European Commission

EUROPEAN SOCIAL POLICY NETWORK (ESPN)

Financing social protection

Hungary

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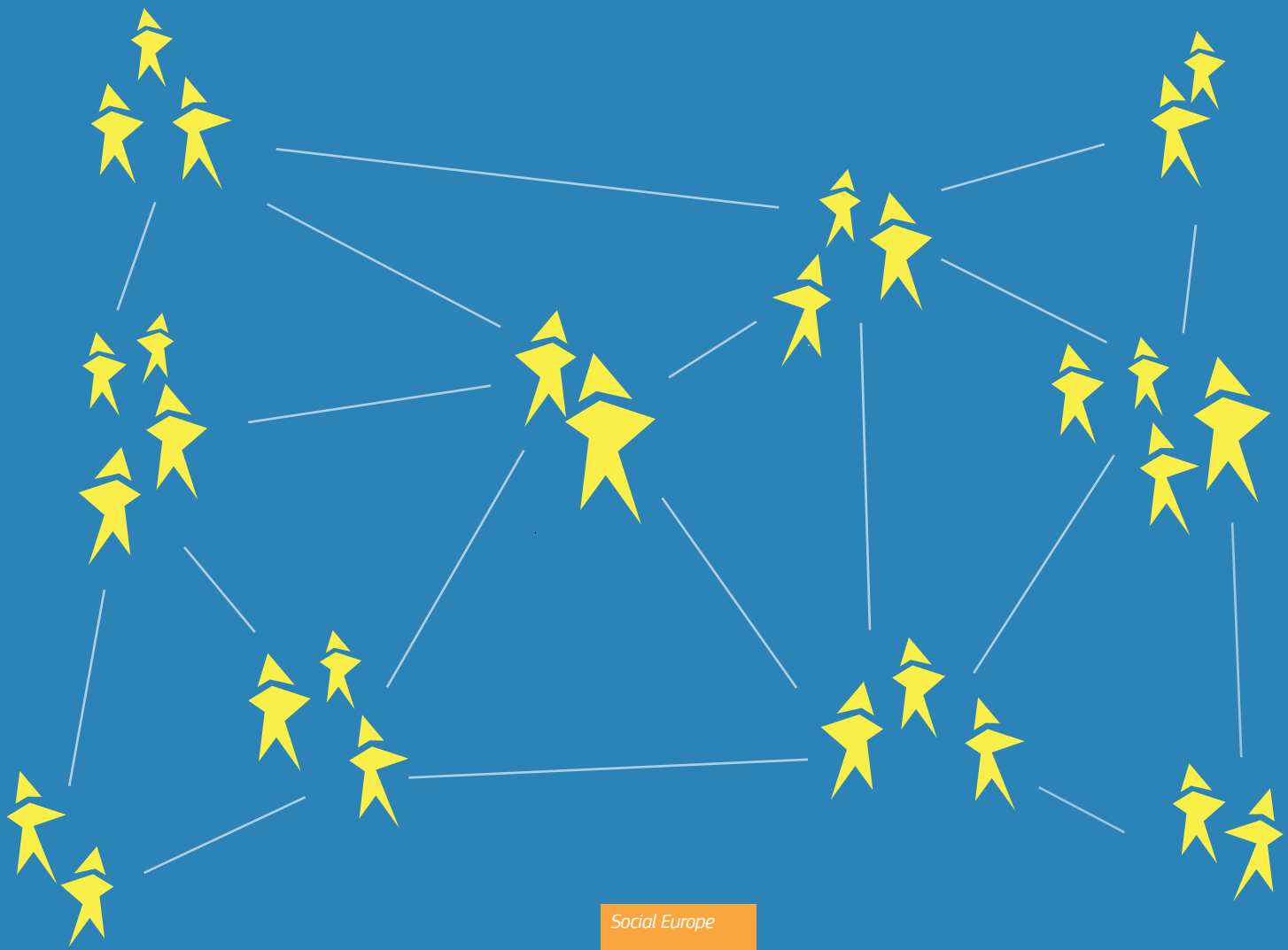

Social Europe

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European Social Policy Network (ESPN)

ESPN Thematic Report on Financing social protection

Hungary

2019

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Directorate-General for Employment, Social Affairs and Inclusion

2019

The European Social Policy Network (ESPN) was established in July 2014 on the initiative of the European Commission to provide high-quality and timely independent information, advice, analysis and expertise on social policy issues in the European Union and neighbouring countries.

The ESPN brings together into a single network the work that used to be carried out by the European Network of Independent Experts on Social Inclusion, the Network for the Analytical Support on the Socio-Economic Impact of Social Protection Reforms (ASISP) and the MISSOC (Mutual Information Systems on Social Protection) secretariat.

The ESPN is managed by the Luxembourg Institute of Socio-Economic Research (LISER) and APPLICA, together with the European Social Observatory (OSE).

For more information on the ESPN, see:
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Quoting this report: Gál, Róbert I. (2019). ESPN Thematic Report on Financing social protection – Hungary, European Social Policy Network (ESPN), Brussels: European Commission.

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Summary

In 2016, Hungary spent 19.2% of its GDP on social protection, down from 20.8% in 2013 and 21.4% in 2005. This was supplemented by tax allowance spending, which amounted to nearly 0.8% of GDP in 2017.

Over the main period examined (2005-2016), social protection benefits shifted towards support for elderly people, while moving from social investment towards income replacement, and from in-kind programmes to cash programmes. Old-age benefits were about 25% higher per inhabitant in 2016 than at the beginning of the economic crisis. Amounts devoted to this function grew steadily, and even during the crisis they dropped only modestly and recovered quickly, shielding old people effectively from poverty. In contrast, per capita spending on healthcare/sickness fell steadily between 2006 and 2012, losing more than a quarter of its value; and despite rapid growth after 2012 it had not regained its pre-crisis level by 2016.

The economic and employment crisis in 2008-2012 shook the contribution base of social protection. Despite the recovery after that, the role of government revenue financing grew in relation to several social protection functions. A particularly pronounced shift from contributions to government revenues took place in healthcare. In 2005, contributions were about 4 times higher than government revenues in this sector; by 2015 the two sources were practically at parity; and by 2018 government revenues slightly exceeded contributions. This development was a consequence of healthcare reforms in 2011-2012 that moved the institutional structure of public healthcare from social insurance to a national health service.

