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The Stock of Consumer Durables as Part of the Balance Sheet

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Abstract

The stock of consumer durables should be an integral part of the balance sheet of households as well as of the total economy and not only a memorandum item as stated in paragraph 3.47 of the 2008 SNA. Otherwise the net worth calculated would be too low as consumer loans are part of the liabilities in the balance sheet. The paper discusses theoretical and practical aspects of the valuation of the stocks of consumer durables – not only – for balance sheets in connection with one main rationale of recommendation 3 of the Report by the Commission on the Measurement of Economic Performance and Social Progress by Stiglitz, Sen and Fitoussi: "What is carried over into the future necessarily has to be expressed as stocks…"

Key words: SNA, balance sheet, consumer durables

JEL classification: E01, E21, I31

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1 The problem

Two of the main messages and recommendations of the Report by the Commission on the Measurement of Economic Performance and Social Progress (2009) by Stiglitz, Sen and Fitoussi (cited as "Commission report" below) regarding the topics "What can be done within the existing measurement framework?" are "Consider income and consumption jointly with wealth" and "Emphasise the household perspective". Consumer durables purchased by households and used over more than one year for consumption purposes are a borderline case in this respect. Their treatment as consumption expenditure in the System of National Accounts (SNA) does not reflect their nature of being a physical stock used gradually over several years. It is widely acknowledged that they qualify as investments (for an overview see Jalava/Kavonius, 2008) or at least have similar characteristics like fixed assets according to national accounts' standards to the point of being really the same physical goods as vehicles (2008 SNA 10.41) or sometimes even treated as fixed assets when for instance kitchen equipment as part of a dwelling is included in the price of the dwelling (2008 SNA 29.152).

Nevertheless the 2008 SNA continues treating consumer durables (only) as part of consumption expenditure and excluding them from the asset boundary. But, acknowledging the analytical interest in the stocks of durables, it is suggested to provide this information as a memorandum item in the balance sheet emphasising "but not be integrated into the totals of the table" (SNA 3.47)[1]. Emphasising the household perspective, this creates a real inconsistency between financial and non-financial assets because consumer loans are – of course – part of the liabilities of the households' balance sheet. And if the stocks attributable to these liabilities are not integrated in the totals of the table – on the asset side – the net worth calculated for the households is definitely too low. This holds even more when balance sheets are differentiated for groups of households, which is also desirable in the sense of Stiglitz-Sen-Fitoussi. Households could be treated as overindebted although this is not true in reality as long as they own the goods for which they took out the consumer loan that is treated as such in the balance sheet. Balance 1 illustrates the described inconsistency using figures for Germany:

[1] All cited paragraphs refer to the 2008 SNA below. That is why the 2008 is not further mentioned.

Balance 1: Households' opening balance sheet 2009 as proposed by the SNA, Germany
EUR billion

Assets 10,086		Liabilities and net worth 10,086	
Non-financial assets	5,653	Borrowed funds	1,531
Fixed Assets	4,085	of which	
of which dwellings	3,563	Loans for house purchase	1,038
Land underlying buildings and structures	1,568		
???		Consumer loans	202
Financial assets	4,433		
		Net worth (= own funds)	**8,555**

Treating consumer durables as assets would solve the problem. But, to the author's knowledge, all the ideas in this direction treat the extension of the production boundary more or less as *sine qua non* for the extension of the asset boundary. Measuring household production is the most common one, with a long history. It is favoured also by the Commission report and recommended – as satellite accounts – in the 2008 SNA (29.155). The second possibility mentioned in this paragraph of the SNA seems not to demand an extension of the production boundary: "The other (approach) is to leave unpaid household production excluded from the production boundary but consider replacing consumer durables by an estimate of the services they provide." But the authors of the quoted paper themselves say: "To recognise households' repeated use of durables, this article extends the production boundary by postulating that these durables are gradually used up in hypothetical production processes whose outputs consist of services. These services are then recorded as being acquired by households over a succession of time periods." (Jalava/Kavonius, 2006, p. 4).

This second approach is the starting point for the question addressed in this paper: Is there a "third way" to treat consumer durables in a way that is more appropriate for their actual use in reality and consistent with the basic national accounts' concepts? Or in which way do these concepts have to be modified so that the use of consumer durables is reflected more realistically?

