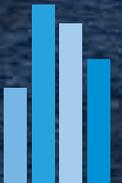


Twinning, social-statistics Israel ↔ Denmark

Social statistics



Jarl Quitzau



- Senior advisor in the office for Welfare Statistics
- 4½ years at Statistics Denmark in the office
- Economist from the University of Copenhagen

Main responsibilities

- Disseminating statistics on income and poverty
- Responsible for registers on: The family income register, The employment Classification module, the property tax register & EU-SILC(from 2015).
- Sampling and calibration of the EU-SILC survey
- Responsible for SILC (From 2015).



Agenda

ESSPROS – Social protection expenditures and their financing

Social services

Examples:

- Child care
- Elder care
- Hospitalisations and doctors

Public transfers

Examples:

- Pensions
- People receiving public benefits (16-64 years old)



Welfare statistics in Denmark

- Welfare statistics could consists of the following
 - Expenditure
 - Receipts
 - Number of beneficiaries
 - Number of employees in the welfare sector
 - Indicators of the populations well-being
- What is welfare? – We need to defined it!



Welfare statistics in Denmark

- ESSPROS
 - The Danish statistics on expenditure on social protection benefits and their financing are based on recommendations by ESSPROS (**E**uropean **S**ystem of integrated **S**ocial **PRO**tection **S**tatistics)
 - It's an act – Denmark has to follow the recommendations in the ESSPROS manual as well as all the other European countries
- Statistics Denmark also has alternative statistics on social cash benefits
 - More on that later



Defining social protection in ESSPROS

- There is no universally accepted definition of the scope of social protection, nor does there exist one that suits all purposes (including the compilation of statistics). It is therefore necessary to formulate a conventional definition of the scope of social protection which meets as well as possible the needs of social policy analysis and data collection on an international level
- In ESSPROS social protection encompasses all interventions from public or private bodies intended to relieve households and individuals of the burden of a defined set of risks or needs, provided that there is neither a simultaneous reciprocal nor an individual arrangement involved



Defining social protection in ESSPROS

- The list of risks or needs that may give rise to social protection is, by convention, as follows:
 - Sickness/Health care
 - Disability
 - Old age
 - Survivors
 - Family/children
 - Unemployment
 - Housing
 - Social exclusion not elsewhere classified.



Defining social protection in ESSPROS

- Social protection in ESSPROS covers only social benefits made through collectively organised schemes by government and/or collectively agreements.
- All schemes that are solely based on individual arrangements, or for which simultaneous reciprocal agreements exist, are not regarded as social protection in ESSPROS.



ESSPROS

- ESSPROS covers both the expenditures of social protection as well as the financing of the expenditures (receipts)
- ESSPROS divides social benefits in
 - Cash benefits
 - Benefits in kind



Expenditures in ESSPROS

- **Cash benefits**
- In ESSPROS, cash benefits are defined as an amount paid out in cash which does not require documentation of actual expenditure. If, however, payment is subject to documentation of actual expenditure (a form of outlay), the payment will be considered as benefit in kind.



Expenditures in ESSPROS

- **Benefits in kind**
- In the ESSPROS, social benefits in kind are defined as benefits granted in the form of goods or services made available to protected people, either free of charge or at reduced prices as well as reimbursements of expenditure made by protected people
- This definition is, in essence, in line with the National Accounts' concept of consumption.

- In the ESSPROS, expenditure on benefits in kind is broken down as follows:
 - + Compensation of employees
 - + Intermediate consumption
 - + Other taxes on production and other subsidies on production, net
 - + Social benefits in kind
 - - Sale of goods and services



Financing social protection (receipts)

- Receipts of an economic nature are grouped as follows:
 - Social contributions – either by employees or employers
 - General government contributions
 - Transfers from other schemes
 - Other receipts
- These receipts are further broken down by sector:
 - Corporations
 - General government contributions
 - Households
 - Non-profit institutions
 - Rest of the world