Aggregate spending on healthcare was 7.4% of GDP in 2016 (of which about 5.3 p.p. was public), down from 7.8% (6.3 p.p.) in 2006 but up from 7.1% (4.8 p.p.) in 2014. In 2016, 58% of the total health budget was financed through compulsory contributory health insurance schemes; 8% through government schemes; and 4% through voluntary healthcare payment schemes. The rest, 30%, was made as out-of-pocket payments by households. This latter rate was among the highest in the EU; it increased during the years of financial austerity (2006-2012) from 25% to 29%, and remained steady after that.

In the pension system contributions were still dominant; in fact, they became more important during the period due to some special factors. In 2015, 88% of revenues for old-age spending were collected in the form of contributions, 20 p.p. more than in 2005. This increase was partly a consequence of a budgeting procedure from 2012 that annually adjusted contributions to cover expected benefits, making government revenues redundant in the sector (but more important in healthcare). Another factor was the maturation, and then in 2011 the abrupt de-funding, of mandatory private pension funds. More specifically, the government underwrote the transitional deficit of the pension system during the maturation period, due to contributions being redirected to funds while pensions in payment still had to be financed. This guarantee increased the share of government revenues at the expense of contributions in financing spending on old age. The maturation of the funded pillar was abruptly interrupted in 2011 when the government created conditions that made an overwhelming majority of fund members return to the first pillar, which immediately led to a reduced share for government revenues in financing the sector.

A characteristic of the Hungarian labour market that is relevant to the social protection system is its widespread informality. Informal wage payments affect both current finances (as they do not sufficiently contribute to the social insurance funds), and future benefits (as tax avoiders do not accumulate adequate pension and other rights – which in turn raises the risk of old-age poverty). In addition, informality amplifies economic crises, since economic actors reduce their tax payments as the first step by way of adjustment. This can be measured by the wage coverage rate, which is the rate of the covered wage bill and the actual wage bill, where the covered wage bill gives how large the total wage bill should be if every cent of labour income paid contributions according

to rules and there were no exceptions and special treatments. This rate, 79% at the start of the crisis, quickly dropped to 67% by 2013.

1 Current levels and past changes in financing social protection

In 2016, Hungary spent €21.8 billion, equivalent to 19.2% of its GDP, on **social protection** (excluding education but including healthcare). The proportion was the same as the simple average for the three other Visegrad countries (Poland, the Czech Republic and Slovakia), which are frequently used as reference points for Hungary, but less than in the European Union as a whole, where it was 28.2%. The spending total mentioned above was the same at constant prices as in 2005 (see the right-hand panel of Figure 1), when it represented 21.4% of GDP (on the left-hand panel of Figure 1).

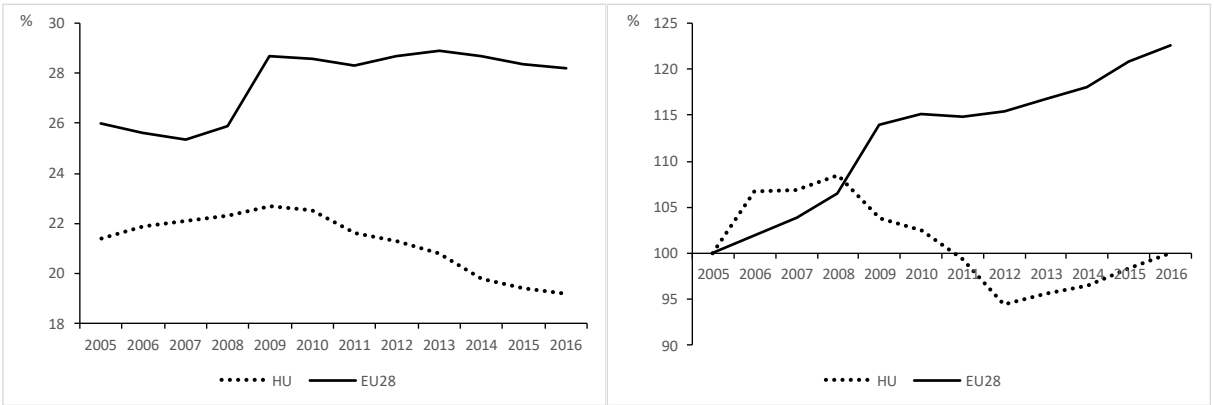
The gap between **gross and net expenditure** was small (0.2-0.3% of GDP) and broadly constant over time.

In addition, the government gives tax allowances, mostly in the form of the family tax allowance (*családi adókedvezmény*), which can be considered a **tax expenditure** on social protection. They amounted to 0.6% of GDP in 2013. In 2014 the family tax allowance was extended from the personal income tax to social contributions, and the scope of beneficiaries was also extended, increasing this form of social protection spending to 0.7% (and by 2017 close to 0.8%) of GDP.

Figure 1 also shows that, in contrast to many other member states of the EU, Hungary did not manage social protection spending in a counter-cyclical way, which would dictate reductions in years of economic growth and increases in a recession. Before the crisis, expenditure in real terms grew faster than in the EU28; but it started to fall when the economic downturn hit the country. Regular excessive budget deficits through the 2000s, and the resulting high rates of public debt, left little space for manoeuvre. Although subsequent governments tried other measures too, such as a combination of extra taxation of the financial sector and transformation of explicit debts to implicit pension debts by de-funding mandatory private pension funds, they could not avoid the introduction of various austerity measures, such as in healthcare in 2006 and in old-age and disability benefits between 2008 and 2012 (see details below).

After 2012, the last crisis year, expenditure on social protection grew again in real terms (see the right-hand panel of Figure 1), but more slowly than the economy – resulting in the social protection sector shrinking relative to GDP (the left-hand panel of Figure 1).