2 The solution – theoretical aspects

2.1 Making the system consistent without extending the production boundary

To recap from the problem description: When considered from wealth aspects, the stock of consumer durables should definitely be part of the assets in the **balance sheets of households** because consumer loans are included under liabilities. If consumer durables are not recorded in the balance sheet, there are no relevant assets corresponding to consumer loans and the net worth shown would be incorrect. This would definitely be a major problem if the balance sheet were represented in a breakdown by household groups. Otherwise, households might be considered as overindebted although they are not in objective terms.

The stock of consumer durables of households is also **part of national wealth** and, as such, it must also be integrated into the balance sheet of the total economy. The mere fact that consumer durables are not used for production in the sense of the production boundary of national accounts does not mean that durables are no wealth. They are just not consumed in the year of purchase but are used for consumption purposes over several years. They are available as a physical stock and they have a specific value which, from the overall economic aspect, has to be determined on the basis of **future consumption possibilities**. Replacing the expenditure on consumer durables by the relevant "accrual consumption of consumer durables" according to the consumption of fixed capital in the concept of actual final consumption of households would be rather easy to implement. It would be a suitable method of taking account of the actual facts in the system of national accounts without having to shift the production boundary and without having to value household production. In this way, consumer durables would be shown in the accounting system as being consumed not directly in the year of purchase but gradually, as is the case in reality. The part not consumed yet would be recorded in the balance sheet as net stock of consumer durables of households.

The proposed treatment of consumer durables meets one main rationale of recommendation 3 of the Commission report: "What is carried over into the future necessarily has to be expressed as stocks…" Moreover, the household perspective is emphasised as well as consumption is considered jointly with wealth by introducing a **parallel treatment of consumer durables** – accrual consumption or accrual use – within the existing concept of household actual final consumption in addition to their consumption expenditure, allowing to treat the part not consumed or used up yet as an asset in the balance sheet.

But, as the Commission report (p. 13) pointed out: “The right valuation of these stocks plays a crucial role, and is often problematic.” Some theoretical aspects of the two constituent parts of the proposed solution, mainly connected with the valuation problem, are discussed in the next sections.

2.2 Including accrual consumption of consumer durables in household actual final consumption

The first constituent part of the proposed solution is to integrate the accrual consumption of consumer durables into the concept of household actual final consumption. Household actual final consumption is defined in SNA 9.81 to 9.83 and includes the goods and services households receive from government and non-profit organisations as income in kind in household consumption. As the concept shifts the concept of consumption expenditure to the actual final consumption for households, one may assume that this concept taken literally considers already the special case of consumer durables as being used over more than one year and not only in the period in which the consumption expenditure is made and measured. Because this is not the case, the idea of including the accrual consumption of consumer durables into this existing concept suggests itself.

Having made this basic decision the next step is the **valuation of the accrual consumption of consumer durables.** Similar to fixed assets calculations, the stock of consumer durables of households and the gradual annual consumption of this stock can be valued by means of the Perpetual Inventory Method (PIM). However, it does not necessarily have to be done in this way because different analytical purposes may imply different valuation methods. This is further considered in the next section. It is proposed here to stick on the traditional PIM, that means **excluding capital services**, because consumer durables are not used in production processes but **used up gradually direct for consumption.** Therefore no hypothetical production process has to be postulated in opposition to SNA 9.44.

Adopting the traditional PIM, the stock of consumer durables of households is calculated both according to the gross concept and the net concept, and in each case both at current replacement cost and in volume terms. When applying the **gross concept**, consumer durables continue to be part of the stock of consumer durables at their full replacement value – not taking account of the decrease in value – until they are definitely no longer used by (possibly changing) households. The underlying idea of the gross concept is that the entire durable good

is used for consumption purposes, irrespective of its age. And it can be used roughly to the same extent every year, provided that it is regularly maintained and repaired. For example, with a washing machine one can wash a comparable volume of laundry every year and with a vehicle one can drive a comparable number of kilometres, even after ten years when one would no longer obtain high proceeds by selling it. Therefore, accrual consumption of consumer durables, measuring the use of the stock of consumer durables in a given period according to consumption of fixed capital, is evenly distributed over the consumer durables' service life. Accrual consumption of consumer durables is the link to the **net concept** where the accrual consumption of consumer durables accumulated since the time of purchase is deducted. So the **net stock of consumer durables** corresponds to the current asset item in the sense of the current value of the stock of consumer durables, **measured according to the future consumption possibilities.**

