

Valuing domestic work in Hungary

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Content

- 1. Guidelines and the Hungarian Household Satellite Account
- 2. The scope of the Household Satellite Account
- 3. Time input: classification of activities and measurement
- 4. Wage input: occupations and data source
- 5. Conclusions

1. Guidelines and the Hungarian Household Satellite Account (HHSA)

HHSA 2000

Known: Eurostat Proposal 1999

While working on Eurostat proposal 2003

In Hungarian: Sik Endre, Szép Katalin szerk. (2003): A háztartási termelés értéke a mai Magyarországon. A háztartási szatellitszámla 2000. évi kísérleti számításai. Műhelytanulmányok. KSH. p. 248

HHSA 2010

Based on Eurostat proposal 2003

UNECE Guide 2017, later published Eurostat Working Papers: Proposal for a Satellite Account of Household Production. 9/1999/A4/11. 21/05/1999

Eurostat: Household Production and Consumption. Proposal for a Methodology of Household Satellite Accounts. 2003 Edition

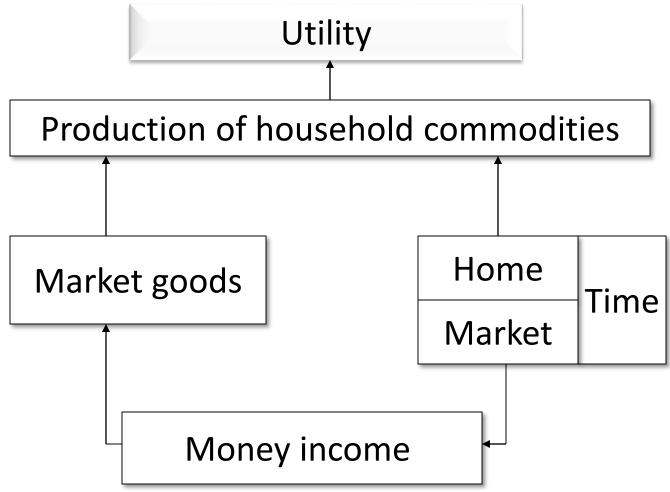
UNECE: Guide on Valuing Unpaid Household Service Work. UNECE 2017

In English: HCSO 2016: Value of domestic work and household satellite account in Hungary. p.6

http://www.ksh.hu/docs/eng/xftp/stattukor/ehaztszatellit.pdf
In Hungarian: KSH 2018: Háztartási munka, önkéntes munka,
láthatatlan munka II. Háztartási szatellitszámla, 2010. p.116+annexes
http://www.ksh.hu/docs/hun/xftp/idoszaki/lathatatlan/lathatatlan_m
unka 2.pdf



2. The scope of the Household Satellite Account Household production model



2. The scope of the Household Satellite Account General concept of production, income and work

"Production is an activity carried out under the control, responsibility and management of an institutional unit that uses inputs of labour, capital and goods and services to produce outputs of goods and services. ..."

ESA 2010 3.07 ESA – European System of National Accounts

"Work comprises any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for own use."

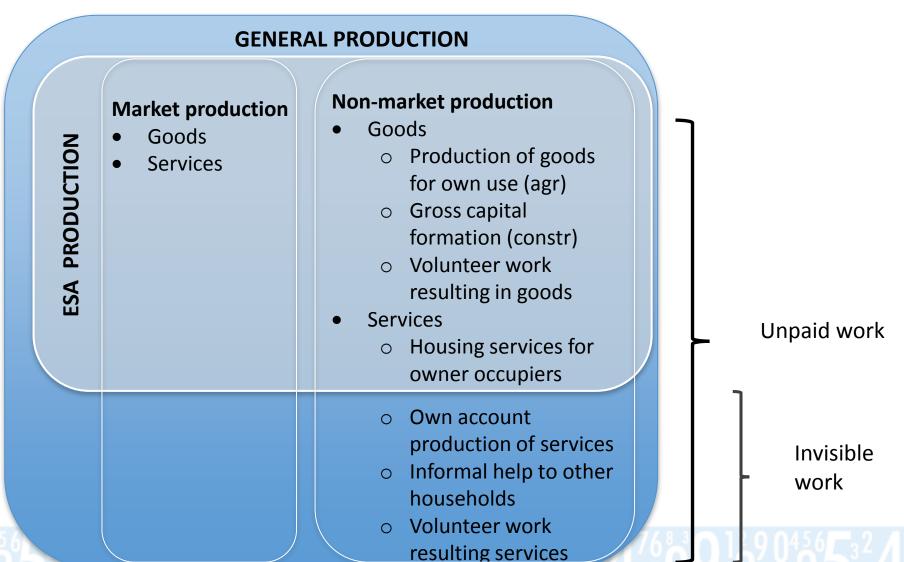
Resolution I of the 19th ICLS 2013.