Figure 1. Aggregate social protection expenditure in Hungary and EU28 relative to GDP (left-hand panel, %) and at constant prices (right hand panel, 2005=100), 2005-2016

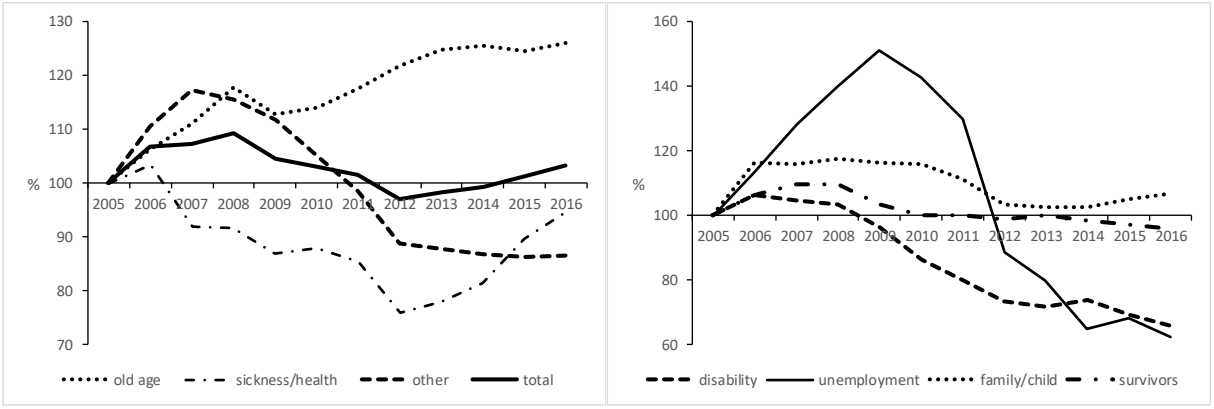


Source: Source: Spasova and Ward (2019), Annex ESSPROS[1] tables.

[1] European System of integrated Social PROtection Statistics

The trend of aggregate per capita spending in Hungary at constant prices is reflected in the solid line of the left-hand panel of Figure 2, which also shows expenditure by separate spending areas. Since Hungary's population was shrinking, unchanged aggregate spending meant a minor increase per capita of 3% over the period examined, from €2,109 to €2,180 at constant (2010) prices. These nearly identical amounts hide some important changes in composition. As Figure 2 demonstrates, the Hungarian social protection system shifted from social investment to income replacement and from in-kind programmes to cash programmes while becoming more skewed to programmes supporting elderly people. Old-age benefits at the end of the period examined were about 25% larger per capita than at the beginning of the crisis. Funds for this function grew steadily, and even during the crisis they dropped only modestly and soon recovered, shielding old people effectively from poverty. In contrast, spending on healthcare/sickness fell steadily between 2006 and 2012, losing more than a quarter of its value; and despite rapid growth after that it had not regained its pre-crisis level by 2016. Disability spending (dashed line in the right-hand panel) followed a similar path, but instead of recovering after 2012 it kept falling even further.

Figure 2. Per capita social protection expenditure by function at constant (2010) prices, Hungary 2005-2016 (2005=100)



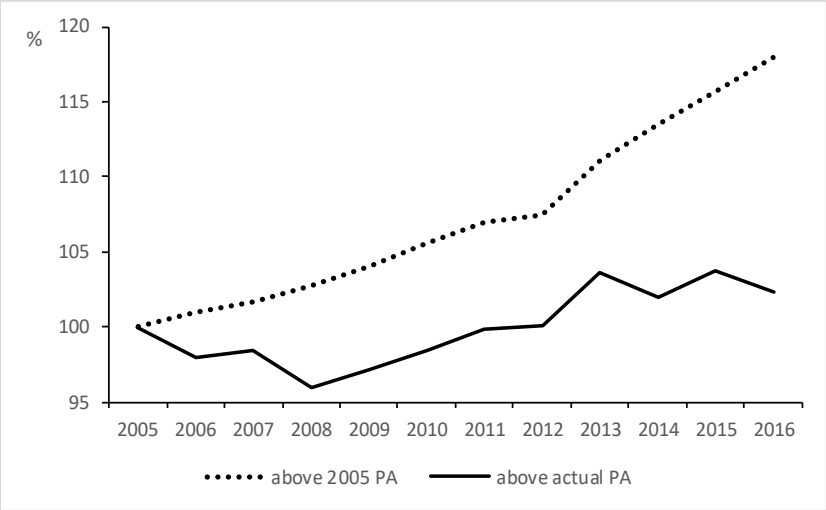
Source: Eurostat spr_exp_fto, spr_exp_fol, spr_exp_fsi, spr_exp_fdi, spr_exp_fun, spr_exp_ffa.
Note: For illustrative purposes the vertical scales of the two panels differ.

The shape of the **old-age** curve in Figure 2 was conditioned by various factors including demography, economic developments and pension policy. At the beginning of the period discussed here, in 2005, the pension age (PA) stood at 62 years for men and 60 for women, and was in the process of gradually increasing to 62 for both sexes by 2009. Not long after that a further transition started in 2014: this second phase is expected to conclude in 2022 when the PA will reach 65 for both sexes. The dotted line in Figure 3 shows how the size of the population older than the PA would have grown if the 2005 rules had remained in place, with a rise of nearly one fifth by 2016, to almost a quarter of the total population. This was the period when a large cohort, the so-called Ratko-generation, reached retirement age (named after the then-minister of social affairs who oversaw the implementation of a rigid anti-abortion regime that lasted four years in the mid-1950s). The two increases in the PA were aimed at postponing the retirement of that generation. The solid line in Figure 3 shows the effect: the size of the above-PA population was practically the same in 2016 as it had been in 2005 (which still meant a relative increase compared with the total population, which was shrinking).

However, raising the PA was just one component of the policy package for extending working lives, as retirement below the PA was common. In 2011, nearly 30% of beneficiaries younger than the PA took up 25% of pension benefits. The routes to leave the labour market were various. New regulations that came into effect on 1 January 2012 closed many of these ways and narrowed those that remained open, making retirement below the PA more difficult. A route through early retirement based on service length (*előrehozott nyugdíj*), which was a type of anticipated pension that offered benefits with

no or just minor reductions, was closed down altogether. No new such benefits could be established any longer after 1 January 2012. This provision has been mostly phased out since then. As the only significant step made in the opposite direction, in 2011 a new retirement channel was opened for women, and only for them, independent of age but based exclusively on service years (40 years including periods on maternal leave). This measure prevented the effective retirement age for women catching up with that for men. Since than the gender gap in the effective retirement age has widened again.

