

2.2 THE IMPACT OF DEMOGRAPHIC REPLACEMENT ON EMPLOYMENT STRUCTURE

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The currently available data sources do not provide a comprehensive overview of the impact of demographic replacement in a broad sense – including entry to the labour market from education and immigration on the one hand, and, on the other, retirement, losing the capacity for work, death before retirement and emigration – on *employment structure*. By the individual-level integration of education, employment, healthcare and retirement registries there will be a possibility for a thorough investigation in a few years' time but at present it is only the Labour Force Survey (LFS) of the Hungarian Central Statistical Office (HCSO) that provides a comprehensive but – because of the small number of observations and the uncertainties of self-reported variables – necessarily inaccurate picture.

It is possible to identify those entering the labour market from education or entering retirement or permanent inactivity from the labour market in the LFS in several ways – relying on the panel aspect and the retrospective questions. The survey enables following a person for six quarters and the retrospective questions allow looking back for a further one year from the 1.5-year-long panel. Two questions of the survey were used for identifying the groups of entrants and outgoing workers, which refer to the activities of the respondent at the time of the survey and one year prior. *Entrants* are defined as persons working at the time of the survey and studying one year before it. *Outgoing workers* are persons reporting themselves as old age pensioners or incapacitated at the time of the survey and working one year prior to it. The occupation of outgoing workers is identified on the basis of the last HCSO code prior to retirement or inactivity, while that of entrants is identified on the basis of the code at the time of the survey.¹ Because of the low number of cases in the sample, several occupational groups and several periods were merged.²

The exit data in *Table 2.2.1* is approximately the same as the number of those exiting the labour market to retirement or incapacity, since the overwhelming majority of incapacitated persons claim to receive a disability pension or a similar benefit. 96 per cent of respondents reporting themselves to be old age pensioners responded to another question as receiving a pension in the January-March 2010 data collection of the LFS and vice versa: 96 per cent of those reporting receiving a pension identify themselves as old age pensioners when answering a question about their labour market status. Similarly, 99 per cent of those identifying themselves as incapacitated reported receiving a disability pension, while 87 per cent of those reporting receiving a disability pension identified themselves as incapacitated.

1 HCSO: Hungarian Standard Classification of Occupations. Occupations in the armed forces are not included.

2 The retrospective questions only reveal whether the respondent was in employment a year before but his/her job at that time was not necessarily his/her final one before exiting employment. Employment abroad or participation in public works schemes also qualify as employment. The database does not verify permanent emigration, which involves the dissolution of the household or exiting the household.

Table 2.2.1: The number of entrants to the labour market from education and from the labour market to retirement and/or incapacity according to estimates based on the Labour Force Survey of the HCSO, 2006–2015 (thousand persons)

	From education to work	From work to retirement	Balance (entrance-exit)
Those in graduate professions, senior positions, business leaders			
2006–2010	100	123	-23
2011–2015	97	115	-18
Those in other intellectual professions, office workers			
2006–2010	126	124	2
2011–2015	133	152	-19
Those in services (all occupations except industrial ones)			
2006–2010	91	86	5
2011–2015	114	105	9
Those in industrial occupations			
2006–2010	56	80	-24
2011–2015	57	58	-1
Assemblers, machine operators, those in elementary occupations			
2006–2010	58	110	-52
2011–2015	109	144	-35

Note: The table contains weighted totals, in thousand persons.

The number of observations: 9,937 entrants, 11,306 outgoing workers. The average cell size in the case of entrants is 662 persons, while in the case of outgoing workers it is 754 persons. The cases were weighted with the weights provided in the survey.

From education to work: working at the time of the data collection, studying one year prior to it. Respondents are placed into occupational categories based on their occupation at the time of data collection.

From work to retirement: pensioner or incapacitated at the time of data collection, working one year prior to it. Respondents are placed into occupational categories based on their last occupation. When identifying respondents, their self-classified labour market status is taken into account. Each person is included only once, at the first observation when he/she meets the above criteria to qualify as an entrant or outgoing worker (exiter).

It is only partially possible to verify the data externally. We estimate the joint number of those entering retirement or incapacity in the period of 2006–2010 to be 523 thousand. In the same period, the number of newly granted old-age, disability and trauma disability pensions was 501 thousand.³ It is not possible to make similar calculations for the period of 2011–2015 because disability pensions were “abolished” (converted into a social security benefit), while most of the persons involved still identify themselves as being on disability pension. LFS data and data from the Central Administration of National Pension Insurance can only be collated with some inaccuracy because some of the persons in retirement in year t and working in year $t - 1$ according to the the LFS do not retire in year t but in year $t - 1$. In addition, the population entering retirement includes a considerable number of unemployed or inactive persons. Nevertheless, the orders of magnitudes are the same. The estimates for the entrants from education to the labour market cannot be externally verified. The only reference point is the number of graduates com-

³ Fazekas–Blaskó (2016) p. 251. The calculation does not contain data on the personnel of the armed forces.

pleting higher education, which was 162 thousand between 2006 and 2010.⁴ The number of entrants to graduate occupations estimated in the table is significantly lower (100 thousand persons), but this is not necessarily contradictory, because some of the graduates do not take up employment, others find employment in jobs not requiring a higher education degree, while some of them go abroad and therefore are not included in the data collection a year after their graduation.

Finally, we should compare the estimates for the balances of demographic replacement with the changes in populations observed in the LFS. For this, the period of 2006–2010 is considered again and the data collections Q4 2005 and Q4 2010 of the LFS are used. The populations changed as follows (estimated balances from the table are given in brackets): graduate occupations 30 (–23), other intellectual 0 (2), services –28 (5), industry –88 (–24), unskilled and semi-skilled workers –12 (–52). The differences are not critical, considering that changes in populations are also influenced by unemployment (which was much higher at the end of 2010 than at the end of 2005 and mainly affected physical jobs), emigration (which primarily influenced the headcounts of skilled workers in the industry and service sectors), the expansion of public works programmes (resulting in an increase in the headcounts in elementary work) as well as taking up employment before completing higher education studies (as a result of which a lot of future graduates are observed in jobs not requiring a higher education degree).

Based on the above comparisons, estimates concerning demographic replacement may be regarded as a rough approximation. *The findings of the calculations are summarised below.*

Demographic replacement resulted in a loss in all occupational categories except the services sector and other intellectual occupations in 2006–2010. The most substantial loss was suffered by the unskilled and semi-skilled workforce despite an increase in entrants from education due to the excessive expansion of public works after 2011. The reason for this is because the impact of large cohorts of unskilled workers reaching the retirement age or losing their capacity to work was more significant.

The data do not confirm that demographic replacement or the different educational attainment levels of entrants and exiters endanger the supplies for industrial skilled labour. Between 2010 and 2015 the number of entrants and exiters was balanced in this sector, while demographic replacement caused a loss in graduate and other intellectual occupations.

⁴ Ibid. p. 228.

Reference

FAZEKAS KÁROLY–BLASKÓ ZSUZSA (eds) (2016): *The Hungarian Labour Market, 2016*. IE CERS HAS, Budapest.