# István György Tóth: Is Hungary still in search of its middle class?

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# 7 In search of the middle class: Hungary

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#### 1. Introduction

The simplest, purely relativistic economic definition of the middle class covers people who belong to the middle of the income distribution. As the distribution of income – like any chosen continuous measure – always has a middle range, the task of identifying the middle class at first glance looks easy. By these standards, the width of the Hungarian middle income class is not outstanding by international comparison. In 2014, roughly 76 per cent of all Hungarians belonged to the income bracket ranging from 60 to 200 per cent of the median equivalent income (henceforth defined as the 'broad middle income class'), with an internal distribution of 16 per cent belonging to the 'lower-middle income class' (from 60 to 80 per cent of the median), 32 per cent to the 'core middle income class' (from 80 to 120 per cent of the median) and some 28 per cent belonging to the 'upper-middle income class' (from 120 to 200 per cent of the median). Income inequality in Hungary belongs to the middle range of EU countries and also of the OECD (Ward et al. 2009; OECD 2008, 2011, 2015; Tóth 2005, 2008, 2014) and by these definitions, the size of the Hungarian middle class looks fairly wide by cross-country comparison.

However, the meaning of 'middle class' has a much broader connotation, implying the possession of adequate housing, the possibility of geographical mobility (for example, own car), adequate resources (or insurance) to cover periods with weaker health or lower working capacities in old age, as well as the ability to provide for regular recreation for the individual and family.<sup>3</sup> Furthermore, the middle class is not simply about those things that we have or can have, but also about their security. In other words, if a middle class family suffers an unexpected shock, their ability to overcome the shock without a major risk of falling out of the middle class can also be important. For example: a middle class person can become unemployed or may lose their home due to loss of employment or a failing business. To stay in the middle class, they have to have a good chance of finding another job or at least sufficient unemployment insurance to help them through the rainy days.<sup>4</sup>

By these broader standards, the picture is much less favourable in Hungary. The same source survey of Hungarian households (from which the abovementioned distribution was drawn)<sup>5</sup> also shows that roughly half of the 'core middle income' households are materially deprived (lacking three of the nine listed deprivation items) and around a quarter of them are reported as being affected by 'severe material deprivation' (lacking four of the nine).<sup>6</sup>

What we see, therefore, is a modestly wide but seriously weak middle-income class in Hungary. The aim of this chapter is to present the evolution of developments leading to this characterization. In what follows I present the historical destruction and reconstruction of the (traditionally weak) Hungarian middle classes (Section 2.1), followed by a presentation of the economic transition, the consequent changes in the world of work (Section 2.2)

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<sup>&</sup>lt;sup>2</sup> Below 60 per cent of the median can (corresponding to the Eurostat definition and academic conventions) be named 'income poor', while people living in households with above 200 per cent of the median can be considered 'well-off'.

<sup>&</sup>lt;sup>3</sup> The meaning of "middle classes" in sociological terms is broader than this, of course. Atkinson and Brandolini (2013) calls for the integration of occupation and also wealth into the definition of the middle class. Sociological accounts take a broader look at class and social status (Goldthorpe 2012). Policymaking focuses more on living standards issues and on consumption prospects (see, for example, White House Task Force 2010).

<sup>&</sup>lt;sup>4</sup> An even broader definition would classify assets that are necessary for membership of the middle class into three categories: in addition to decent incomes, a stable middle class position assumes sufficient resources originating from human capital (skills, education, occupation), from network capital (which can be mobilized in hard times) and physical capital (wealth, preferably in forms that can be mobilized if needed). This would, however, go beyond the scope of this chapter.

<sup>&</sup>lt;sup>5</sup> The Tárki Household Monitor Survey covers 2,000 households in each wave. The series goes back to 1992 (the first six waves were an annual panel, then regular cross-sections every second year. For more, see Szivós and Tóth 2015).

<sup>6</sup> According to Eurostat, material deprivation is defined as the inability to pay for at least three items on a list of basic expenditure items. The inability to pay for at least four of the listed nine items defines severe material deprivation.

and the development of the crisis (Section 2.3). Section 3 is devoted to the socio-economic composition of the middle-income classes (Sections 3.1 and 3.2) and the trends of what we call the broader middle classes (defined by occupational and consumption patterns) in Section 3.3 and Section 3.4. Section 4 is devoted to case studies that briefly present the skill and age bias of the transition (case study 1) and some mobility trends (case study 2). Section 5 concludes.

#### 2. Weak middle classes - a historic account

In pre-transition Hungary, as in other central and eastern European countries, the official ideology was to build a classless society. Concentrated efforts to industrialize the economy led to the large-scale social mobility of previously poor and mostly agricultural masses (Andorka, 1982), while serious constraints on economic freedom and the overwhelming presence of regulation in the shortage economy (Kornai 1980, 1992b) prevented the creation of a wealth-based upper middle class. Inequalities (at least of measured incomes and wealth) appeared relatively low (Atkinson and Micklewright 1992) in Hungary, as throughout the region. This is not to say that there was no strong social stratification, on the contrary (for Hungary, see Ferge, 1969; Andorka, 1982; Kolosi, 1987).

One of the major questions of post-socialist socioeconomic development is how the economic transition and political transformation would affect the class structure. It was also an open question how the inherited (from both pre-socialist and socialist times) social structures would facilitate, block or alter transformation processes in post-socialist societies.

#### 2.1 Origin of the historical weakness of the middle classes in Hungary

The fact that Hungary did not have a strong middle class after the socialist period is not a historical novelty. The social and economic structure of the country prior to the Second World War was characterized by the dominance of agriculture with only embryonic industrialization; strong concentration in both agriculture and industry; a high degree of inequality in wealth and earnings; and, as a consequence of all this, a dualistic social structure. Back at the beginning of the twentieth century, approximately 0.5 per cent of the landowners controlled 44 per cent of the land, while most independent peasants operated tiny farms. Meanwhile, some two-fifths of those working in agriculture did not own any land at all (Andorka, 1982: 33–34). The financial and industrial sector was controlled by some 50 families, and medium-sized enterprises were largely missing. Large public bureaucracies lost their functions after the treaties after the First World War reduced the country to one-third of its pre-war territory (and population).

Due to the lack of comprehensive social and institutional reforms, inequality of wealth and income remained very high in Hungary until the Second World War. In the interwar period, about half of the Hungarian population lived in extreme poverty. In 1930, approximately 20 per cent of total incomes were concentrated in the hands of 0.6 per cent of the population, while 81 per cent shared 44 per cent of total incomes. The average income of the rich was some fifty times higher than that of the poor (Matolcsy, quoted by Ferge, 1986: 40). Stagnation was also reflected in social mobility which may even have declined, especially among the agricultural population (Andorka, 1982: 249–50).

The high inequality in agriculture, as well as industry and the cleavage between a quasi-feudal class of landowners, public bureaucracies and the church, on one hand, and a small class of modern capitalists, intelligentsia and industrial workers on the other, created a dualistic social structure (Erdei, 1980; see also Gyáni and Kövér 2003). This structure was a major obstacle to social reform (Andorka and Harcsa, 1988).

As a result, Hungary was relatively backward country in the interwar period. Just before the Second World War, some 37 per cent of the national product was produced in agriculture and only 36 per cent in industry. National income per capita was less than one-third of the most developed countries in Europe (Great Britain and Sweden), but exceeded that of most Mediterranean and eastern European Countries, with the exception of Italy (Pető-Szakács, 1985: 11).

Public sector was relatively large high in terms of public administration and employment and also industrial enterprises Hungary arrived at the Second World War with approximately a 10 per cent public sector employment share in industry (especially mining and public utilities) plus a reasonable share in agriculture (state farms and state owned forests) and an extensive public administration (Pető-Szakács, 1985: 77). The post-war land reform covering more than 35 per cent of the land could not contribute to the emergence of a strong middle class, given that 40 percent of the expropriated land was immediately nationalized and the rest was soon taken

back from the new owners in the process of forced collectivization, despite suggestions for compensatory strategies by the Smallholders Party (Donath, 1977).

Nationalization of economic activities<sup>7</sup> went in parallel with the raising of political, economic, technical and legal obstacles to individual wealth accumulation and thus stymied the development of a middle class. The widespread regional mobilization of workers (because extensive industrialization required cheap labour) led to the break-up of work patterns. The world of work soon became over-politicized: party membership and loyalty to the regime became one of the most important criteria for getting ahead, especially at the higher levels of the hierarchy. A large share of incomes were redistributed through the state budget, again leaving only a constrained role for market forces in middle class formation.

While aggressive forces were at work to build a socialist society, their success was undermined by opposing factors rooted in the functioning and failures of the regime itself (Kornai, 1992a, 1994).

The inadequate performance of the state sector pushed the government to gradually allow private activities and this led to the emergence of a 'second economy'. This term is broader than 'illegal economy' because it includes all activities outside state control. Many people started living a 'double life': working in the socialist sector during the day and otherwise operating private or quasi-private businesses. Approximately two-thirds of households in the 1970s became involved in small-scale agricultural production. At the beginning of the 1980s, small, semi-private (or sometimes purely private) firms were established, first in trade and services, then in industry. The relaxed control of labour (starting at end of the 1960s) allowed people to manage their working time more freely and to share their energies between first and second employment (Szalai, 1992). Many households thus developed a diversified portfolio of jobs and earnings in order to supplement their inadequate incomes from the formal sector. This extension of the second economy later provided the nucleus of a fully private sector, and to some extent, changes on which a middle class could be built.

The dualistic nature of Hungarian society prevailed – to some extent and in a different form – under socialist rule as well. In addition to the fact that differential involvement in the 'second economy' drew additional division lines in the social structure, new, horizontal dimensions of inequality and stratification appeared. Neither position in the occupational structure, nor ownership or income in themselves could define social position: material differentiation, cultural inequalities, housing conditions and power relationships all had their role in defining social strata. As Kolosi (1987: 196) has shown, some two-thirds of Hungarian society could be described as 'status inconsistent' (meaning that they occupy different positions in the various dimensions of stratification). It is important to highlight that status inconsistency prevailed primarily in the middle of society, while consistently good and consistently bad combinations could be found both at the top and the bottom. The size of the consistent elite was estimated to be small (around 6 per cent), while the group of people deprived at least to some extent was estimated to be much larger (around 20 per cent), while status groups in the middle showed different types of status inconsistency, alongside cultural, material and regional (settlement) dimensions. In addition, the wide range of redistribution (the provision of education, health services, various in-kind benefits, as well as the rationing of many goods, most importantly, housing) has also shaped the social structure.

To summarize, the middle classes were traditionally weak in Hungary and while the socialist system allowed a rise in the living standards of the masses, no consistent middle class emerged before 1990. Status inconsistency across various dimensions of social stratification prevailed, large classes with decent incomes *and* sufficient reserves could not develop. When the socialist economic and political system turned out to be unsustainable, the socio-economic and political transition brought the promise of stabilization, accumulation and development of a middle class. The reasons for the only partial success lie in the management of wealth accumulation (privatization) and the development of labour markets (and their interaction with the social protection system).

#### 2.2 Factors affecting middle class formation since the transition until recently

This section reports on various aspects of middle class formation in Hungary during the transition<sup>8</sup> and on their implications for the formation of the middle classes.