"Household income may be defined to cover: (i) income from employment (both paid and self-employment); (ii) property income; (iii) income from the production of household services for own consumption; and (iv) current transfers received."

Resolution on "standards for household income statistics" adopted by the International Conference of Labour Statisticians (ICLS) in December 2003 (ILO, 2004).



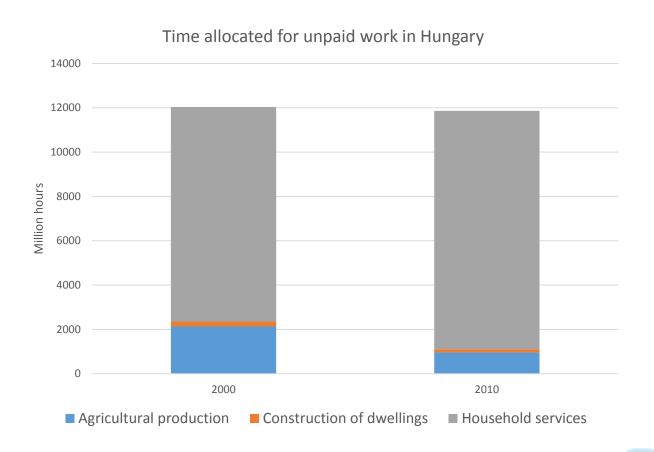
2. The scope of the Household Satellite Account Production boundary of National Accounts



2. The scope of the Household Satellite Account Non-market production or only services?

Which one?

- Eurostat 2003: non-market household production, both SNA and non-SNA
- UNECE 2016: unpaid service work;



2. The scope of the Household Satellite Account Household services: Input-based method

value of labour (time valued at suitable wage)



- + other taxes on production
- other subsidies on production
 - + consumption of capital
 - = gross value added
 - + intermediate consumption
- = value of total output (sum of costs)

Applied by most countries, recommended by UNECE (2017)



3. Time input Concept of household production

Reid 1934, p. 11 "third party criterion":

"Household production consists of those unpaid activities which are carried on, by and for the members, which activities might be replaced by market goods or paid services, if circumstances such as income, market conditions and personal inclinations permit the service being delegated to someone outside the household group."

Hawrylyshyn (1977):

"those economic services produced in the household and outside the market, but which could be produced by a third person hired on the market without changing their utility to the members of the household."

Source: Margaret G. Reid (1934): Economics of Household Production. J. Wiley & Sons , p. 11.

https://archive.org/stream/economicsofhouse00reid#page/10/mode/2up

Hawrylyshyn, Oli (1977): Towards a definition of non-market activities. Review on Income and Wealth, vol. 23. No1 (March) pp 79-96.



3. Time input: classification of activities and measurement

Unfortunately activity coding lists do not offer "ready to use" list, exept ICATUS 2016, but good estimations can be achieved.

- Information needed from Time Use Surveys on activities:
 - For market, barter, free (only unpaid);
 - Type of activity, (third party criterion);
 - For whom, (for own household, family member in other household, other household, organisation (volunteering));
 - Duration;
 - Paralel activities (primary and secondary, passive childcare)
- Challanges:
 - Short activities
 - Non identified paralel activities (planning...logistic, order and duration, diet...)

