# CHARACTERISTICS OF SPLITTING FAMILY TAX BENFIT AND STRATEGIES OF THOSE CHOOSING THE SPLITTING 

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The study examines data regarding splitting of family tax benefit received upon children in personal income taxation and the strategies of those splitting the tax benefit. The purpose of the investigation is to analyse proportions of sharing and principles of couples who split the family tax benefit each other, increasing or decreasing each other's financial opportunities. During the investigations, starting from a general analysis of the thousand people sample of family tax benefit beneficiaries from personal income tax return, we examined more detailed data of those who fully realized the family tax benefit. In the course of the examination we set up theoretical strategies for the analysis of the possible ways of splitting the tax benefit in order to check their matching with real data. The sharing strategy identifiable in the highest proportion was realizing the family tax benefit by $50 \%-50 \%$ by family members, which is influenced primarily by the realizing preferences of families with two children. A theoretical decision-making strategy has been identified in the case of more than half of the families fully realising family tax benefit. It has been found that, after the use in a fifty-fifty ratio, the preference of fathers' recourse is slightly stronger than mothers' due to the impact of families with three or more children. This is also typical of cases not identified with a specific strategy. The reason of preferring fathers' recourse is mostly the idea that who has a larger tax base should use the tax benefit. However, this is not typical for giving preference to maternal use.

Our findings indicate that families most often decide on the simplest solution that still can be considered rational, when sharing family tax benefit, which decision is differentiated according to the number of children.
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## 1. The socio-economic context of family allowances

A number of factors can be identified as determining factors for the negative demographic trends affecting Hungary. Sági and colleagues (2017), based on academic literature sources, identified changes in family formation patterns, more years spent in school, changes in family models and life philosophies as the reasons behind the low fertility rate. The insecurity of employment for young people and the difficulty of finding a home are also economic factors.

To ease the loss of income and the return to work due to having children, governments tend to use financial benefits, labour law and vocational training measures, as well as tax relief. Each country's approach also depends on its historical background, public attitudes towards marriage and gender roles, the role of government and the underlying family policy goals, as Adema's (20i2) research points out.

In their study, Lentner and Horbulák (202I) summarise the current Hungarian literature on the use of economic policy instruments to promote starting a family. According to the study, Giday (2012) would help those who have children by using the life-cycle approach, Banyár and Németh (2020) and Botos (2019) by compensating them in the pension system. Mihályi (2019) concludes, however, that population decline and ageing cannot be eliminated or even mitigated within a national framework, no matter how much money the state tries to spend to offset the individual costs of having children.

In the context of the Hungarian family support system, Gábos (2005), analysing aggregate, annual time-series data from Hungary, finds that the maintenance of the family support system has a clear potential to influence decisions on having children. According to Gábos and Tóth (2000), however, given that the decision to have children is a very long-term commitment, lasting results can only be expected if family policy is based on a complex approach and provides a stable institutional environment for those who have children. In the case of family allowances, the promotion of employment is also a priority. We will not discuss the structure of female employment data, but it may be important for our analysis that Borbély's (20II) study also points to the prominent role of Hungarian women's time spent working in the household. In her opinion, the fact that Hungarian women work a lot does not necessarily mean that they are economically independent, as a lot of work in the household does not mean labour market activity.

The main areas of support through the tax system are through tax or tax base relief and family taxation. Garfinkel et al. (2022) have conducted a cost-benefit analysis of the costs borne by the state and the benefits to society of, among other things, expanding the US federal income tax child tax credit. Their results show that the measures are a good investment: the additional costs borne by the state are multiplied by the benefits to society.

Grow and Van Bavel (2020), looking at women's contribution to family income in 27 EU countries, found that the number of women drops sharply after the contribution point rises to $50 \%$, after which there are far fewer women contributing
more to family income than their male counterparts. Slotwinski and Roth (2020), drawing on data from Switzerland and Austria, also show that couples where the woman earns more than the man are more likely to report incorrect data on their income in order to conform to the role perception that traditionally identifies men as breadwinners.