To understand the political context of the systemic changes in Hungary, it must be underlined that it was not like a 'revolution', in which economic and political actors organize themselves to break the power of the old elite. Rather, driven by geopolitical processes such as the end of the Cold War and the collapse of the Soviet Union,

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<sup>&</sup>lt;sup>7</sup> State employment in manufacturing, for example, reached 84 per cent as early as the beginning of 1948 (Berend, 1979: 80).

<sup>&</sup>lt;sup>8</sup> For the full story of the Hungarian transition from the perspective of inequality, see Fábián et al. (2014).

the changes in the rules of the game and of the political and economic institutional settings were under the control of various elite groups, competing with each other. Because capitalization was in general very low and the class of capitalists and the middle classes were weak, the 'intelligentsia' working in various redistributive sectors of the economy was strong enough to be able to set the tone and shape the process of transition. State enterprises were broken up and privatized, but service sectors such as education and health care proved difficult to reform, given the many crosscutting vested interests and lobby groups.<sup>9</sup>

#### 2.2.1 Privatization

The privatization process in Hungary can be divided into several phases (Mihályi, 2010: 29; and Kolosi, 2000). Starting in the second half of the 1980s (accelerating between 1988 and 1990) in a sizeable segment of the economy, a management-initiated 'spontaneous' process of partial or total ownership conversion took place. This affected mostly small and medium-sized enterprises, in which control over useable resources ended up in the hands of the first- or second-tier managers of the old socialist enterprises. This was possible mainly in sectors and enterprises where the general lack of capital prevented transformation.

For the privatization of larger companies, with more sophisticated institutional forms and in greater need of capital, special privatization techniques were developed. Between 1990 and 1994, the sale of marketable firms started. In some cases the breaking up of middle sized firms was followed by sale of assets; in other cases companies were transformed into shareholding companies and their shares were sold. The first freely elected government (led by József Antall) after the introduction of the multiparty system prioritized the creation of a national bourgeoisie. Compensation vouchers were introduced for those who lost their lands and property during nationalization after the Soviet occupation. Compensation vouchers were issued to 2 million Hungarians plus some 250,000 who were not citizens at the time; 760,000 new owners in agriculture and one-third of total land for cultivation was affected. In addition, some 300,000 people received increased pensions (Mihályi, 2010). Most, however, were not interested in privatization, so newly emerging entrepreneurs started buying the compensation vouchers at discount prices, thus boosting demand for assets to be privatized. Some 50 per cent of assets sold in the main phases of privatization were paid for in vouchers (mostly bought in secondary voucher markets). In addition, the government introduced (in 1993–1994) special, very favourable loan schemes for those wishing to buy stakes in companies for sale. This further contributed to the process of wealth accumulation of the new Hungarian upper middle classes (Kolosi, 2000).

However, the general undercapitalization of the economy prevailed and when in 1994 the socialist party, in coalition with the Free Democrats was elected, the government (led by Gyula Horn) opted for a large-scale sale of major firms in energy, utility and banking. This happened on a massive scale: the largest revenue flow arrived in 1995, amounting to over 8 per cent of GDP from privatization (but 1994 and 1996 were also significant) (Mihályi, 2010).

As Mihályi (2010) concludes, the penetration of transnational corporations was fast and smooth in the Hungarian privatization process. However, the slow and hesitant development of home-grown private firms <sup>10</sup> and the inability of the new market economy to create jobs for hundreds of thousands of under-qualified Hungarians was the price of this. In addition, various assessments of the privatization process and of the emergence of the Hungarian 'new rich' agree that (with a few exceptions), the old communist nomenclature was not able to convert its power and links into economic power after the transition, as they were, by and large, outmanoeuvred by the emerging young generation of Hungarian businessmen (Mihályi, 2010; Kolosi and Szelényi 2010; Laki and Szalai 2004, 2013).

All in all, foreign direct investment had a major role in the initiation and acceleration of economic growth, but also in the creation of a new economic structure. The massive influx of FDI brought about significant technological modernization. Technological change increased demand for young educated labour, while employment prospects worsened for the low educated and older cohorts with obsolete human capital. The employment rate of the low educated remained the lowest in the EU due also to the underdeveloped SME sector.

#### 2.2.2 Transition to a lower employment equilibrium

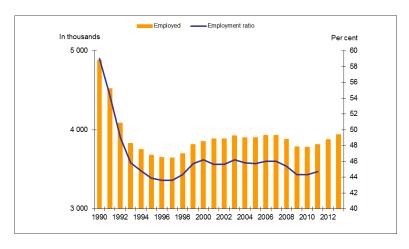
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<sup>&</sup>lt;sup>9</sup> Using the German terms for differentiating between ownership classes and skills and education classes, one can speak of 'Besitzbürgertum', busy in these years with accumulating capital in a low capital context, on one hand, and 'Bildungsbürgertum', active in setting the rules in politics and the economy but protecting their interests in science, education and health care (Kolosi and Tóth, 2012).

<sup>&</sup>lt;sup>10</sup> The steady growth of entrepreneurial activity (as measured by the number of newly formed enterprises) was, especially in the 1990s, to some extent an artefact. Many of these were 'forced entrepreneurs' (in reality, they became self-employed to minimize tax and social security contributions).

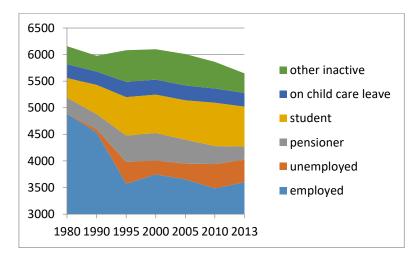
The first years of the transition witnessed a large-scale change in employment equilibrium. This led to a situation in which a society initially characterized by seemingly high (but due to unemployment within factory walls, very inefficient) level of employment during the course of transition moved to a regime which was characterized by very low employment and a high rate of exit from the labour force. <sup>11</sup> As Figure 1 shows, employment fell dramatically between 1990 and 1993, resulting in long-prevailing lower employment rates.

Figure 1 Employment ('000, left scale) and employment ratio (%, right scale) in the Hungarian economy, 1980–2013



Source: Fazekas and Neumann (2014) Fig 4.1.

Figure 2 Number of people (of male 15–59 and female 15–54) belonging to the various labour market categories ('000s), 1980–2013, selected years



Source: Fazekas and Neumann (2014)

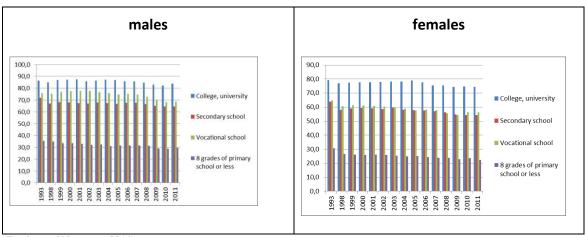
Total annual average number of employed fell from 4.9 million (4.5 million of active age) in 1990 to 3.7 million (3.6 million of active age) by 1995. This massive drop in employment was not fully taken up by unemployment. The two major inactive groups absorbing the difference were pensioners and other inactives, in addition to the relatively smaller increases in students and those on maternity leave.

<sup>&</sup>lt;sup>11</sup> In fact, the transition could also be described as a way of removing microeconomic inefficiencies (overemployment at firm level) by pushing the burden onto the state.

As Figure 2 shows, the period between 1990 and 1995 is of special interest here. This is the period of large structural change, when the labour market parameters of the population changed. This is discussed in case study 1

To better understand the long-term freeze of overall employment levels, it is worth analysing employment rates by education categories for both sexes, separately. As shown in Figure 3, levels of employment are relatively high for those with at least a secondary education. The long-term low employment rates for the lowest educated, however, indicate the core of the problem of low level employment equilibrium. The high level of inactivity is blocked by the mutual inability of supply (low skills of the people involved, no attempts to provide adequate second schooling) as well as of demand (no proper jobs offered for the low skilled by the perhaps technologically 'over-developed' labour market).

Figure 3 Employment rates of population aged 15–64 by level of education and gender, 1993–2011 (%)



Source: Fazekas and Neumann (2014)

Data based on KSH MEF. Note: Up to 2000 data are weighted on the basis of the 1990 Population Census

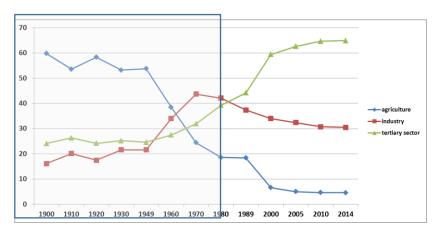
All in all, we can conclude that the transition to a market economy and the emergence of a much more efficient economy as a 'by-product' has led to the development of a large, marginalized segment. From the perspective of the middle classes this had far-reaching consequences: it increased the clientele of the welfare state (primarily to be paid for by middle class taxes), decreased the tax base (given that massive parts of society did not have taxable incomes) and, in purely distributional terms, created a large class of people who had low incomes ('below' the middle classes), without any positive effect on the absolute position of the middle.

#### 2.2.3 Sectoral changes in employment

The distribution of employment by broad economic sectors shows that massive re-composition of the labour force took place (after a long period without change), before our reference period started (between 1949 and 1980, shaded in Figure 4). While the service sector has shown a gradual increase in this period, the decline in agricultural employment was very large (from 54 per cent in 1950 to 24 per cent in 1970), and the pace of industrialization was also remarkable (its employment share rose from 22 to 44 per cent). The period following the systemic change saw acceleration of the services sector growth and a further fall in agriculture.

It should also be noted that many of the people active in the labour markets in the 1980s were mobile, moving from agriculture to industry or from industry to services, for example. This vast intergenerational (and, in many cases, intragenerational) mobility involved different socialization experiences and employment histories for a great proportion of the population. This process also contributed to widespread status inconsistencies across the social spectrum, including the middle-income class. The transition affected these broad trends by accelerating the decline of agricultural employment, on one hand, and the expansion of tertiary employment, on the other.

Figure 4 Employment<sup>1)</sup> by broad sector, 1900-12014 (% of total employment)



Note: Active earners, excluding people on paternity leave and working students. Source: 1900–1989: Andorka-Harcsa, 1988: 91, 1992–2005: Harcsa 2008, 2006–: KSH 2014.

Figure 5 shows the distribution of the active earners by socio-economic strata is shown for the years between 1949 and 2014. The share of agricultural workers experienced the biggest fall, shrinking by over 30 per centage points between 1949 and 1990 and declining further thereafter to reach roughly 2 per cent of all active earners. During 1949–1990, by contrast, the size of the non-agricultural manual worker population increased by more than two and a half times, while subsequent increases meant that they accounted for roughly one-third of all earners by 2009–2014. There was also an increase in average skill levels: while in 1949 some 42 per cent of manual workers did not have any skills, that applied to only 13 per cent by 1990. However, at the end of the period the share of skilled workers was still just 51 per cent among manual workers and indeed this share fell further by 2014, when the share of semi-skilled and unskilled workers amounted to around 17–18 of total active earners and roughly one—third of the total manual workforce. As a result of socialist industrialization and efforts to eliminate economic units outside the state sector, the share of artisans and small shop owners fell to fewer than 80,000 people by 1970 and remained unchanged in the next decade. Even at the end of the 1980s (after years of gradual opening-up) the share of this population was less than half the 1949 level, growing back to just under 10 per cent by 2009.

