

What Can Be Learned on the Living Standard of Households from National Accounts?

Stanislava Hronová¹ | *University of Economics, Prague, Czech Republic*

Richard Hindls² | *University of Economics, Prague, Czech Republic*

Luboš Marek² | *University of Economics, Prague, Czech Republic*

Abstract

The living standard of households can be assessed with the aid of several indices. The standards of the System of National Accounts (SNA 1993 and ESA 1995) have introduced the concept of actual final consumption and social transfers in kind apart from the final consumption expenditure. However, the information which could be taken from these indices is utilized only to a very small extent. So, what can they actually tell us? Can they be used for assessing the living standards of households and their comparing on an international scale? The paper gives answers to these questions by means of comparing the data from the Czech Republic and France.

Keywords

Actual final consumption, social transfers in kind, households, disposable income, living standard

JEL code

E21

INTRODUCTION

The living standard in general, and the living standard of households, are comprehensive notions that are rather difficult to quantify; the reason for that stems from the use of different approaches to identify what the living standard actually is and which aspects (economic, social, environmental, etc.) should be included in it. Subsequently, a question is addressed of how to synthesise all those aspects under one index. Such a synthesis is hard or even impossible to carry out; hence similar attempts quite often result in simplified views and the indices such as the gross domestic product (hereinafter GDP) per capita or the national disposable income per capita are used. Both of these indices are based on the national accounts and are considered the basic aggregates whose relative (per capita) values are tools suitable

¹ Faculty of Informatics and Statistics, Department of Economic Statistics, University of Economics, Prague, Nám. W. Churchilla 4, 130 67 Prague 3, Czech Republic. E-mail: hronova@vse.cz.

² Faculty of Informatics and Statistics, Department of Statistics and Probability, University of Economics, Prague, Nám. W. Churchilla 4, 130 67 Prague 3, Czech Republic. E-mail: hindls@vse.cz.

³ Faculty of Informatics and Statistics, Department of Statistics and Probability, University of Economics, Prague, Nám. W. Churchilla 4, 130 67 Prague 3, Czech Republic. E-mail: marek@vse.cz.

for comparing economic levels in different countries; but they cannot be looked upon as indices of households' living standard levels. The national accounts, and, in particular, the account of the household sector, contains additional indices that are much closer to the living standard concept than the two mentioned aggregates.

The GDP shows the outcome of the economic activities and does not reflect the living standard or the economic well-being; and neither do other indices on the national accounts. The primary goal of the national accounts is not to measure the living standard but to describe economic activities taking place in the given country and its relationships with abroad, using a system of interconnected indices. The national accounts have never been intended to express the living standard or well-being as its primary goal.

Objections frequently occur, stating that the GDP only expresses the outcome of economic activities, and these objections arise regularly.⁴ Sometimes they are caused by efforts to reflect in the GDP damages on the environment, sometimes to express the population's satisfaction, social progress, economic performance of the given country or the well-being in general (conscious of the fact that it is not even clear what the well-being actually is). All such thoughts stem from misapprehension of the true purpose of the GDP – expressing the outcome of economic activities in a given territory. Hence it makes no sense to blame it for not providing the information about the living standard or even the well-being. Any efforts to adapt the GDP to reflect, say, the well-being, lead to artificial constructions that are far from the reality and have very little, or even nothing, in common with the mission the GDP has. Experts try hard to provide in the GDP an image of the economic activities' outcome that is as plausible as possible. The GDP is a basic aggregate whose design is based on a simple consideration: every productive activity generates an instance of value added, and its summary value is expressed by the GDP at the national-economy level. Because of its direct relationship with productive activities (income from production) and theoretical features (no duplicity occurs when summing up the value added amounts), the GDP is rightly viewed as a basic (even if not sole) aggregate on the national accounts. It is the root of all considerations aimed at generating, distributing and utilising income; other aggregate indices are derived from the GDP in compliance with the economic principles of the national accounts.

Due to its unambiguous definition and standardised estimation procedures, the GDP is suitable for international comparisons of a country's economic maturity. If this is the case, GDP per capita is used, expressed by the purchasing power parity; it is often presented as an indicator of the living standard. This view is undoubtedly simplified, but the point is that it depends on the definition of the living standard (similar to the importance of the definition of the well-being). If we relate the living standard or well-being of each inhabitant solely with the outcome of economic activities, this simplification may be acceptable. If a wider definition of the living standard or well-being is accepted, additional solutions become available – such as comparing the so-called actual consumption by households or selecting another suitable index, or a system of indices, directly concerning households.