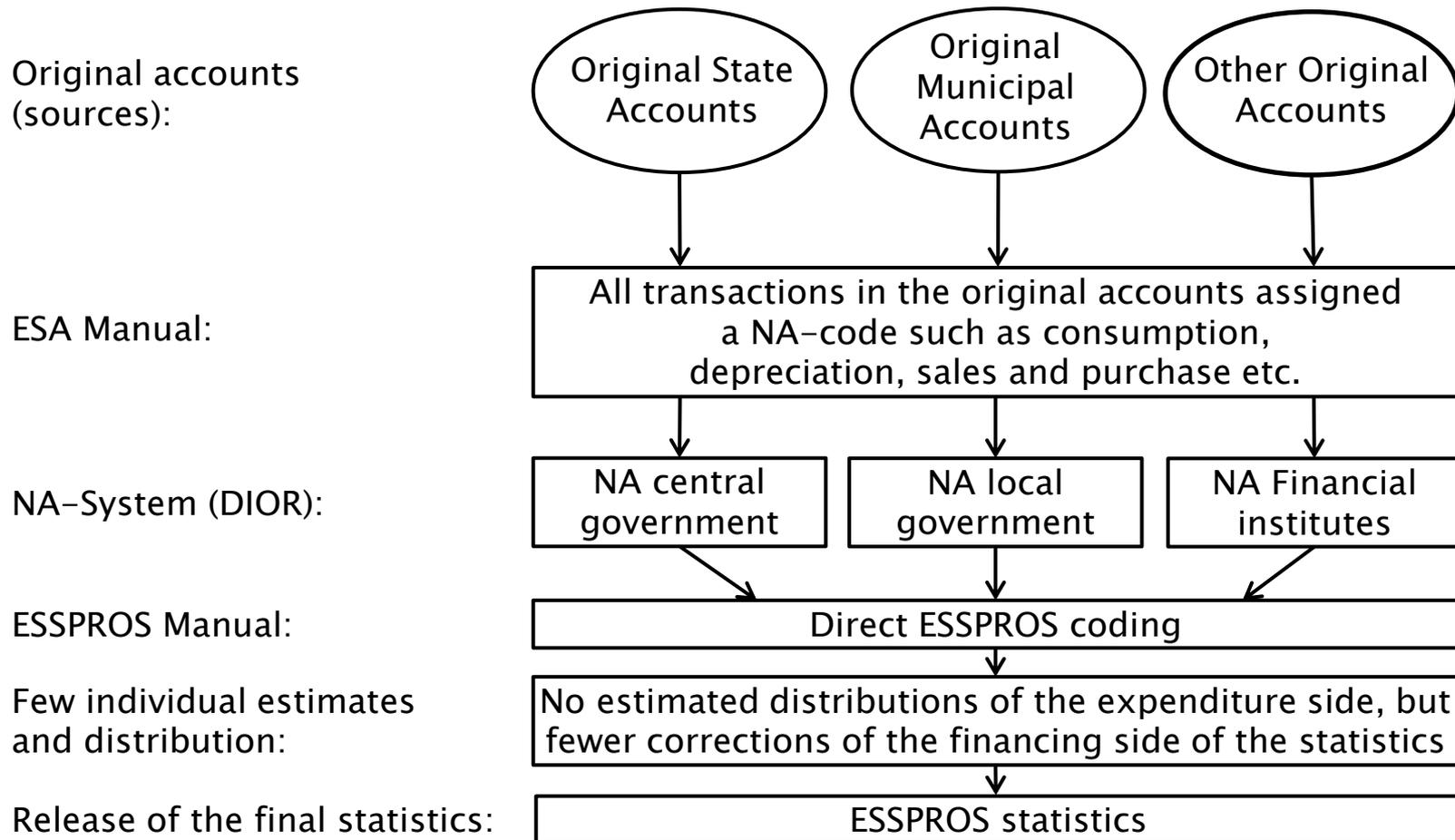


ESSPROS

- Are geared to international comparability – mostly within EU
- Are harmonised with other statistics - particularly the main concepts of the National Accounts
- Is organized as a satellite account to ESA
- All data in the danish ESSPROS is extracted directly from the detailed Danish National Accounts system - (most of all from the government sector plus private pensions funds)



Danish ESSPROS coding procedure



Danish ESSPROS coding procedure

- **NA central government and NA local government**
 - Data from our DIOR system. The data sources are the state accounts, municipal accounts and social security funds accounts
 - Data on social cash benefits in ESSPROS comes directly from the NA coding of social income transfers to households (D.62)
 - Data on benefits in kind in ESSPROS corresponds to public consumption in NA on the defined set of risk and needs in ESSPROS. Benefits in kind must be individual in nature as collective elements cannot be considered social protection of an individual citizen. The COFOG coding is used to distinguish between individual and collective public consumption
- **NA financial institutes**
 - Primarily labour market pension schemes. Data comes from the NA. The sources are the pension funds accounts which are collected from The Danish Financial Supervisory Authority (FSA)