One important area of economic independence is decision-making within the family. Using data from 20 countries, Pepin and Cohen (202I) find that a person is more likely to manage joint family money in countries where gender inequality is generally higher compared to other countries. This was not significantly affected by the level of earnings inequality among the couples. Relying on data from 27 EU countries, Klesment and Van Bavel (2022) report that women who earn more than their partners are more likely to make key financial and other important decisions alone. However, in line with traditional gender roles, the relationship with relative earnings is not linear: in couples where the wife earns almost all of the income, husbands have a greater say in financial decision-making than in couples where both contribute a significant share of joint income. However, this does not apply to general family decisions, suggesting that major financial issues, which have traditionally been the role of men, may be more gender-sensitive than other family decisions.

## 2. Starting points of the research, data and methods used

The study aims to contribute to the analysis of the financial role of women and men in families with a small section. The analysis concerns possible family choices that could be made in relation to the family tax benefit under the personal income tax system. We are looking at the proportion of couples who claim and split the family tax benefit among taxpayers filing personal income tax returns who have children, and thus the proportion of couples who split the benefit and possibly contribute to a certain degree of financial independence of the other.

Our data come from personal income tax returns, so we do not have surveys on the details of households' financial circumstances. For this reason, we can examine to what extent the decision of couples splitting the family tax benefits one or the other party, or does not favour either party, because, for example, couples typically decided to split the benefit fifty-fifty. In this context, before analysing family decisions to split the benefit, the paper also briefly examines the baseline data on the use of the family tax benefit.

The basic data set used is a sample of $\mathrm{I}, 000$ personal income tax returns of those opting to split the family tax benefit, representative of taxpayers' incomes, which also includes the main income tax data of the sharing partners of the taxpayers splitting the benefit. At the beginning of the study, this sample will be compared with another sample of $\mathrm{I}, 000$ family tax benefit recipients, also derived from personal income tax returns and representative of the income distribution - but this will be done only briefly, given the purpose of the study and the limitations
of the scope. The anonymised stratified samples were provided by the Ministry of Finance. ${ }^{2}$

The data are from the 2020 tax year. Then, depending on the number of dependants, the family tax benefit was HUF 66,670 for one dependent, HUF 133,330 for two dependants and HUF 220,000 per dependent per month for three and each additional dependent.

The first part of the analysis is carried out using descriptive statistics (frequency, mean). An essential and completely new element of the study is the decision tree model, which is presented in detail below, to calculate the expected family tax benefits of taxpayers based on theoretical strategies and compare them with actual data. Given the different decision characteristics of the sample groups and the specificity of the modelling method used in the analysis, other statistical tools cannot be used in this study. ${ }^{3}$

## 3. Characteristics of those opting to split the family tax benefit during the period under review

## Characteristics of the average of those opting to split the family tax benefit

The vast majority of people who opt for family tax benefit splitting have several children. It is noteworthy, however, that in the sample of taxpayers generally claiming the family tax benefit, $47.5 \%$ of taxpayers are families with one-child. Thus, although we do not have information on the two populations as a whole, it is likely that a large proportion of single parents do not opt to split the family tax benefit, and are either single or the only one in the family to claim it. Therefore, we cannot ignore the fact that those splitting the family tax benefit represent a relatively well-defined proportion of the family tax benefit recipients.

[^1]In contrast, those with three or more children are over-represented in the sample of family tax benefit sharers compared to the sample of benefit claimants - those with more children are more likely to favour from the larger amount of benefit through sharing alone compared to others. These data are presented in Table I. ${ }^{4}$

Table 1: Breakdown of families receiving and splitting the family tax benefit by number of children

| Number of children | Family tax benefit splitters |  | Family tax benefit recipients |  |
| :--- | :---: | :---: | :---: | :---: |
|  | number | proportion | number | proportion |
| 1 child | 72 | $7.3 \%$ | 475 | $47.5 \%$ |
| 2 children | 442 | $44.5 \%$ | 363 | $36.3 \%$ |
| 3 or more children | 479 | $48.2 \%$ | 162 | $16.2 \%$ |
| Total | 993 | $100.0 \%$ | 1,000 | $100.0 \%$ |

Source: Ministry of Finance, own calculation
Among those who split the benefit, the average tax base of mothers is much lower than that of fathers: on average for all families, they account for $40.6 \%$ of the average family tax base. Data on the distribution of tax bases are shown in Table 2.