3. Time input: Principal functions of households

To provide

Housing/ accomodation

- Cleaning
- Maintenance
-

Meals/ nutrition

- Meals
- Shopping food
- Transport
- Dish washing
- Planning
- ...

Clothing and laundry services

- Repair
- Laundry services
- Shopping cloths
-

Care

- Child care
- Adult care
- Transportati on
- ...

- For own household
- For other households
- Volunteering

Categories recommended by L. Goldschmidt-Clermont, and Eurostat 2003. (+ volunteering)

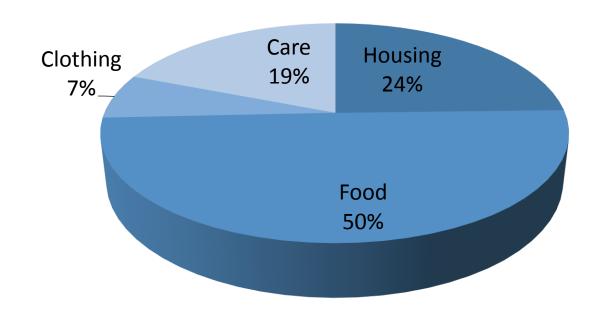


Some results in Hungary

Population of age 15 - 84 (8,26 million people) all together allocate 10 760 million hours for unpaid household and voluntary work, outside National Accounts boundaries. This is more than the time allocated for work covered by National Accounts.

95,9% for own household, 3,9% for other households, 0,2% voluntary work.

Structure of time allocated for (own) household production



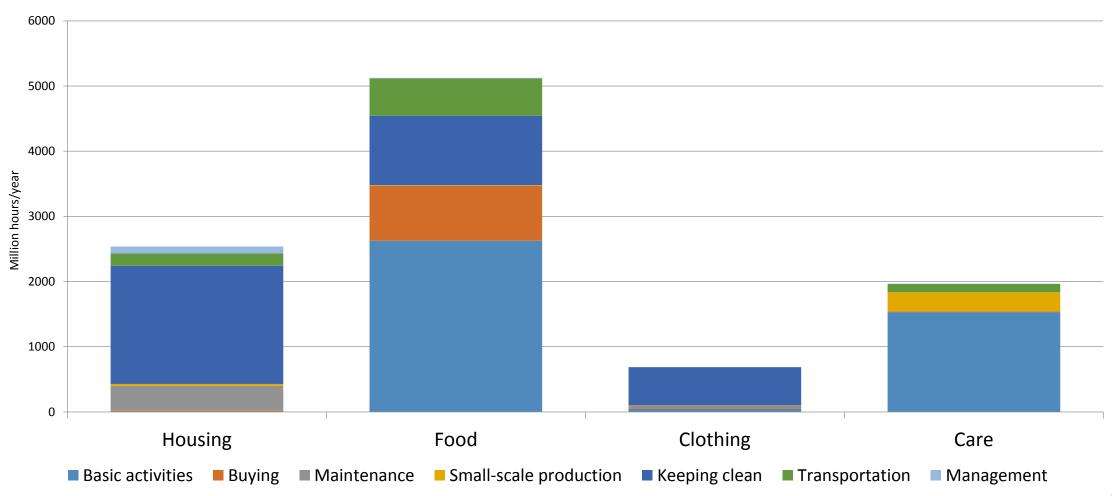
In Hungary Hungarian ACL is used, very detailed with the necessary extensions. Mostly separable by codes.

Source: KSH időmérleg 2009-2010 (Time Use Survey).