2.3 Including future consumption possibilities in the definition of assets

The second constituent part of the proposed solution is to include future consumption possibilities in the definition of assets in order to allow consumer durables to be treated as assets of households and the total economy. According to the 2008 SNA the definition of an asset is as follows: "An asset is a store of value representing a benefit or series of benefits accruing to the economic owner by holding or using the entity over a period of time. It is a means of carrying forward value from one accounting period to another." (SNA 3.30) Why should consumer durables not meet this definition? They exist as **physical stocks**, used by their owners over a period of time and represent a **store of value for their owners** which at least can be realised by selling them. And if you ask your neighbour he would of course tell you that he benefits from all his consumer durables.

The reason for excluding consumer durables from the asset boundary reads as follows: "The services these durables produce are household services outside the production boundary of the SNA." (SNA 10.34) But they do not produce services (production is well defined in national accounts), they are consumed gradually over more than one year, they are **used up over their service life for consumption purposes in reality.**[2] Although consumption, too, is mentioned in connection with the explanation of benefits in the SNA (3.19), durables, aimed for current and future consumption, are not acknowledged as assets in the balance sheet. This may arise

[2] The possible special case of using motor vehicles, bicycles etc. for the journey to and from work is not examined here.

from the fact that balance sheets stem from business accounts originally. The aim of production for enterprises is more or less to maximise return on (financial) capital. But from the household perspective, and hence for the total economy, the ultimate aim of production is to maximise consumption – in the sense of satisfaction of human needs or wants as defined accordingly in the SNA (9.39). Including consumer durables into the asset boundary and to valuing these durables on the basis of future consumption possibilities is essential in this respect.

There are some **valuation problems** to be considered, because different analytical objectives may imply different valuation methods. For example, as an asset in the balance sheet, the stock of fixed assets and hence the stock of consumer durables – strictly speaking – would have to be estimated at their current market value. However, for valuation it is relevant whether a durable good is disposed of to realise the market value of the asset, which is an exception in most cases, or whether it continues to be used for the owner's own purposes – either production or consumption purposes. Generally, there are no smoothly working markets for second-hand consumer durables (as well as fixed assets) of different ages. An exception is motor vehicles, in particular passenger cars. It would certainly be possible on the basis of the data available to determine their decrease in value along with increasing age if sufficient time and manpower were employed. It is however doubtful whether the results could be transferred to other fixed assets or consumer durables, considering the psychological characteristics of that market (importance of demonstrating social status, new cars losing much value directly after purchase, etc.). To determine the current value – which reflects future consumption possibilities –, the value of consumer durables is therefore distributed over the entire estimated average service life, similar to the traditional approach applied to fixed assets.

Another aspect that could play a role in this respect is the basic principle of **capital services.** It is also rooted in business accounting and transferred directly to national accounts. But it is questionable if it holds when it comes to the level of the total economy. Besides the discussion of important practical challenges, it is at least questionable whether these different measures of service flows for several categories of capital should be included in official national accounts figures, given the fact that practice does not meet the various assumptions of neoclassical theory. Net operating surplus results from the whole production process in reality, in practice including first and foremost human work in a wider sense, and should not be related to the capital categories covered so far in national accounts only.

Moreover the introduction of the concept of capital services into national accounts holds the danger of **mixing** the sphere of the **production** of goods and services, on the one hand, and the sphere of **financing the production** of goods and services, on the other, as “capital” as such is a financial category. In the view of the author, the fathers of the SNA in the past used the term “fixed assets” rather than “fixed capital” for good reasons.

