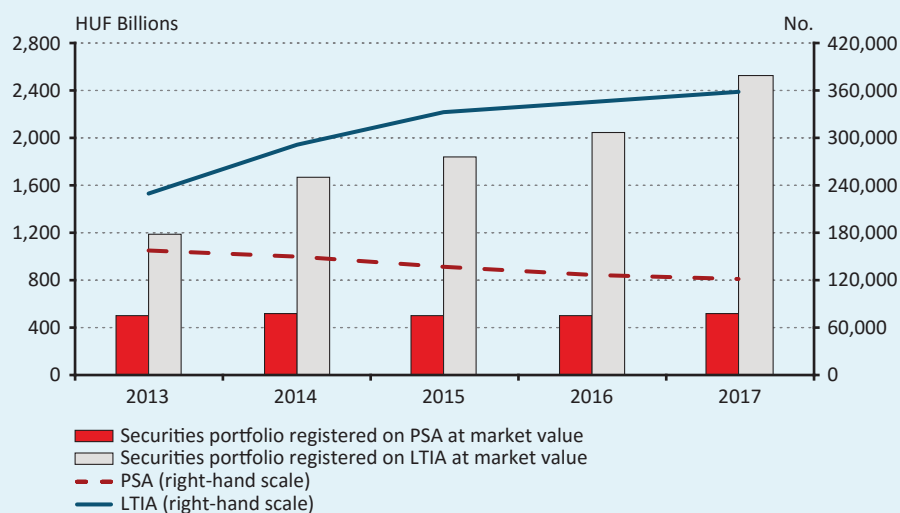


Source: MNB

Growth trend continues for long-term investment accounts

The number of securities accounts kept in the form of long-term investment accounts (LTIA) rose in 2017, similarly to previous years. The LTIA portfolio of 359,000 contracts, recorded by investment service providers at the end of 2017, represents an increase of 4 percent compared to the previous year (in 2016 this growth was 3.5 percent, while it was 14.3 percent in 2015 and 27.0 percent in 2014). The larger part of the growth can be linked to credit institutions: the credit institutions' 2017 closing portfolio of 248,500 contracts exceeds the 2016 closing portfolio by 3.3 percent. In the case of investment firms, the LTIA closing portfolio of 110,500 contracts in 2017 exceeds the previous year's closing portfolio by 5.8 percent (the growth in 2016 was 4.4 and 1.4 percent, respectively). The growth rate of the LTIA securities portfolio soared in 2017: the 2017 closing securities portfolio of HUF 2,533 billion registered on LTIA exceeded the 2016 closing securities portfolio of HUF 2,042 billion by 24 percent (the growth recorded in 2016 and 2015 was 10.7 and 10.3 percent, respectively). Accordingly, the average securities portfolio per LTIA rose from HUF 5.9 million at the end of 2016 to HUF 7.1 million by the end of 2017. In line with the former trend, the fall in the portfolio of the pension savings accounts (PSA) continued: after the decrease of 5.4, 7.4 and 8 percent registered in 2014, 2015 and 2016, respectively, the portfolio of pension savings accounts shrank by 4.5 percent in 2017, and closed with 121,400 accounts at the end of 2017. The decline primarily affected credit institutions: in 2017 the PSA portfolio registered by credit institutions fell by 5.3 percent, whereas investment firms only registered a decline of 1.9 percent. 97 percent of the decline observed at the credit institutions can be linked to two institutions. (Chart 54)

Chart 54
Long-term investment accounts and pension savings accounts; portfolios held on the accounts



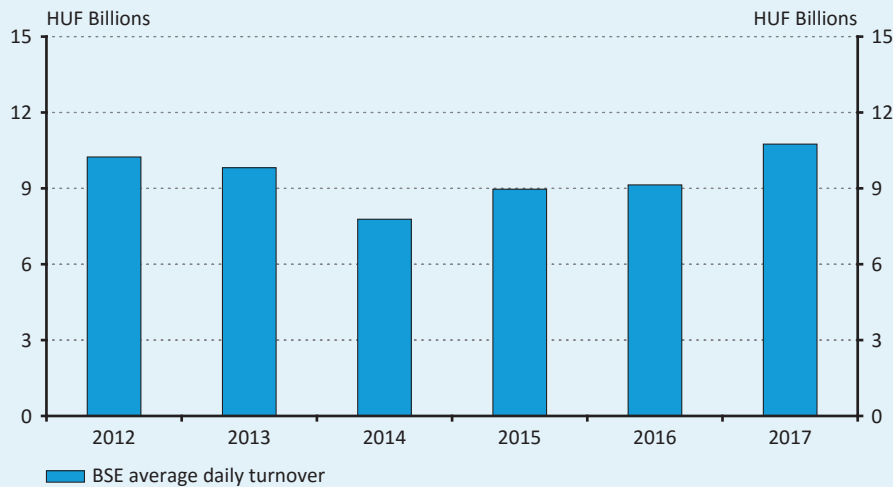
Source: MNB

6.2 REGULATED MARKET, POST-TRADING INFRASTRUCTURES

Continued rise in turnover of Budapest Stock Exchange (BSE)

In 2017 the overall turnover of the Budapest Stock Exchange rose by 3.1 percent in total: the HUF 2,785 billion prompt turnover in securities exceeded the HUF 2,412 billion turnover of 2016 by 15.5 percent; by contrast, the HUF 2,368 billion derivatives market turnover in 2017 fell short of the HUF 2,587 billion turnover of 2016 by 8.5 percent. The growth of 17.1 percent in the turnover of Hungarian equities played a major role in the growth of the prompt market, while the prompt turnover of other securities (foreign equities, mutual fund shares) fell (Chart 55). The decline in the derivatives market is due to the 15.3 percent drop in the turnover of currency futures, which was partly offset by the growth in the turnover of equity futures and index-based futures. In the prompt market, the share of securities other than equity (domestic and foreign together) – government securities, mutual fund shares, certificates, mortgage bonds, corporate bonds – within total turnover declined further in 2017 from 4.5 percent in 2016 to 3.2 percent: the decline is attributable to the fall of 18.3 and 34.4 percent in certificates and mutual fund shares, respectively. The concentration ratio in the prompt market segment, contrary to the trend of previous years, decreased slightly in 2017: the turnover generated by the top five stock exchange members covered 76.9 percent of the turnover of the entire prompt market, which falls short of the 2016 figure of 78.7 percent by roughly 1.8 percentage points. In the derivatives market, the turnover of foreign exchange futures, equity futures and index-based futures covered 99.6 percent of the total derivative turnover in 2017 (2016: 99.2 percent), while the options (equity and forex options) market and the grain futures market were practically negligible. FX futures accounted for 80.7 percent of derivative turnover in 2017; this was 6.5 percentage points lower compared to 2016, and was the combined result of the fall in the turnover of FX futures (-15.3 percent) and the 36.5 percent and 77.8 percent growth in the turnover of equity futures and index-based futures, respectively.