Table 2: Ratio of tax bases of members of families splitting the family tax benefit to each other

| Number of <br> children | Tax base of mother |  | Tax base of father |  | Tax base of <br> family |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HUF | \% of the family <br> tax base | HUF | \% of the family <br> tax base | HUF |
| 1 child | $2,829,616.1$ | $39.8 \%$ | $4,287,990.6$ | $60.2 \%$ | $7,117,606.7$ |
| 2 children | $2,705,819.2$ | $42.3 \%$ | $3,690,088.5$ | $57.7 \%$ | $6,395,907.6$ |
| 3 or more |  |  |  |  |  |
| children | $2,443,911.5$ | $39.0 \%$ | $3,816,040.8$ | $61.0 \%$ | $6,259,952.3$ |
| Total | $2,588,457.2$ | $40.6 \%$ | $3,794,197.3$ | $59.4 \%$ | $6,382,654.6$ |

Source: Ministry of Finance, own calculation

4 For the sole purpose of the study (to analyse the financial role of women and men in families), it was necessary to exclude from the family tax benefit recipients those couples who were identified as same-sex in the sample, and therefore the number of family tax benefit recipients is less than one thousand.

Comparing the distribution of tax bases with Table 3 below on the distribution of family tax benefits, it can be seen that the distribution of tax bases within families is broadly similar across the sample. In principle, therefore, the aggregate data would suggest that the distribution of the family tax benefit within families simply follows the distribution of tax bases.

However, if we also look at families by number of children, we see that for families with one and two children opting to split the family tax benefit, the share of family tax benefit use within the family is slightly skewed in favour of mothers compared to the share of their tax base within the family (although it is true that mothers use less family tax benefit in these cases). However, for those with three or more children, mothers claim on average only $37.3 \%$ of the family tax benefit, which is also very slightly lower than the share of their tax base in the family.

Table 3: Family tax benefit claimed by members of families opting to split the benefit

| Number of children | Family tax benefit claimed by the mother |  | Family tax benefit claimed by the father |  | Total average number of family benefits claimed by families |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | amount <br> (HUF) | \% of the benefit received by the family | amount <br> (HUF) | \% of the benefit received by the family | amount (HUF) |
| 1 child | 470,282.8 | 44.4\% | 622,819.7 | 55.6\% | 1,093,102.5 |
| 2 children | 1,336,674.8 | 46.8\% | 1,511,667.8 | 53.2\% | 2,848,342.6 |
| 3 or more children | 1,821,000.2 | 37.3\% | 3,027,628.2 | 62.7\% | 2,424,314.2 |
| Total | 1,515,523.9 | 40.9\% | 2,188,765.7 | 59.1\% | 3,704,289.6 |

Source: Ministry of Finance, own calculation
The use (splitting) of the family tax benefit by the mother and the father in proportion to the tax base - up to the maximum amount of the tax bases - ensures the maximum possible use of the benefit in all cases, so the use of the family tax benefit in proportion to the tax bases is (would be) a perfectly rational decision from the point of view of the most efficient use of the family allowance. Based on the above data, it is therefore likely that families do not base their decision to split the benefit solely on the size of the tax base, but also take other factors into account (or use a simpler calculation) when claiming the benefit.

## Characteristics by family of those claiming the family tax benefit in full

So far, we have drawn conclusions from the average of the data, but this information only gives a superficial picture of the distribution of the family tax benefit, since in reality there may not be families that distribute the benefit among their members at or close to the average. It is therefore necessary to analyse the data by family using the methods and data available to us in order to obtain more detailed information on the individuals in the sample.

