## 1 Methodological part

The *Financial Situation of Households (FSD)* survey has been conducted by the Czech Statistical Office (CZSO) in cooperation with the Czech National Bank (CNB) since 2020. The survey is coordinated by the European Central Bank as the Household Finance and Consumption Survey (HFCS) and is carried out every three years in the euro area countries and several other countries (ECB 2023a, ECB 2023b). The FSD survey provides unique data that cannot be obtained by other means than direct interviews in households. The Czech version of the survey is conducted annually, and the data obtained are used both at the national level (by institutions such as the CNB and the CZSO) and at the international level.

The aim of the FSD survey is to map the situation of Czech households in terms of their financial and asset positions. The resulting data are used, among other applications, to construct a net wealth indicator, which requires an estimate of the value of households' assets and liabilities in addition to their income. The results are intended to provide a basis for assessing the behaviour of households in terms of the financial market instruments they use, their overall level of indebtedness and the extent to which their assets are burdened by loans and credits. A further advantage is that the resulting data from this survey are internationally comparable in terms of methodology and it is therefore possible to compare the resulting indicators across the euro area.

Similar to the Household Budget Survey (HBS), the FSD is conducted by integrating it into the Living Conditions Survey, which is the national version of the European Union – Statistics on Income and Living Conditions (SILC) survey, i.e. using a subset of households randomly selected for the SILC.

#### 1.1 Selection of households

The selection of households for the FSD is based on the four-year panel of the SILC survey, where the unit of observation is a dwelling. At the first visit (Wave 1), households and their members who have habitual residence in the selected dwelling were interviewed. At subsequent visits, only households with 'panel persons', i.e. persons who participated in Wave 1, were interviewed.

Households from all regions of the Czech Republic are contacted for the FSD throughout the year. The survey unit is a household that was successfully surveyed in Wave 4 of the SILC.

## 1.2 Household data collection, data procurement

Data collection was conducted through face-to-face interviews with respondents, using either an electronic questionnaire in a laptop computer, known as CAPI (Computer Assisted Personal Interviewing), or a paper questionnaire, referred to as PAPI (Pen and Paper Interviewing), subsequently transcribed into an electronic version. At regional level, fieldworkers were responsible for data collection and verification. At the CZSO head office, questionnaire data were consolidated and subjected to a final 'supercheck', which included editing, the imputation of missing values, and final centralised processing.

The interview for the FSD survey was usually conducted during the same visit as for the SILC or HBS surveys, less often during a separate visit.



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The FSD questionnaire included questions on mortgages and property loans, as well as other types of loans and credit that the household may be repaying (consumer credit, hire purchase, financial leasing, credit card debt, etc.). The survey also covered the ownership and estimated value of assets such as real estate, cars and other vehicles, valuables and, where applicable, the value of a business or interest in a business. The questionnaire also focused on the use and value of financial products (bank accounts, building society accounts, supplementary pension insurance, mutual funds, securities, etc.).

#### 1.3 Number of households in the FSD

The published results for 2021 are based on a total of 3,122 households monitored in 2020 and 2021, the results for 2022 are based on a total of 3,155 households monitored in 2021 and 2022, and the results for 2023 are based on a total of 3,246 households monitored in 2022 and 2023. The reason for this is to obtain a representative sample of households for the subsequent breakdown of the results. The specific numbers are shown in Table 1.

Table 1 Number of households surveyed in FSD 2020, 2021, 2022 and 2023

|  | 2020  | 2021  | 2022  | 2023  |
|--|-------|-------|-------|-------|
| Number of households surveyed                  | 1,571 | 1,551 | 1,604 | 1,642 |
| Share of households surveyed <sup>1)</sup> (%) | 76.2  | 76.4  | 77.7  | 79.6  |

<sup>1)</sup> i.e. the response rate

### 1.4 Data conversion to population totals, corrections and calculations

The sample for the FSD was a subset of the SILC sample, thus the results of the SILC were used as the basis for the calculations. A significant non-response rate, which was also influenced by SILC response rates from previous years, distorted the composition of the final dataset from which the FSD results were compiled.

However, the limited size of the households sample was the limiting factor for the calculation method, respectively the construction of conversion factors.

The calculations themselves involved the elimination of complete non-responses, i.e. the addition of correction coefficients for individual households with respect to their representation in the FSD sample relative to the SILC population estimates. An iterative weight calibration procedure was used to calculate the weights, using as a reference the SILC baseline estimates of aggregates (the number of households, total persons, working members, dependent children, non-working pensioners and unemployed persons), including selected characteristics used to classify households in published results:

- 4 groups of households according to the status of the head of the household (employees with lower/higher education, self-employed, pensioners);
- 4 groups of households according to the legal form of use of the dwelling (owner-occupied house, owner-occupied apartment, cooperative dwelling, rented dwelling);
- 2 groups of households according to the number of dependent children (with or without children);
- 4 groups of households according to municipality size (up to 1,999, 2,000 to 9,999, 10,000 to 49,999, 50,000 and more inhabitants);
- 5 groups of households according to net monetary income per person (quintiles).

The outlined procedure primarily reflects the social structure of households, including income distribution.



For the classification of households by income level (quintiles), each household was assigned the net cash income determined in the SILC survey for the relevant year (i.e. for the previous year). The year 2021 was compiled from household data from 2020 and 2021, the year 2022 from 2021 and 2022, and the year 2023 from 2022 and 2023. Income from the previous year was always recalculated for the relevant year using the income growth index from the SILC survey, while housing expenses and costs were recalculated using the consumer price index, and the prices of real estate and vehicles were recalculated using the mean (moving) year-on-year indices of real estate prices and car prices, respectively. All FSD sample survey outputs are published after reweighting to the whole population.