Figure 3. Size of population older than pension age, according to 2005 and actual rules, Hungary 2005-2016 (2005=100)



Source: Author's calculation based on Central Statistical Office data.
Note: PA = pension age.

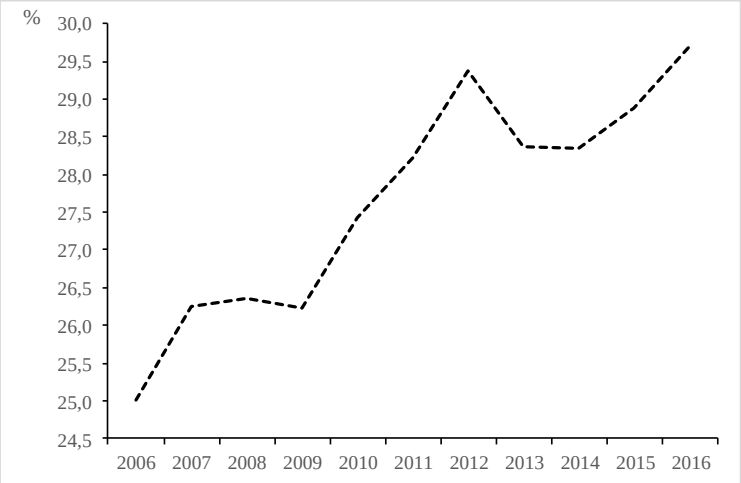
Nevertheless, the overall outcome of these measures was a rapid rise in the effective retirement age. We will return to this issue in Section 3.

Apart from the retirement age, the other component influencing the trend of pension expenditure was benefits. In the boom years before the crisis, the so-called 13th month pension, a bonus on top of the regular benefit, was phased in gradually: one week in 2003, two weeks in 2004 and so on until 2006. It did not last long. In 2008, its amount was capped at HUF 80,000 (around €320) and in 2009 it was abolished altogether. In addition to withdrawing the extra benefit, another measure cut entry pensions. Benefits are established by a formula based on length of service and the average indexed net monthly wage earned after 1988 (that is, the start of tax records). In 2008, the authorities redefined net wages. Until then, net wages had been defined as gross wages less personal income tax. Under the new rule, gross wages were also netted by the employee share of social insurance contributions (at the time 9.5%; currently 10%). This severe cut was partly compensated for by a different valorisation system, that is the indexation of past earnings. The overall effect was a cut of about 7% in entry pensions.

Pensions in payment are indexed to predicted price changes. Each January pensions are raised by the inflation rate expected in the annual government budget. If the actual rate (based a special pensioners' consumer basket) turns out to be higher, pensions are retroactively adjusted in November. Adjustment is asymmetric, in that benefits do not have to be paid back if inflation proves to be lower than expected. After 2013 there were regular overshoots, resulting in unintended benefit growth in real terms: 3.6% in 2013, 3.0% in 2014, 1.4% in 2015 and 1.0% in 2016. The cumulative effect, 9.3% real growth in benefits, was equal more than an extra month of benefit. In years when the economy grows faster than 3.5%, and the balance of the government budget is within the limits set by Parliament, pensioners receive an extra premium, which depends on their regular benefit and the growth rate. 2017 was the first year such a premium was paid.

The Hungarian public **healthcare** system went through various reforms before the period discussed here, going back and forth between a system of integrated health services and a split purchaser-provider contract model. In 2006-2007, the sector saw a renewed attempt to decentralise social insurance, this time combined with the aim of inviting private capital into the system and a parallel effort to curtail public spending. In the end, the privatisation plan was challenged by a referendum and had to be withdrawn before implementation, whereas cuts in the public budget were implemented. The current government, in power since 2010, opted for systematic moves towards a national health service, by centralising the allocation of capacity; establishing a new hierarchical system of actively managed patient routes; organising more effective competition of generics in public purchases of pharmaceuticals; and taking steps to replace contributions by taxes. From January 2012, the government took over the property rights, including debts, of hospitals formerly owned by local governments as well as outpatient centres belonging to these hospitals, which make up about three quarters of outpatient capacity.

Figure 4. Share of out-of-pocket household spending in total health budget (%), Hungary 2006-2016



Source: Eurostat hlth_sha11_hchf.

Aggregate spending on healthcare was 7.4% of GDP in 2016 (of which about 5.3 p.p. was public), down from 7.8% (6.3 p.p.) in 2006 but up from 7.1% (4.8 p.p.) in 2014. The total health budget per capita was €853 in 2016, of which €495 (58%) was financed through compulsory contributory health insurance schemes; €70 (8%) through government schemes; and €35 (4%) through voluntary healthcare payment schemes (see the first row of Table 1). The rest, €253 (30%), was made as out-of-pocket payments by households. This latter rate was among the highest in the EU (Eurostat hlth_sha11_hchf); it increased during the years of financial austerity (2006-2012), from 25% to 29%, and remained broadly stable after that (see Figure 4). Perhaps accidentally, but potentially as an indicator of inefficiencies in public spending, the time series for the out-of-pocket share of expenditure on healthcare/sickness is strongly correlated with the time series for healthy life years. Healthy life years at birth grew by 6.2 years for women and 7.0 for men in the course of a mere 7 years between 2005 and 2012, just when out-of-pocket payments grew relatively more important, but stabilised after that. The growth was fast enough to increase the proportion of healthy life years in total life expectancy from 70% to 77% for men, and from 76% to 83% for women, between 2005 and 2012; although it fell slightly thereafter.

Sources of financing varied by healthcare function during the period examined (Table 1). Whereas inpatient care was financed mostly through social insurance, households' contribution to outpatient care and medical goods was roughly equal to that of social insurance. Other government schemes were dominant in preventive care.