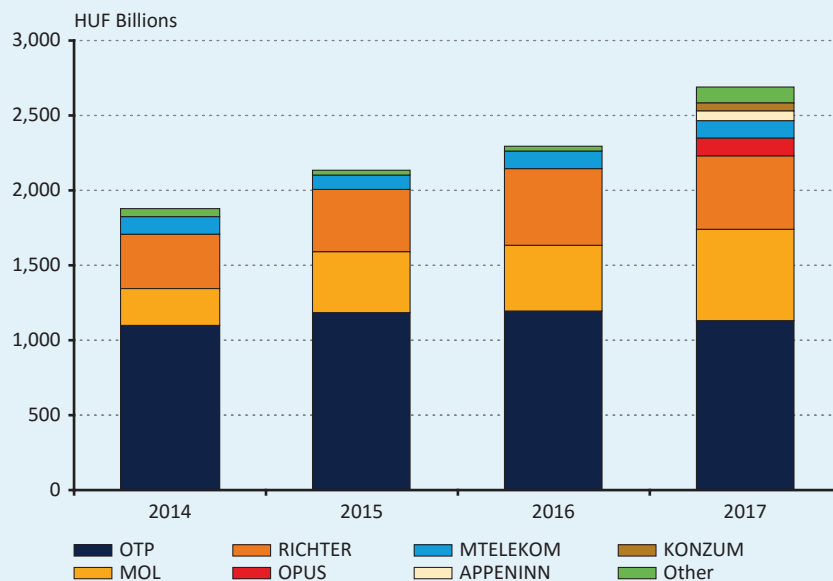
Chart 55
Average daily equity market turnover of the Budapest Stock Exchange



Source: MNB

In terms of issuers, and contrary to the previous rising trend, the concentration of the prompt market turnover decreased in 2017. The share of the four equities generating the largest turnover in past years – OTP, MOL, Richter, MTelekom – fluctuated between 97 and 99 percent (2014: 97.3 percent, 2015: 98.4 percent, 2016: 98.6 percent). However, two major changes occurred in 2017: on the one hand, Opus caught up with the four equities that used to generate the largest turnover (OTP, MOL, Richter, Mtelekom), and thus Mtelekom, which in past years was constantly in fourth place, slipped back to fifth, with almost the same annual turnover. On the other hand, the share of the four equities with the highest turnover (OTP, MOL, Richter, Opus) dropped from the previous 97-99 percent to 87.2 percent because of Opus' annual turnover of HUF 122 billion, which in 2017 outstripped Mtelekom's annual turnover of HUF 119 billion. With a share of 42 percent, OTP still registered the highest turnover in 2017, with second place taken by MOL with a share of 22.5 percent, followed by Richter in third place with a share of 18.1 percent and Opus in fourth with 4.5 percent. (Chart 56)

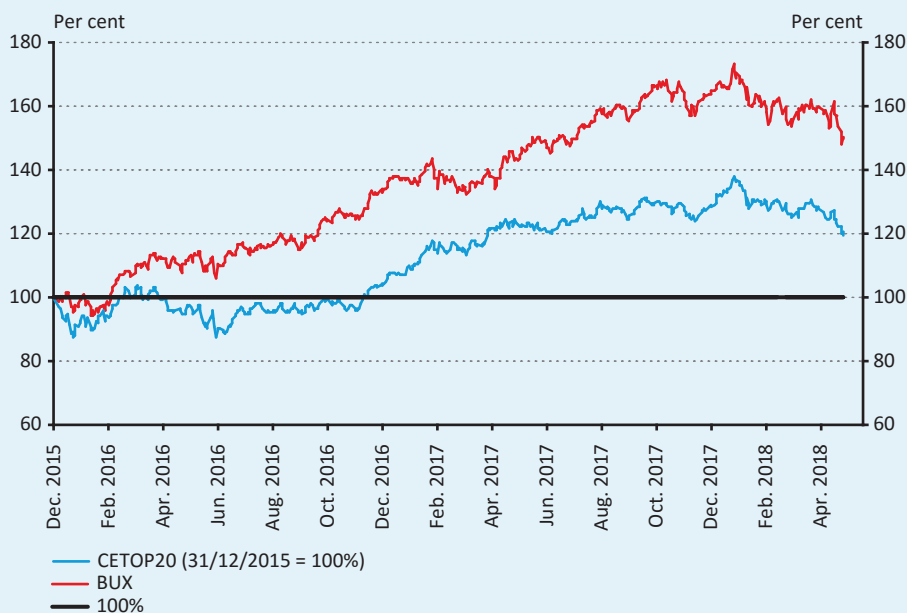
Chart 56
Annual stock exchange turnover of issuers



Source: MNB

The value of the BUX index at the end of December 2017 was 39,377 points: although the growth of 23 percent registered in 2017 falls short of the 33.8 percent rise recorded in 2016, it is still outstanding at regional level. (Chart 57)

Chart 57
Changes in BUX and CETOP indices



Note: CETOP20 is the Blue Chip Index of Central Europe and includes the 20 Central European equities with the highest capital value and stock exchange turnover. The composition of the index is revised twice a year, in March and September.

Source: MNB

BSE registers two initial public offerings and two delisting events in 2017

In 2017, the trading of two new equities – Waberer’s International Nyrt. and UBM Holding Nyrt. – commenced at the Budapest Stock Exchange and there were seven private capital increases. Contrary to the four delisting events in 2016, only two were registered in 2017 (Externet Nyrt., Pannon-Váltó Nyrt.), both based on Section 63 of the Capital Markets Act.

Stable operation at the KELER Group

In 2017, KELER Central Securities Depository submitted its application for a licence under the European Union’s regulation on central securities depositories (CSDR³), and thus, after the central counterparty, the other member of the KELER group may also receive a European activity licence once the licensing procedure is completed. In terms of the functional reliability of the KELER Group it operated efficiently, with high availability in 2017 as well, thereby supporting the functioning of the money and capital markets. The default procedures of KELER CCP did well under real conditions since neither the central counterparty nor the clearing members thereof suffered any losses due to the increased number (2016: 22, 2017: 58) and value (2016: HUF 5.7 billion, 2017: HUF 8.5 billion) of late deliveries by the clearing members. As regards the international role of KELER Group, the international supervisory college of the Romanian commodity exchange (Bursa Romana de Marfuri) issued a licence for the clearing of its gas forwards, and thus in 2018 KELER CCP can appear as central counterparty in the Romanian market too.

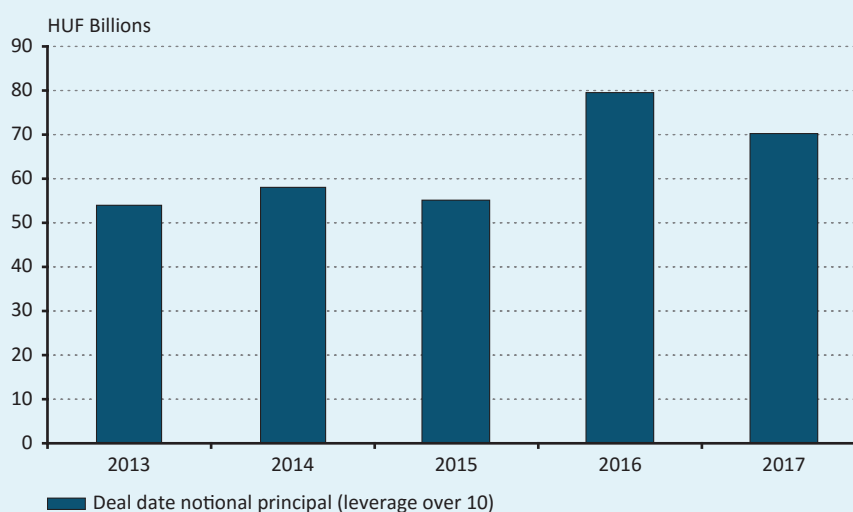
6.3 RISKS AFFECTING INVESTMENT FIRMS

Decreasing portfolios in white-label services

A white-label product is a service where an investment firm purchases a specific investment product from a third-party investment service provider and then resells it under its own brand and business name. Investors using white-label services and the investment service providers rendering such services have higher credit and counterparty risk exposure than usual. This is because the investors' assets and derivative positions are recorded on sub-accounts opened at the third-party investment service provider under the customer account registered in the name of the investment firm, but for the purposes of the open derivative positions the third-party investment service provider treats the eligible collaterals for these together.