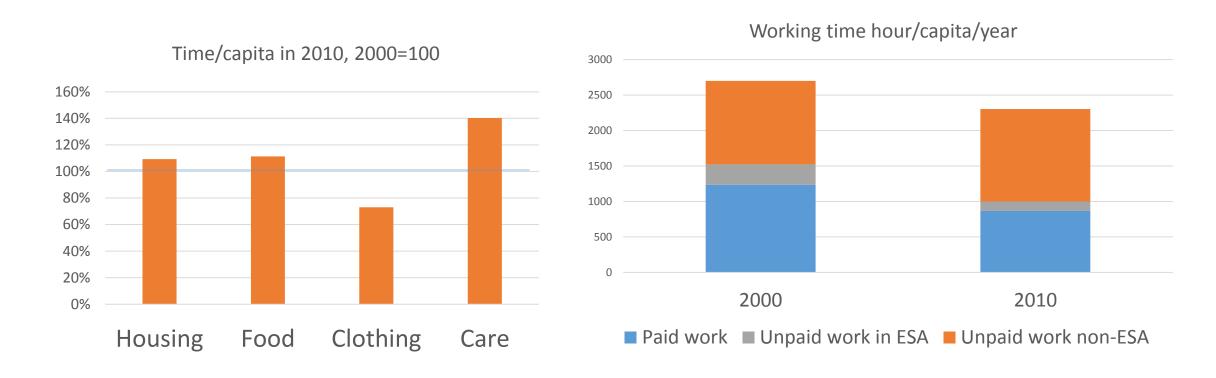
Population of age 15 -84



Working time spent on own household



Working time changes 2000 - 2010



Example: During recession 30% of foregone work (Single persons 15%, married 42%) reallocated to nonmarket work. Mainly to childcare. Data source: American Time Use Survey 2003 - 2010 Source: Mark Aguiar, Erik Hurst, Loukas Karabarbounis: Time Use During Great Recession. American Economic Review 2013. 103(5): 1664-1696



4. Wage input: occupations and data source Who's wage to value unpaid work?

- What price the household would have to pay in case of hiring someone to perform the required task (replacement cost)?
 - Hourly wage of housekeeper: General substitute
 - Hourly wage of specialised workers in the corresponding occupation e.g. cook, nurse, driver: Special substitutes
- What would one earn if time on unpaid work would have been spent on paid work?
 - Hourly wage in the paid work of the given person: Opportunity cost not supported in macroeconomics
- In each case net and gross wages, ~+social security paid by employers; 3x3 alltogether 9 versions were calculated

4. Wage input: occupations and data source Arguments

Occupations: skilled or not skilled?

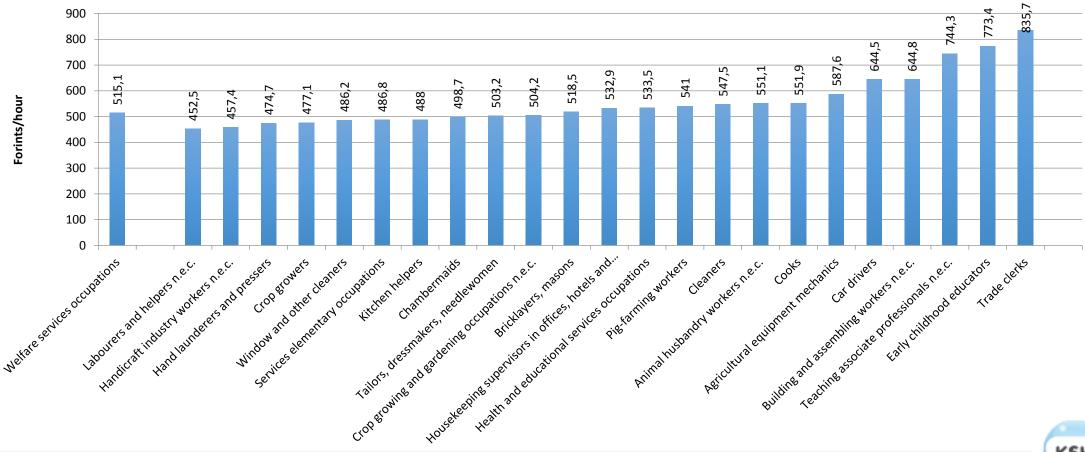
- Eurostat 2003.: generalist, (but no management tasks included)
- UNECE 2017.p19.: generalist (productivity is unlikely to match those of specialist workers)
- Skilled no qualification, but special knowledge of local needs and environmental condition are needed, skills developed in regular repetition, decisions needed can be identified with the competence of medium-level leaders

Gross or net

- Eurostat 2003 p27/83.: "Gross wages include income tax and social security contributions paid by the employer and employee." Choice based on the purpose: gross expenses forgone, net income from household production
- UNECE 2016 p.35: "gross wage rates (that is including overtime and before tax and deductions)" Choice is the same.