The differentiation between the value side and the volume side of capital, or better, of (fixed) assets is appreciated. However there is the danger of an inadequate measurement of the volume side as the proposed measurement methods do not maintain a consistent perspective of the production of goods and services but rather include financial categories. Value added is a result of the production of goods and services. The contribution of fixed assets and other assets to this volume category should therefore not be measured by using a return on financial capital from financial markets because they are dependent on the further development of the production of goods and services in reality. Of course there is a strong interrelation between the two spheres but **eventually the volume of goods and services and its development decide what the money is worth** and therefore a circular measurement should be avoided. Financial markets can be highly speculative and risks cannot satisfactorily be covered, as we saw again in the near past. Certain assumptions on future developments are needed to measure fixed assets and consumption of fixed capital. But they should be kept as simple as possible and not include financial categories.

This holds *a fortiori* for consumer durables. It is to be stated that the **creation of value added is not inherent to durable goods as such.** Consumer durables are means to satisfy human needs or wants easier and/or more comfortably or to raise efficiency of consumption in the same way as fixed assets are means to make production processes easier and/or more comfortably and to raise efficiency of production and thereby labour productivity. Consequently, the treatment of consumer durables as assets used up over their service life for consumption purposes is in accordance with the main principles of the core account taking into consideration that **consumption is the ultimate aim of human production.** Moreover, if it is accepted that **sustainable development** of societies means first and foremost maintaining current and future consumption, the treatment of consumer durables as assets of households and at the level of the total economy is a logical consequence.

The stock of consumer durables might also be seen as something in between the stock of fixed assets and the stock of inventories, where the inventories do not consist of single goods for immediate consumption that can be postponed but of long-living goods representing a stock of consumption possibilities for future gradual consumption. This leads to a last aspect that should be considered here: There is **no discounting of future consumption possibilities** – for good reasons. At the level of the total economy it is really questionable why consumption possibilities for future years should count less than for current years, especially taking into account the aspect of sustainability. In this respect, the aspect of time preferences deserves closer attention but is not further discussed in this paper. From the perspective of goods or thinking in volume terms, all years of a **time series** have the same importance or are counted equally. The figures of all years are price-adjusted, but not discounted to one year in a time series of gross domestic product (GDP). That is why the future consumption possibilities embodied in the stock of consumer durables to be used year by year have not to be discounted for a time series and therefore not in the balance sheet either (and, consequently, neither the future yearly contributions to the GDP embodied in fixed assets).

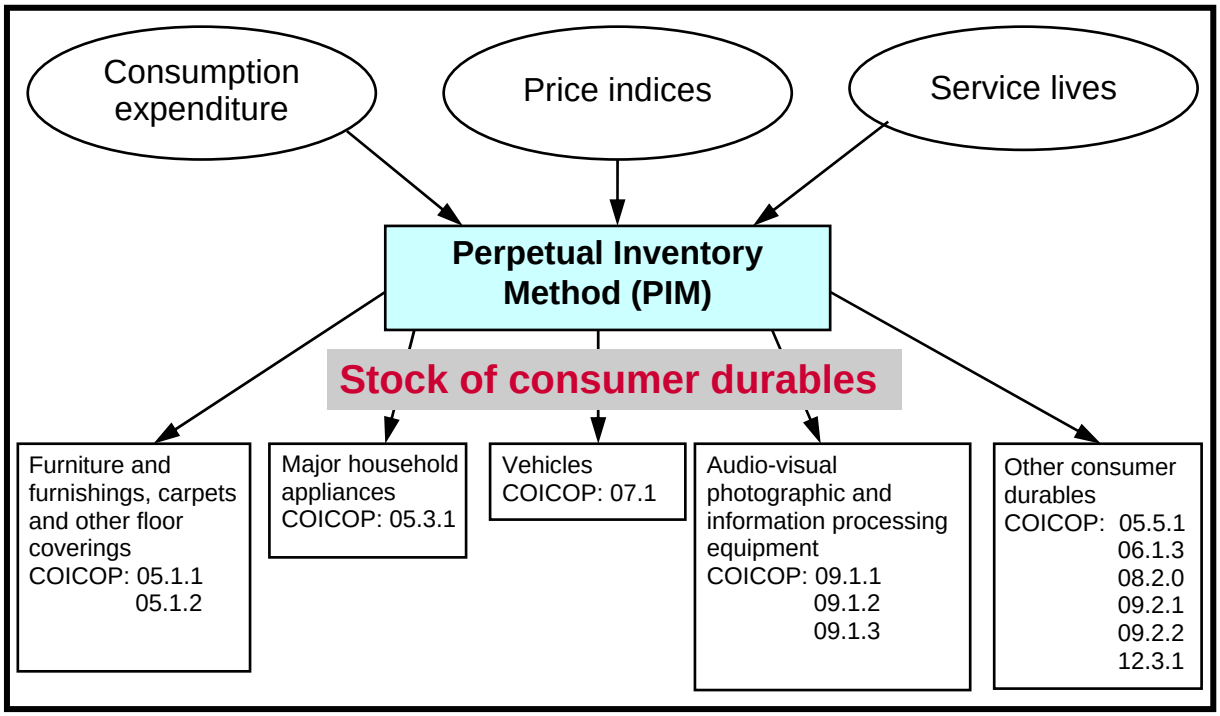
Therefore, the following treatment is fully consistent with basic national accounts principles: Consumption expenditure for consumer durables can be equally distributed over the service life in volume terms. The (yearly) accrual consumption of these durables is included in household actual final consumption by inflating the parts allocated to the reporting years (periods), using the price index for new goods of the same type. The part not consumed yet is recorded in the balance sheet as net stock of consumer durables of households, also inflated using the same price index. In this way, the required consistency is achieved between financial and non-financial assets in household's balance sheet within the core system. There is **no influence on the measurement of GDP**, because consumption expenditure remains unchanged as part of the GDP. There is just a parallel treatment of consumer durables: The consumption expenditure for these goods is treated as capital formation building up a stock of future consumption possibilities and the yearly accrual consumption of these goods is included in household actual final consumption allowing for the part not consumed yet being shown in the balance sheet.