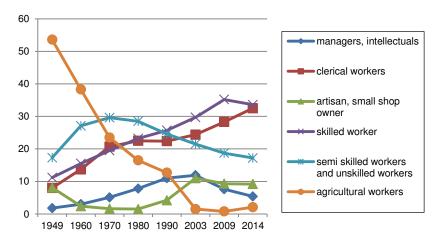
The already mentioned sectoral recomposition of employment was driven partially by the fact that the 'designers' and 'engineers' of the transition were mostly the high skilled intelligentsia and those working in the public sector (Kolosi and Tóth, 2012). This left its footprint on employment and wages developments in the public sector.

Public sector employment is estimated to be around 30 per cent of all employees and roughly a quarter of total employment (Köllő, 2014). The time trend of public sector employment has been volatile. The size of public sector employment increased during the political transition (from 650,000 to approximately 800,000 employees), due mainly to reclassification and the shift of previous political positions into public sector positions (Köllő, 2014). This was followed by a 60,000 drop after the so-called 'Bokros [austerity] package' in 1995, with similar increases at the beginning of the 2000s, followed by a major 150,000 fall in employment in the next four years. <sup>12</sup>

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<sup>&</sup>lt;sup>12</sup> This volatility also highlights the political exposure and vulnerability of many occupations that otherwise would be considered typical middle class jobs. Given that the wage sensitivity of public sector employment is especially high in Hungary, electoral spending cycles may well be behind this employment rollercoaster.

Figure 5 Active earners<sup>1)</sup> by social group, 1949–2014 (% of all active earners)



Note: <sup>1</sup> Employed population of working age, excluding people on paternity leave and working students. Source: Andorka and Harcsa (1988: 110); based on census data, between 1949 and 1990. Kolosi and Keller 2010 (for 1982–2009) and Zoltán Fábián 2015 (for 2014, based on Tárki Household survey). Regroupings by the author.

Despite this volatility, public sector employment is very high by OECD comparison (close to that of Sweden, though well below both Norway and Denmark; see OECD 2015b: 85). General government employment (including state-owned enterprises) in Hungary is also reported to be among the highest in the OECD (OECD 2015c).

Public sector employment is heavily gender-biased: in 2011 the share of public sector workers was 19 per cent among men and 45 per cent among women (Köllő, 2014: 45). Also, the public sector share is very high among the higher educated (54 per cent, primarily because of the many administration jobs, health care and education personnel) and among the lowest educated (82 per cent among those who did not finish their primary schools). This latter figure is obviously a result of the generally very low economic activity of the lower educated in general, but also of the fact that for this group public work schemes provide the bulk of their employment.

#### 2.2.4 Wage development

The rise of earnings inequality started before the political transition: the P90/P10 ratio increased from 2.6 in 1986 to 3.07 in 1989, followed by a continued increase to peak at 4.66 in 2000 (Figure 6). After 2000 we see a fluctuation in earnings inequality, with the P90/P10 index varying between 4 and 4.5 until 2011. Then it dropped to around 3.7 in consecutive years. The overall decline was driven mainly by a catch-up of the lower tail (with P50/P10 dropping from above 1.9 between 2003 and 2006 to below 1.6 by 2012–2013).

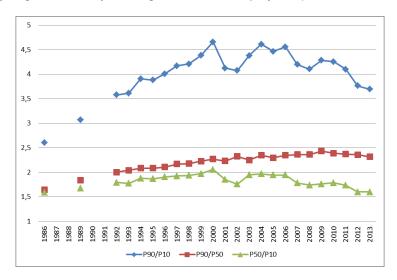
Another indicator of earnings inequality is the proportion of employees with low earnings (defined as the share of full-time workers earning less than two-thirds of the gross median earnings of all full-time workers). This proportion rose from 13.1 per cent in 1986 to 19.4 per cent in 1992, and then 23.4 per cent in 2000. During the crisis years this ratio fell gradually from 23.1 per cent in 2006 to below 17 per cent in 2013.

The path of the minimum wage has had two abrupt turning points. In 2001–2002, the minimum wage doubled, in two stages. While average wages also grew, the relative level of the minimum wage increased from 0.29 to 0.41 within this short period. After a stagnation during the 2000s, the government took another leap forward in 2012, at a stroke increasing the minimum wage significantly and thus raising its ratio to the average wage by 5 percentage points (to 0.42) in that year. The long-term evolution of minimum wages (by constant 2014 USD purchasing power standards) is shown by Figure 7, in comparison with similar trends in Poland, the Czech Republic and Slovakia, the three important benchmark countries for Hungary. As shown, the two leaps are large in comparison as well, although similar one-off increases also happened in Poland, for example. 13

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<sup>&</sup>lt;sup>13</sup> According to a study by Köllő (2008), the immediate negative effect of doubling the minimum wage contributed to reducing wage inequality, but also created some employment disincentives in the small-firm sector and adversely affected the probability of low-wage workers losing their jobs and of finding another job. These effects appear to be stronger in low-wage segments of the market and in depressed regions, where the minimum wage bites deeper into the wage distribution.

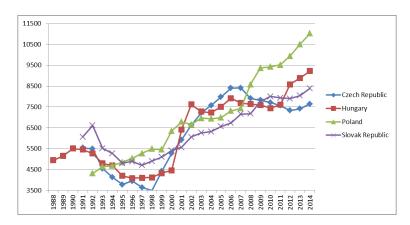
Figure 6 Inequality in gross monthly earnings of full-time employees (men and women)



Note: In May of each year.

Source: Fazekas and Neumann (2014), Fig. 6.3.

Figure 7 Annual real minimum wages in Visegrad countries (constant 2014 USD PPS), between 1988 and 2014



 $Source: OECD\ Earnings\ database.\ Download\ from\ http://stats.oecd.org/\ on\ 01\ Sep\ 2015$ 

The minimum wage increasingly effected the distribution from the bottom in consecutive periods. This effect was larger for women's than for men's wages (Fazekas and Neumann 2014, Fig 6.5). Also, it seems that the minimum wage increase did not have a marked effect on the other segments of the distribution (rather than pushing all categories upwards, it seemed to cause 'congestion' in the bottom tail). This is also important for the evolution of the middle classes. While minimums have risen, it did not contribute to stronger wages for those in the middle. Rather, the inequality between the middle and the bottom has declined, as already shown by the percentile ratios.

The earnings differentials between the public and private sectors were, similar to employment in these sectors, also very volatile after the transition. As Köllő (2014) shows, instability of pay differentials was more prevalent in Hungary than in any other EU member state, at least before the economic crisis. If one takes the period 1993–2008, the relative pay level of the public sector fluctuated between a 22 per cent regression adjusted (by age, education and gender) disadvantage in 1996 (following the 1995 austerity package) and an 18 per cent premium in 2004 (following the massive public sector wage increase in 2003). This was followed by further erosion (partly due to the crisis, partly because of the austerity packages).

Needless to say, all of this sent very mixed signals to a large part of the workforce (mainly to those in traditionally core middle class occupations). In addition to the volatility, this also indicated vulnerability to electoral (political) cycles. <sup>14</sup>

Furthermore, when relative wages of relatively large groups of typical middle class occupations are examined, very low levels are found for Hungary. Two examples may illustrate this, namely teachers' and doctors' wages. Comparing teachers' salaries to the earnings of tertiary educated workers overall, 25-64 years of age, the Hungarian figure of around 50 per cent is the second lowest in the OECD (see OECD 2014, indicator D3, p. 455). Doctors' wages are similar: relative remuneration (gross wages in relation to the national average) of Hungarian doctors (both specialists and general practitioners) is the lowest in the OECD (see OECD 2013: 75). While this latter figure has to be treated with great care, given the widespread system of informal payments in the Hungarian health care system, it clearly illustrates the problem. Typical middle class job categories (to which doctors certainly belong, whether public or private employees, working in hospitals or otherwise) earn just 1.5 times the national average wage (including all categories of jobs and education levels). This is a very low ratio (in most OECD countries this ratio is at least double the national average). The highly unequal distribution of their incomes (inclusive of formal salaries and informal gratuities) means that some (but only a few) specialists belong to the upper income class, while the majority are only average earners. For others in health care the situation is even worse. While, for example, nurses earning 1.4 times the national average in Luxembourg (OECD 2013: 81) can reasonably be expected to belong to the middle class there, Hungarian nurses, with wages at 0.8 times the national average (OECD 2013, same table), are nowhere near it.

#### 2.2.5 Trade unions and the institutional background to wage setting mechanisms

Trade unions, deeply rooted in the old communist system, lost ground after the systemic changes. This is partly because structural adjustment and rapid technological development in the economy drove their traditional host firms out of existence, and partly because they could not establish sufficient distance from political parties. Among other factors, these trends contributed to a serious decline in the unionization rate. Institutions of tripartite social dialogue, in existence for the first 20 years of the transition, gradually lost their strength and were dismantled by the government in 2010. With no powerful tripartite bodies in operation, the amendments of the Labour Code enabled employers to impose more 'flexibility' and thus much more insecurity for many middle class jobs.

Trade unionism has declined in several stages in Hungary; they can now reach and represent only a relatively small proportion of workers. Although data on industrial relations are relatively scarce and fragmented, a comparison of various sources shows very low levels since the traditional communist trade unions broke up and lost their memberships after the political changes in and around 1990. As the ICTWSS<sup>15</sup> database shows, unions had slightly below 4 million members in 1990, falling rapidly below 1.5 million by 1995, halving (to 700,000) by 2000, and, as the latest available estimate shows, standing at around 560,000 by 2008. This may even be an overestimation as surveys have shown lower unionization figures. <sup>16</sup> The OECD online employment database shows that trade union density fell from around 24.5 per cent in 1999 to 10.6 per cent in 2012.

The weakness of the trade unions in Hungary is partly due to their loss of credibility during the socialist period. In addition, the social-liberal Horn government (1994–1998) gave trade union leaders prominent places on their party lists, but when these leaders became part of the government, they did not effectively represent workers' interests in the period of the first austerity packages (the abovementioned 'Bokros package'). In addition, the legal successor of the 'old' MSZOSZ trade union confederation was close to the Hungarian Socialist Party (MSZP) and signed another electoral agreement with it in 2005. Other (smaller) confederations, such as MOSZ (Munkástanácsok Országos Szövetsége), having identified themselves as 'Christian' unions, maintained alliances with right-wing parties. Others have tried to become independent from political parties, but trade unionism in general has remained 'political'.

<sup>&</sup>lt;sup>14</sup> However, these ups and downs cannot be linked systematically to particular parties. In fact, the extreme low in 1996 and the extreme high in 2004 happened under socialist governments and the 2012 extreme low was under the right-wing FIDESZ government.