⁴ Let us, e.g., mention the Human Development Index – HDI of 1990, the Index of Sustainable Economic Welfare – ISEW of 1989, or the Genuine Progress Index – GPI of 1995. The Commission on the Measurement of Economic Performance and Social Progress (CMEPSP), generally referred to as the Stiglitz Commission, created by the French Government in the beginning of 2008 on initiative of the French President Nicolas Sarkozy is viewed as the most important activity in this direction. The work of this expert group in the area of economics and statistics should have resulted in suggestions for novel ways of quantifying the results of each individual country; these new ways should be more suitable (than the currently used indices) for expressing economic performance and social progress. The Commission consisted of 27 experts, mainly university economists from France, the USA, representatives of OECD, World Bank, and the United Nations, as well as eight Rapporteurs – French statisticians from INSEE, OECD, and OFCE. The Commission set out three areas in which it should find answers to the following questions: whether or not the GDP properly expresses the economic performance of a given country; whether (and how) social progress can be quantified; and whether mankind's development is sustainable from the economic, social and environmental viewpoints.

National disposable income (net or gross) is often presented as characteristic of the living standard or well-being that is more suitable than GDP because it is affected by redistribution processes. Nonetheless, the national disposable income is an outcome of the economic activities and the subsequent distribution and redistribution of income of all economic subjects, not only households (even though households' proportion in its value is substantial).⁵ Distinguishing between the national disposable income and households' disposable income is therefore important because of not only the value, but – especially – of the content. The disposable income is the most important index for the household sector. It is an outcome of the distribution of the income coming from production, i.e., value added. Its most significant component is represented by labour income (wages and salaries); the additional ones include business income (operating surplus), and property income (or possibly the balance values of those components: in particular, interest and dividend values). The disposable income further includes social benefits, in particular old-age pensions, and other current transfers; its value is decreased by current taxes (income tax), social contributions, and other current transfers. In this respect, GDP and households' disposable income cannot, in general, be imposed upon one another. The GDP is an aggregate related to the national economy as a whole; but for the disposable income, while it is also monitored at the national-economy level, it does not make much sense to make use of the national value of the disposable income when measuring the population's living standard; households' disposable income should be used then. The latter can be related to the number of households, or even households' disposable income per consumption unit (equivalence scale).

The disposable income is understood, and designed on the national accounts, purely as an outcome of distribution. The fact that it does not reflect redistribution in kind is not detrimental because the national accounts also provide a concept of the adjusted disposable income; this is the disposable income adjusted to reflect the so-called social transfers in kind. In the case of households, the amount of the adjusted disposable income is higher than that of the disposable income by the value of the goods and services (education, health care, culture, etc.) paid in favour of households by the general government and the non-profit institutions serving households. The concept of adjusted disposable income was introduced by the United Nations national accounts standard SNA1993⁶ and the EU standard ESA 1995.⁷ The adjusted disposable income, and the related index of the actual final consumption, have, unfortunately, been tools rarely used in evaluating and comparing households' living standard levels. At the same time, those very indices better express the scope of households meeting their needs. The said indices came out of the system of national accounts; this fact enables us to evaluate and compare households' living standard levels in time and space. The present contribution is also aimed at comparative analysis based on the data taken from the household sector's account.

1 GENERAL RESOURCES FOR MEASURING THE LIVING STANDARD OF HOUSEHOLDS

The access route to quantification of the living standard is a proper definition of that notion. Hardly any other economic category is covered by such a wide spectrum of possible definitions: from strictly material, via social, political and other aspects, to purely subjective perception of the living standard as a certain degree of (not only material) well-being. All such definitions are based on qualitative approach; however, evaluations and comparisons require the notion to be quantified. And, unfortunately, we can only quantify what is quantifiable. In other words: if we are able to express the living standard in financial values, we are also able to measure and compare it. On the contrary, it is utterly impossible to quantify joy, happiness, and feeling of safety or satisfaction. Let us, therefore, focus on a definition of the living standard that we are able to quantify.