The number of Hungarian investment service providers rendering white-label services decreased in 2017: while 5 investment firms rendered white-label services in 2016 in total, their number fell to 3 in 2017. The market of white-label services was highly concentrated in 2017: the largest market participant covered 79 percent of the notional amount of open positions characterised by leverage higher than 10. In the previous year, the notional principal of deals executed under the white-label scheme with an open position characterised by leverage higher than 10 decreased: the 2017 closing portfolio of HUF 70.2 billion fell short of the 2016 closing portfolio of HUF 79.2 billion by 11.5 percent (Chart 58). As part of the continuous oversight, the MNB pays special attention to white-label products, and during the annual supervisory review of the internal capital adequacy assessment process it prescribes additional capital requirements for the respective institutions.

Chart 58
Market value of derivatives traded at white-label partner



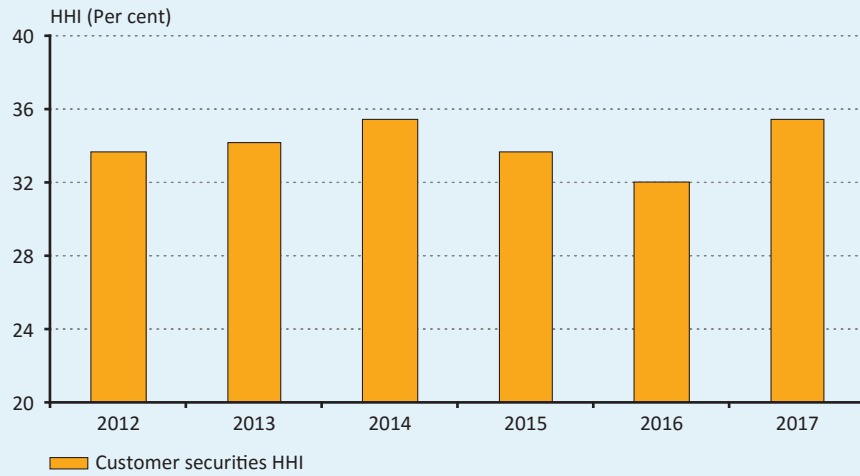
Note: The data is only available from 2013.

Source: MNB

Market risk: market share of small investment firms decreases again in 2017

The concentration of the customer securities portfolio of investment firms, calculated according to the Herfindahl-Hirschman-index (HHI), rose in 2017: the 35.5 percent registered in 2017 exceeds the 32.0 percent of 2016 by 3.5 percentage points (it was 33.6 percent in 2015). The concentration of the investment firm sector – contrary to 2016 – was characterised by growth in 2017: the three largest market participants covered 81.2 percent of the customer securities portfolio for the entire investment business sector, which exceeds the figure of 78.7 percent registered in 2016 by 2.6 percentage points. The share of the top five market participants in customer securities saw similar growth: the value of 93.6 percent registered in 2017 exceeds the 91.2 percentage points from 2016 by 2.5 percentage points. The growth is mainly attributable to the fall in the number of investment firms in 2017 – for details see the next paragraph – and to the fact that all of these investment firms had relatively small customer portfolios – less than HUF 50 billion. (Chart 59)

Chart 59
Market concentration of customer securities portfolio

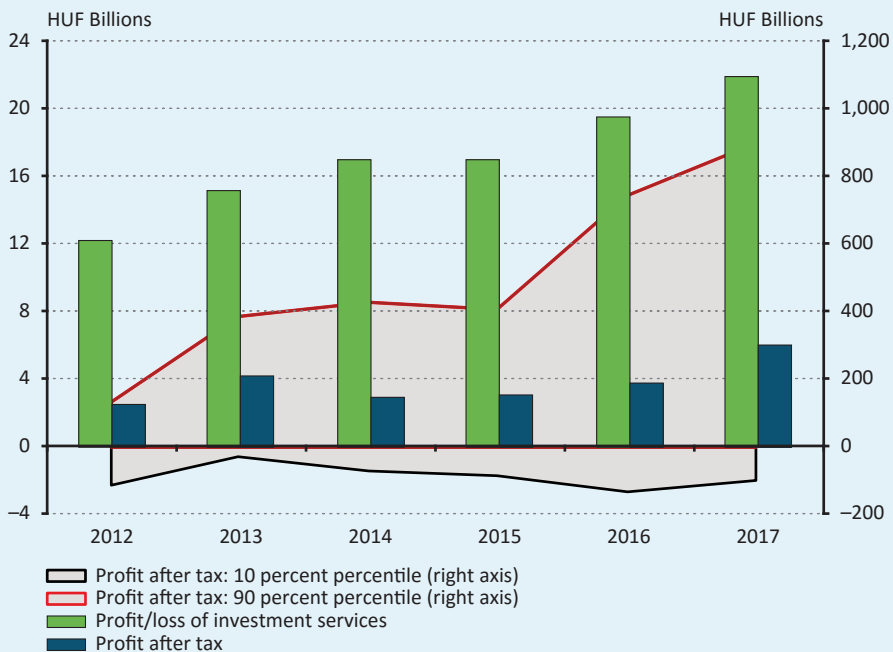


Source: MNB

Number of loss-making investment firms decreases while consolidation continues

The after-tax profit of HUF 5.97 billion recorded in 2017 in the investment business sector – including branch offices – substantially exceeded the 2016 profit of HUF 4.02 billion – by roughly 48.6 percent. HUF 1.85 billion of the HUF 1.95 billion growth is related to a single institution. The income concentration of the investment business sector followed the previous trend and decreased further in 2017: the aggregate after-tax profit of HUF 5.72 billion realised by the top three market participants with the highest after-tax profit in 2017 accounted for 95.7 percent of the entire sector’s after-tax profit, falling short of the 2016 value of 101.2 percent by 5.5 percentage points. Similarly to the previous years, the income concentration also decreased in the case of the top five investment firms with the highest after-tax profit: the income concentration of 104.8 percent in 2017 falls short of the 2016 value of 113.2 percent by 8.4 percentage points. (Chart 60)

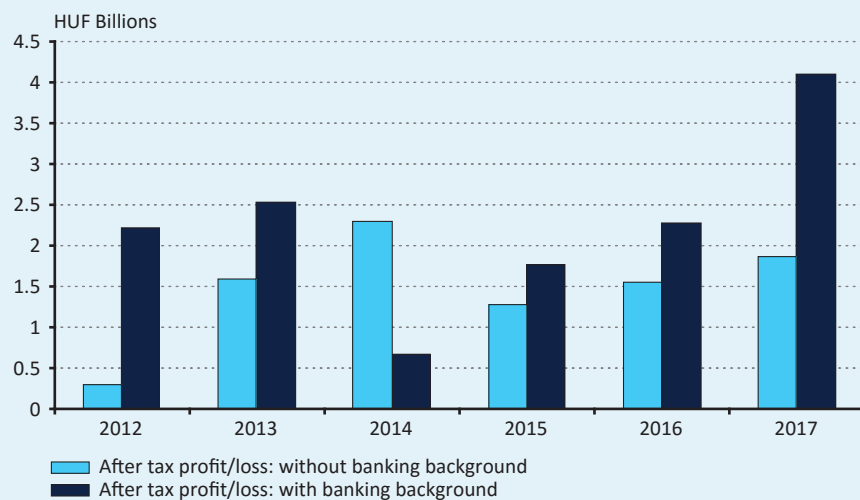
Chart 60
Profitability of investment firms



Source: MNB

The number of investment firms fell from 18 in 2016 to 14 in 2017. As a result of the consolidation process, the activity licences of 4 investment firms were withdrawn in 2017 (Geo Professional Zrt., Pláninvest Zrt., Solar Capital Markets Zrt., Strategon Értékpapír Zrt.), 2 branch offices obtained an activity licence in 2016, but did not start to operate, while one new investment firm and the branch office of a non-resident investment firm received activity licences in 2017. The 4 investment firms whose activity licence was withdrawn were small and medium-sized investment firms, generally making a loss: in 2016 their aggregated loss after tax was HUF -201 million. On the other hand, the profitability of the surviving investment firms improved. This is also evidenced by the fact that in 2017 the number of loss-making investment firms dropped from 5 in 2016 to 2, where for the purposes of the comparison the 4 investment firms whose activity licence was withdrawn in 2017 were ignored. The consolidation of the investment business sector is also proven by the 2017 improvement in the profitability of independent investment firms not belonging to a banking group (Chart 61).