<sup>&</sup>lt;sup>15</sup> Database on the institutional characteristics of trade unions, wage setting, state intervention and social pacts in 51 countries between 1960 and 2014. http://www.uva-aias.net/208 (as of 01.03.2016)

and 2014, http://www.uva-aias.net/208 (as of 01.03.2016)

<sup>16</sup> For a further, concise analysis on the development of the trade union movement, see the ETUI website: http://www.worker-participation.eu/National-Industrial-Relations/Countries/Hungary/Trade-Unions (as of 01.03.2016)

17 https://stats.oecd.org/ (as of 01.03.2016)

Another contributor to the decline of union density is the nature and timing of privatization in some sectors. During the 1990s, driven mostly by privatization and structural adjustment policies, manufacturing and private services underwent many changes, resulting in a massive decline in unionization (especially for MSZOSZ, Magyar Szakszervezetek Országos Szövetsége). In later periods other sectors (including tertiary sectors, such as IT, education and communications) were more affected. The public sector and public utilities, including transport and energy supply, were less affected and these areas are still unionized at a higher level.

Trade unionism is very fragmented in Hungary, with six competing confederations, especially in those industries in which union membership is still relatively high (mostly large state-owned companies). However, given that some confederations are sector-specific (one covering manufacturing industry and private services and another utilities and transport) competition appears only in some segments of – strangely enough – public services.

With other fundamental changes in the economy, the legal system was also adjusted to the changing macro environment and to the altered operational principles of the market economy at the beginning of the transition. The new Labour Code, redrafted in 1992, established a system of collective agreements at enterprise and sectoral level. National sectoral agreements were of secondary importance (except in the public sector where wage negotiations were national). The Act also stipulated that the government should discuss issues of national significance pertaining to labour relations and employment with the representative organizations of employees and employers, through the National Labour Council, which was (until the second FIDESZ government dissolved it after its landslide victory in 2010) a tripartite forum for conciliation of (government, employee and employer) interests. Although unionization in Hungary fell to very low levels after the systemic change, collective bargaining coverage was still about 35–40 per cent of total employment. For long after the transition, trade unions were able to influence bargaining developments through the tripartite OÉT (Országos Érdekegyeztető Tanács – National Interest Reconciliation Council), although the extent of their influence depended on the government.

The Interest Reconciliation Council existed until 2011 and provided a forum in which the three parties could agree on the national minimum wage and set a minimum rate for skilled workers. It also made (non-binding) recommendations to lower-level negotiators on proposed pay increases. However, in 2011 the government replaced the OÉT with a new body, the NGTT (Nemzeti Gazdasági és Társadalmi Tanács – National Council on Economy and Social Issues) with more participants (including chambers of commerce and churches), but fewer competences (it was no longer able to set the minimum wage). Since then, Hungary's national minimum wage has been laid down by government decree.

The new Labour Code of 2012 has resulted in a significant increase in 'flexibility' and thus far less security of employment (more room for firing at shorter notice, cuts in severance pay, options for firing without giving detailed reasons, longer probation periods). The labour market effects of these changes are not yet known, but early assessments conclude that job security has indeed suffered serious damage (Laki, Nacsa and Neumann, 2012); furthermore, as most of these changes have affected public sector jobs, middle class job security has been seriously and negatively affected. This has been exacerbated by adverse changes in unemployment provisions (lower coverage, extremely short eligibility).

#### 2.2.6 Inequality and polarization

An analytic overview of changes in income dispersion between 1987 and 2014 in Hungary shows substantial shifts between critical moments of the transition: 1987 (baseline), 1992 (deep recession), 1996 (austerity), 2001 (high GDP growth), 2003 (massive welfare expansion), 2006 (austerity and tax rises), 2010 (austerity and benefit cuts) and afterwards (benefit cuts and shift towards workfare) (Tóth, 2005, 2015). Inequality increased the most in 1987–1992. After slowing down somewhat, there was a levelling off, then another increase due to the 2008 crisis (Tóth and Medgyesi, 2011).

The evolution of the major inequality indices can be followed in Table 1, presenting various measures sensitive to various parts of the distribution. Income inequality began to increase as early as the 1980s, with the Gini index reaching 0.24 in 1987 (KSH, 1990). There was a marked increase in inequality during the first years of transition and the Gini index reached 0.30 in 1995 (Andorka, Ferge and Tóth, 1997). Changes in inequality were smaller during the period 1995–2005, with stagnation overall (or even a fall in inequality in 2003–2007) until the economic crisis, followed by a significant increase afterwards.

Redistribution policies during the 2000s have played a significant role, first by increasing transfers to the lower middle-income class, and then increasing the tax burden on the upper middle-income class (Szivós and Tóth, 2008). Most indicators of income distribution show the growth of inequalities between 2007 and 2012 and then stagnation between 2012 and 2014. As the gap between the two ends of the distribution widened, both

households at the low end and those at the top experienced losses, but the sharpest decrease in real incomes was suffered by the lowest decile (Table 1, also Szivós and Tóth, 2015).

The size of the middle groups shrank over time (with the exception of a small broadening in 2009). The share of the well-off seemed to increase between 1987 and 2003 (from 5 per cent to 9 per cent), but afterwards the circle of those fortunate enough to have incomes at least two times higher than the median shrank (to 6 per cent by 2014). The poverty rate (below 60 per cent of the median) rose from around 10 per cent in 1987 to around 18 per cent by 2014 (Panel A of Figure 8). As for the relative share of the various income classes in total incomes (Panel B, Figure 8), there was an overall gain in the two upper income groups (with a slight interruption in 2009).

Table 1 Distribution of equivalent incomes between 1987 and 2014, as measured by indicators sensitive to different segments of the income distribution

	1987	1992	1996	2000	2003	2005	2007	2009	2012	2014
P90/P50	1.69	1.86	1.90	1.92	1.92	1.91	1.74	1.81	1.84	1.71
S10/S1	4.55	5.52	6.62	6.63	7.30	6.68	6.00	6.35	7.3	7.1
P90/P10	2.8	3.1	3.6	3.5	3.58	3.42	3.16	3.53	4.03	3.58
Gini	0.236	0.263	0.290	0.292	0.302	0.291	0.271	0.272	0.293	0.288
P10/P50	0.60	0.59	0.54	0.55	0.54	0.56	0.55	0.51	0.46	0.48

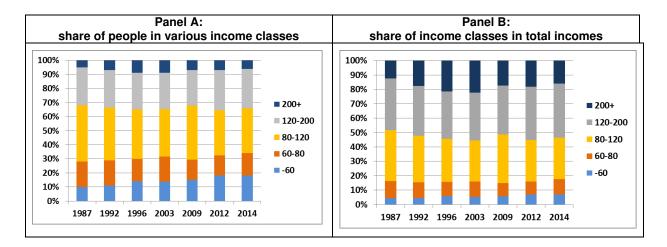
Note:

PX= Xth percentile value. SX = share of the xth decile from total incomes. Author's calculations.

Source: own computations based on various surveys: '1987: KSH Income Survey; 1992, 1996: Hungarian Household Panel (HHP); 2001–2014: Tarki Household Monitor'

A combined reading of the two panels of Figure 8 shows a concentration of incomes. The income-poor in 1987 (who constituted 10 per cent of society) had 4 per cent of total incomes, while the income-poor in 2014 (accounting for 18 per cent of society) controlled 7 per cent of total incomes. At the other end, the well-off (5 per cent of society) controlled around 13 per cent of total incomes in 1987, while in 2014 the well-off (now 6 per cent) were reported as having 16 per cent of all incomes in 2014. The core middle class shrank from 40 to 32 per cent (number of people) and from 35 to 29 per cent (income share) between 1987 and 2014.

Figure 8 Relative size of various income classes (% of median equivalent household disposable incomes), 1987–2014



Note: Income classes defined relative to the median of equivalent household income distribution.

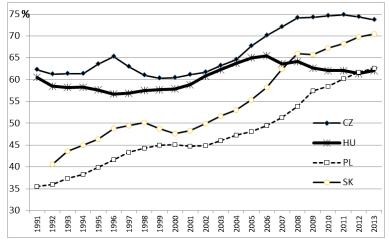
Source: own computations based on various surveys: '1987: KSH Income Survey; 1992, 1996: HHP; 2001–2014: Tárki Household Monitor'

## 2.2.7 GDP convergence

We have seen how the chances of forming a strong middle class have been constrained by government policies and developments in the world of work. However, a middle class could also have developed without any relative change if wages, incomes and living standards had risen across the board. It is therefore worth looking at GDP and household income convergence trends.

Oblath (2014) underlines that the Hungarian economy seriously underperformed (in terms of GDP convergence with other EU countries) between 1991 and 2013. In terms of growth in GDP per capita, out of the 22 years observed, only in six years did the Hungarian economy achieve significant convergence (exceeding a 1.5 per cent annual change) with the EU15. Per capita GDP convergence was low, whether calculated in current or real PPP terms. Constant PPP time series (fixed at 2013 levels), adjusted for population composition change (see Figure 9, based on Oblath, 2014), even show a setback between 2006 and 2013.

Figure 9 Relative GDP change in Hungary, Czech Republic, Poland and Slovakia, 1991–2013 (2013 PPP)

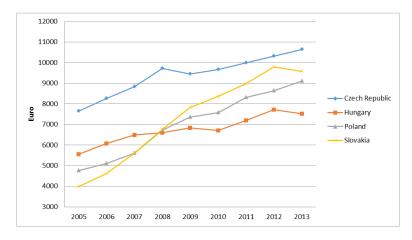


Source: Oblath, 2014 Figure 3b.

At micro level, median equivalent household disposable incomes (EU-SILC) also show much slower growth (even halted at certain points) than those of Czech, Polish and Slovak households (Figure 10, based on Szivós,

2014). The pace of growth of household incomes was highest in Slovakia for most of the period, while in Hungary it lagged behind. Income and consumption (overall and food) figures from national accounts also show very similar trends (Szivós 2014).

Figure 10 Median equivalent household disposable incomes in euros, Hungary, Czech Republic, Poland and Slovakia, 2005–2013



Source: Szivós 2014, based on Eurostat data.

A cross-section comparison of middle incomes in purchasing parity standards is proxied in Figure 11. The width of income bands is roughly similar in Hungary, Croatia and Lithuania, meaning that the absolute material situation of the middle-income classes is roughly comparable\_in these countries. However, when the income situation of the Hungarian upper middle class is compared to neighbouring Austria's lower middle class, we see very serious disparities. Part of the Hungarian 'upper middle' income class has smaller incomes than people in Austria's lower middle class (in other words, some Hungarians who qualify as 'upper middle' at home have incomes that would qualify them as poor in Austria (and in many EU15 and even some CEE countries).

70000
60000
40000
30000
10000
10000
RO BG LV LT HR HU EE PL SK EL CZ PT ES SI MT IT JE BE FI DK UK SE NL DE CY FR AT LU

Figure 11 Average incomes of various income bands (proxying income classes) in the EU28 (in euros at PPS), 2011

Note: Definition of ranges: lower middle: from average of second decile to average of fourth decile, middle: from average of fourth decile to average of seventh decile, upper middle: from average of seventh decile to average of tenth decile.

Source: Calculations based on Cross-sectional EU SILC 2014, UDB August 2014. Social Situation Monitor, <a href="http://ec.europa.eu/social/main.jsp?catId=1049&langId=en">http://ec.europa.eu/social/main.jsp?catId=1049&langId=en</a>

#### 2.2.8 Income security of middle-income class households: effects of crisis and policies

The financial and economic crisis has provoked policy changes that, together with the evolution of the crisis itself, have had a long-term effect on households, adversely impacting large segments of society.