⁵ The EU average value equals $\frac{2}{3}$.

⁶ *System of National Accounts 1993*. New York: United Nations, IMF, OECD, Eurostat, World Bank, 1993.

⁷ *European System of Accounts – ESA 1995 (Système Européen des Comptes – SEC 1995)*. Luxembourg: Eurostat, 1996.

Keeping in mind that different aspects of the living standard and well-being cannot be synthesised, the broadest approach is that of the OECD's basic concept (cf. OECD, 2011). For individual member countries, levels of different aspects of households' quality of life are evaluated – both tangible (income, wealth, wages, and housing) and intangible (health care, safety, education, environment, etc.). In the area of expressing and comparing the living standard levels there is an indisputably interesting OECD "Better Life Index" project; it has been offering, since 2011, comparisons of living standard and well-being levels among the member states based on 11 areas in the material and quality-of-life conditions.⁸ Another option offered by OECD in a number of research publications (cf. e.g., Van Zanden, 2014; or Exton and Shinwell, 2018; or Boarini, 2016) is synthesis of individual aspects with the aid of multi-dimensional analysis.

We can, alternatively, focus on quantifying households' living standard with respect to one selected aspect, i.e., restrict this wide notion to a single, but important index.

One of the possible restrictions of households' living standard and well-being notion is to focus on wealth.⁹ Undoubtedly, it is important to monitor the status and evolution of wealth when considering measurements of well-being.¹⁰ Statistically, it is not easy to estimate the status of households' tangible and intangible assets, even though we can rely on relatively trustworthy data sources, based on the definitions of individual assets. Nonetheless, Stiglitz (2009) contemplated to include the human and social capital in households' wealth (in addition to the components already contained on the national accounts). However, adding the concept of human and social capital to estimating households' wealth brings about new elements that are difficult to grasp statistically. If we extend the existing definitions by wealth components for which the estimate of the value is dubious, not only do we not approach the describable measurement of the living standard level, but also emphasise the doubts about the informative value of the data published by statisticians.

Accardo (2017) brought an interesting token into the discussion on the possibility to measure and compare the living standard levels on the basis of using data from the national accounts. His way to express the living standard level, quality of life and well-being goes via setting up an account of a "single" household (single in the sense of household categories identified by age, income, social circumstances, etc.). In fact, the standard summary account of the household sector does not have the necessary informative value from the viewpoint of expressing the quality of life; moreover, it does not contain such activities and aspects of households' life like housework, health, habits, free time, satisfaction, happiness, etc. To create such a "single household" account, we would have to combine different data sources and (again) resolve the problem of assigning financial valuation to activities and phenomena that do not have such financial "magnitudes". For example, we can estimate the amount of free time by analysis the daily timetables of selected people. But how should we actually evaluate the free time? On the basis of opportunity cost, i.e., net wages? What if the person in question has never worked? Is the value of free time, viewed in the sense of contributing to the well-being, the same of a person who is employed as a person who is unemployed, possibly for a long time? Can we, on an international scale, compare the data from the accounts set up for a "sole" household? We have mentioned just a few from among the questions asked by J. Accardo. His and similar works have, to a different extent, contributed to the bulk of the options we have at our disposal to describe certain socio-economic phenomena; but we must admit that scientist still encounter numerous obstacles, in many instances insurmountable.

Another way to go may be to restrict the notion of the living standard to the area of households' earnings/income (cf. OECD, 2011). Here we most often make use of the index of households' (adjusted) disposable income. The households' adjusted disposable income is a very good characteristic

⁸ Cf. <<http://www.oecdbetterlifeindex.org>>.

⁹ See Stiglitz, Sen, Fitoussi (2009) for one of such suggestions.