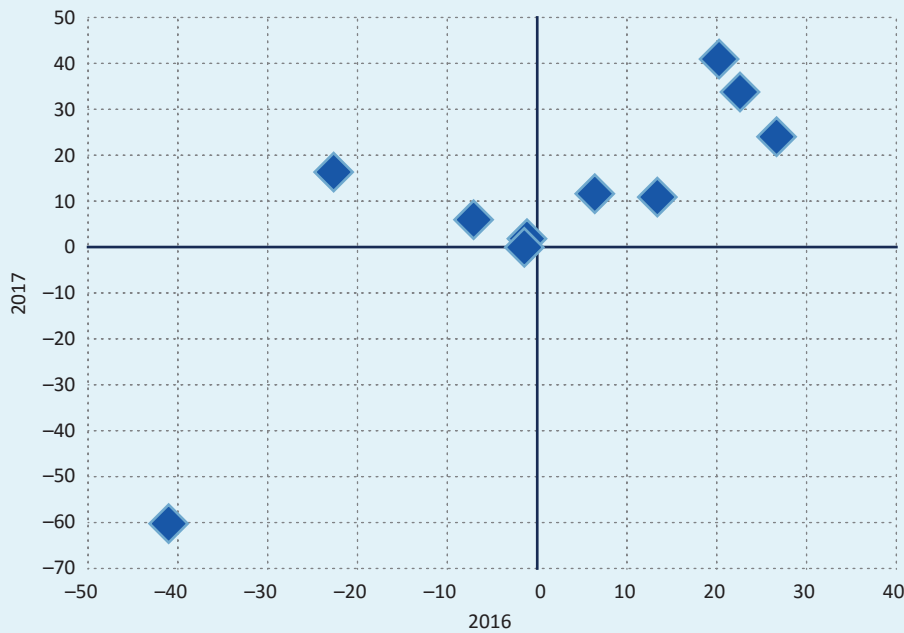
Chart 61
After-tax profit/loss of investment with and without banking background



Source: MNB

The 2 investment firms that made a loss in 2017 have been loss-makers for years, practically since their foundation; their operations were maintained through continuous capital injections. The investment firm that received its activity licence recently and the branch office of the non-resident investment firm generate losses; accordingly, 4 of the 14 enterprises active at the end of 2017 made a loss, which is an improvement compared to 2016, where 9 of the 18 investment firms realised a loss. The improvement in profitability is also evidenced by the after-tax return on equity (ROE) (Chart 62).

Chart 62
ROE figures of investment firms (percent)



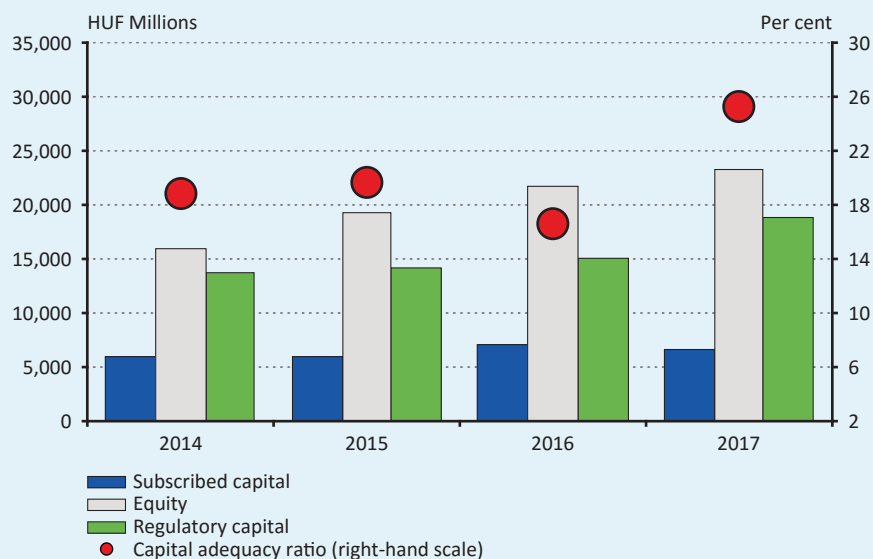
Source: MNB

Capital adequacy ratio increases; capital adequacy still outstanding across the sector on the whole

The subscribed capital of the investment firms declined by HUF 0.45 billion to HUF 6.56 billion by the end of 2017: the decrease is attributable to the withdrawal of the activity licence of the 4 investment firms mentioned above, and to the capital reduction by one investment firm in 2017. By contrast, owing to the positive sector-level result and increasing after-tax profit compared to 2016, equity rose from HUF 21.68 billion in 2016 to HUF 23.37 billion in 2017. The investment business sector's end-2017 capital adequacy ratio of 25.3 percent exceeds the capital adequacy ratio of 16.6 percent registered in 2016 by 8.7 percentage points. The growth is essentially attributable to a single institution, whose available solvency capital increased substantially in 2017.

As a result of the consolidation process, the withdrawal of the activity licence in 2017 typically affected investment firms struggling with a shortage of capital or low profitability. As a result of this, at the end of 2017 only 1 of 12 investment firms with a registered office in Hungary did not have the prescribed capital, and this is also attributable to the additional capital requirement assessed during the SREP⁴. At the end of 2017, 6 of the 12 institutions with a registered office in Hungary have to comply with the capital requirement calculated on the basis of risk exposure, while for the other 6 institutions, the capital requirement comprises the statutory initial capital requirement, as a higher limit. (Chart 63)

Chart 63
Capital and capital adequacy ratio of investment firms



Source: MNB

Sector level risk map of the investment firms

Risk category	Risk groups	Risk rating	Risk prospects	Evaluation in words	
Credit risk	Placement of customer funds with third parties	●	↓	Assets placed with third-party counterparties under white-label schemes (online platforms)	
Profitability	Extra burdens due to payments related to indemnification, and MiFID II/MiFIR compliance	●	↓	The extra burdens stemming from the indemnification may have a negative impact particularly on small and medium-sized investment firms' profitability. As a result of the MiFID II/MiFIR requirements related to inducements, the declining incomes and the additional regulatory burdens will have a negative impact on profitability.	
Capital adequacy	Decreasing profitability	●	↓	The decreasing profitability of the small and medium-sized investment firms, stemming from the indemnification burdens, will have a negative impact on their capital position as well.	
Corporate governance	Compliance: MiFID II/MiFIR	●	→	Compliance with the MiFID II/MiFIR requirements imposes extra burdens on investment service providers; on the other hand, compliance with the MiFID II/MiFIR requirements represents progress in terms of investor protection (e.g. more transparent cost structure).	
Market risk	Trends of uncertain developments in turnover, volatility of investor confidence	●	→	As a result of the consolidation process, the number of investment firms keeping customer accounts decreased, and thus the previous strong competition became more moderate.	
<i>Magyarázat:</i>					
<i>Degree of risk</i>		high ●	significant ●	moderate ●	low ●
<i>Direction of risk</i>		increasing ↑	stagnant →	decreasing ↓	