In the second half of 2008, the crisis was primarily of a financial nature and affected those with substantial savings. Some of the losses were 'virtual' in the sense that those who could afford to hang on to their securities or savings avoided having to realize a loss. Those, however, who for some reason had no choice but to 'cash out' suffered an effective loss of assets. In the next phase of the crisis the volatility of the exchange rates of the Hungarian forint has led to an increase, in interest payments on housing and car loans, originally denominated in foreing currencies. As a result, the living standards and consumption potential of affected households were substantially narrowed, although the effects were not directly reflected in income distribution statistics.

After stagnating in the late 2000s, the Hungarian economy was hit by severe recession in 2009. GDP fell by 7 per cent, with both employment and real wages declining. Employment fell by 100,000 and unemployment increased from 7.8 per cent in the second half of 2008 to 10 per cent in first half of 2009 (Köllő, 2011). Gross real wages declined by 3.4 per cent, net wages a bit more moderately. Adjustment was completely different in the public and in the private sector, however. The public sector showed no decline (even an increase) in employment, while real wages declined by more than 10 per cent. In the private sector real wages remained at their pre-crisis level, while the number of employees declined by 7 per cent (Köllő, 2011). The decline was achieved by halting recruitment rather than massive layoffs.

In the third phase, the effects brought on by the crisis were mediated by the austerity programmes announced in spring 2009: cuts in government spending with public sector consequences and contraction of the welfare system. The measures included cuts in pensions (the thirteenth month pension was abolished), family support (freeze on child benefits) and social transfers (upper limit introduced on household entitlements). Households responded to these measures by showing considerable – perhaps overcautious – restraint in spending, which of course only exacerbated the economic downturn.

After the major macro shocks, the fourth phase of the crisis saw strong interventionism by the government after the 2010 elections. A supply-side economic policy gained ground and renationalization occurred in various sectors. There was a concerted effort to redirect social assistance recipients into the secondary labour market via public works programmes. At the same time, the government endeavoured to protect households from further austerity.

Since 2010, various policy measures <sup>18</sup> have affected the position and behavioural constraints of households. Benefit cuts included a reduction of the ceiling on unemployment and other benefits and a shorter eligibility period. An extension of conditionality was introduced (child allowance was tied to school attendance and a premium for kindergarten attendance was introduced). On the contribution side a flat-rate income tax (with substantial tax breaks for – in particular, large – families with children) was introduced. In the labour market a minimum wage increase was announced and firms were forced to compensate employees' losses due to tax changes. With regard to living costs, the government intervened in the financial sector and the banks were forced to accept that over 160,000 households pay back foreign currency mortgages in forints. There were some layoffs in the public sector and unemployment in general climbed to levels comparable with those of the early 1990s in the first period of the crisis, but then fell back slightly, partly as a result of public works programmes and partly as a result of job creation in the primary labour market.

The decline in incomes due to the crisis caused financial difficulties for households – primarily in the middle-income class – with a loan (especially in foreign currency) repayment obligation (Bernát and Kőszeghy, 2011). After a decade of stagnation, the last two years of the past decade saw an increase in the percentage of households experiencing material deprivation or financial difficulties. The proportion of households having difficulties paying their rent or utility bills also increased (from 12 to 18 per cent as early as 2012). After 2012, this repayment burden was eased somewhat (Szivós and Tóth, 2015).

The rising frequency of households with loan repayment obligations which characterized the whole 2000's, both for bank debts and non-bank debts. The various bank loans also reached low-income groups then; the incidence of loan debts among them roughly corresponds to the average. The proportion of households with regular loan repayment obligations among low-income groups continued to grow between 2010 and 2012, but seemed to halt between 2012 and 2014 (Tóth, 2015).

As expected, low-income households have suffered most from the burden of loan repayments. Indebted households in the lowest income quintile inevitably pay a higher share of their income towards their debts and are also more likely to be in arrears because of financial difficulties. Our analysis of differences between various demographic groups also indicates that the incidence of repayment difficulties is higher for typically low-income population groups (those with low educational attainment, the unemployed, large households and households in disadvantaged geographical regions).

## 3. Middle class composition in perspective (1980s to 2014)

#### 3.1 Socio-demographic composition of the middle income classes

Changes in the socio-economic composition of the various levels of middle (and other) income groups can be followed in Figure 12.

The middle-income group – together with Hungarian society as a whole – is clearly more highly *educated* in 2014 than it was in 1987. However, the social gradient also became steeper over time: higher education degrees provided a more efficient passport to the middle classes and to the higher social strata in 2014 than in 1987. With regard to various *labour market participation* categories, however, the picture looks less clear cut. The share of pensioners (partly due to demographic ageing and partly to expansion of the pension system) has increased in the whole spectrum, but mostly in the middle. The increase of inactivity appeared almost exclusively in the group of the income-poor. This may have been an important reason behind the fact that households with an employed head were much less often found in poverty in 1987 than in 2014.

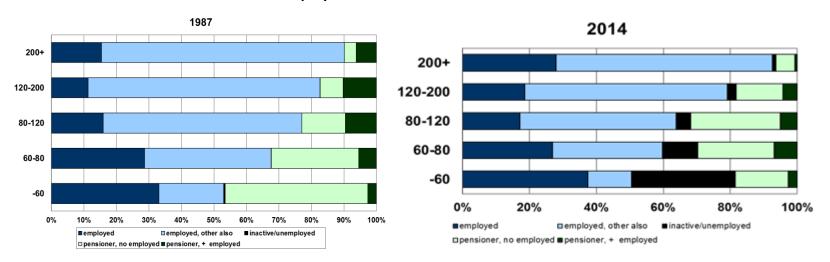
Correspondingly, there is a characteristic shift in the composition of the various income brackets by *age groups*. The share of younger households increased as we move down the income ladder in both 1987 and 2014, but poverty risk (the relative concentration of the younger cohorts in poverty compared with their share in other income brackets) increased significantly during the period. The case of older households is peculiar. There seems to be a non-linear relationship here: while the share of older age households was highest in lower income groups in 1987, parallel to the moves in the concentration of the younger cohort, aged households tended to shift towards the middle-income groups.

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<sup>&</sup>lt;sup>18</sup> An analysis of these in the context of the European Social Model can be found in Scharle and Szikra (2014).

Figure 12 Distribution of people in various income brackets by socio-demographic dimensions, 1987 and 2014

# **Employment situation of household head**



**Education of household head** 

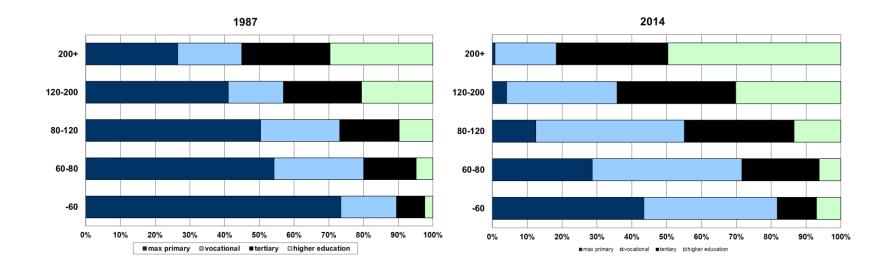
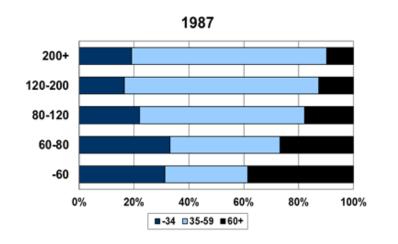
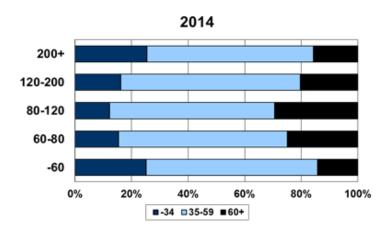


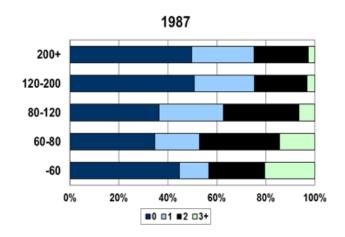
Figure 12 Distribution of persons in various income brackets by socio-demographic dimensions, 1987 and 2014 (continued)

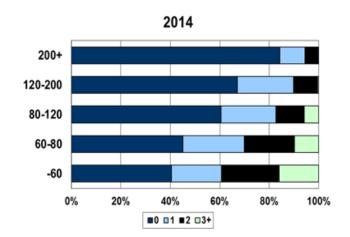
# Age of household head





#### Number of children in household





Source: own computations based on KSH Income Survey for 1987 and Tárki Household Monitor for 2014.

Finally, the share of those living in childless households increased from 41 to 58 per cent from 1987 to 2014. The majority of this overall increase appeared in the upper, upper-middle and middle-income groups, while the share of households with dependent children (especially those with three or more) increased among the income-poor. Poverty rates for childless households decreased, while poverty rates for households with children decreased in all categories of households with children. It is important to note that the poverty risk of single parent households is high and has increased.

All in all, the composition of the middle-income class has tended to shift (as in society as a whole) towards the highly educated, and towards the childless; it has also become older, more than society as a whole.

#### 3.2 How strong are middle-income groups? Deprivation and middle-income classes

In addition to socio-demographic variables, vulnerability to various material shocks also differs along the social and income hierarchy.

An absolute proxy of the vulnerability to material shocks of an income group is the prevalence of material deprivation. According to Eurostat, material deprivation is defined as the inability to pay for at least three of the below-mentioned items and is expressed as a headcount or as a percentage of the total population: (1) rent, mortgage or utility bills; (2) keeping the home adequately warm; (3) facing unexpected expenses; (4) eating meat or proteins regularly; (5) going on holiday; (6) having a television set; (7) having a washing machine; (8) having a car; (9) having a telephone. Inability to pay for at least four of the above items defines severe material deprivation.

Table 3 Prevalence of various deprivation items in various income brackets in Hungary, 2014 (percentage of people in the various brackets reporting the given problem)

	-60	60–80	80–120	120–200	200+	total
Inability to meet unexpected expenses	93	92	75	56	31	73
Problem going on holiday	89	81	68	46	21	65
Problem paying utility bills	34	20	8	6	3	14
Problem buying meat	69	51	35	18	4	37
Problem paying for heating	49	26	12	7	0	19
No washing machine	22	9	1	0	0	6
No colour TV	2	1	0	0	0	0
No telephone	12	2	1	1	0	3
No car use	57	36	19	9	2	25
Lack of at least three items	81	64	42	22	5	44
Lack of at least four items	69	42	20	10	0	28
Lack of three 'middle class essential' items	47	24	12	6	0	18

Source: Author's calculations based on Tarki Household Monitor 2014.

Three out of four of the Hungarian "core middle" income class households declare it difficult or impossible to meet unexpected expenses, while almost 70 per cent reports difficulties going on holiday for a week (Table 3). Roughly 2 out of 5 in this group says they are unable to pay for three out of the nine items, and one fifth of them reports four out of the nine items difficult or impossible to meat. Even a third of the highest income bracket members declares it difficult to meet unexpected expenses and one in five reports difficulties paying for a week's holiday.