Table 1. Sources of financing for selected healthcare functions, Hungary 2016, %

	Health insurance	Household	Other	Total
Total expenditure	**58**	**30**	**12**	**100**
Curative and rehabilitative care	67	27	6	100
Inpatient	*88*	*8*	*4*	*100*
Day care	*65*	*34*	*1*	*100*
Outpatient	*45*	*47*	*8*	*100*
Medical goods	49	44	7	100
Preventive care	35	2	63	100

Source: Eurostat hlth_sha11_hchf.
Note: Health insurance = compulsory contributory health insurance schemes; household = out-of-pocket payments by households; other = government schemes and voluntary healthcare payment schemes.

Informal payments are a notorious issue in healthcare finances in Hungary. The most comprehensive survey of under-the-table payments so far (Bognár et al., 2000) – though now rather outdated – found that doctors, who collect the vast majority of such payments, received about 1½ times more through informal channels than in the form of their net wages (informal payments also avoid taxation, unlike gross wages). In other words, the average doctor earned more in informal ways than in legal, tax-paying forms.

About a third of the total health budget was spent on medical goods; a quarter on inpatient care; and another quarter on outpatient services. Day care in curative and rehabilitative care was marginal, as was preventive care; each received 3% of the total health budget.

2 Current mix and past changes in the sources of financing for social protection

Social protection expenditure was financed through contributions by economic and social actors (employees, employers, the self-employed and benefit recipients) as well as the general government; other receipts were marginal in the Hungarian case. The **share of social versus general government contributions** varied by social protection function and over time, but the pattern was often unexpected. The economic and employment crisis in 2008-2012, which could have led to an increasing role for government revenue as a replacement for falling social contributions, found Hungary with already mounting debts. The government could not allow itself to become further indebted in order to cushion the consequences of the crisis. Instead, it cut back social protection programmes, leaving the composition of sources of financing broadly unmodified. However, when the crisis was over, and when employment and wages started to grow quickly and tax avoidance receded – resulting in rapidly increasing contribution inflows – the government cut contribution rates instead of withdrawing tax revenues from the sector. The role of government revenues grew in most areas of social protection spending, and wherever it did not (old age and survivorship) this was due to additional factors such as the aborted pre-funding reform in the pension system that relieved the central budget of the costs of transition.

In 2015, 88% of revenues for old-age spending were collected in the form of contributions, 20 p.p. more than in 2005 (see Table 2). This increase was due to the maturation, and then in 2011 the abrupt de-funding, of mandatory private pension funds. From 1998 workers were given the opportunity (and new entrants to the labour market were obliged) to split their pension contribution between the first, pay-as-you-go, pillar and a privately managed fund. In 2005 the employee pension contribution rate was 8.5% of gross wages (see Table 3 below), of which 8 p.p. could be accumulated on the individual accounts of workers who opted out to the mixed (funded and pay-as-you-go) system. Only those, mostly older, workers who decided to stay fully in the pay-as-you-go pillar kept paying their entire share to the social security system. Contributions paid by employers (18% of gross wages in 2005) could not be split but were directed to the first pillar.

Box 1: Exceptionally high values for 'other receipts' in 2009-2010

The time series for 'other receipts' financing old-age pensions (and consequently total social protection benefits) includes two extreme values, for 2009 and 2010. As Table B1 shows, in those years the total amount of other receipts was 9-10 times higher than 2008 or 2011. Under Hungarian accounting practice at the time, asset revaluations (that is, changes in share values) were included in 'other receipts', as if they were financial flows. Due to huge swings in the value of pension fund reserves during the financial crisis this had a dramatic effect on 'other receipts' in 2009 and 2010 (based on personal communication with experts of the Department of National Accounts of the Hungarian Central Statistical Office).

Table B1. Total receipts and other receipts of the social protection sector, Hungary 2008-2011, billion HUF

	2008	2009	2010	2011
Total receipts	**6,628**	**7,135**	**7,276**	**6,089**
Other receipts, total	94	937	864	97
Of which by:				
corporations	63	810	847	81
central government	8	25	5	3
local government	0	0	0	0
social security	0	0	0	0
households	23	99	12	11
NPISH	0	2	0	0
rest of the world	0	1	1	2

Source: Eurostat spr_rec_nac.
Note : NPISH = non-profit institutions serving households.

The government underwrote the resulting financial deficit, which by 2009 had reached 1.3% of GDP. This resulted in an ever-growing share of government revenues in financing old-age spending, at the expense of contributions. The share of other receipts should also have been increasing gradually since the returns on the accumulating assets appeared in this accounting category. However asset revaluations that were considered other receipts shook the otherwise smooth time series (see Box 1 for further details on 'other receipts').

The maturation of the funded pillar was abruptly interrupted in 2011, when the government created conditions that made an overwhelming majority of fund members return to the first pillar with their entire contribution (the 3.1 million-strong membership at the end of 2010 melted to below 0.06 million by the end of the period discussed here).

An even more pronounced shift between contributions and government revenues took place in **healthcare**, but in the opposite direction. In 2005, contributions were about 4 times higher than government revenues in this sector; by 2015 the two sources were practically in parity; and by 2018 government revenues slightly exceeded contributions. This development was a consequence of the healthcare reforms mentioned briefly in the previous Section, which were reshaping a hybrid system into a national health service.

Table 2. Composition of social protection financing by function and source, Hungary 2005-2015 (%)

	2005			2015		
	Social contributions	Government revenue	Other receipts	Social contributions	Government revenue	Other receipts
Old age	68	25	7	88	12	0
Sickness/ health	78	19	3	51	49	0
Survivors	75	23	2	99	1	0
Disability	53	45	2	43	57	0
Unemployment	74	26	0	54	46	0
Family/child	12	88	0	12	88	0
Housing	0	100	0	0	100	0
Social protection n.e.c.	0	100	0	0	100	0

Source: Source: Spasova and Ward (2019), Annex ESSPROS tables.
Note: n.e.c.: not elsewhere classified.

Table 3 contains the **rates of social contributions for healthcare and pensions**. The rates are given as percentages of gross wages. The frequent, and at times abrupt, changes reflect the short time horizon of day-to-day governance. Sometimes the rates were modified during the financial year, as in 2006 (when the government postponed long-overdue austerity measures until after the elections); in 2009 (when the same government resigned and was replaced by a caretaker administration); and in both 2010 (when a new government with a super-majority in Parliament introduced new reforms mid-year) and 2019 (when a cut in the contribution rate was postponed from January to July). In 2010 the contributions flowing to mandatory private pension funds were rechannelled to social security; in the other three cases the contribution rate was modified.