For this part of the analysis, we use data on full recipients of the family tax benefit. We will continue to examine how the data on benefit receipt compare with the ratio of tax bases to each other, but we will now examine the data on an individual basis. In order to identify the families that fully claim the family tax benefit, we had to filter the data in order to carry out a detailed analysis. When comparing the data, we excluded from the sample those couples

- where the statutory amount of family tax benefit for dependants was not the same for both parents (i.e. only families where both parents receive family tax benefit in their own right and share it),
- where one member of the family splitting the benefit has a zero tax base,
- where the amount of the family tax benefit that can still be claimed jointly with the spouse or civil partner was not the same for the two taxpayers,
- the combined amount declared by the two taxpayers in the tax return as a family tax benefit reducing the consolidated tax base was greater or less than the amount declared in the tax return as a family tax benefit still available to the spouse or partner.
In Table 4, we compare the tax bases of the couples in the study and analyse the families' data in terms of which family members claim more family tax benefits against the tax bases compared.

Table 4: The relative tax bases of members of families claiming the full family tax benefit and the amount of the benefit claimed ${ }^{5}$

| Situation | the father has a larger tax base |  | the mother has a larger tax base |  | total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | number of families | \% | number of families | \% | number of families | \% |
| the father claims the larger benefit | 160 | 53.3\% | 13 | 12.6\% | 173 | 42.9\% |
| the mother claims the larger benefit | 49 | 16.3\% | 50 | 48.5\% | 99 | 24.6\% |
| equally claim the benefit | 91 | 30.3\% | 40 | 38.8\% | 131 | 32.5\% |
| Total | 300 | 100.0\% | 103 | 100.0\% | 403 | 100.0\% |

Source: Ministry of Finance, own calculation

It is clear from the previous analysis and from these data that the father has a larger tax base in the vast majority of families claiming the benefit. Fathers make more use of the benefit in almost half of families, with one third of families claiming it equally, and the mother making more use in $24.6 \%$.

The table shows that there are some families where, despite the higher tax base of the father or mother, the other party still claims a higher tax benefit. For $16.3 \%$ of families where the father has a larger tax base, the mother's claim is higher, and $30.3 \%$ of families where the father has an equal claim, the family tax benefit is claimed by the same proportion. In families where the mother has a higher tax base, the proportion of higher paternal claims is slightly lower: the father still claims a higher benefit in $\mathrm{I} 2.6 \%$ of families. Equal claim is more pronounced: $38.8 \%$ of them choose this option.

The data from the analysis of the claim of the family tax benefit by number of children for families claiming the full family tax benefit are presented in Table 5. For families with one, three or more children, the highest share is accounted for by the higher amount of paternal claims, which represent $2 / 3$ of families with three or more children. (This latter result is in some respects consistent with our earlier study of the full sample of family tax benefit sharers, where we found that for those with three or more children, paternal claim is stronger than the proportion of tax bases.)

However, among families with two children, one case that is not yet apparent from the analysis of average data is very striking: the proportion of families opting for equal, joint claim is the highest, which option is chosen by half of the families.

[^2]Table 5: Family tax benefit received by members of families claiming the full tax benefit in relation to the number of children in their care

| Situation | 1 child |  | 2 children |  | 3 or more children |  | total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% |  | \% |  | \% |  | \% |
| the father claims the larger benefit | 14 | 45.2\% | 67 | 28.6\% | 92 | 66.7\% | 173 | 42.9\% |
| the mother claims the larger benefit | 9 | 29.0\% | 50 | 21.4\% | 40 | 29.0\% | 99 | 24.6\% |
| equally claim the benefit | 8 | 25.8\% | 117 | 50.0\% | 6 | 4.3\% | 131 | 32.5\% |
| Total | 31 | 100.0\% | 234 | 100.0\% | 138 | 100.0\% | 403 | 100.0\% |

Source: Ministry of Finance, own calculation
The relationship between the use of the family tax benefit and the tax base can also be shown for families categorised by the number of children, as shown in Table $6^{6}$.