These rates are certainly too high. For a person or a household to qualify as 'middle class', at the minimum they must be free of material deprivation. The figures presented here highlight that the middle-income category cannot be really called 'middle class' (in sociological terms).

### 3.3 Beyond middle-income classes: the middle by broader definition

A broader definition of the middle class (stemming from a broader perspective on social structures, see Atkinson and Brandolini, 2013; Goldthorpe, 2012; Kolosi, 1987, 2000) may include a number of other stratification dimensions (housing conditions, savings and wealth, lifestyle).

Earlier studies based on neo-Weberian accounts of social stratification in Hungary have made attempts to map the relative sizes of the various social classes defined in a multi-dimensional framework (Fábián, Kolosi and Róbert, 2000; Fábián, Róbert and Szívós, 1998; Kolosi and Keller, 2010; Kolosi and Pósch, 2014). These approaches combine dimensions other than incomes to define middle classes. They vary in terms of the dimensions they apply (housing, wealth, savings, possession of various durable goods, cultural consumption and lifestyles). However, the general message – that classifications based purely on income will miss important points about the middle classes – is the same.

The approach to social stratification of Kolosi and Keller (2010) is based on a social status index (a composite measure of income, wealth and housing conditions), combined with occupation (current for actives and last occupation for inactives). Their social structure time series is shown in Table 4.

Table 4 Class structure of Hungarian Society, 1982–2009 (%)

Class position	1982	1992	2003	2009
Elite	2.3	1.8	2.6	4.6
Upper middle class	4.4	8.8	6.8	8.2
Middle class	42.3	40.3	32.8	29.5
Working class	36.3	34.7	38.3	39.3
Deprived	14.7	14.4	19.6	18.4
N	14011	3213	4211	3575

Source: Kolosi and Keller 2010:121. Data from Stratification model survey of 1982, Hungarian Household Panel Study of 1992 and Tárki Household Monitor surveys of 2003 and 2009.

A recent study by Fábián (2015), following the methodology of earlier studies by Tamás Kolosi (see Kolosi 1987, 2000; Fábián, Kolosi and Róbert, 2000; Kolosi and Keller, 2010; Kolosi and Pósch, 2014) combines incomes (household, equivalized), wealth (mostly housing, but also some durables) and consumption to define social classes. Aggregated (via z-scoring – normalizing to the mean) from a number of elementary indicators, a composite is created reflecting overall material well-being and people are classified based on this.

The final typology shows that there are five basic categories of social structure in Hungary (Table 5). First, the 'lower status group' contains roughly 36 per cent of the population. Another 30 per cent belongs to the 'lower middle' category. This means that, at a rough estimate, some two-thirds of Hungarian society belongs to classes that are (in terms of consumption and wealth but also cultural activities) lower than the middle classes. Roughly 20 per cent can be categorized as 'middle', another 10 per cent 'upper-middle' and around 4 per cent 'upper'. It should be emphasized that this categorization is by and large consistent with the results of similar earlier studies referred to above.

The composition of the various social strata follows expected differentiation. The uppermost three status groups (the middle classes in a broader sense) can be found mainly in Budapest and other cities and their housing conditions (judged by the survey) are significantly better. Lower status groups are older, while household size and consumption status seems to correlate positively. What is important is work intensity (measured as proposed by Eurostat's WI indicator), which is significantly lower for the lowest two groups than for the middle and upper classes. Also, education correlates highly with social status – the higher educated are extremely underrepresented in the group of the deprived and overrepresented in the upper three social strata. This also draws attention to perhaps one of the most serious problems of the Hungarian social structure – that is, the presence of a large, lower educated, marginalized and deprived group in society. This is another argument for not simply sticking to income based and 'symmetric' measures of inequality.

Table 5 Size, income and savings of the various social classes in 2014

Class position	Population share, households, %	Household net disposable income as % of average	Per capita net disposable income, as % of average	Current savings,* as % of average
Upper	4	267	236	400
Upper middle	11	158	135	207
Middle	20	124	119	122
Lower middle	29	88	90	67
Lower	36	57	70	44

N=1739.

Note: Incomes minus current consumption expenditures on food, housing and mortgages.

Source: Author's calculations, based on Fábián (2015).

#### 4. Case studies

In two case studies we seek to illustrate key points of the argument so far. In the first, the selection (or clearing) process of the labour market adjustment in the beginning of the 1990s favoured particular age and education categories, thus providing opportunities for different labour market segments to move towards middle class status. The second adds to our understanding of the transition from an intergenerational mobility perspective for a longer time span.

#### 4.1 Case study 1: The age/education bias of the transition and consequences for the middle class

Section 2 highlighted that the shift to a lower level employment equilibrium was highly selective by skills and by age. This case study is about how this happened and what consequences it might have for middle class formation in Hungary.

Labour market transitions has lead to, increasing inactivity and unemployment though the initial periods of the transition.

A special feature of the process was that structural adjustment in labour markets involved a much larger share of job-to-job shifts than previously expected. The dominant routes led from employment to employment (perhaps with sectoral change in between), together with paths from the labour market to inactivity. A small proportion only changed sector through paths from (public sector) employment via unemployment to (private sector) employment. The causes and consequences of this process are complex, but education policy failure (inadequate skills portfolio of the low educated), badly calibrated economic policies (mostly failed assumptions about incentive structures and behavioural reactions in terms of labour supply) and a (perhaps too) rapid modernization of the economy (creating high skilled jobs but offering almost nothing to the marginalized low skilled) all played their role (Köllő, 2009).

Figures on stocks in Table 6 show no real differences in the average years of schooling of people working in the public or private sector, while the unemployed were younger and much less educated. The share of women – and this seems to be a peculiarly Hungarian phenomenon – was much lower among the unemployed (35 per cent) than that of men and more concentrated in the public sector, which showed a high rate of feminization (almost 60 per cent).

When turning to the flows between labour market categories, we see that people changing from public to private firms were younger and somewhat more educated, with women being underrepresented. On the other hand, people working in privatized firms were clearly older and less educated, with women even more underrepresented.

Flows from unemployment to private sector employment were characterized by a larger share of women (56 per cent), by the better educated and by younger people. For example, the average age of these 'lucky' unemployed was some six years lower than the average age of the unemployed in general. Generally, the road from private sector employment led mostly to unemployment and inactivity. Mostly male, the lower educated and older persons travelled that path.

Table 6 Social characteristics of labour market actors, 1992/1993

Observed population	Share of women	Average age (years)	Completed school years (average)			
	Stock (March 1993)					
Total active age population	50.3	37.70	10.57			
Public sector	59.1	37.72	11.32			
Private sector	<u>46.4</u>	37.32	11.24			
Unemployed	<u>34.7</u>	36.56	9.90			
	Flows	ows (between April 92 and March 93)				
From public to private	<u>52.8</u>	38.0	11.0			
of which: 'privatized'	<u>51.8</u>	38.4	10.9			
'mobile'	56.7	36.4	11.4			
From unemployed and inactive to private	56.4	<u>30.5</u>	10.9			
From private to public	58.0	38.2	11.0			
From private to unemployed and inactive	<u>39.9</u>	40.7	10.0			

N=2610

Note: underlined/bold: under/over-represented in the relevant group, respectively.

Source: Hungarian Household Panel.

Structural adjustment, therefore, seemed to favour the higher educated, younger people and women, at every possible point of potential labour market shifts.

This one-year transition perspective cannot, of course, offer a particularly broad picture. In a broader context, Kertesi and Köllő (2002), when describing the process of skills obsolescence in the post-socialist economy, differentiate two early phases of the transition. In the first period there was a massive collapse of demand for unskilled labour, while technology import and high tech FDI was at a very early stage and increased returns to education were still only relative: there were no particularly substantial gains for the higher educated, but their relative position improved compared with the low skilled, who lost out dramatically. At the next stage, when market institutions were operating at full swing and modern technological FDI was coming in on a massive scale, the gains of younger educated people grew, while returns to experience continued to decline. In other words, the returns to education increased only for those just coming into the labour market. Returns to older higher educated people started to decline, together with a general devaluation of experience (Kertesi and Köllő, 2002,).

To illustrate the implications for relative position of households (characterized by age and education of household heads), a 'quasi-longitudinal' cohort analysis can be presented. The first cohort we differentiate was born before 1931, of whichthe youngest member was around 60 in 1990; we may call them 'retired in 1990'. Members of the second group (born between 1932 and 1951) were, (being 39–59 years old in 1990), supposed to be 'on top in 1990'. The third group, born between 1952 and 1965 reached the age of 25–38 in 1990 and are termed the 'transition core' generation. Finally, the systemic change found the fourth group at 14–25 years of age in 1990, hence we term them 'career starters in 1990'.

The story is as follows. The within-cohort variance is smallest among the 'retired in 1990' group. This is not surprising as their income differentials were accumulated in the socialist period and most were in retirement after 1990. The within-cohort variance (by education group) is largest among the 'career starters in 1990' and 'transition core' groups. In these groups, which were already on their education track when the systemic change came, depended on how far they got up the educational ladder. Those attaining higher qualifications received by far the highest premium compared with their lower educated peers.

The time-change of the relative position (compared with annual national average) of the higher and the lower educated in various cohorts clearly shows (Figure 13). that the lowest educated are paid the least in each cohort. Moreover, this group's relative position seems to have deteriorated over time. The relative position of the higher educated in the 'retired in 1990' cohort also seems to have been deteriorating, probably because of this ageing group's reliance on pensions. The relative position of the higher educated within the 'on top in 1990' and the 'transition core' groups seems to show a 'normal' (Mincerian) inverted U-shape over time. Their relative position first grows to a high level (especially for the higher educated of the 'on the top in 1990' cohort), then starts to fall. The fact that the career path of the higher educated in the youngest cohort does not really show this inverted U-shape (with a little exaggeration: it starts declining before it could have increased) is a new and remarkable phenomenon. It seems to indicate the emergence of a lost generation, perhaps due to congestion among older workers just ahead of them on the career ladder, perhaps because the crisis hit them at a more vulnerable phase of the life cycle.

To sum up, the economic transition led to a drastic revaluation of relative positions between households with different initial asset portfolios in Hungary. Institutional restructuring, structural adjustment and (social) policy reforms all played their part in reshaping the relative economic prospects of households in various social segments. In this process, much depended on how households were able to combine their members' skills, educational levels and employment activities. The process was deeply selective, starting with a strong disregard of low skills at the beginning, followed by increased appreciation of high skills with the massive influx of high tech FDI. Long experience – even if in highly skilled jobs – did not pay enough for the older generations to keep up with younger entrants. A potential 'lost generation' of the higher educated was also found, with clear implications for the weaker supply of new entrants to the middle classes.

