## 12 DILEMMAS OF FEMALE40

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The program Female 40 has been in operation in Hungary since 2011: basically it allows every Hungarian woman, who fulfills the eligibility criterion of working and caring small children for at least 40 years, to retire below the full benefit retirement age, without any actuarial deduction. Since 2012 any other channel for early retirement (with or without actuarial deduction) has been closed down. This dual system is unique to Hungary; in our opinion, it is dysfunctional and only the political circumstances keep it alive: the government prides itself on the generosity of Female40, while the opposition proposes its extension rather than its replacement with an international standard flexible (variable) retirement age.
In our study, first we present the data, then evaluate the program's advantages and disadvantages. Our starting point is Augusztinovics (2005) and Augusztinovics-Köllő (2009), which called attention to fragmented careers. In addition to Mihályi-Vincze (2016), we rely on the following papers: Czeglédi et al. (2017), Granseth et al. (2019) and Simonovits (2018).
We commence the presentation of the data with the number and age of females who retired between 2007 and 2016 (Table 12.1). With a break on the rise between 2009 and 2012, the full benefit retirement age rose from 61 to 63.5 years (it was only 55 years in 1996). The number of new retirees jumped in two years: in 2007 due to the anticipation of the next year's drop in initial benefits; and in 2011 due to the sudden opening of Female 40 ; otherwise both the numbers of all retirees and of Female 40 retirees developed smoothly. The average (effective) retirement age of both categories rose quite slowly, and the introduction of Female 40 diminished the first number by 2.2 years. In summary, the average retirement age rose by 3.2 years over a period of 10 years, and the Female 40 beneficiaries' age by 1.4 years.

Table 12.1: The number and age of females taking old-age retirement

|  | Full-benefit <br> retirement age | Total |  | Female40 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Year |  | 62.0 | 57.8 |  |  |
| 2007 |  | 39.3 | 57.3 |  |  |
| 2008 | 62 | 15.2 | 59.9 |  |  |
| 2009 |  | 13.6 | 60.7 |  | 57.6 |
| 2010 |  | 84.9 | 58.5 | 54.8 | 57.8 |
| 2011 |  | 51.2 | 59.2 | 26.6 | number <br> (thousand) |
| 2012 | 62 | 40.2 | 59.6 | 24.1 | 58.0 |
| 2013 | 62.5 | 39.1 | 59.6 | 27.6 | 58.3 |
| 2014 |  | 41.7 | 60.0 | 28.7 | 58.7 |
| 2015 | 63 | 54.9 | 61.0 | 28.7 | 59.0 |
| 2016 | (year) |  |  |  |  |

[^0]The average benefit received in Female 40 was close to the male-female average benefit, i.e. it is significantly higher than the other females' average benefits.
At this point, we cite Czeglédi et al. (2017). Table 12.2 displays the situation of Female 40 in 2013. The most populous cohort was born in 1955, their average retirement age was equal to 58 years; and their average career's length was equal to 41 years. The bulk retired with the minimal eligibility length, 40 years but 15 and 11 percent had 41 and 42 years, respectively.

Table 12.2: Data of Female40, 2013

|  | Relative <br> average <br> earning | Average <br> initial <br> benefit | Average <br> length of <br> employ- <br> ment |  | Size distribution according to contribution length |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| (percent) |  |  |  |  |  |  |  |  |  |  |

* Less than 0.05 .

Source: ONYF (2014) 111-112. Table 6.9.
Table 12.3 presents the same breakdown showing earnings and career's lengths.
Table 12.3 Relative benefits of Females 40, retiring in 2013, in terms of nationwide net age

| Birth year | Size distri- <br> bution <br> (percent) | Average retirement age | Average length of employment | Size distribution according to contribution length (percent) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 40 | 41 | 42 | 43 | 44 |
| 1953 | 0.938 | 0.771 | 40.5 | 70.6 | 18.2 | 60.9 | 20.3 | 10.2 |
| 1954 | 0.954 | 0.776 | 40.2 | 86.9 | 10.4 | 10.8 | 0.6 | 0.2 |
| 1955 | 0.954 | 0.775 | 40.2 | 90.2 | 8.0 | 10.2 | 0.4 | 0.2 |
| 1956 | 0.793 | 0.655 | 40.2 | 89.8 | 8.8 | 10.0 | 0.3 | 0.2 |
| 1957 | 0.792 | 0.639 | 40.2 | 91.7 | 7.6 | 0.6 | 0.0 | * |
| 1958 | 0.760 | 0.609 | 40.1 | 95.0 | 5.0 | * | * | * |
| Average | 0.897 | 0.731 | 40.2 | 88.2 | 9.1 | 10.5 | 0.6 | 0.3 |

* Less than 0.05 .