The requirements outlined in the MiFIR – issued by the European Commission and directly applicable by Member States from 3 January 2018, in the related RTS and in the parts of MiFID II implemented in Hungarian legislation – impose an extra burden on the corporate governance and business processes of investment firms. Accordingly, we classify the **corporate governance risk** as moderate. The **credit and counterparty risks** related to white-label products are still significant; however, the risk expectation is declining given that the portfolio has shrunk and only 3 investment firms offer

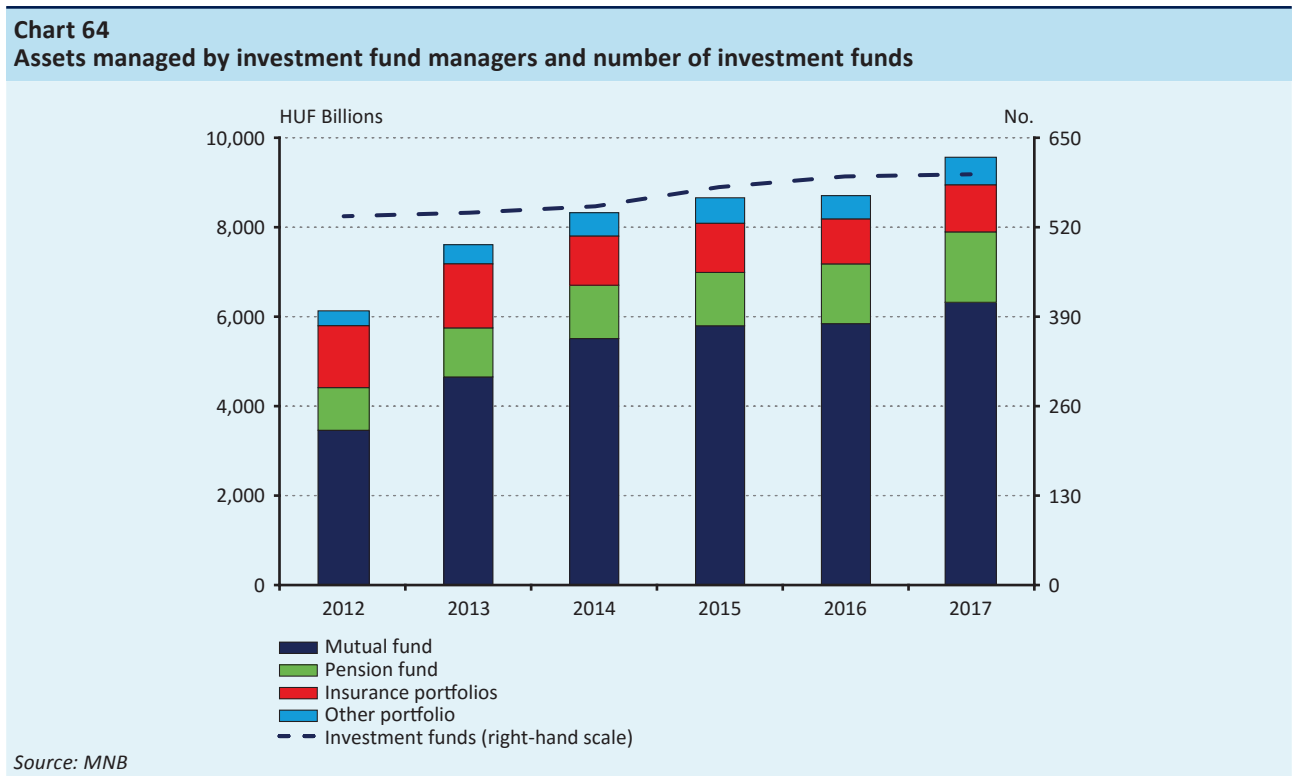
such schemes. Due to the consolidation of the investment business sector, the **market risk** has changed from significant to moderate since fewer investment firms are pursuing activities on a market of roughly the same size. The **capital and profitability risks** are still significant, but with decreasing expectations: although both profitability and capital adequacy improved at sector level in 2017, the small and medium-sized investment firms still show signs of vulnerability (low ROE, relatively weak capital adequacy).

6.4 FUND MANAGEMENT MARKET AND RISKS AFFECTING INVESTMENT FUND MANAGERS

Assets managed by investment fund managers still rising at accelerating rate

In 2017 the number of investment funds – securities and real estate funds – remained practically unchanged on the whole (2017: 598 investment funds, 2016: 595 investment funds), but the composition thereof changed: while the number of real estate funds increased by 24 to 72 by the end of 2017, the number of securities funds decreased by 21 to 526. The number of investment fund managers rose by two to 39 in 2017.

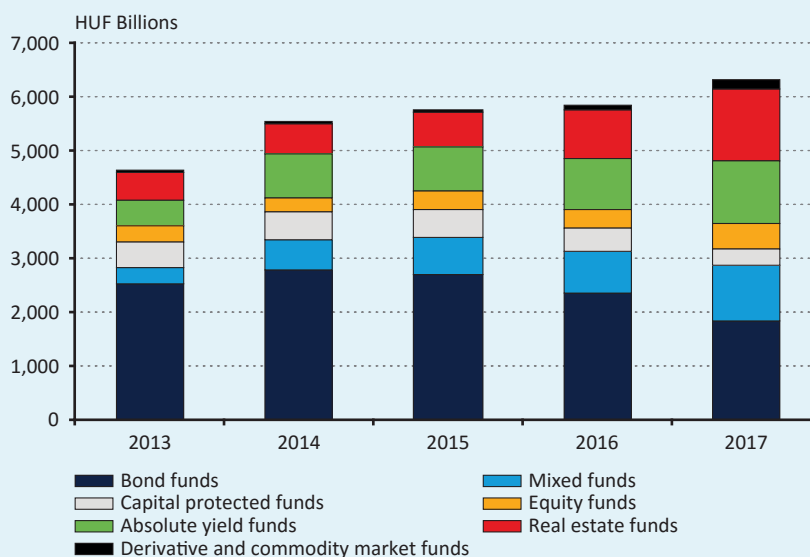
The growth in the assets managed by the investment fund managers accelerated sharply in 2017: while in 2016 the managed assets rose by 0.7 percent, in 2017 the growth rate reached 9.7 percent and the portfolio of HUF 9,570 billion managed by the investment fund manager represents a historic high. Similarly to last year, the pension fund sector was the driver of the growth in 2017 as well: the voluntary and private pension funds’ assets of HUF 1,597 billion managed by the investment fund managers at the end of 2017 exceeded the value of HUF 1,297 billion in 2016 by 19.8 percent (HUF 264 billion) – the growth in the pension funds’ assets was also significant in 2016, but its rate of 9.5 percent falls short of the outstanding figure registered in 2017. Roughly half of the portfolio increase registered in 2017 is related to a single institution. The growth of the assets managed in investment funds accelerated in 2017: the HUF 6,313 billion portfolio in 2017 exceeds the HUF 5,841 billion in 2016 by 8.1 percent – i.e. the growth is HUF 472 billion – while in 2016 and 2015 it rose by 1.1 and 4.5 percent, respectively. Contrary to the trend observed in the previous three years, the assets managed in the insurers’ portfolio also rose in 2017: the assets of HUF 1,055 billion managed by insurers exceed the previous year’s managed insurance funds of HUF 997 billion by 5.8 percent. The growth is essentially linked to two institutions. Contrary to the previous year, in 2017 the value of the assets managed in other portfolios rose too: the HUF 605 billion of 2017 exceeds the value registered in 2016 by 9.7 percent. (Chart 64)