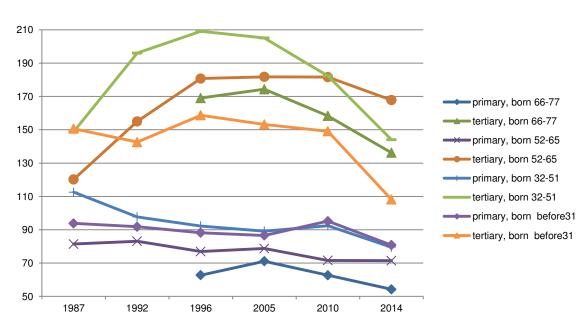


Figure 13 Person equivalent household incomes of the various age/education categories, as a percentage of annual national average, 1987–2014

Notes: Age and education of household head. Author's calculations. Some categories (secondary educated and those born after 1977), were excluded due to lack of space or the small number of cases.

Source: own computations. 1987: KSH income survey, 1992, 1996: HHP, 2005–14: Tárki Household Monitor Survey

#### 4.2 Case study 2 Groups and factors behind middle class mobility in Hungary, 1992–2007

This case study provides background information on intra-generational mobility based on follow-up research (Lifepath Survey of Hungarian Households, LSHH) of the 1992 wave of the Hungarian Household Panel (HHP) survey (covering 2,000 households) in 2007. Although a small survey, it is fortunate that this information is available for a relatively long, 15-year time-span real panel and for some variables, through retrospective questions, for much longer periods. The completed survey found 2,682 individuals of the original sample.<sup>19</sup>

Results show one-tenth of the respondents (about 8 per cent of Hungarians in 2007) to belong to the underclass, originating in the early shocks of the systemic change, when a significant decline in employment resulted in their permanent and/or periodic exclusion from the labour market. Later on they were attracted/forced to retire for economic reasons. These people can unequivocally be regarded as the real losers of regime change; by 2007 most were living on welfare.

For some others, the upsurge in entrepreneurship in and around the systemic change has provided prospects (however risky). In the 25-year period after 1980 approximately 9 per cent of all respondents had, at some stage, been involved, at least for some time, in running a business (cumulative figure). Roughly half of them (4.4 per cent) were in business on their own account in 2007. The overwhelming majority of those in this position in 2007 (90 per cent) set up their ventures after the change of regime, but more than a third of them were either employees or not working by 2007.

A relatively small proportion of who continued staying on the labour market for the 15 years were upward or downward mobile. On the whole, the employment hierarchy proved to be relatively stable during the regime change.

The first half of the 1990s was characterized by significant employment turbulence (Róbert and Balogh, 2008). This was prompted by internal shifts (politically inspired economic processes, such as privatization), but globalization,

<sup>&</sup>lt;sup>19</sup> For more on the survey: TARKI (2008), Kolosi and Tóth (2008) and Kolosi and Tóth (eds 2008).

further strengthening the post-industrial processes, the expansion of the service sector and the influx of multinational capital also had an effect.

In terms of material conditions and income status, both a decline and a rise could be observed (Table 7). Almost 60 per cent of those who, in 1992, belonged in the bottom quartile were there in 2007, while almost half of those in the top quartile were still there 15 years later. In other words, in the wake of the systemic change, examples of both upward and downward movements were to be found in society, but there was a larger movement at the top than at the bottom.

Five categories of people are of particular interest here. The first is the stable group; 60 per cent of the 1992 middle belonged to the middle in 2007 as well. The second and third groups were able to improve their relative positions: 36.1 per cent of the 1992 bottom quantile rose to the middle and somewhat more than one-fifth of the middle in 1992 rose to the top by 2007. The fourth and fifth groups slipped back in this 15-year period. Some one-fifth (18.4 per cent) of those in the middle ended up in the bottom quantile and over two-fifths (42.7 per cent) of the top fourth in 1992 had fallen back to the middle by 2007.

Table 7 Proxy for income mobility: transition matrix, quantiles of individuals, based on a combined material – financial index, 1992–2007 (%)

		2007						
		Bottom 25%	Middle 50%	Upper 25%	Total			
	Bottom 25%	57.4	36.1	6.5	25.2			
1992	middle 50%	18.4	59.4	22.1	49.6			
	Upper 25%	9.4	42.7	47.9	25.2			
	Total	26	49.3	24.7	100			

Source: Kolosi and Tóth (2008).

In order to present the differential chances of the various categories moving up or down we first calculate the composition of 'stayers' and 'movers' from a certain category<sup>20</sup>.

Ratios for the various category outflows and inflows (Table 7) tell the following story. For upward mobility from the bottom quartile (getting into the middle class), (i) those with relatively high cultural capital (measured by parental education); (ii) those running their own business; (iii) those who have completed some education (the higher, the better) had the highest chances. Speaking at least one foreign language, belonging to the majority ethnicity and living in Budapest was also advantageous. To leave the middle-income category upwards is also driven by cultural variables and by education (but only at higher levels). Running one's own business also matters but less so than in the movements from the bottom to the middle.

Having a lower initial education or acquiring less education in the period observed means a higher risk of falling out of the middle category. Also, being Roma represents a higher risk than belonging to the majority ethnic group. Finally, the risk of falling out of the top in 1992 was higher for those (i) lower educated; (ii) people with unemployment spells in the period; and (iii) those who were already over 55 years of age in 1992.

Table 8 Factors of upward and downward mobility: odds ratios for category outflows and category inflows between quantiles of individuals, based on a combined material/financial index, 1992–2007

Upward mobility				
Up from the bottom 25%		Up from the middle 50	0%	
Vocational school	2.2			
Secondary school	4.2	Secondary school	1.5	
Tertiary education	4.2	Tertiary education	2.5	
County capital	3.9			

To illustrate, we present how the value 2.2 in the upper left cells of Table 8 was calculated. The share of those with vocational training among those who remained in the bottom 25 per cent throughout the period ('stayers') is 7.8 per cent (not shown in the table); their share among those who were able to rise from the bottom quartile during the period ('movers') is 17.4 per cent. Dividing the movers by the stayers results in 2.2.

				•		
Budapest	3.7	Buo	dapest	2.7		
Not Roma	1.5					
Medium level cultural capital*	4.3					
High level cultural capital*	11.6	High level cultural c	apital*	2.5		
Entrepreneurship**	7.2	Entrepreneurs	ship **	1.5		
Finished school after 1992 (2–5 pts)	2.2					
Finished school after 1992 (6+)	4.2	Finished school afte	r 1992 (6+)	1.8		
No. of workplaces, 1992–2007 (2–6)	3.0	No. work		1.5		
		1992–2007				
Language (yes)	2.3	Language	e (yes)	1.7		
Downward mobility						
	Down from the middle 50%				Down from the top 25%	
					Age 55+ in 1992	1.7
					Not (yet) in school in 1992	1.6
		Primary school	1.7		Primary school	2.2
		Roma	5.1	Village		1.8
	Finis	shed school after 1992	1.5	Finished school after 1992 (1		2.3
		(1pt)		pt)***		
				Finished school after 1992 (2-5 pts)***		1.7
				Une	employment spells 92+ (at least 1)	1.5
				Une	employment spells 92+ (at least 2)	2.9
				Num	nber of workplaces 92+ (0)	1.9

Notes: Odds ratios with smaller than 1.5 values are not shown. All variables as of 1992.

For more see Kolosi and Tóth, 2008.

The same factors (education, cultural capital) played the biggest role in shaping material-income status in 1992 and 2007. In addition, the movement between various categories was also driven to a very large extent by initial education levels and further studies. In the period since regime change, property-income status has become more and more connected to the most important socio-demographic variables. This shows a decline in the inconsistency in status that was to be found in the 1980s, and the emergence of a stronger hierarchical inequality system. Level of education plays a larger role than ever in explaining property and income differences.

<sup>\*</sup>Index created from combined parental education.

<sup>\*\*</sup> Index based on personal entrepreneurial record and willingness to become entrepreneur in 1992.

#### Conclusion

The middle classes in Hungary have traditionally been weak. This was partly a cause, partly a consequence of major socio-structural and political developments (the authoritarian trend prior to the Second World War, the communist regime and the transition after 1989).

We have looked at the various factors that lie behind the historical weaknesses of the Hungarian middle classes, as well as the social, economic and political developments as a result of which the middle classes remain weak even 25 years after the political changes in 1989–1990.

Highly unequal and fairly backward agriculture-dominated social structures prior to the Second World War and the 'decapitation' of various segments of the elite (by the Nazis and the Communists) in the middle of the last century are the historical reasons. Socialism brought a high level of social mobility, resulting in a very high level of status inconsistency (measured by economic, housing, cultural and political dimensions) in the middle classes.

Most developments in the transition tended towards weaker rather than stronger middle classes. Attempts (via privatization) to develop a Hungarian bourgeoisie in this seriously undercapitalized country were weak, while social and economic policies resulted in a low labour market equilibrium (low employment, high inactivity, low job supply). Public sector employment (mostly due to postponed or never initiated reforms in health care and education) remained sizeable, but wages in traditional middle class jobs remained very low by international standards.

After the collapse of the socialist system the trade unions were unable to strengthen their position and play a significant role in the world of work. Their capacity to defend the interests of the labour market insiders (a major potential source for the middle classes) remained very weak. Polarization of income distribution continued, with the additional effect of hollowing out the middle. In addition, because the country was unable to fully utilize its growth potential (very promising at the beginning of the transition but largely unrealised), GDP convergence with richer EU countries was slow and even negative in some periods. Altogether this means that it was not simply relative social status that explains the weak middle classes; Hungary's overall low level of economic development makes even the 'real' middle class weak in terms of economic security, compared with their peers in not only the EU15, but also in neighbouring countries.

The two case studies analysed how labour market selection processes change relative social status (the most drastic changes are due to age and education). The transition has not only introduced a skills bias via the massive high tech FDI influx during the 1990s, but the selection process was very much age-biased. Upward intra-generational mobility was driven by the human and cultural capital of people at the right age to be able to adjust their life strategies to cope with the challenges of major labour market adjustments.

Categorization based on income classes creates an image of society in which there are symmetrical relationships between the bottom, the middle and the top. However, deeper analysis has shown that the bottom two-thirds of the income distribution cannot really be classified as middle. Rather, deprivation analyses, consumption categorizations and multidimensional social stratification analyses have shown that what is traditionally called the 'middle class' should be sought somewhere in the upper third of Hungarian society. This share of the 'real' middle class is certainly higher than it was a hundred years ago, but much lower than it should be, especially with a view to establishing a stable and balanced social structure in Hungary.

#### References

Andorka, R., Z. Ferge and I.G. Tóth (1997) Is Hungary really the least unequal? (A discussion of data on income inequalities and poverty in Central and East European Countries), *Journal of Russian and East European Finance and Trade*, Vol. 33, No. 6: 67–94

Andorka, R. and I. Harcsa (1988) Modernization in Hungary in the Long and Short Run as Measured by Social Indicators, Sociological Working Papers, (former) Karl Marx University of Economic Sciences, Department of Sociology, Budapest. Andorka, R. (1982) A társadalmi mobilitás változásai Magyarországon, Budapest: Gondolat.

Atkinson, A.B. and A. Brandolini (2013) On the identification of the 'middle class', in J. Gornick and M. Jantti (2014), 77-100.

Atkinson, A. and J. Micklewright (1992) Economic Transformation in Eastern Europe and the Distribution of Income, Cambridge University Press.

Berend T. I. (1979) A szocialista gazdaság fejlődése Magyarországon 1945–1975. Budapest: Kossuth.