Note: Meanwhile the source ONYF [2015] has also been published and the data for 2014 attest basically the same situation.
Source: ONYF (2014) 111-112. Table 6.9 censored.
Through the Connected Administrative Database, available in the CERS's Data Bank, we can obtain a more precise picture on the situation of various types in 2011. We distinguish three types of old-age retirees: early retirees, Female 40 and those retiring at the full benefit age. In the following paragraphs, we shall compare them (with respect to fragmentation, pre-retirement earning and benefit).

According to our statistics, it is evident that every year the share of early retirees was very high, those retiring at full benefit form a minority. The average retirement age basically follows the rise of the full-benefit retirement age. Discussing Table 12.3 we have already mentioned the critical role played by the career's length of 40 years; moreover, the differences between benefits of given cohorts (of those whose career's length are 35-39 and 40-44.)
The closing part summarizes the findings of Granseth et al. (2019) on the Hungarian pension system. In the framework of a public data request, the ONYF (which became part of the Treasury) sent us a detailed contingency table on the retirement age and the career's length of females retiring in 2016. Due to the loose-rigid system, ${ }^{1}$ the bulk of the cells are empty (nobody could retire without having at least 40 years of eligibility or age 63). To save space, Tables 12.4 and 12.5 present the data on career's length with full-benefit age and Female 40 in a condensed form, respectively:

Table 12.4: Condensed contingency table on females retiring in 2016, retirement age $=63$

| Length of contribution | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 0.008 | 0.008 | 0.009 | 0.010 | 0.013 | 0.014 | 0.016 | 0.016 | 0.016 | 0.017 |
| Length of contribution | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| Frequency | 0.019 | 0.020 | 0.022 | 0.021 | 0.022 | 0.023 | 0.021 | 0.025 | 0.026 | 0.029 |

Source: Hungarian State Treasury.
Table 12.5: Condensed contingency table on females retiring in 2016, Female40

| Length of <br> contributions <br> (year) | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0.014 | 0.019 | 0.026 | 0.113 | 0.038 | 0.013 | 0.008 | 0.004 | 0.030 |
| 40 | 0.004 | 0.011 | 0.012 | 0.012 | 0.026 | 0.025 | 0.010 | 0.004 | 0.018 |
| 41 | 0.000 | 0.014 | 0.030 | 0.012 | 0.008 | 0.019 | 0.020 | 0.005 | 0.015 |
| 42 | 0.000 | 0.000 | 0.013 | 0.016 | 0.009 | 0.006 | 0.017 | 0.011 | 0.014 |
| 43 | 0.000 | 0.000 | 0.000 | 0.005 | 0.008 | 0.006 | 0.003 | 0.008 | 0.017 |
| 44 | 0.018 | 0.044 | 0.081 | 0.058 | 0.089 | 0.069 | 0.058 | 0.024 | 0.094 |
| $\left(S^{*}=41.2\right)$ |  |  |  |  |  |  |  |  |  |

Source: Hungarian State Treasury.
To save space, we aggregate the data of Tables 12.4 and 12.5 into 3 categories in Table 12.6: category 1: females with at least 40 years of eligibility and younger than 63; category 2: females with less than 40 years of eligibility and not younger than 63 ; and category 3: females with at least 40 years of eligibility and aged at least 63 . We call attention to the strongly negative correlation between retirement age and career's length.
Table 12.7 contains the results of the 3-class aggregation. It is easy to see that under normal circumstances, on average, the beneficiaries of Female 40 contribute less than, and the others contribute more than, they receive.

Table 12.6: Three-class aggregation: partial statistics

| Category-1 <br> (Female40) <br> share | Category-2 <br> (aged at least 63): <br> share | Category-1 <br> average retire- <br> ment age | Category-2 <br> average career's <br> length | Relative <br> standard error <br> in 1 | Relative <br> standard error <br> in 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0.551 | 0.355 | 58.6 | 31.4 | 0.547 | 0.390 |

Table 12.7: Averages for the three classes

| Name | Average <br> retirement age | Average career's <br> length | Standard error <br> of retirement age of career's length | Standard error | Correlation <br> coefficient |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Data | 60.6 | 37.8 | 2.6 | 5.7 | -0.587 |

Source: Own calculations.
The real wage hike of 2016-2018, however, changed the situation (Statistical data, Table 1.1 and Simonovits, 2018). If we recalculate the lifetime balance, certain beneficiaries have recently suffered significant losses with respect to those staying. For example, assume that a woman of 40 years of eligibility and length of career retiring in 2016 with an annual benefit of 100 units which she will receive for 20 years. If she had stayed another 3 years and retiring in 2019, then her 80 percent replacement would have risen to 86 ( 7,5 percent rise) and due to valorization, from 2019 she would have received a real benefit of $1.075 \times 127=137$ units, which she would have enjoyed approximately for 17 years. (As if on her pension account her investment had exceptionally high real rates of return in 2016-2018!) The two lifetime benefits are $20 \times 100=2000$ units and $17 \times 137=2329$ units - a significant advantage for the stayer!

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[^0]:    Source: Fazekas-Köllö (eds.) (2017), Table 11.5, p. 269.