Figures from danish ESSPROS 2012

ESSPROS 2012									
	Expenditure			Financing					
In mill. Dkr.	Cash benefits	Benefits in kind	Total	The State	Municipalities	Employers	The insured	Net interest	Total
Sickness	18.249	107.680	125.929	87.542	33.364	4.915	107	-	125.929
Disability and rehabilitation	48.767	25.686	74.453	12.743	58.830	4.157	-	153	75.884
Old age	222.965	40.670	263.635	138.800	44.872	72.408	60.045	13.848	329.973
Survivors	2	141	143	2	141	-	-	-	143
Families	29.213	44.265	73.479	32.564	40.915	-	-	-	73.479
Unemployment and employment promotion	23.714	9.741	33.455	17.648	4.168	-	11.639	-	33.455
Housing	-	13.180	13.180	8.947	4.234	-	-	-	13.180
Other social benefits	15.618	4.065	19.683	7.996	10.941	746	-	-	19.683
Total	358.529	245.428	603.956	306.241	197.465	82.226	71.791	14.001	671.724

Not covered by ESSPROS

- Number of social services (child, family and elder care in hours/day etc.)
- Number of hospital or medical patients
- Numbers of hospital treatments
- Number of employees (skilled/unskilled)
- Numbers of volunteers in social and non profit institutions



Statistics on incomes and living conditions

- The importance of common & wide spread identifiers at the micro level
- Introduction to social statistics in Denmark
- Introduction to EU-SILC



Social benefits



Legal basis

- Statistics Denmark can request and collect any data on the Danish population from public authorities free of charge, if the data is needed for statistical purposes.

Minimizing admin costs

- We have a responsibility to keep the administrative burden for our data providers at a minimum.



Child care

Three types of institutions:

- Public institutions (Almost full information)
- Independent institutions (Almost full information)
- Private institutions (Information have to be collected through existing registers or questionnaires)

- Seasonal deviations
- Data is currently cross sectional. Work on longitudinal statistics in progress.



Child care - examples

- Number of children

www.statbank.dk/pas11

- Staff

www.statbank.dk/pas33

- Yearly fees for day-care

www.statbank.dk/res88

(Poor families can get subsidies to cover these costs)



Elder / home care - examples

- Recipients of home care

<http://www.statbank.dk/aed14> (Own home)

<http://www.statbank.dk/aed03> (Nursing homes)

- Home care provided hours

www.statbank.dk/AED01

- Staff

www.statbank.dk/res10



Hospitalisations and doctor visits

Tables: www.statistikbanken.dk/2412

Tables covers

- Hospitalisations
- Bed-days
- Diagnosis
- Visits to the doctors, dentists etc. and public expenses associated with these
- Other treatments (alcohol, drugs etc.)



Other ways to acquire data on staff in Denmark

Access to micro data

- Wage and labour market data contains information on businesses
 - Public / private employer
 - Line of business
 - Job description (ISCO) (small businesses excluded)
 - Hours worked
 - Wages

That can be linked with

- Data on education, incomes, Sicknes leave, maternity leave etc.



Some important questions

Is the legal basis in order?

Access to the data? – How can data be collected or sampled?

How much of the data have to be acquired from public and private institutions?



Some important notes on staff

Staff

Data requirement – In a joint micro /macro system

Target: Measuring staff in full-time persons

Required information on all staff:

Hours worked, basic job description. ([ISCO?](#))

Nice to have:

Personal Id of staff for linking with other data I.E. income (wage-data) and education of the employees.



Social transfers



Adults (16 – 64 years old) - examples

People receiving public benefits

www.statbank.dk/10037

- Based on a register with a weekly status for all recipients.

Cash benefits:

www.statbank.dk/10038

- Recipients and amounts

Data source: Municipal registers



Pensions - examples

Social pensions (CS – january only)