Table 6: Family tax benefit claimed by members of families claiming the full benefit in relation to the relative size of the tax bases and the number of children

| Situation | 1 child | 2 children | 3 or more children | total |
| :---: | :---: | :---: | :---: | :---: |
| the father has a larger tax base |  |  |  |  |
| the father claims the larger benefit | 48.2\% | 35.5\% | 83.7\% | 53.4\% |
| the mother claims the larger benefit | 25.9\% | 17.8\% | 11.5\% | 16.3\% |
| equally claim the benefit | 25.9\% | 46.7\% | 4.8\% | 30.3\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| the mother has a larger tax base |  |  |  |  |
| the father claims the larger benefit | 25.0\% | 10.8\% | 14.7\% | 12.6\% |
| the mother claims the larger benefit | 50.0\% | 30.8\% | 82.4\% | 48.6\% |
| equally claim the benefit | 25.0\% | 58.4\% | 2.9\% | 38.8\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: Ministry of Finance, own calculation

[^3]Among single parents, there is a clear tendency for those with a larger tax base (half of single-parent families) to claim the larger tax benefit. However, it is also relatively common for those with a smaller tax base to claim a larger tax benefit or even to claim fifty-fifty (a quarter of families consider both strategies). For this type of family, there is no significant difference between a higher rate of benefit for the mother and a higher rate for the father, despite a smaller tax base.

Among those with two children, parents opt for equal entitlement to the greatest extent regardless of the size of their tax base, although this is a higher proportion for those with a larger tax base. This is followed by the idea that those with a larger tax base benefit more, which is stronger for those with a larger tax base. When the mother has a larger tax base, the equal use requirement is so strong that the ratio of both other options is lower than when the father has a larger tax base.

Among those with three or more children, the overwhelming majority of those claiming the benefit are those with a larger tax base, compared to a negligible equal take-up, and it is not very common for the party with a smaller tax base to claim the greater benefit. This is roughly what the data show in both cases where one or the other parent has a higher tax base.

## 4. Strategies of those opting to split the family tax benefit during the period under review

The data available allow us to examine the principles on which families that opt to split the benefit decide to do so. Theoretical strategies have been developed based on the considerations that may guide families in this decision. Based on these strategies, and using the available data - the tax base of the mother and father, the amount of family allowances still claimable in the tax return and the number of children they have together - it is possible to calculate for each family how much family tax benefit the father and mother would claim if the theoretical strategy were followed. The result of the calculation is the income data of each family after claiming the benefit, and the amount of family benefit claimed by each family member. We compare these theoretical amounts for the family tax benefit with the real data on actual claim by each household and infer whether the family is following the theoretical strategy.

Five theoretical strategies were distinguished in the analysis:
I. Basically, the father claims the benefit - under this strategy, the father takes as much of the benefit as his tax base allows, and the mother can claim the remaining benefit.
2. Basically, the mother claims the benefit - the reverse of the previous strategy: the mother takes as much benefit as her tax base allows, the father can claim the remaining benefit.
3. They claim the benefit fifty-fifty - parents basically split the benefit by $50 / 50$, but if one parent's taxable income is less than half the benefit, the other parent can claim the remaining amount.
4. The parents share the benefit by $\mathrm{I} / 3-2 / 3$ - either the mother or the father takes $2 / 3$ of the benefit and the other parent $1 / 3$ - the other parent can claim the remaining part.
5. The parent with the larger tax base is the main beneficiary - the parent with the larger tax base claims as much of the benefit as their tax base allows, with the other parent claiming the remainder.

The underlying assumption of our study is that by following theoretical strategies, taxpayers make rational choices and take as many benefits as possible. Hence, the above strategies involve a process of multiple considerations and decisions: in essence, after the principles have been applied, they always check whether there is any unclaimed part of the benefit that the other parent could claim. The details of the decision-making processes are illustrated in the following diagrams.