Assets managed in investment funds at new historic high

The investment funds' closing net asset value of HUF 6,313 billion in 2017 is yet another historic high. Of the HUF 472 billion annual growth in assets, HUF 270 billion is attributable to net capital inflows, while the remaining HUF 202 billion is the return on investment realised on the assets managed. In the case of bond-type investment funds (liquidity, money market, short-term bonds, long-term bonds and bonds without duration target bonds) the previous trend continued: the net asset value of the liquidity, money market and short-term bond funds declined by HUF 570 billion (in 2016 it declined by HUF 401 billion), while the net asset value of long-term bonds and bonds without duration target bonds increased by HUF 48 billion (in 2016 by HUF 62 billion). On the whole, the net asset value of HUF 1,838 billion for the bond-type investment fund recorded at the end of 2017 fell short of the closing value of 2016 by HUF 522 billion. The assets of the mixed funds (bond-heavy mixed funds, balanced mixed funds, and dynamic mixed funds) continued to increase in 2017: the closing portfolio of HUF 1,037 billion in the previous year exceeded the net asset value of HUF 772 billion registered at the end of 2016 by HUF 265 billion. Among the mixed funds, first place was taken by the bond-heavy mixed funds in terms of absolute growth, and by the dynamic mixed funds in terms of relative growth. The growth in the net asset value of real estate funds (investing in direct and indirect real estate) continued in 2017 as well, and by the end of the year it reached HUF 1,347 billion. By the end of 2017, according to the classification by investment policy, the real estate funds investing in direct real estate were ranked first with their portfolio of HUF 1,203 billion, outstripping the short-term bond funds, which took first place in 2016 (2016: HUF 1,013 billion; 2017: 758 billion) and the absolute return funds, ranked second in 2016 and in 2017 (2016: HUF 908 billion; 2017: HUF 1,172 billion). The capital-protected funds – a key investment product in previous years – were characterised by declining assets in 2017 as well: the end-2017 portfolio of HUF 316 billion falls short of the end-2016 portfolio of HUF 443 billion by 29 percent (in 2016 the decrease was 13 percent). The net asset value of equity funds, contrary to the stagnation that characterised previous years, rose by 28 percent – roughly HUF 104 billion – in 2017, and reached HUF 457 billion. (Chart 65)

Chart 65
Breakdown of investment funds by investment policy



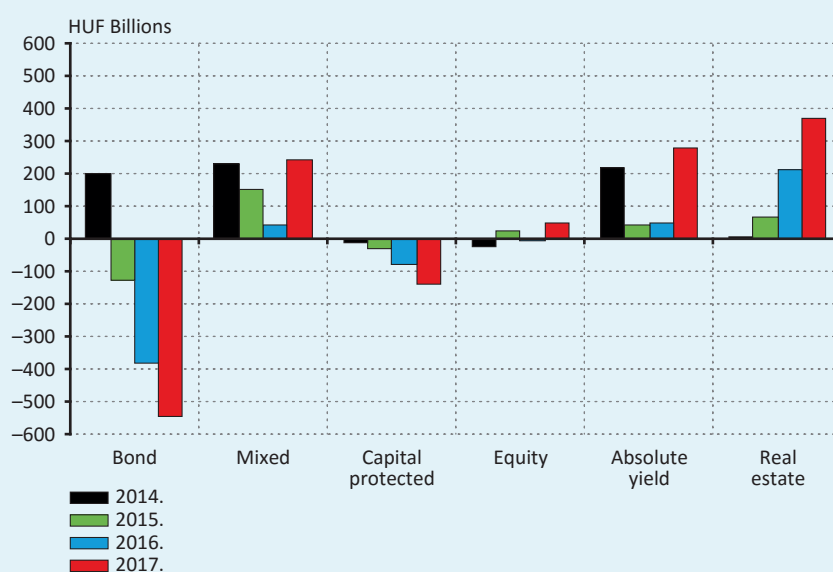
Source: MNB

Investment funds characterised by positive net capital inflows in 2017 on the whole

Contrary to the previous year, the investment funds experienced net capital inflows of HUF 270 billion in 2017 on the whole. Despite this, the period of dynamic, cash flow-driven increases in mutual fund assets has come to an end, as the positive net capital inflow is attributable to the inflow to real estate funds: while securities funds were characterised by net capital outflows overall (HUF -109 billion), real estate funds recorded net capital inflows (HUF +379 billion). Divestiture from the bond-type investment funds (liquidity, money market, short-term bonds, long-term bonds and perpetual bonds) continued at an accelerating rate: in 2016 the volume of funds withdrawn from the bond-type investment funds amounted

to HUF 379 billion in total, but in 2017 this figure reached HUF 546 billion. The net divestiture particularly affected the funds investing in the short and medium section of the yield curve – i.e. the liquidity, money market and short-term bond funds – which is attributable to the low yield environment. Although mixed funds (bond-heavy mixed funds, balanced mixed funds, and dynamic mixed funds) were characterised by steady net capital inflows in past years, the magnitude of this soared in 2017 (2017: HUF +244 billion; 2016: HUF +44 billion), which is attributable to the creation of a new bond-heavy mixed fund. Capital-protected funds were characterised by net divestiture in 2017 as well: the net divestiture of HUF 25 billion and HUF 79 billion registered in 2015 and 2016, respectively, were substantially exceeded by the net capital outflows of HUF 139 billion in 2017. In 2017, capital inflows to the absolute-return funds soared: 2017: HUF +280 billion; 2016: HUF +49 billion; 2015: HUF +45 billion), which is explained by the low interest environment, in addition to investors' yield-hunting approach. (Chart 66)

Chart 66
Net capital flows of investment funds

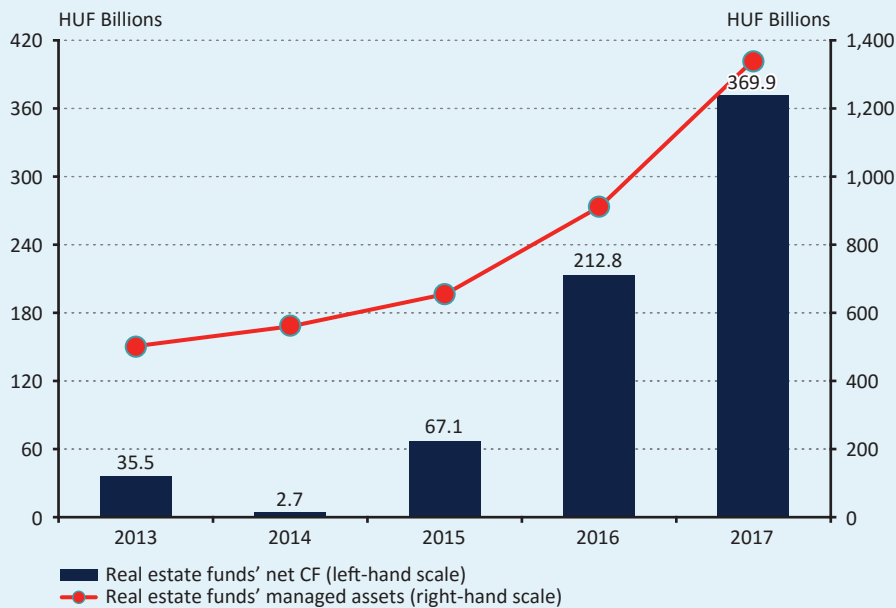


Source: MNB

Real estate funds characterised by outstanding capital inflows in 2017

In 2017, net capital inflows to real estate funds – funds investing in direct and indirect real estate – accelerated (2015: HUF +67 billion; 2016: HUF +213 billion; 2017: HUF +379 billion) and because of this the net asset value of real estate funds soared to a historic high of HUF 1,347 billion. In the case of funds investing into direct real estate, the net capital inflows contributed HUF 293 billion to growth of HUF 343 billion in net asset value (2016: HUF 859 billion; 2017: 1,202 billion), while the remaining HUF 50 billion is the investment yield realised on the managed portfolio. The net capital inflows of HUF 293 billion, recorded in 2017, represent outstanding growth compared to the HUF 192 billion in 2016 and HUF 68 billion in 2015. The vast majority of net capital inflows is connected to public real estate funds managed by three investment fund managers. The growth in assets managed in indirect real estate funds was characterised by higher dynamics: the net asset value of HUF 144 billion at year-end exceeded the HUF 55 billion of 2016 by 162 percent. From the growth of HUF 89 billion, HUF 86 billion is attributable to net capital inflows. (Chart 67)