Working time for hourly wage Eurostat 27.0 82. paid working time includes holydays, sick leaves, coffee breaks...

4. Wage input: occupations and data source Net hourly wages (average) 2010 for replacement cost approach



Wage data sources: Individual wages and salaries survey of the Empolyment and Social Office in Hungary, 2010, Survey representative to businesses (>5 employees) and public institutions.

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4. Wage input: occupations and data source Opportunity cost method

Hungarian Time Use Survey, 2009/2010

Sex

Age in years

Highest level of the education

Legal status of settlement

County

Hungarian Standard Classification of Occupations (similar to ISCO)

Hungarian activity classification (similar to NACE)

Size of respondent's workplace

Day, diary completed

Month, diary completed

Year, diary completed

(…)

Individual wages and salaries, 2010

Sex

Age in years

Highest level of the education

Legal status of settlement

County

Hungarian Standard Classification of Occupations (similar to ISCO)

Hungarian activity classification (similar to NACE)

Size of respondent's workplace

Monthly net wage in May

Monthly gross wage in May

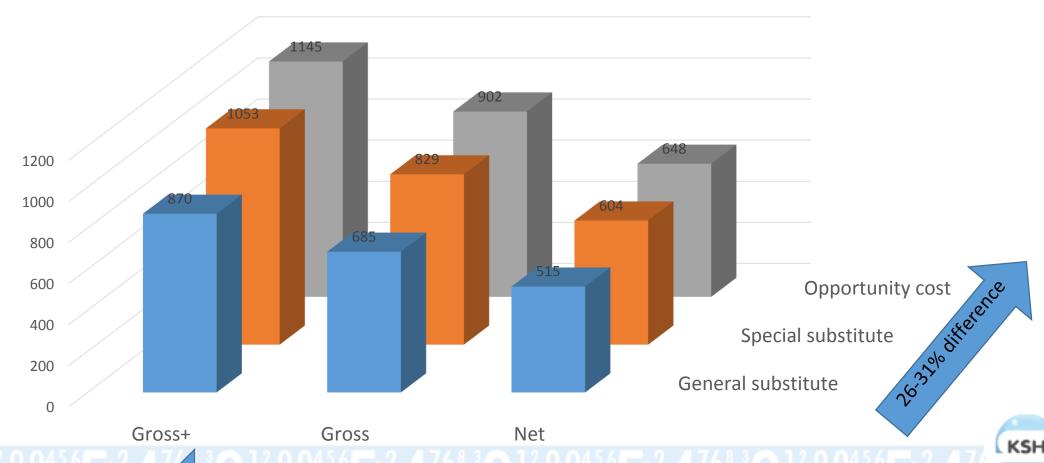
Annual leave

(…)

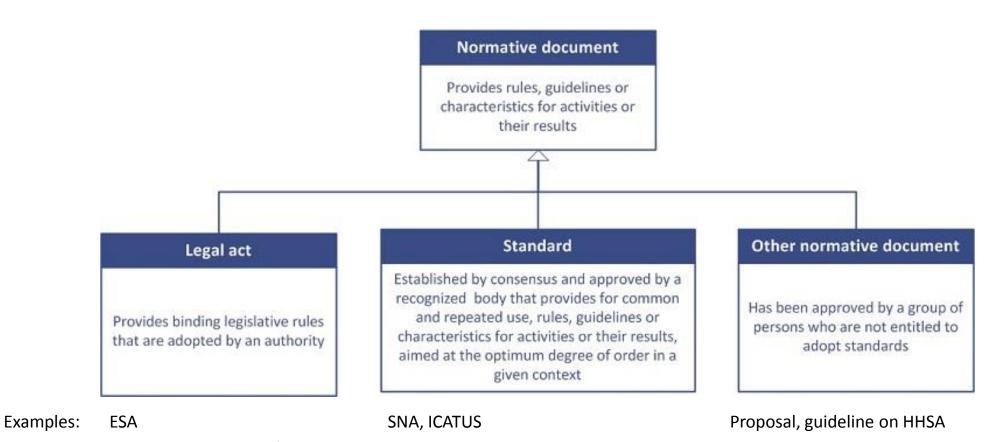


4. Wage input: occupations and data source Some results: The value of labour input with different methods

Implicit hourly wages HUF/hour



Guidelines and the Hungarian Household Satellite Account (HHSA) Guidelines and standards