Figure 1: Strategy 1 - Basically the father claims the benefit


Source: own editing

## Strategy 2 - Basically the mother claims the benefit

The reverse of the above decision process: in the first stage of the process, we compare the mother's tax base and the size of the benefit, and then, where the father is included in the analysis, we now refer to the mother, and the father is included in the analysis instead of the mother.

Figure 2: Strategy 3 - They claim the benefit by 50-50\%


Source: own editing

## Strategy 4 - The father or the mother takes $2 / 3$ of the benefit and the other parent 1/3

In this case, the decision-making process is the same as in the $50-50 \%$ case, except that in the first step, depending on the decision, the tax base of the father or mother is compared to $2 / 3$ of the benefit and the tax base of the other parent is compared to $1 / 3$ of the benefit. (Thus, there are actually two sub-options to this strategy: the family can decide that the father takes $2 / 3$ of the benefit, but also that the mother does so.)

Figure 3: Strategy 5 - The parent with the larger tax base is the main beneficiary


Source: own editing

After comparing the theoretical strategy and the actual demand data, we have shown in Table 7 for how many families the calculated figures are the same as the actual figures. The top row of the table shows the number of claims for a given family type, and the bottom rows show the number of claims with an identifiable strategy.

Table 7: The use of the family tax benefit with an identifiable strategy

| Situation | 1 child | 2 children | 3 or more <br> children | Total |
| :--- | :---: | :---: | :---: | :---: |
| Number of families | 31 | 234 | 138 | 403 |
| basically claimed by the father | 7 | 17 | 15 | 39 |
| basically claimed by the mother | 7 | 22 | 6 | 35 |
| the benefit is claimed by 50-50\% | 10 | 128 | 12 | 150 |
| the benefit is claimed by $1 / 3$ to <br> $2 / 3$ | 3 | 19 | 20 | 42 |
| the benefit is basically claimed <br> by the one with a larger tax <br> base | 7 | 15 | 14 | 36 |
| Number of claims with an iden- <br> tifiable strategy | 34 | 201 | 67 | 302 |

Source: Ministry of Finance, own calculation

Based on the aggregated data, the strategy most often identified is the 50-50\% family tax benefit claiming by family members. The other four strategies were identified in lower numbers, roughly the same. Behind the $1 / 3-2 / 3$ claiming ratio, paternal claiming was slightly higher than maternal claiming in the aggregate data.

This table also shows that among two-child households, the split-half share is prominent, and among one-child households it is also the leading strategy, but only slightly. In any case, a relatively high number of these two types of families can be identified as using one of the strategies outlined, compared to the number of families that fully benefit from the family tax benefit and opt for splitting. In contrast to the aggregate data, for families with two children (after claiming it fifty-fifty), the mother's claim is higher than the father's. This is also confirmed by the data on the $\mathrm{I} / 3-2 / 3$ ratio for families with two children, where the maternal $2 / 3$ ratio ( I 4 families) is much higher than the paternal $2 / 3$ ratio ( 5 families).

Among those with three or more children, however, a lower proportion of the five strategies can be identified compared to the number of families. One of the reasons for this shortfall compared to the findings on the larger tax base in the earlier part of the study is probably that in the preliminary simplified analysis in this respect we only examined whether the larger tax base was the one that benefited from the larger benefit. However, the decision-making process for a similar theoretical strategy is
subject to much stricter rules: the strategy means that the beneficiary with the larger tax base takes the benefit, and the principles of rationality (using every penny) are well defined. It is noteworthy, however, that the $1 / 3-2 / 3$ ratio is highest for families with three children compared to other strategies and other family types. However, for families with three children, the number of families claiming in a $\mathrm{I} / 3-2 / 3$ ratio is much higher for the paternal $2 / 3$ ratio ( 15 families) than for the maternal $2 / 3$ ratio ( 5 families).

However, the table does not tell us exactly how many families in total are thinking along the lines of one of the strategies we have identified. This is because the calculations show that, in some cases, more than one strategy can be identified for a family, but the table only shows the number of identifiable claims, not the total number of families affected.