Table 3. Pension and healthcare contribution rates, Hungary 2005-2019 (% of gross wages)

	Employer contributions					Employee contributions				
	Health, in-kind	*Health, cash*	Total health	Pension	Total, employer	Total health	*Health, in-kind*	*Health, cash*	Pension	Total, employee
2005			11	18	29	4			8.5	12.5
2006/1			11	18	29	4			8.5	12.5
2006/9	*7.0*	*4.0*	11	18	29	6	*4*	*2*	8.5	14.5
2007	*5.0*	*3.0*	8	21	29	7	*4*	*3*	8.5	15.5
2008	*4.5*	*0.5*	5	24	29	6	*4*	*2*	9.5	15.5
2009/1	*4.5*	*0.5*	5	24	29	6	*4*	*2*	9.5	15.5
2009/7	*1.5*	*0.5*	2	24	26	6	*4*	*2*	9.5	15.5
2010/1	*1.5*	*0.5*	2	24	26	6	*4*	*2*	9.5	15.5
2010/11	*1.5*	*0.5*	2	24	26	6	*4*	*2*	9.5	15.5
2011	*1.5*	*0.5*	2	24	26	6	*4*	*2*	10.0	16.0
	Social contribution tax					**Employee contributions**				
			Total health	Pension	Total, employer	Total health	*Health, in-kind*	*Health, cash*	Pension	Total, employee
2012			2.0	24.0	27.0	7	*4*	*3*	10.0	17.0
2013			0.0	27.0	27.0	7	*4*	*3*	10.0	17.0
2014			1.0	26.0	27.0	7	*4*	*3*	10.0	17.0
2015			3.9	23.1	27.0	7	*4*	*3*	10.0	17.0
2016			5.6	21.4	27.0	7	*4*	*3*	10.0	17.0
2017			4.5	15.8	22.0	7	*4*	*3*	10.0	17.0
2018			4.0	15.5	19.5	7	*4*	*3*	10.0	17.0
2019/1			5.3	13.7	19.5	7	*4*	*3*	10.0	17.0
2019/7			4.8	12.3	17.5	7	*4*	*3*	10.0	17.0

Source: Annual legislation.
Notes: The table includes only healthcare and pensions contributions paid by employees and employers; other contributions are discussed in the body of the text and shown in Table 5. The years 2006, 2009, 2010 and 2019 appear more than once due to mid-year changes; the number after the slash refers to the month of new rules taking effect. Changes in 2010 did not affect rates but recipients: pension contributions formerly paid to mandatory private pension funds were redirected to social security. Employer contributions were replaced by a social contribution tax in 2012 (see more in the body of the text). Social contribution tax was annually divided between pensions and healthcare and (in 2012, 2017 and 2019) unemployment (see Tables 4 and 5).

Another practice, introduced in 2012, added to the ad hoc nature of the regulations. Employer contributions ceased to exist as such and were reintroduced as a tax. The official translation of the Hungarian legal term (*szociális hozzájárulási adó*: social contribution tax) hides the symbolic nature of the move – the deletion of the actual term for contributions, *járulék*. A *járulék* creates eligibilities, an *adó* does not. The move is indeed symbolic as the benefit formula has always been based on employee contributions, which remained a contribution or *járulék*, so indeed entry pensions are not affected. However, although the social contribution tax is levied at a unified rate for healthcare and pensions, it is not split equally between the two social risks. Instead, Parliament distributes the amount between the two (and sometimes other social purposes) in the annual budget, in ever-changing proportions. Table 4 contains the actual shares. In 2012, 2017 and 2019, a small part of the social contribution tax was allocated to the National Employment Fund (*Nemzeti Foglalkoztatási Alap*). (This is also the reason why the total healthcare and the pension columns do not add up to the total employer column in Table 3 for these three years.)

In 2013 the ceiling of the social contribution tax rate was abolished, which helped the balance of social security in the short and medium term, but will result in increasing inequalities in benefits, and an excessive burden on the pension budget, in the long run.

Table 4. Distribution of the social contribution tax among social protection functions in the annual budget, Hungary 2012-2019 (%)

	Pensions	Healthcare	Employment
2012	88.89	7.41	3.70
2013	100.00	0.00	0.00
2014	96.30	3.70	0.00
2015	85.46	14.54	0.00
2016	79.43	20.57	0.00
2017	71.61	20.50	7.89
2018	79.50	20.50	0.00
2019	70.22	27.31	2.47

Source: Annual legislation.

The trends in healthcare contributions and pension contributions are the exact opposite of each other. The contribution rate for healthcare (employer and employee rates combined) fell from 15% in 2005 and 17% in the second half of 2006 to 7% in 2013, only to climb back to 12% in 2019. In contrast, pension contribution rates grew from 26.5% in 2005 to 37% in 2013 but had fallen to below 24% by 2019. These opposite trends after 2012 were to a large extent due to the reassignment of disability spending from the Pension Insurance Fund to the Health Insurance Fund. In addition, the recent slope in the pension contribution rate is also the consequence of the rise in the effective retirement age (see the next Section).

Currently, unemployment benefits are funded by the **labour market contribution** (*munkaerőpiaci járulék*) paid by employees, and the **vocational training contribution** (*szakképzési hozzájárulás*) levied on employers. Each takes 1.5% of gross wages, which covers only about half of expenditure on unemployment. The rest is covered by general government revenue. The combined rate, 3% of gross wages, is down from 6% in 2007 (and 5.5% in 2005), as shown in Table 5.