¹⁰ Even though it remains unclear that well-being really is and whether the wealth measured by the wealth is or is not connected with well-being as such.

of the resources households can utilise for meeting their needs in the area market and non-market goods and services. It is a sum of disposable income (net or gross) and social transfers in kind that express the value of goods and services paid in favour of households by the general government and the non-profit institutions serving households. The adjusted disposable income represents the resources; and the index of actual final consumption expresses the value of the consumed goods and services. The latter is necessary (and, unfortunately, this fact often remains forgotten) to be monitored when evaluating and comparing households' living standard levels. As a matter of fact, that was the reason for including the concept of actual final consumption into the national accounts within the SNA 1993, or ESA 1995 standards. The national accounts provide us with long time series of data and their concepts and definitions are mutually comparable – that fact makes available to us new possibilities of evaluation and, in particular, of (international) comparisons of the living standard levels. The existence of long time series is an indisputable advantage here because the usual international comparisons (such as OECD, 2011) provide us with statistical views on one evaluated year for all the countries to be compared.

2 COMPARATIVE ANALYSIS OF HOUSEHOLDS' LIVING STANDARD LEVELS

As already stated above, our analysis will be based on the annual data of the national accounts, or rather the data on the account of the household sector. The period of our evaluation is from 2000 to 2018 and the countries to be compared are the Czech Republic and France. These two countries are different from each other not only by size, but also by their levels of economic development and the social policies applied by their governments. These circumstances are reflected not only in the different position held by the household sector within the national-economy framework (cf. Table 1), but also in different households' living standard levels.¹¹

Table 1 Selected indices of the household sector position in the national economy (%)

	2000	2007	2009	2013	2018
France					
GVAh/GDP	17.2	17.3	17.1	16.3	15.5
GDIh/GNDI	60.1	61.3	63.4	61.3	60.3
AFCh/GDP	67.5	68.6	70.9	70.2	69.2
NWh/NWt	80.5	75.2	73.8	73.9	75.0
Czech Republic					
GVAh/GDP	23.2	18.7	19.3	17.5	16.4
GDIh/GNDI	57.2	54.8	59.5	57.8	55.5
AFCh/GDP	60.1	55.7	59.1	60.1	58.1
NWh/NWt	25.2	29.3	29.8	32.0	36.5

Note: GVAh – Gross Value Added of Households, GDP – Gross Domestic Product, GDIh – Gross Disposable Income of Households, GNDI – Gross National Disposable Income, AFCh – Actual Final Consumption of Households, NWh – Net Worth of Households, NWt – Net Worth of Total Economy.

Source: <www.insee.fr>, <www.czso.cz>

¹¹ Due to the impossibility to present the data in an integral time series, in addition to the beginning and ending years of the given period, the authors have decided to present the pre-crisis year 2007, crisis year 2009, and recovery year 2013.

The data shown in Table 1 indicates that the economic importance of households is approximately the same in both of the countries, if this importance is expressed as their proportions in the GDP. However, from the viewpoints of other selected indices we can see that French households are better off regarding the income distribution, redistribution, and use processes. The difference in proportions in the gross national disposable income amounts to about four percentage points, but the difference in the proportions of the actual final consumption values in the GDP gets to as high as 10 percentage points. In other words, French households' standing is better than that of the Czech households in the distribution and redistribution processes, especially in the in-kind form.

A principal difference can be seen with respect to households' proportion in the net worth. The very high proportion held by the French households is mainly implied by the excessive indebtedness of the French general government, which is pronounced in the low difference between the general government's financial assets and liabilities, a very low value of the net worth, and the low proportion in the corresponding national-economy value (cf. Hronová, Hindls, Marek, 2019). In the Czech Republic, general government's indebtedness is low; hence the situation is completely opposite.¹²

Consequently, the income distribution and redistribution processes reflected on the national accounts will help us identify the differences in households' outcomes from the economic activities, but also the results of the governments' social policies.

Table 2 Selected indices of the household sector_1 (%)

	2000	2007	2009	2013	2018
France					
AFC/FCE	130.0	131.2	132.8	133.5	133.5
STK/GDI	25.9	26.6	27.5	28.7	28.8
FCE/GDI	86.5	85.2	83.9	85.8	85.8
Wages/GDI	62.6	61.4	61.3	63.4	64.5
SB/GDI	30.9	31.3	33.1	35.4	35.5
Czech Republic					
AFC/FCE	120.5	122.6	123.4	123.3	124.1
STK/GDI	18.2	20.2	20.4	21.1	21.7
FCE/GDI	88.9	89.2	87.2	90.4	90.2
Wages/GDI	52.2	58.1	57.6	58.3	63.8
SB/GDI	22.8	24.1	24.8	25.5	23.7

Notes: AFC – Actual Final Consumption, FCE – Final Consumption Expenditure, STK – Social Transfers in Kind, GDI – Gross Disposable Income, Wages – Wages and Salaries, SB – Social Benefits.