The number of families following an identifiable strategy is shown in Figure 4, with the number of claiming cases with a possible overlapping strategy also shown. The figure shows the relative proportions of those who choose a strategy and also shows which group those who do not follow a clear strategy tend to be closer to. The circles in the top row show the number of families that can be identified as following one of the strategies. The circles in the bottom row show the number of families for which there was no clearly identifiable strategy. Even without this, it was still possible to classify all families according to their preferences: the graph shows how many families had a higher paternal or maternal preference compared to the fiftyfifty preference strategy.

The data show that $55.3 \%$ of the 403 families under analysis, i.e., 223 households, can be identified as following one of the above strategies (the figure is the sum of the numbers in the upper sets). The figure shows that I3I families ( $32.5 \%$ of families following the identifiable strategy) clearly follow the fifty-fifty strategy, i.e., a significant proportion of families do not prefer the claim of the parent with the largest tax base (typically the father), but simply split the benefit fifty-fifty.

Taking into account the fifty-fifty claim and the possible identity of the strategy of one parent's preference, a total of 39 families chose the father to claim the benefit first. In 33 of these families, the largest proportion of families ( $84.6 \%$ of those opting for the father's preference), this strategy coincided with the father's preference as the parent with the larger tax base (in 4 of these families, the father's preference as the parent with the larger tax base means that the father is targeted to claim $2 / 3$ of the benefit).

Together with the fifty-fifty claim, 35 families - not much less than those who benefited fathers - preferred the claim by mothers, but only 3 of these families had this strategy coinciding with that of the mother as the parent with the larger tax base (of which 2 mothers claimed $2 / 3$ of the benefit). Thus, the reasons behind the preference for maternal claiming are more likely to be other than the size of the tax base (which, interestingly, still resulted in the mother claiming $2 / 3$ of the benefit in 5 families). And the main reason for the preference for paternal claims is simply that their tax base is larger.

Figure 4: Ratio of strategies followed in claiming the family tax benefit and number of families not following an identifiable strategy



The father is the first to claim the benefit
The mother is the first to claim the benefit
Fifty-fifty claim of the benefit
The first to claim the benefit is the one with the higher tax base

- $1 / 3-2 / 3$ claim of the benefit

No clear strategy, but the father is more likely to claim the benefit first
No clear strategy, but the mother is more likely to claim the benefit first

Source: Ministry of Finance, own calculation and editing
Among the families following an identifiable strategy, the number of families splitting the benefit in a ratio of $\mathrm{I} / 3-2 / 3$ is remarkable. I2 families opted for a $2 / 3$ share for the father and $I / 3$ share for the mother, completely independently of any other principle. Less than 6 families chose the $2 / 3$ maternal and $I / 3$ paternal claim, regardless of other strategies.

Due to the principles of the theoretical strategies set up (taxpayers behave rationally, striving to ensure that not a single forint of the benefit is wasted), there is a greater chance that more than one strategy can be identified for a family. Thus, for example, the ratio of $\mathrm{I} / 3-2 / 3$ coincides mostly with another strategy, but -
mainly because of the families with three children, who are the most likely to use it independently - this strategy is also presented.

There is basically no major difference in the number of families between the preference for paternal and maternal preference as an identifiable strategy. However, i8o families ( $44.7 \%$ of all families) did not have a clear claiming strategy. Nevertheless, even in these cases, compared to the fifty-fifty preference, the preference is still shifted towards the father in $27.8 \%$ of the families (in2 families) and towards the mother in 68 families ( $\mathbf{I} 6.9 \%$ ).