Table 5. Unemployment-related contribution rates, Hungary 2005-2019 (%)

	By employer	By employee	Total
2005	4.5	1.0	5.5
2006/1	4.5	1.0	5.5
2006/9	4.5	1.5	6.0
2007	4.5	1.5	6.0
2008	4.5	1.5	6.0
2009	4.5	1.5	6.0
2010	2.5	1.5	4.0
2011	2.5	1.5	4.0
2012	1.5	1.5	3.0
2013	1.5	1.5	3.0
2014	1.5	1.5	3.0
2015	1.5	1.5	3.0
2016	1.5	1.5	3.0
2017	1.5	1.5	3.0
2018	1.5	1.5	3.0
2019	1.5	1.5	3.0

Source: National Tax and Customs Administration.
Notes: The table includes employer contributions (2005-June 2009), labour market contributions (July 2009-2011) and vocational training contributions (throughout the entire period) on the employer side; and employee contributions (2005-June 2009) and labour market contributions (since July 2009) on the employee side. 2006 appears twice due to the change of contribution rate mid-year.

The total contribution rate is shown in Table 6. The fluctuation, first from 47.0% (in 2005) to 50.5% (2007-2009), then down to 45.5% (2010), up again to 47.0% (2012-2017) and down again to 37.1% (second half of 2019), reflects the attempts by successive governments to balance the needs of social protection and international tax competition. In general, however, the trend has been downwards, especially since 2016. This is in line with the rapid increase in real wages, which could have financed expansion in social spending or public human capital investments; accumulation of reserves; or tax cuts. Clearly, the government's preference is the latter. The total contribution rate fell by about 10 p.p. between 2016 and the second half of 2019, from 47.0% to 37.1%. The government has promised to reduce the contribution rate for employers even further if real wages keep growing. The relative share of employers in the contribution package has been declining in an almost monotonous way, from 71% in 2005 to a level in 2019 where the employer and employee rates are almost the same. The tax incidence literature is all but unequivocal in assigning both employer and employee contributions to the employee, so in reality the entire contribution package is borne by the employee (although there could be sectoral differences depending on price elasticities). However, the relative share matters, in that employee contributions are more tangible for those insured, making them more sensitive to reforms that include this part of government revenues.

Between 2007 and 2015 employers of workers in **arduous or hazardous jobs** were mandated to pay 13% of gross wages on top of the standard contributions. The list of such jobs was set by law and workers taking them up were rewarded with a lower retirement age. In fact, such an early-retirement option had existed long before, but this special labour market risk was integrated in the old-age benefit system and became separated only in 2007. The new contribution was introduced gradually (2007, 0%; 2008, 3.25%; 2009, 6.5%; 2010, 9.75%) and was fully implemented in 2011 only to be abolished four years later. Rights accumulated prior to 2015 were preserved, so the closure of this channel of early retirement will happen only gradually.

Table 6. All contribution rates combined, Hungary 2005-2019 (%)

	Employer	Employee	Total	Employer share in total
2005	33.5	13.5	47.0	*71*
2006/1	33.5	13.5	47.0	*71*
2006/9	33.5	16.0	49.5	*68*
2007	33.5	17.0	50.5	*66*
2008	33.5	17.0	50.5	*66*
2009/1	33.5	17.0	50.5	*66*
2009/7	30.5	17.0	47.5	*64*
2010/1	28.5	17.0	45.5	*63*
2010/11	28.5	17.0	45.5	*63*
2011	28.5	17.5	46.0	*62*
2012	28.5	18.5	47.0	*61*
2013	28.5	18.5	47.0	*61*
2014	28.5	18.5	47.0	*61*
2015	28.5	18.5	47.0	*61*
2016	28.5	18.5	47.0	*61*
2017	23.5	18.5	42.0	*56*
2018	21.0	18.5	39.5	*53*
2019/1	21.0	18.5	39.5	*53*
2019/7	18.6	18.5	37.1	*50*

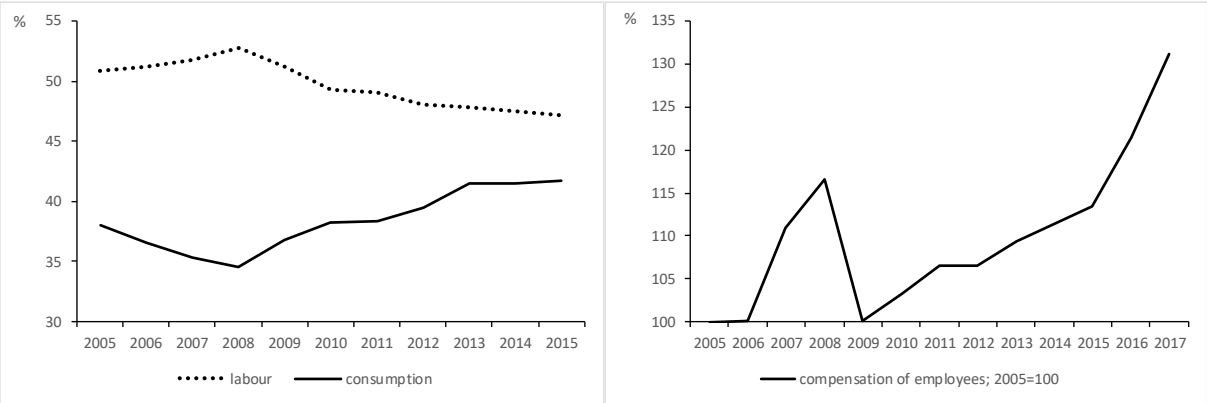
Source: Annual legislation and National Tax and Customs Administration.
Notes: The years 2006, 2009, 2010 and 2019 appear more than once due to changes in mid-year; the number after the slash refers to the month of new rules taking effect. Changes in 2010 did not affect rates but recipients: pension contributions formerly paid to mandatory private pension funds were redirected to social security.

3 Strengths and weaknesses of the existing mix of financing options and potential future sources of financing – national debate on the topic

Social contributions, which are **levied on labour income**, make up about two thirds of the revenues of the social protection sector. In this respect recent years have seen two opposing dynamics. On the one hand, the current government, which took office in 2010, is resolute about 'building a society based on labour'. This also results in, among other measures, an effort to reduce the tax wedge on labour, including the slashing of contribution rates (see Table 2 in the previous Section). The left-hand panel of Figure 5 shows the opposing dynamics of taxes on labour and consumption. The two time series almost perfectly mirror each other. The share of total public revenues levied on labour peaked at 53% in 2008, against 35% for taxes on consumption. This gap of 18 p.p. fell to 5 p.p. by 2017 (47% on labour, 42% on consumption). On the other hand, this has been compensated for so far by a dynamic growth in employment and wages, shown on the right-hand panel of Figure 5 as changes in the aggregate compensation of employees. This indicator was chosen because it combines the effects of dynamics both in employment and in wages.