3 The solution – empirical evidence and practical aspects

3.1 Empirical results for Germany

The estimation of the stock of consumer durables has a **long tradition** in German national accounts. Some initial calculations of purchases of consumer durables and assets in the form of such products were made in national accounts as long ago as the mid-1980s (Schäfer, 1985). For reasons of capacity, it was not originally possible to update this work on an ongoing basis. The calculations had been revised and updated as part of the satellite system on household production for the first time at the beginning of the 1990s (for West-Germany only) and again at the beginning of the 2000s for the measurement of unpaid household work in the framework of the data interpretation of the second time use survey (for an overview see Schmalwasser et al., 2011). It should be underlined that the accrual consumption of consumer durables in the sense of consumption of fixed capital was the main output of these calculations used for the satellite system on household production.

Chart: Calculation of the stock of consumer durables in Germany



The **current state of play** is as follows: The calculation of the stock of consumer durables is based on the PIM. The chart shows schematically how the calculations are made, especially

the inputs and the outputs. All goods marked as “durable goods (D)” in the “Classification of Individual Consumption According to Purpose (COICOP)” are covered. The five product groups used for publication and shown as output in the chart differ a little from those four groups proposed in the SNA classification hierarchies (SNA A1.45). Major household appliances are treated separately like already in traditional German national accounts for West-Germany and the split between the last two groups takes account of special analytical interest by separating audio-visual, photographic and information processing equipment – a group with rapid price changes (and use of hedonic methods in price statistics).

The results are published for gross and net stocks both in current replacement cost as well as in volume terms. The net stock of consumer durables in current replacement cost is included in the balance sheet, **published together with the Deutsche Bundesbank** – as a memorandum item as proposed by the SNA and the European System of Accounts (ESA) which is compulsory for European countries in opposition to the SNA which is only a recommendation.

In a modified way, Balance 2 shows the results if the stock of consumer durables were fully included in the balance sheet of households and the difference between net worth of households and the traditional measure as shown in Balance 1. In the case of Germany this difference amounts to Euro 943 billion which is 11 % of the traditional net worth.

Balance 2: Extended households’ opening balance sheet 2009, Germany
EUR billion

Assets 11,029		Liabilities and net worth	11,029
Non-financial assets	5,653	Borrowed funds	1,531
Fixed Assets	4,085	of which	
of which dwellings	3,563	Loans for house purchase	1,038
Land underlying buildings and structures	1,568		
Consumer durables	943	Consumer loans	202
Financial assets	4,433		
		Net worth (= own funds)	9,498
		Net worth (= own funds), Balance 1	8,555
		Difference	943

3.2 International comparison of the stock of consumer durables

From the **OECD database**, data on the stock of consumer durables were obtained for the following countries to draw a comparison with German results: Italy, the Netherlands, the United States, Canada, Australia and Japan.