We also briefly show family claiming preferences by number of children, not shown in the figure. For all families, the preference for the fifty-fifty strategy is again mainly influenced by the claiming patterns of families with two children: for all families with two children, $54.7 \%$ of households, 128 families, opt for the fifty-fifty strategy (including cases where the strategy of one parent's preference coincides with the fifty-fifty strategy). The rate is only $32.3 \%$ for families with one child and $8.7 \%$ for families with three children. Among claimants with one child, the leading strategy is fifty-fifty claiming to a lesser degree, but there is also paternal claiming overlapping with claiming that favours a larger tax base, and maternal claiming that is most self-assertive but slightly overlapping with the fifty-fifty claiming. Among those with three or more children, the proportion of those with an identifiable strategy is also lower than the overall sample ( $55.3 \%$ ): $29 \%$, compared to $68.4 \%$ for those with two children. In the case of families with three or more children, given that for this analysis we can already look at the overlap between strategies, it can be seen that paternal claiming is clearly the most important, overlapping almost entirely with the strategy of claiming the larger tax-based family member.

In less than half of all families ( $44.7 \%$ ), no clear strategy for claiming could be identified, but even in these cases, claiming tends to favour the father rather than the mother, representing $62.2 \%$ of families with no specific strategy.

## 5. Executive Summary

In examining the data on splitting the family tax benefit and the strategies of benefit sharers, we have moved from an analysis of aggregate baseline data to an analysis of increasingly detailed data on individual families. Theoretical decision processes were set up according to five different strategies, and the extent to which the demand figures calculated on the basis of the theoretical strategy cover the real figures was examined. First, we analysed the number and composition of families in which a particular claiming strategy could be identified, and then we looked at the strategy of each family, identifying overlapping strategies. We identified a theoretical decision strategy in more than half of the families that fully claim the family tax benefit.

Overall, although the conclusions that can be drawn from the available data are limited, we can say that decisions on the distribution of family tax benefits are differentiated according to the number of children in the families. Families are likely to opt for the simplest, even rational, solution when splitting the family tax benefit.

This is the fifty-fifty split of the benefit for families with two children make full use of the family tax benefit, which was also the strategy identified in the largest number of cases, and a shift towards paternal claiming for families with three children, mainly because of the size of the tax bases. It is noteworthy that the $1 / 3$ to $2 / 3$ claiming ratio is highest for families with three children compared to other strategies and other family types. For families with one child, although the proportion of families following an identifiable strategy is high, the trend was not so clear-cut, with a slightly higher proportion of families with fifty-fifty of the total.

Our study of our filtered sample was able to somewhat nuance the literature's picture of male and female family decision-making on a slice of family finances. Stereotypes about traditional gender roles may play less of a role in the splitting of the family tax benefit, so our analysis suggests that mothers are generally not at an additional financial "disadvantage" compared to men when claiming the family tax benefit. The different strategies pursued by families differentiated by the number of children and the size of the benefit also show that they are not necessarily driven by gender stereotypes, but rather by simple decision making and the desire to maximise the share of the benefit. With a larger benefit, families have to be more discerning about who has a larger tax base - and this tips the balance more often in favour of the father. The idea behind the possible preference for paternal claiming is more likely to be that the person with the larger tax base should claim the benefit, whereas this is not the case for maternal claiming. The findings may be refined by a more detailed categorisation of families according to internal income ratios, as described in the literature, in a future study.

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[^1]:    2 For the sampling, all the taxpayers surveyed were divided into 50 income bands of increasing income per HUF 200,000 and then sampled. The distribution of the sample is representative of the number of taxpayers in these income bands.
    3 For the purposes of the tests, we take as income the amount of the taxpayer's consolidated tax base less the allowance for mothers with four or more children and the allowance for first-time married couples. The family tax benefit is the amount claimed by taxpayers on their tax return. Therefore, for the purposes of the analysis, given that we cannot simulate decision situations in any other way, we do not include in the scope of the analysis the amount of family tax benefit that the taxpayer or the person he or she has included in the family tax benefit splitting has already claimed as a contribution allowance in the period of payment of the tax advance before the tax return. The number of children taken into account is the number of children who qualify as "dependent beneficiaries" for the purposes of the family tax benefit, given that only these children are eligible for the benefit.

[^2]:    5 Given that there is no family in the sample where the tax base of the parents would be equal, this case is not included in the table and will not be included in the remainder of the table.

[^3]:    6 Only percentages are presented in this table due to space limitations.