Chart 67
Real estate fund portfolios and net capital inflows

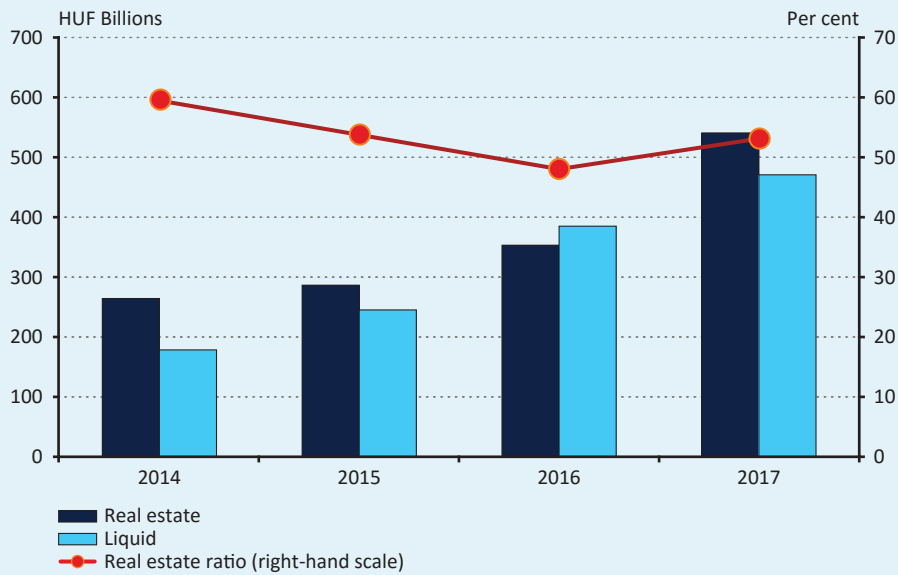


Source: MNB

Real estate exposure relatively low at public real estate funds due to major capital inflows

In the end-2017 portfolio for real estate funds of HUF 1,202 billion – i.e. funds investing directly in real estate – the share of public real estate funds reached 84.4 percent (HUF 1,014 billion), while the share of private real estate funds was only 15.6 percent (HUF 188 billion). Public real estate funds are characterised by very strong concentration: the top three public real estate funds with the highest net asset value accounted for 78.6 percent of the public real estate funds' total net asset value, while the top five public real estate funds with the highest net asset value accounted for 93.7 percent of the public real estate funds' total net asset value at the end of 2017, and these ratios were typical of the previous years as well. In line with this, the capital inflows were also very concentrated in the past two or three years. From the HUF 244 billion in net capital inflows registered by public real estate funds in 2017, the net capital inflow of the top three public real estate funds with the highest net asset value reached HUF 183 billion, while the net capital inflow of the top five public real estate funds with the highest net asset value amounted to HUF 209 billion. As a result of the strong capital inflows characterising real estate funds – and particularly public real estate funds – in the past three years, the ratio of real estate investments compared to the net asset value dropped from 59.5 percent at end-2014 to 53.4 percent by 2017, and bottomed out at the end of 2017 Q1 with 46 percent. (Chart 68)

Chart 68
Real estate investment portfolio of public real estate funds and ratio thereof compared to net asset value

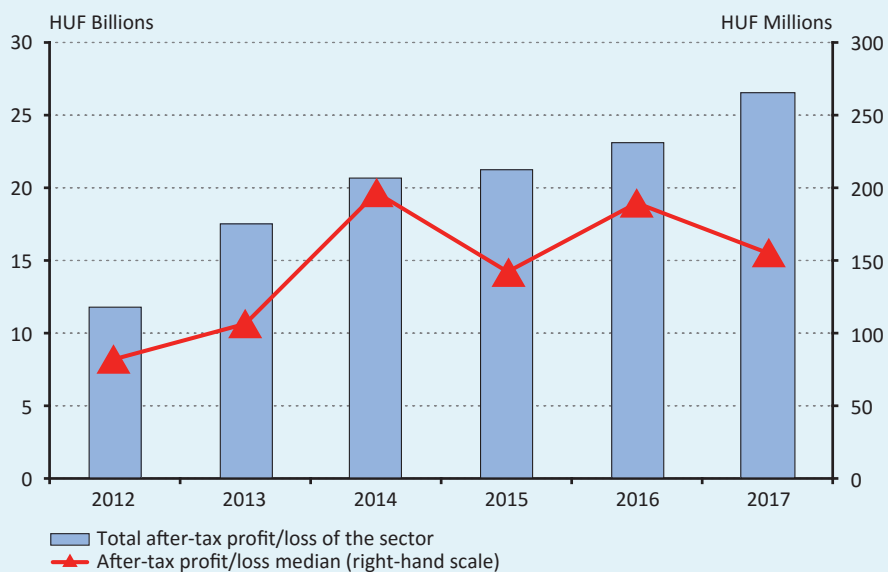


Source: MNB

Increasing profitability in investment fund management sector

As a result of the growth in managed assets – particularly in portfolio-managed assets – the investment fund managers’ after-tax profit rose from HUF 23.1 billion in 2016 to HUF 26.5 billion in 2017: almost 60 percent of the HUF 3.4 billion growth belongs to a single fund manager, and the growth in the after-tax profit of this fund manager is attributable to the decrease in mediated services observed in 2017. The 14.9 percent growth in after-tax profit exceeds the 8.7 percent growth in the assets managed by the investment fund managers. (Chart 69)

Chart 69
Profitability of investment fund managers



Source: MNB


















The concentration ratio of the sector declined further in 2017, albeit to a minimum degree: the five asset managers with the highest after-tax profit accounted for 64 percent of the entire sector's after-tax profit in 2017, falling short of the previous year's figure by 1 percentage point. The composition of the top five market participants based on after-tax profit changed in 2017 as well: the entity formerly ranked twelfth took fifth place. In 2017 there were eight loss-making fund managers, i.e. one more compared to 2016. Their total loss amounted to HUF -186 million, which is essentially the same as the HUF -213 million recorded in 2016. Five of the eight investment fund managers that realised a loss in 2017 received their activity licence in 2017, and thus the loss-making operations are attributable to start-up costs, while one investment fund manager made a loss back in 2016 as well. The assets managed by the loss-making fund managers (HUF 152 billion) look small beside the total managed assets of the sector (HUF 9,482 billion), and thus we have no financial stability risk issue in terms of profitability. The business model of the investment fund managers was characterised by strong profitability in 2017 as well, also evidenced by the high level of the ROE indicator, i.e. after-tax profit to equity ratio: Chart 17 only shows the investment fund managers that were active in both 2016 and 2017 and whose activity licence was not withdrawn in 2017. (Chart 70)