To make the results comparable across countries, purchasing power parities for household final consumption expenditure from the OECD statistical data base (OECD.Stat) are used to convert the net stocks into US Dollars. That **conversion into the purchasing power standard** allows drawing volume comparisons at the international level. What is calculated is how many units of the relevant currency are required to purchase the same representative basket of goods that could be obtained for one US Dollar. So purchasing power parities can replace exchange rates, whose fluctuations sometimes cause biases. As all stock data are available in a standard currency and, at the same time, differences in price levels between the countries examined have been eliminated, volume comparisons can be drawn.

Due to the different size of the countries included, however, it is not sufficient to just compare the absolute stock data with each other. Instead it seems useful to **compare the stock of consumer durables per inhabitant** of the countries (OECD.Stat)[3]. Presentation per inhabitant has been preferred to presentation per household to eliminate influences of household size in different cultural areas. However, this could be questionable because some consumer durables are typically used per household such as kitchen equipment.

Table: Stock of consumer durables per inhabitant in purchasing power standards

Germany = 100

Country	2003	2007
Australia	58	57
Canada	73	73
Italy	92	92
Japan	58	59
Netherlands	70	71
United States	108	112

[3] Changeover to representation at the end of the year (number of inhabitants at the end of the year = number of inhabitants at the beginning of the subsequent year).

The table shows that the population in the United States was best equipped in 2003 and 2007. In 2003, every inhabitant there had about 8%, in 2007 even 12% more consumer durables at their disposal than inhabitants of Germany. However, this purely goods-based analysis does not take account of consumer credit debt aspects. The lowest equipment with consumer durables in this comparison is recorded for Australia and Japan (just 58% of the German stock of consumer durables per inhabitant in 2003 as well as 57% and 59%, respectively, in 2007). The values for Italy are closest to the German stock data. In the two years examined, the stock of consumer durables per inhabitant in Italy was 92% of the German level.

3.3 Measurement problems – Evaluation of the results

Only with some reservation can the international results shown here be interpreted to reflect reality. There is not sufficient information published in the countries on the **calculation methods applied** to allow making generally valid statements. This might explain in particular the low score of Australia and Japan in the international comparison because countries may make different use of the discretion regarding the methodology of calculating the stock of consumer durables of households. For example, the **different assumptions regarding service life** have an impact on the stock of consumer durables shown. While Germany estimates an average service life of eleven years for vehicles (Schmalwasser et al., 2011), Italy takes nine years as a basis (Istat, 2008) and the Netherlands just eight years (Taminiau-van Veen, 2010). Differences between countries are also observed in the service life assumed for large household appliances. There is a range of eight to 15 years in an international comparison. However, the technological standards in the countries have to be taken into account here. In Germany, for example, there is a tradition of high-quality electronic devices with a longer service life. The differences in the estimated service life are smallest for audiovisual equipment and computers. Generally a period of around seven years is applied, only the United States use an estimated nine years (BEA, 2003). Again, caution must be applied when comparing those results with each other because the service life information released generally refers to product groups rather than individual products. Often it is not possible to draw direct comparisons because there are no binding provisions on the composition of products within the groups, so that this is handled individually. In the United States, audiovisual equipment and computers are grouped into a product group together with musical instruments. This might be a reason why Americans show a longer service life for the group containing audiovisual equipment.

Also, in different countries, **different consumer durables may be included** under the stocks. For example, there is a publication by Taminiau-van Veen, 2010 specifying that in the Netherlands the stock of consumer durables includes not only furniture, large household appliances, vehicles and computers but also clothing and footwear. These products are marked as semi-durable goods (SD) in the COICOP and their inclusion in the Netherlands shows that there are some borderline cases to be discussed which is not done in this paper.[4] If those items were subtracted from the stock value, the Dutch stock of consumer durables of households in 2008 would decrease by about 13.5%. This would further reduce the relative position of household equipment with consumer durables when compared with Germany – appearing already rather low – from 70% and 71% for 2003 and 2007, respectively. For the other countries, detailed information on what is included under the stock of consumer durables is not available. But hopefully, it should be more or less what is defined as durable goods in the COICOP.