Source: Eurostat Ramon Catalogue of ESS standards

http://ec.europa.eu/eurostat/ramon/miscellaneous/index.cfm?TargetUrl=DSP_GENINFO_ESS_CAT

6. Conclusions

- Further work is needed
 - to do more research, to elaborate HHSA in more countries
 - to develop guidelines and proposals for household satellite account in long term standards
- While reviewing terms and classifications for TUS
 - Look for consistency with international standards (i.e. ICLS, NA)
 - Consider the needs of HHSA
- Develop a metadata set to describe methodology used, short, but informative enough to assess comparability

Some household satellite accounts in

Finland 2001, 2006

- Varjonen et al. 2006 Varjonen, Johanna; Aalto, Kristiina: Household Production and Consumption in Finland 2001: Household Satellite Account. Helsinki, 2006 Statistics Finland and National Consumer Research Centre
- http://www.stat.fi/tup/kantilinpito/2001 household satellite account.pdf
- Hamunen et al. 2012. Hamunen, E., Varjonen, J., and Soinne, K. (2012). Satellite Accounts on Household Production: Eurostat Methodology and Experiences to Apply It. In Paper Prepared for the 32nd General Conference of The International Association for Research in Income and Wealth.
- http://www.iariw.org/papers/2012/HamunenPaper.pdf

Germany 1992, 2001

- Schäfer 2004 Schäfer, Dieter: Unbezahlte Arbeit und Bruttoinlandsprodukt 1992 und 2001:

 Neuberechnung des Haushalts-Satellitensystems. In: Wirtschaft und Statistik 9 (2004), p. 960 978

 https://www.destatis.de/DE/Publikationen/WirtschaftStatistik/WirtschaftsrZeitbudget/UnbezahlteArbeit92004.pdf? blob=publicationFile

France 2010

- POISSONNIER, Aurélien et ROY, Delphine 2013: Methodological issues on the assessment of domestic production INSEE, Série des documents de travail de la Direction des Études et Synthèses Économiques. G 2013 / 14 Households Satellite Account for France in 2010.
- https://www.insee.fr/en/statistiques/1381047

Hungary 2000, 2010

- Sik Endre, Szép Katalin szerk. (2003): A háztartási termelés értéke a mai Magyarországon. A háztartási szatellitszámla 2000. évi kísérleti számításai. Műhelvtánulmánvok. KSH.
- HCSO 2016: Value of domestic work and household satellite account in Hungary http://www.ksh.hu/apps/shop.kiadvany?p kiadvany id=501891&p temakor kod=KSH&p session id=746862757654014&p lang=EN

Poland 2013

- Ilona Błaszczak–Przybycińska, Marta Marszałek 2015: DZIAŁ 4. WYCENA WARTOŚCI PRACY WŁASNEJ GOSPODARSTW DOMOWYCH NA PODSTAWIE BADANIA BUDŻETU CZASU. p. 131-183 IN GUS: Budzet czasu ludnosci 2013 Czesc I Warszawa 2015 (Section 4. OWN WORK OF HOUSEHOLDS VALUE ESTIMATION ON THE BASIS OF TIME USE SURVEY In: Central Statistical Office: Time use survey 2013. Part 1. Warsaw 2015)
- http://stat.gov.pl/en/topics/living-conditions/living-conditions/time-use-survey-2013-the-second-part-including-the-first-part.6.3.html

Schweiz 1997, 2000

- OFS BFS UST: Satellitenkonto Haushaltsproduction. Pilotversuch für die Schweiz. Compte satellite de production des ménages. Project pilote pour la Suisse. Neuchatel
- https://www.bfs.admin.ch/bfs/en/home/statistics/work-income/unpaid-work.html