Source: <www.insee.fr>, <www.czso.cz>

¹² The net worth of the French general government went down by 30.0% in the period under assessment; it amounted to a mere 2.0% of the national-economy net worth as of the end of 2018. The net worth of the Czech general government amounted to 40.0% of the national-economy value as of the end of 2018. This difference is implied by the substantially lower debt of the Czech general government (32.6% of GDP in 2018) than that of the French general government (98.4% of GDP in 2018).

The starting point for such considerations is, undoubtedly, the comparison of the actual final consumption and the expenses incurred on the final consumption. The difference between these two values consists of social transfers in kind, that is, the value of the goods and services paid in favour of households by the general government and the non-profit institutions serving households – such as education, health care, culture, sports, etc. The value of the social transfers in kind therefore covers goods and services consumed by households without paying for them, i.e., increasing households' living standard level regardless of their (in)ability to pay the corresponding expenses incurred on the final consumption.

The data shown in Table 2 clearly implies that, on a long-term basis, the Czech households incur a larger proportion of their disposable income on the final consumption. This difference will, *inter alia*, be reflected in the lower saving rate¹³ of Czech households as compared with French ones (approximately 11% for the Czech households on a long-term basis, and approximately 14% for the French households). The most significant component that affects households' ability to satisfy their needs from their income, and consequently the most significant component of the disposable income, is undoubtedly represented by wages. The Czech Republic has always been characterised by a lower level of wages (and of labour productivity). However, the economic results of the Czech national economy, as well as the economic policy in the most recent years¹⁴ have led to increasing the proportion of wages in households' gross disposable income (hereinafter GDI) by more than 10 percentage points, by which the value of this index got balanced between the Czech and French households in 2018. In a simplistic formulation, the initial conditions of the Czech and French *employee* households got balanced as regards the final consumption expenditure. The differences in the proportions of the final consumption expenditure with respect to the GDI are undoubtedly caused by the significantly lower purchasing power of old-age pensioners in the Czech Republic as compared with France; in fact, a typical pensioners' household spends its entire disposable income on consumption, mainly due to the low level of old-age pensions.¹⁵

The households' living standard does not exclusively depend on the ability to obtain the market products; it also follows from households' access to goods and services provided to them for free or almost for free by the general government and the non-profit institutions serving households. French households' actual final consumption is, on a long term basis, by one-third higher than the expenses incurred on final consumption; it is only by one-fourth for Czech households (cf. Table 2). In other words, French households cover three-quarters of their needs from their resources, while Czech households cover four-fifths. This is an important aspect that indicates a higher living standard and better living conditions of French households than those prevailing in the Czech Republic. Another consequence is a higher (by about eight percentage points) ratio of the social transfers in kind with respect to the GDI¹⁶ for French households as compared with Czech ones (cf. Table 2).

The proportion of social benefits in the GDI is similar regarding a comparison between Czech and French households. The initial difference of eight percentage points was increased by one-half, that is, to 12 percentage points. Since the largest component of the social benefits is represented by old-age pensions, this growing disproportion can be assigned to the above-mentioned difference in the levels of the old-age pensions.¹⁷

¹³ Saving rate = Gross saving/Gross disposable income.

¹⁴ In particular, salaries were increased in public institutions with the consequent pressure on wage increases in the private sphere, as well as repeated increases of the minimum wages.

¹⁵ In 2018, the replacement rate was 60% in France but just 46% in the Czech Republic. Cf. <<https://www.oecd-ilibrary.org/finance-and-investment/gross-pension-replacement-rates/indicator>>.

¹⁶ Keeping in mind that the social transfers in kind are not included in the disposable income but are included in the adjusted disposable income. That is why we speak about a ratio, not a proportion.

¹⁷ A substantial proportion in social benefits corresponds to unemployment benefits, whose amount has been undergoing different evolution paths in the considered countries: the unemployment rate in France fluctuated between 8% and 10% during the entire period in question, while in the Czech Republic it was on a comparable level until 2015, when it started to fall down to its current value of 2%.