In addition, the **different versions of the Perpetual Inventory Method applied**, in particular the method of determining accrual consumption of consumer durables according to consumption of fixed capital, may have a major impact on the net stocks of consumer durables calculated. A study of Statistics Canada (1999) on the net stock of fixed assets demonstrates that, for a comparable data set, the method applied by the Bureau of Economic Analyses (BEA) in the United States provides higher net stocks than the method applied in Canada and Germany, among other countries.

What should also be mentioned is that, for conversion into purchasing power standards, it would be **better to use purchasing power parities determined specifically for consumer durables.** As they are not available, however, the purchasing power parities for total final consumption expenditure have been used instead. This means that the international comparison might also be impaired by the fact that the differences between, and developments of price levels regarding expenditure on consumer durables on the one hand and total final consumption expenditure on the other are not the same in the countries examined.

The measurement problems affecting international comparison as highlighted above are not meant to be exhaustive. But they show that differences in the reported stocks of consumer

[4] For a discussion of the boundary for durable consumer goods see Schäfer, 1985.

durables may not reflect differences in reality as one could already assume having a look at the relations between the countries in the table presented in the section before. Together with the fact that only a few countries reported their stocks of consumer durables to the OECD, one may imagine that there are at least as many problems for more **practical acceptance** as there are already for the **net figures such as Net Domestic Product or Net National Income** because of lower comparability induced by measurement problems of consumption of fixed capital.

This leads to another possible reason for differences in the reported stocks of consumer durables: The **treatment of durable goods** such as cars and electrical goods as gross fixed capital formation or as consumer durables may be handled differently in practise because the proposed **split of the good** in the balance sheet is restricted to unincorporated enterprises only in the SNA 13.94, whereas the current version of the 2010 ESA gives an extension to quasi-corporations: “Durable goods, such as vehicles, are classified as either fixed assets or as consumer durables depending on the sector classification of the owner and the purpose for which they are used. For example, a vehicle may be used partly by a quasi-corporation for production and partly by a household for final consumption. The values shown in the balance sheet for the non-financial corporations sector (S.11) should reflect the proportion of the use that is attributable to the quasi-corporation. A similar example exists for employers (including own-account workers) sub-sector (S.141+S.142). The proportion attributed to the households sector (S.14) as final consumers should be recorded in the memorandum item, net of the equivalent accumulated charges for consumption of fixed capital.” (ESA 7.97) As vehicles play an important role for capital formation as well as for consumption expenditure this may really influence these figures to a considerable extent. The possible different practical handling of **sales of used vehicles between producers and consumers** according to SNA 10.41 adds to this problem.

4 Conclusion

It is possible for the stock of consumer durables to be included in the households' balance sheet as well as in the balance sheet for the total economy without any effect on GDP by a parallel treatment of the accrual consumption of these durables in household actual final consumption in addition to their consumption expenditure. This permits reaching consistency between financial and non-financial assets within the households' balance sheet, which is not the case according to the treatment of consumer durables only as a memorandum item as proposed in the 2008 SNA. Because consumer loans are included in the balance sheet, the net worth calculated so far is too low given the fact that the goods corresponding to these loans as assets in reality are missing. In the case of Germany, households' net worth including the stock of consumer durables exceeds the traditional measure by 11 per cent.

Consumer durables are available as a physical stock and they have a specific value. From the household perspective, and hence for the total economy, the ultimate aim of production is to maximise consumption – in the sense of satisfaction of human needs or wants. Including consumer durables into the asset boundary and to valuing these durables on the basis of future consumption possibilities is essential in this respect.

A lot of questions remain unanswered however, especially regarding the influence this parallel treatment of the accrual consumption of consumer durables has on the other accounts.

When it comes to practical measurement problems it has to be stated that these are the same as for fixed assets and consumption of fixed capital because certain assumptions on future developments are needed to measure all durable goods. But they should be kept as simple as possible and not include financial categories.

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