Chart 70
ROE value of investment fund managers (percent)



Source: MNB

Sector level risk map of the investment fund managers

Risk category	Risk groups	Risk rating	Risk prospects	Evaluation in words	
Corporate governance	Compliance: MiFID II/ MiFIR and PRIIPS			In the case of fund managers also holding a licence for investment services, the compliance with the MiFID II/MiFIR regulations is a challenge, while in the case of the fund managers managing closed-end funds, the compliance with the directly applicable rules of PRIIPS represent a challenge.	
Operational risk	Risk management systems			At some of the fund managers, the risk management and back office processes call for enhancement.	
Market risk	Low interest environment, yield hunting attitude, culmination of real estate funds			The low interest environment and the relatively high yield of household government securities fostered net capital outflows from the funds investing in interest-bearing assets, and resulted in major capital inflows to the absolute yield and real estate funds.	
Profitability	Capital outflows from the funds investing in interest-bearing assets and capital protected funds, capital inflows to real estate funds			Due to the lack of economies of scale at certain small fund managers, profitability problems may arise. In the case of the new fund managers – typically managing real estate funds only – established in the wake of the property market boom, a potential downturn in the real estate market has a negative impact on profitability. The strengthening of cross-border services may point towards a decrease in fees in the Hungarian market as well.	
Capital adequacy	Decreasing profitability			The fund management sector is characterised by adequate capitalisation levels, but the lower profitability may have a negative impact on the capital positions of certain small fund managers as a result of economies of scale.	
<i>Magyarázat:</i>					
<i>Degree of risk</i>		high 	significant 	moderate 	low 
<i>Direction of risk</i>		increasing 	stagnant 	decreasing 	

On the whole, the risk assessment of the investment fund management sector has not changed compared to the previous year. In the case of **corporate governance risk**, the main challenge is still the MiFID II regime, effective from 2018, for the members of the sector that hold a licence for investment services activity – i.e. in addition to fund management, they also perform distribution or portfolio management. The persistently low interest environment, the outstanding yield of household government securities compared to retail bank deposits and the capital inflows characterising the real estate fund contributed to raising the moderate **market risk** expectation. Contrary to securities funds – where the international diversification of investments is common practice – above a specific amount of the managed assets and liquid funds in the case of real estate funds it is difficult to make good real estate investments, particularly because international diversification requires local expertise. **Profitability risk** is still moderate, but has increasing risk expectations, since some of the newly established investment fund managers have one-sided real estate fund exposure.

6.5 VENTURE CAPITAL AND PRIVATE CAPITAL FUND MANAGERS

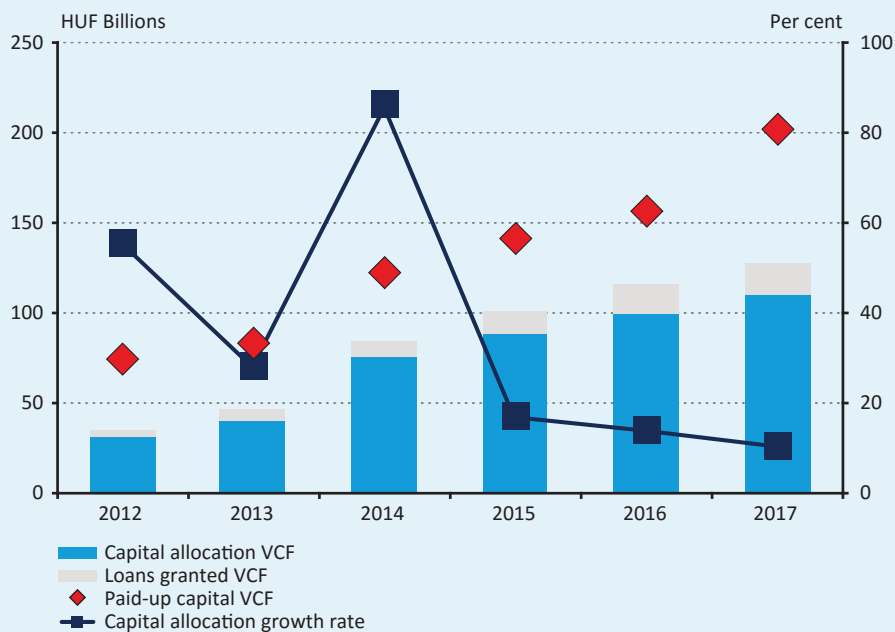
Private capital funds still characterised by dynamic growth

The number of private capital funds pursuing activity based on an operating model subject to a supervisory licence roughly doubled; 9 private capital funds were active at the end of 2017; however, the number of institutions engaged in managing private capital funds did not change compared to the end of 2016; there are still six institutions managing private capital funds. Private capital funds continued to register dynamic growth: the funds available to private capital funds rose from HUF 42.3 billion in 2016 to HUF 51.8 billion in 2017, while the change in the capital allocations performed by private capital funds was much more dynamic (2017: HUF 34 billion; 2016: HUF 22.6 billion; 2015: HUF 2.6 billion); the portfolio of loans granted by private capital funds stagnated (2016: HUF 4.6 billion; 2017: HUF 4.7 billion). A decline was observed in the case of one private capital fund (HUF 3.4 billion) both in terms of subscribed capital and funds paid in, because this amount was transferred to establish a new private capital fund managed by the same fund manager. On the whole, the number of venture capital fund managers rose in 2017 by one to 32.

Venture capital funds investments were characterised by decelerating growth rate in 2017

At the end of 2017 the subscribed capital of venture capital funds reached HUF 257 billion, exceeding the venture capital funds' subscribed capital in 2016 by 44 percent (HUF 79 billion). The growth is attributable to the establishment of 5 new venture capital funds in 2017. The funds available to the venture capital funds, paid in by the holders of capital fund units, rose from HUF 157 billion in 2016 to HUF 202 billion in 2017: the growth affected 8 venture capital funds to the tune of HUF 47 billion, while 3 venture capital funds registered a decrease in the total amount of HUF 2 billion. The allocation of HUF 11 billion executed in 2017 from the venture capital funds – direct investment (HUF 10 billion) and loans (HUF 1 billion) – fell short of the allocation made in 2016 amounting to HUF 15 billion (direct investment: HUF 12 billion; loans: HUF 2 billion) and was well behind the allocation of HUF 17 billion made in 2015 (direct investment: HUF 13 billion; loans: HUF 4 billion), despite the dynamic growth in available funds in 2017. At the end of 2017 the funds allocated from venture capital funds – direct investments and loans together – reached HUF 127 billion. The concentration of the venture capital fund sector did not change compared to 2017: based on the amount of capital investments, the top five capital funds covered 29 percent of all capital investments (in 2015 this ratio was 32 percent). (Chart 71)

Chart 71
Assets of venture capital funds and capital allocations



Source: MNB

Glossary

a MiFID II (Markets in Financial Instruments Directive) Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments. MiFIR (Markets in Financial Instruments Regulation) Regulation of the European Parliament and the Council (EU) No 600/2014 on markets in financial instruments and amending Regulation (EU) No 648/2012.

b PRIIPS (Packaged Retail and Insurance-based Investment Products) is Regulation 1286/2014/EU of the European Parliament and of the Council on key information documents for packaged retail and insurance-based investment products.

c CSDR: Regulation 909/2014/EU of the European Parliament and of the Council on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation 236/2012/EU.

d SREP (Supervisory Review and Evaluation Process): According to international and Hungarian regulations, this means the control and evaluation by the MNB of the business model, corporate governance, risk profile and capital and liquidity position of institutions.

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