Table 3 Selected indices of the household sector_2 (%)

	2000	2007	2009	2013	2018
France					
SC/GDI	9.9	10.4	10.4	11.1	10.3
CT/GDI	15.1	14.1	13.9	16.3	17.5
(SC + CT)/GDI	25.0	24.5	24.3	27.4	27.8
SB/SC	314.0	301.3	316.7	318.6	344.1
SB/(SC + CT)	124.2	128.5	135.7	129.0	127.8
Czech Republic					
SC/GDI	10.1	12.6	11.2	11.9	12.6
CT/GDI	8.2	8.6	6.8	7.5	9.3
(SC + CT)/GDI	18.3	21.1	18.0	19.4	21.9
SB/SC	226.1	191.9	220.7	214.4	193.6
SB/(SC + CT)	124.8	114.1	137.2	131.4	108.2

Notes: SC – Social Contributions, GDI – Gross Disposable Income, CT – Current Taxes on Income, Wealth, etc., SB – Social Benefits.

Source: <www.insee.fr>, <www.czso.cz>

A higher proportion of social benefits in the GDI and a higher amount of unpaid consumption in the case of French households not only means a growing pressure on the general government's expenditure¹⁸ and, consequently, debt (cf. above); it also brings a higher load on households regarding the (direct) taxes and social contributions paid by them.

The data shown in Table 3 enables us to take a "reverse view" on households' living standard. The situation is comparable in both of the countries regarding social contributions by households (related to the GDI): the proportion of social contributions by Czech households is by a mere one to two percentage points. However, French households' income-tax (current tax) load is, on a long term basis, substantially higher than that in the Czech Republic. We can include both of these components under a sole "umbrella" index of the so-called mandatory payments (here a sum of social contributions and current taxes paid by households), and compare the value of this umbrella index with that of the GDI. The result is again to the detriment of French households and the difference has, on a long term basis, been fluctuating around six percentage points. Let us compare the proportions in the GDI of the social benefits and social contributions in each of the countries in question. We can thus identify the balance between households' payments to the social system and their gain (in the form of social benefits) from the same system. Czech households pay by one to two percentage points (as related to the GDI) more on social contributions than French households (cf. Table 3) but the former get by eight to 12 percentage points (again, as related to the GDI, cf. Table 2) less in social benefits than the latter. This disproportion to the detriment of Czech households is even emphasised when we compare the volumes of received social benefits and paid social contributions (cf. Table 3).

¹⁸ The expenditure of the French general government amounts to 52% to 57% of the GDP on a long-term basis; in the Czech Republic, this proportion fluctuates between 39% and 45% (cf. Hronová, Hindls, Marek, 2019).

However, this comparison is not entirely correct: let us realise that if there is a lack of resources from the paid social contributions¹⁹ (of course paid by all subjects, not only households), the government may provide funding for social benefits from other resources, such as the taxes. Payments by households in the form of current taxes can thus, in connection with the received social benefits, be viewed on as a load analogous to the payments of social contributions. If we compare the volumes of the social benefits received by households²⁰ with those of the mandatory payments paid by households, this ratio is not so significantly better for French households; or rather, this ratio has been decreasing for Czech households after 2013, getting as low as 108.2% in 2018, which is by nearly 20 percentage points lower than the value valid for French households.

In the years of the economic growth that began in the Czech Republic in 2013, logically, the smaller value of the unemployment rate and the higher level of wages worsened the balance between the amounts Czech households pay to the social system and the benefits they receive from it. In any case, the increasing level of the living standard should bring about an increase in the social transfer amounts paid in favour of households by the general government and non-profit institutions serving households. Unfortunately, Czech households' position in this respect is worse than that of French households.