In short, during this period of catching up with the western part of the continent, financing the social protection sector did not create an unsurmountable obstacle in Hungary: the country could even afford to cut tax rates on labour in the recent boom years.

Figure 5. Relative share of taxes on labour and consumption (left-hand panel) and aggregate compensation of employees, Hungary (2005=100)



Source: Author's calculation from Eurostat National Tax Lists and nasa_10_nf_tr.

An important characteristic of the Hungarian labour market is **widespread informality**. Due to a large, although in recent years decreasing, tax wedge the collaboration of employers and employees in tax avoidance or even tax evasion saves important amounts in taxes, which is shared by the parties. In such cases the issue is frequently less of the coverage of people (whether workers are insured against various social risks) but more the coverage of wages (whether contributions are fully paid).

Informal payments affect both current finances (as these wages do not sufficiently contribute to the social insurance funds) and future benefits (as tax avoiders do not accumulate adequate rights – which in turn raises the prospect of old-age poverty).

Informality has induced intensive research. Balog (2014) analysed the distribution of workers around the legal minimal wage (MW) in 2006, 2010 and 2013 and the guaranteed wage minimum (GWM, the legal minimal wage of workers employed in a position requiring at least secondary level of education) in 2013. He found exceptionally high peaks in contributions at these particular levels. Estimations of the number of

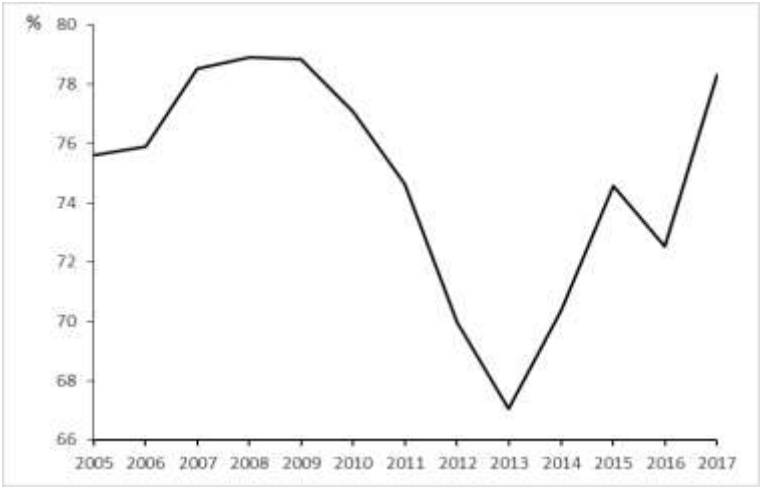
workers involved, based on corporate surveys of companies employing 5 or more workers, varied between 300,000 and 500,000 (Benedek et al., 2013) at the peak in the mid-2000s, though falling since then. Since informal arrangements are more frequent in establishments employing fewer than 5 people, the above numbers probably underestimate the extent of the problem. Svraka, Szabó and Hudecz (2013) compared estimates based on the wage survey and employer social security declarations. They found that the number of workers earning MW or GWM can be as much as 50% higher than captured by surveys.

The salience of MW and GWM probably indicates the presence of tax-avoiding or tax-evading arrangements. Elek et al. (2012) found that about 40-50% of workers who reported their wages to be at these two thresholds earned more in reality. Since this estimation was also based on the wage survey, the actual rate may be even higher.

Another indirect piece of evidence for the problem of undeclared wages is the inelasticity of employment, activity and the size of the moonlight economy to drastic changes in MW regulations. The amount of the MW nearly doubled in two steps between 2000 and 2002 (from HUF 25,500 to HUF 50,000 – that is, from 29% of the average wage to 43%), offering a kind of natural experiment. Such a shock might be expected to negatively affect economic activity and employment, as well as increasing unemployment and informality. However, as labour market data show, and research on the extent of the undeclared economy has confirmed (see Elek et al., 2009; Benedek et al., 2013), no such consequences arose. Even such a radical increase induced only marginal effects, if any, on employment, activity and moonlighting. Instead, the proportions of taxed and tax-avoiding income changed.

A similar development was observed as a consequence of the economic crisis. Figure 6 depicts the rate of wage coverage – that is, the proportion of the wage bill on which insurance contributions are actually paid. Its level, 79% at the start of the crisis, quickly dropped to 67% by 2013, before starting to climb back to nearly pre-crisis levels by 2017.

Figure 6. Wage coverage, Hungary 2005-2017 (%)



Source: Author's calculation from Central Statistical Office data.
Note: Wage coverage = proportion of wage bill on which insurance contributions are actually paid.

In short, widespread informality threatens the social protection system in two ways: it diminishes current revenues and threatens the old-age income of future seniors. In addition, its effect is amplified by an economic crisis, since economic actors reduce their tax payments as the first step by way of adjustment.

Another frequently discussed risk to future financing of social protection is **population ageing**. However, we find ageing less of a pressing issue. As Gál and Radó (forthcoming in 2019) show, the effective retirement age (the average age of exit from the labour

market) is flexible enough to absorb the expected negative effects. Between 2005 and 2016 the effective retirement age increased by 3.1 years, or 3.4 months a year on average. In other words, an average worker got closer to the effective retirement age by only 17.2 hours a day, instead of 24, because the effective retirement age grew 6.8 hours daily (about the same time an average person spends sleeping). They also show that this improvement was enough, or even more than that, to allow the labour market to absorb improvements in mortality. In 2016, the average exit age from the labour market was 61.2. People of that age had a life expectancy of 19.7 years, practically the same as in 1992 at a lower effective retirement age (56.7) and less than in 2005 (20.3 years retiring at age 58.1) or in 2008 (21.0 years retiring at age 58.3). Since the country has further improved its education system in recent decades by expanding tertiary enrolment among currently young cohorts, an additional increase in the effective retirement age in the future can be expected. Such a development could diminish the upward pressure on demand for social protection and the downward pressure on its contribution base.

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