Bernát, A. and L. Kőszeghy (2011) Managing household debts: Hungarian country report. Prepared for Eurofound, Dublin. http://issuu.com/tarki\_research/docs/managing\_household\_debt\_-\_hungarian\_country\_report/3 (as of 01.03.2016)

Cowell, F.A. and C.V. Fiorio (2011) Inequality Decompositions: A Reconciliation, *Journal of Economic Inequality*, 9: 509–528.

Donáth, F. (1977) Reform és forradalom. A magyar mezőgazdaság strukturális átalakulása 1945–1975., Budapest: Akadémiai Erdei, F. (1980) A magyar társadalomról, Budapest: Akadémiai

Fábián Z. (2015) Társadalmi rétegek, fogyasztási státuscsoportok magyarországon, in Szivós and Tóth (2015), 128-142.

Fábián, Z., P. Róbert and P. Szívós (1998) Anyagi-jóléti státuscsoportok társadalmi miliői, in Kolosi, Tóth and Vukovich (eds), 72–91

Fábián, Z., A. Gábos, M. Kopasz, M. Medgyesi, P. Szivós and I. G. Tóth (2014) Hungary: A country caught in its own trap, in B. Nolan, W. Salverda, D. Checchi, I. Marx, A. McKnight, I. G. Tóth and H. G. van de Werfhorst (2014), chapter 14, 322–345.

Fábián, Z., T. Kolosi and P. Róbert (2000) Fogyasztás és életstílus, in T. Kolosi, I. G. Tóth and G. Vukovich (eds, 2000), 225–259.

- Fanelli, J. M. and L. Squire (eds) (2008), Economic Reform in Developing Countries: Reach, Range, Reason, Cheltenham: Edward Elgar
- Fazekas, K. and G. Molnár (eds) (2011), The Hungarian Labour Market 2011. Review and analysis, Budapest: Institute of Economics, IE HAS National Employment Foundation
- Fazekas, K. and L. Neumann (eds) (2014) The Hungarian Labour Market 2014. Budapest: Research Centre for Economic and Regional Studies, Hungarian Academy of Sciences & National Employment Non-profit Public Company Ltd.

Ferge, Z. (1969) Társadalmunk rétegződése, Budapest: KJK.

Ferge, Z. (1986) Fejezetek a magyar szegénypolitika történetéből, Budapest: Magvető Kiadó.

Goldthorpe, J. H. (2012) Back to class and status: or why a sociological view of social inequality should be reasserted, *Revista Espanola de Investigaciones Sociologicas*, 137 (1): 201–16.

Gornick, J. and M. Jäntti (eds) (2014) Income inequality: Economic disparities and the middle class in affluent countries, Stanford University Press.

Gyáni G. and G. Kövér (2003) Magyarország társadalomtörténete, Budapest: Osiris.

Harcsa I. (2008) Magyarország a jelzőszámok tükrében in. Kolosi, T., I. Gy. Tóth and Gy. Vukovich eds (2008) pp 471-498.

Kertesi, G. and J. Köllő (2002) Economic transformation and the revaluation of human capital – Hungary, 1986–1999, in A. de Grip, J. van Loo and K. Mayhew (eds) *The Economics of Skills Obsolescence*, Vol. 21, 235–73, Kidlington, Oxford: Elsevier Science.

Köllő, J. (2008) Hungary – The consequences of doubling the minimum wage, in D. Vaughan-Whitehead (2008), 239–266.

Köllő, J. (2011) Employment, unemployment and wages in the first year of the crisis, in K. Fazekas and G. Molnár (eds) (2011), 43-68.

Köllő J. (2009) A pálya szélén. Iskolázatlan munkanélküliek a posztszocialista gazdaságban, Budapest: Osiris

Köllő, J. (2014) What do we know about public sector employment?, in K. Fazekas and L. Neumann (2014), 43-55.

Kolosi, T. (1987) Tagolt társadalom, Budapest: Gondolat.

Kolosi, T. (2000) A terhes babapiskóta. A rendszerváltás társadalomszerkezete, Budapest: Osiris.

Kolosi, T. and Tóth I. G. (2008) A rendszerváltás nyertesei és vesztesei – generációs oldalnézetből (10 állítás a gazdasági átalakulás társadalmi hatásairól)., in T. Kolosi and I.G. Tóth (eds, 2008), 15–45.

Kolosi T., and I.G. Tóth (eds) (2008) Újratervezés. Életutak és alkalmazkodás a rendszerváltozás évtizedeiben, Kutatási jelentés a Háztartások életút vizsgálata alapján, Budapest: TÁRKI.

Kolosi, T. and K. Pósch (2014) Osztályok és társadalomkép, in T. Kolosi and I. G. Tóth (2014), 139–156.

Kolosi, T. and Keller (2010) Kikristályosodó társadalomszerkezet, in T. Kolosi and I.G. Tóth (2010), 105–138.

Kolosi, T. and I. Szelényi (2010) Hogyan legyünk milliárdosok? – avagy A neoliberális etika és a posztkommunista kapitalizmus szelleme, Budapest: Corvina.

Kolosi T., I. G. Tóth and Gy Vukovics (eds) (2000) Társadalmi riport 2000, Budapest: TÁRKI.

Kolosi and I.G. Tóth (eds 2010): Társadalmi riport 2000, Budapest: TÁRKI.Kolosi, T. and I. G. Tóth (2012) Előszó, in T. Kolosi and I.G. Tóth (eds. 2012), 7–15.

Kolosi T. and I. G. Tóth (eds) (2012) Társadalmi riport 2012, Budapest: TÁRKI.

Kolosi T. and I. G. Tóth (eds) (2014) Társadalmi riport 2014, Budapest: TÁRKI.

Kornai, J. (1980) The Economics of Shortage, Amsterdam: North Holland.

Kornai, J. (1992a) The post socialist transition and the state: reflections in the light of Hungarian fiscal problems, *American Economic Review*, 82: 2.

Kornai, J. (1992b) The Socialist System: The Political Economy of Communism, Princeton: Princeton University Press.

Kornai J. (1994) Transformational recession. The main causes, Journal of Comparative Economics, Vol. 19, No. 1 (August): 39-63.

KSH (1990) Jövedelemeloszlás Magyarországon. Az 1988. évi felmérés adatai., Budapest: KSH.

KSH (2014) Magyar Statisztikai Évkönyv Budapest:KSH

Laki, M. and J. Szalai (2004) Vállalkozók vagy polgárok? A nagyvállalkozók gazdasági és társadalmi helyzetének ambivalenciái az ezredforduló Magyarországán, Budapest: Osiris.

Laki, M. and J. Szalai (2013) Tíz évvel később: magyar nagyvállalkozók európai környezetben, Budapest: Közgazdasági Szemle Alapítvány.

Laki, M., B. Nacsa and L. Neumann (2012) Az átalakuló munka világa. Az új Munka Törvénykönyve bevezetésének kezdeti tapasztalatai. Szakszervezeti KiskönyvtárXXXIII, Budapest: Liga Szakszervezetek 2012 December.

Mihályi, P. (2010) A magyar privatizáció enciklopédiája 1-2. kötet, Pannon Egyetemi Kiadó - MTA Közgazdságtudományi Intézet.

Nolan, B., W. Salverda, D. Checchi, I. Marx, A. Mcknight, I. G. Tóth and H. G. van de Werfhorst (eds) (2014) *Changing Inequalities and Societal Impacts in Rich Countries: Thirty Countries' Experiences*, Oxford: Oxford University Press.

Oblath, G. (2014) Gazdasági átalakuklás, nekilendülés és elakadás. Magyarország makrogazdasági konvergenciája az európai unió fejlett térségéhez az 1990-es évek elejétől 2013-ig, in T. Kolosi and I.G. Tóth (eds, 2014), 21–50.

OECD (2008) Growing Unequal? Income Distribution and Poverty in OECD countries, Paris: OECD.

OECD (2011) Divided we stand. Why inequality keeps rising? Paris: OECD.

OECD (2013) Health at a glance. OECD indicators. Paris: OECD.

OECD (2014) Education at a glance 2014, Paris: OECD.

OECD (2015a). In it together. Why less inequality benefits all. Paris: OECD

OECD (2015b) Government at a glance 2015, Paris: OECD.

OECD (2015c). Government at a Glance: How Hungary Compares, Paris:OECD

Pető, I. and S. Szakács (1985) A hazai gazdaság négy évtizedének története 1945–1985, Budapest: Közgazdasági és Jogi Könyvkiadó.

Róbert, P. and A. Balogh (2008) Foglalkozási turbulencia Magyarországon, 1992–2007, in T. Kolosi and I.G. Tóth (2008), Újratervezés – Életutak és alkalmazkodás a rendszerváltás évtizedeiben, kutatási jelentés 'A háztartások életút vizsgálata (HÉV)' alapján, Budapest: TÁRKI.

Scharle, Á. and D. Szikra (2014) Recent changes moving Hungary away from the European Social Model, in D. Vaughan-Whitehead (2014), 219–254.

Szalai, J. (1992) Az érdekviszonyok történeti és jelenkori alakulása a társadalombiztosításban, Szociológiai Szemle 3. sz.

Szivós P. and I. G. Tóth (eds) (2008) Köz, teher, eloszlás, TÁRKI Monitor jelentések. Budapest: TÁRKI.

- Szivós, P. and I. G. Tóth (eds) (2015) Jól nézünk ki (...?!) Háztartások helyzete a válság után. Tárki Monitor jelentések 2014, Budapest: TÁRKI.
- Szivós, P. (2014) A magyar háztartások jövedelme és fogyasztása nemzetközi összehasonlításban: Felzárkózás vagy leszakadás?, in T. Kolosi and I.G. Tóth (eds. 2014), 51–62.
- TÁRKI (2008) Lifepath analysis of Hungarian households. Final project report, Budapest: TÁRKI.
- Tóth I.G. (2005) A gazdasági rendszerváltástól az uniós csatlakozásig, Budapest: Andorka Rudolf Társadalomtudományi Társaság Századvég Kiadó, Budapest.
- Tóth, I.G. (2008) Economic Transition and Income Distribution in Hungary, 1987–2001, in J. M. Fanelli and L. Squire (eds) (2008), 3–34.
- Tóth, I. G. (2014) Revisiting Grand Narratives of Growing Income Inequalities: lessons from 30 country studies, in B. Nolan, et al (eds, 2014), 11–47.
- Tóth I. G. (2015) Jövedelem-eloszlás 2009-2014 között, in P. Szivós and I. G. Tóth (eds 2015) 11-44.
- Tóth, I.G. and M. Medgyesi (2011) Income distribution and living difficulties in the midst of consolidation programmes and crises in Hungary, in Fazekas and Molnár (2011) 170–186.
- Vaughan-Whitehead, D. (ed.) (2008) The minimum wage revisited in the enlarged EU, Geneva: ILO.
- Vaughan-Whitehead, D. (ed.) (2014) The European Social Model in times of economic crisis and austerity policies, Geneva: ILO.
- Ward, T., O. Lelkes, H. Sutherland and I.G. Tóth (eds) (2009) European inequalities. Social inclusion and income distribution in the European Union, Budapest: TÁRKI.
- White House Task Force (2010) Annual report of the White House Task Force on the middle class. February 2010.