After formulating this partial conclusion, we must get back to the fact that the largest proportion in the social benefits is represented by old-age pensions. The economic growth and low unemployment rate in the Czech Republic have led to a faster growth in the volume of the social contributions paid by households (with a growth rate of 180.4% in current prices in the period in question) than in the volume of social benefits received by households (with a rate of 133.5%);²¹ that is, the value of the SB/SC, or SB/(SC + CT), index went down. At the same time it means that people not participating in the labour process, in particular old-age pensioners, are hurt by the overall economic prosperity. Old-age pensioners' households are those that make use, to the greatest extent, of the healthcare services (including payments for medicines) and other social services whose values are included in the amount of the social transfers in kind. It is therefore clear that the insufficient scope of the services provided for free, or nearly for free, and the volume of the social benefits are, in addition to the expenses incurred on final consumption, important attributes of households' living standard – and these very attributes may be decisive in the perception of "which households are better off". Nonetheless, the larger proportion of households' unpaid consumption and the higher proportion of the social benefits (whether related to the GDI or to the paid social contributions) generates pressure on the general government's expenditure.²² This is the case of France, where the government's social policy on the one hand ensures a higher level of households' living standard, on the other hand it decreases the living standard of the society as a whole due to the problematic sustainability of public finances.

¹⁹ This is the case of France, where – since 2009 – the volume of the social benefits paid by the general government has been higher than the amount of the social contributions received by the general government. This balance has been opposite in the Czech Republic on a long-term basis; the volume of the social contributions received by the general government is by about one-third higher than the volume of the social benefits paid by the general government.

²⁰ The authors are aware of a certain margin of error here: households receive social benefits not only from the general government (within the framework of the mandatory social insurance) but also from financial corporations (within the framework of the optional social insurance) and from employers (as an equivalent of employers' imputed social contributions). However, such additional benefits are by far less important.

²¹ In France, the amount of social contributions paid by households went up by 67.3%, while the amount of the social benefits received by households by 83.4%.

²² Partly to the expenditure incurred by non-profit institutions serving households; however their proportion in the social transfers in kind in favour of households and in the non-market output is not very significant in this context. The proportion in the social transfers in kind of non-profit institutions serving households amounts to about 5% in the Czech Republic and about 10–12% in France; their proportion in the non-market output is again about 5% in the Czech Republic and about 10% in France.

CONCLUSIONS

Evaluating and comparing households' living standard levels is a recurring and politically sensitive topic. In order to quantify this problem, we must first define the content of the notion and then find indices that will enable us to evaluate and compare them. OECD is active in the evaluations and international comparisons; on the basis of the individual indices, OECD compares the countries to be evaluated. This approach is static; the living standard levels are evaluated in particular years but the results can hardly be used for comparative analysis in time.

The national accounts, or rather the account of the household sector, provide a tool that is very suitable to evaluate and compare the living standard levels in time and space. The possibility to compare in space is based on the comparable methodologies of national accounts (ESA 2010,²³ or SNA 2008,²⁴ the temporal comparisons stem from not only the long and methodologically comparable time series, but – in particular – the use of relative indices. In addition to the indices usually used for the evaluation of particular components of the living standard, such as the disposable income and adjusted disposable income, the household account provides other indices, whose values bear information about households expenditure (incurred on final consumption expenditure),²⁵ as well as what households consumed regardless of who pays for it (actual final consumption). The difference between the actual final consumption and the final consumption expenditure consists of the social transfers in kind.

When comparing the data for the household sectors in the Czech Republic and France, we revealed the fact that the area of households' unpaid-for consumption (in the form of transfers in kind) is an important aspect by which households' living standard levels differ from each other in the two countries we consider here. Czech households obtain a relatively lower proportion of the unpaid-for final consumption; and the ratio of the social benefits as related to the disposable income is also smaller in the Czech Republic than in France. On the other hand, Czech households' load by income tax is smaller; and the relative value of their payments on social contributions is about the same as that of French households. The economic growth in the Czech Republic after 2013 has been accompanied by a worsening ratio of the received social benefits with respect to the mandatory payments by households; this fact indicates, inter alia, a significant lag in the growth of social benefits (mostly consisting of old-age pensions) behind the that of wages and other types of income. Having in mind the low level of social benefits (in particular, old-age pensions), we clearly see that the living standard level can be improved by increasing the unpaid-for final consumption. On the other hand it turns out that the general government's accommodating social policy (manifested in the large volume of the non-market output and social transfers in kind) in favour of households leads to problems with sustainability of public finances, from which root the social tension grows, being detrimental to the well-being of the society as a whole (even though we still cannot be sure what the well-being in fact is); this is also the case of France.