UK 2000. 2010

- Holloway, Sue Short, Sandra Tamplin, Sarah 2002: HOUSEHOLD SATELLITE ACCOUNT (EXPERIMENTAL) METHODOLOGY. Office for National Statistics <a href="http://www.ons.gov.uk/ons/guide-method/method-quality/specific/social-and-welfare-methodology/household-satellite-account/household-s publications.html

Basque country

- Brief
- http://en.eustat.eus/elementos/ele0006100/ti_unpaid-household-work-of-the-basque-country-accounted-for-287-of-the-gdp-in-2008/not0006165_i.html
- http://en.eustat.eus/estadisticas/tema 189/opt 0/temas.html
- http://en.eustat.eus/document/ficha metod ctasatrab dom i.aspx



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Katharine G. Abraham and Christopher Mackie, Editors: **Beyond the market**. Designing Nonmarket Accounts for the United States. Panel to Study the Design of Nonmarket Accounts. Committee on National Statistics. Division of Behavioral and Social Sciences and Education. NATIONAL RESEARCH COUNCIL *OF THE NATIONAL ACADEMIES*. THE NATIONAL ACADEMIES PRESS. Washington, D.C.

http://www.nap.edu/openbook.php?record_id=11181&page=R1

UN Department of Economic and Social Affairs, Statistics Division 2000: Handbook of National Accounting. Household Accounting: Experience in Concepts and Compilation. Volume 2 Household Satellite Extension ST/ESA/STAT/SER.F/75/Vol.2. Studies in Methods, Series F, No. 75/Vol.2. 464 p.

http://unstats.un.org/unsd/publication/SeriesF/SeriesF 75v2E.pdf

Nadim Ahmad, Seung-Hee Koh (2011): Incorporating Estimates of household Production of Non-Market Services into International Comparisons of Material Well-Being. OECD Statistics Working Papers 2011/07 UNECE 2011: Canberra Group Handbook on Household Income Statistics. Second Edition 2011 UN.

http://www.unece.org/fileadmin/DAM/stats/groups/cgh/Canbera Handbook 2011 WEB.pdf

Related standards

ICATUS 2016 (UN): International Classification of Activities for Time Use Statistics

https://unstats.un.org/unsd/statcom/48th-session/documents/BG-3h-ICATUS-2016-13-February-2017-E.pdf

HETUS - ACL 2008 (Eurostat)

http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=TIMEUSE_08&StrLanguageCode=EN&IntPcKey=&StrLayoutCode=HIERARCHIC

SNA System of National Accounts https://unstats.un.org/unsd/nationalaccount/sna.asp

https://unstats.un.org/unsd/nationalaccount/sna2008.asp

European System of Accounts (ESA) - Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union Text with EEA relevance)

Eurostat 2003: Household Production and Consumption. Proposal for a Methodology of Household Satellite Accounts. 2003 Edition Working studies. 2003. ISSN 1725-065X ISBN 92-894-6049-0

http://ec.europa.eu/eurostat/ramon/statmanuals/files/KS-CC-03-003-EN.pdf

ICLS 2003: ICLS standard on household income 2003. Resolution concerning household income and expenditure statistics

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms 087503.pdf

ICLS 2013: Resolution concerning statistics of work, employment and labour underutilization

Adopted by the Nineteenth International Conference of Labour Statisticians (October 2013)

http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS 230304/lang--en/index.htm

Eurostat 2003: Household Production and Consumption. Proposal for a Methodology of Household Satellite Accounts. 2003 Edition Working studies. 2003. ISSN 1725-065X ISBN 92-894-6049-0

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ILO: International Labour Force Manual on the measurement of volunteer work (2011) http://www.ilo.org/wcmsp5/groups/public/@dgreports/@stat/documents/publication/wcms 162119.pdf)

OECD: Framework for Statistics on the Distribution of Household Income, Consumption and Wealth. 2013 June

http://www.oecd.org/statistics/framework-for-statistics-on-the-distribution-of-household-income-consumption-and-wealth-9789264194830-en.htm