# 1.5 Differences in the outputs of household sample surveys and macroaggregates of national accounts

Data on the property, financial, and income situations of Czech households can be obtained from two main sources: national accounts and sample surveys in households. When comparing results, it is important to be aware of the conceptual differences between the micro- and macro-approaches.

The national accounts cover the whole economy. Sample surveys are conducted on a representative sample of households, the sampling unit being a dwelling. Persons living in institutional units (e.g. in nursing homes, hostels, hospices and prisons) are not included in the surveys. Homeless people at the lower end of the wealth distribution scale also do not participate in the surveys. Respondents at the upper end of the distribution scale are also not fully represented, due to the declining willingness of wealthier households to participate in statistical surveys. In the highest income group, there is a small group of households owning high-value financial assets, which are not included in the results of household surveys, unlike in national accounts.

In addition to the differing representation of groups, there are also a number of conceptual and methodological differences in the approach to compiling individual indicators at the level of the economy and at the level of households, e.g. the inclusion of imputed rent or in-kind social transfers (transfers to households from government institutions for healthcare, education, etc.) in the income and actual consumption of households in the national accounts, compared to the actual incomes reported by respondents in household surveys. There are also differences in the case of non-financial assets, where, unlike the valuation in the national accounts, the outputs from the household surveys are based on respondents' answers.

An analysis of the comparison of selected data from the FSD and the national accounts was prepared by the CZSO. Table 2 shows the percentage share of selected indicators from the FSD (aggregated to the whole economy) in the value of the corresponding indicators from the national accounts<sup>1</sup>, highlighting the differences between these data sources described above. The results show that surveys like the FSD are not fully

<sup>&</sup>lt;sup>1</sup> The estimate of the value of households' non-financial assets in the national accounts focuses mainly on residential real estate (apartments, houses, land). The value is determined based on realised market prices, real estate price indices, and estimates of the residential housing stock. Model calculations that take into account the wear and tear and depreciation of assets are also used. Financial assets and liabilities in the national accounts concept include data for the whole economy. For this purpose, a wide range of sources is used, including data from non-financial, financial, government and non-profit institutions. The reported values of liabilities and financial assets are allocated to assets, including household assets. However, the national accounts are not only the sum of data from data sources primarily based on corporate accounting. National accounts data are in some cases supplemented by additional estimates and adjustments that ensure compliance with the ESA 2010 national accounts methodology. Significant adjustments of this type include, for example, the imputation of technical reserves from non-life insurance in the assets of insured households, the imputation of the share of households in housing cooperatives, valued in the context of the national accounts at the value of the given property, and the adjustment of the value of participation in household assets, which includes data even for the wealthiest households. The CNB is the main source of data for the national accounts.



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comparable with the macroeconomic aggregates of the national accounts, primarily due to differences in methodology, coverage and definitions of individual categories of assets and liabilities.

Financial assets in the FSD account for approximately one fifth of the financial assets reported in the national accounts, confirming that the FSD survey is not capable of fully capturing the financial situation of the wealthiest households. These households own a significant share of financial assets and at the same time have the lowest willingness to participate in surveys, leading to an underestimation of their actual financial situation in the FSD. The situation is more complex for financial liabilities. Two factors complicate the comparison. Firstly, the aforementioned effect of the wealthiest households, which also have the largest liabilities in absolute values, is not fully represented in the survey. Secondly, differences in the definition of mortgages within the FSD. In the FSD, only mortgages secured by the financed property are included, namely mortgages for the main residence and mortgages for additional properties. However, there are mortgages in the Czech market secured by more than one property (see CNB 2023), and mortgages for cooperative apartments that cannot be used as collateral. These loans are often secured by other properties and are not recorded as mortgages in the FSD, which affects the total reported values of mortgage debt. These differences suggest that in interpreting data from survey sampling, it is necessary to take into account not only methodological constraints but also the structural characteristics of the households participating in these surveys.

Table 2 Selected indicators from the FSD (aggregated to the whole economy) as a percentage of the value of the corresponding indicators from the national accounts

Source: National accounts as of 28 June 2024, FSD 2021, FSD 2022, FSD 2023 percentages

| Source: National accounts as of 20 June 2024, 1 3D 2021, 1 3D | percentages |      |      |
|---|-------------|------|------|
|   | 2021        | 2022 | 2023 |
| Net wealth <sup>1)</sup>                                      | 65          | 62   | 66   |
| Non-financial assets <sup>2)</sup>                            | 105         | 100  | 107  |
| Financial assets  | 22          | 22   | 21   |
| Financial liabilities   | 32          | 31   | 31   |

<sup>1)</sup> Net wealth = non-financial assets + financial assets - financial liabilities.

The ECB has prepared and described a detailed analysis comparing HFCS and macro data on the financial wealth and liabilities of households across all countries of the European Union participating in the HFCS survey (ECB 2023a). This analysis shows a similar phenomenon to that described in Table 2 for all (most) participating countries, i.e. that financial assets (liabilities) from the HFCS are lower than financial assets from the national accounts. This analysis draws from the outputs of an expert group established by the ECB, which aims to understand and quantify the differences between data on household financial wealth from the HFCS and the national accounts (ECB 2020).

<sup>&</sup>lt;sup>2)</sup> Non-financial assets calculated from FSD data do not include the value of vehicles and other properties than the main residence, making the resulting value comparable to the value of non-financial assets according to the national accounts definition.