It is difficult to say where the level of households' living standard is actually higher. Hence we should not resort to a more-or-less intuitive comparisons between easily grasped and popularising indices. In each such comparison, different indices have different meanings; only when we evaluate them comprehensively, with a wide use of the data from the national accounts, can we find a qualified answer to the question where the living standard level is higher (or lower). That is why our analysis (on an example of comparing the Czech Republic and France) has been aimed at illustrating the possibilities offered by the system of the national accounts not only in comparing the living standard levels on the basis of the data taken from the household sector's account but also in the context of other data that can be found on the national accounts.

²³ *European System of Accounts – ESA 2010 (Système Européen des Comptes – SEC 2010)*. Luxembourg: Eurostat, 2013.

²⁴ *System of National Accounts 2008*. New York: United Nations, IMF, OECD, Eurostat, World Bank, 2009.

²⁵ The authors are aware of a certain margin of error here: the final consumption expenditure also includes items consumed by households but paid by someone else, in particular, imputed rents and self-supplied agricultural production.

ACKNOWLEDGEMENTS

This article was written thanks to support from the Institutional Support to Long-Term Conceptual Development of Research Organisation, the Faculty of Informatics and Statistics of the University of Economics, Prague.

References

- ACCARDO, J. An Appreciation of Living Standards, Well-Being and Quality of Life [online]. In: *Texts of the 16th Conference of the Association de Comptabilité Nationale*, Paris: INSEE, 2017. <<https://insee.fr/fr/information/2834065>>.
- BOARINI, R. et al. Multi-dimensional Living Standards: A Welfare Measure Based on Preferences [online]. *OECD Statistics Working Papers*, No. 2016/05, Paris: OECD Publishing. <<https://doi.org/10.1787/5jlpq7qvxc6f-en>>.
- CLARK, A. AND SENIK, C. Will GDP growth increase happiness in developing countries? *Paris School of Economics Working Paper*, 2010, No. 2000/43.
- EXTON, C. AND SHINWELL, M. Policy use of well-being metrics: Describing countries' experiences [online]. *OECD Statistics Working Papers*, No. 2018/07, Paris: OECD Publishing. <<https://doi.org/10.1787/d98eb8ed-en>>.
- GCEE. *Monitoring economic performance, quality of life and sustainability*. Wiesbaden: German Council of Economic Experts, 2010.
- HALLIWELL, J. F. Life Satisfaction and the Quality of Development. *NBER Working Paper* 14507, National Bureau of Economic Research, 2008.
- HINDLS, R. AND HRONOVÁ, S. Unemployment and inflation rates in the years of economic turbulences or do the Phillips curve relationships still hold? In: *8th Annual Conference of the EuroMed Academy of Business*, Verona: EuroMed Press, 2015, pp. 861–870.
- HRONOVÁ, S., HINDLS, R., MAREK, L. Economic Behaviour of the General Government and Sustainability of Public Finances – Comparative Analysis of the Czech Republic and Selected EU Countries [online]. *Statistika*, 2019, 99(4), pp. 350–368. <https://www.czso.cz/documents/10180/88506452/32019719q4_350_hronova_analyses.pdf/059f497e-dbf6-4ca1-a93b-3af73d369c34?version=1.0>.
- INSEE. Deux ans après le rapport Stiglitz-Sen-Fitoussi: quelles mesures du bien-être et de la soutenabilité? *Contributions de l'INSEE*, Paris, 2011.
- LLENA-NOZAL, A., MARTIN, N., MURTIN, F. The economy of well-being: Creating opportunities for people's well-being and economic growth [online]. *OECD Statistics Working Papers*, No. 2019/02, Paris: OECD Publishing. <<https://doi.org/10.1787/498e9bc7-en>>.
- OCDE. *Comment va la vie? Mesurer la bien-être*. Paris: Editions OCDE, 2011.
- OECD. *Compendium of OECD Well-Being Indicators*. Paris: OECD, 2011.
- STIGLITZ, J. E., SEN, A., FITOUSSI, J.-P. *Report by the commission on the Measurement of Economic Performance and Social Progress* [online]. <<https://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report>>.
- VAN ZANDEN, J. et al. eds. *How Was Life? Global Well-being since 1820* [online]. Paris: OECD Publishing, 2014. <<https://doi.org/10.1787/9789264214262-en>>.