<http://www.statbank.dk/10043>

Source: Municipal registers

Incomes

<http://www.statbank.dk/2435>

Source: Tax authorities

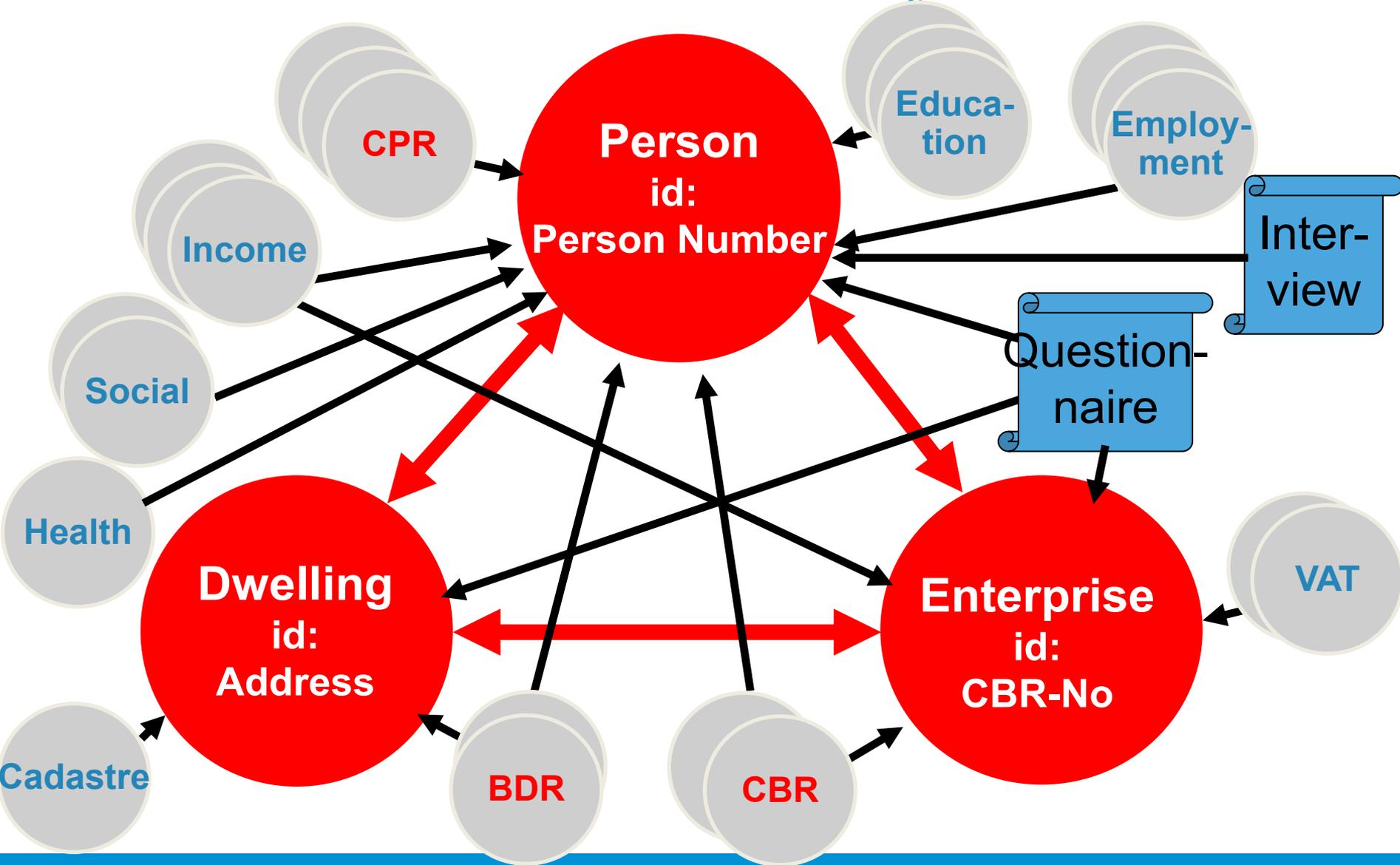


Income and living conditions

- Measuring poverty and income distribution



The Statistical Information System



Perfect Identifiers – It's so hard to work without them!

When doing social statistics at the micro level based on registers, the ability to link data from many differing sources is essential.

When designing databases at the micro level. Make sure you develop the best and most coherent identifiers possible.

Optimally they should...

- Cover the entire population
- Be consistent (same formats & design)

For easy linkage of registers

Legal framework on linking data in Israel?



Three approaches to measuring income inequality and poverty

Statistics Denmark (SD)

- Income statistics / Income distribution

The law model, Ministry of social affairs

The official Danish poverty line

Eurostat, EU-SILC

At risk of Poverty or Social exclusion

Common unit of measurement

Household equivalised disposable income.

- SD and Eurostat use the OECD modified equivalence scale.



Income statistics @ statistics Denmark

Income in the statbank

www.Statbank.dk/2435

Periodical newsletters (Danish)

<http://www.dst.dk/da/Statistik/nyt.aspx>

Annual publications <http://www.dst.dk/publ/indkomster>



2010: Income distribution

2011: Income mobility

2012: Income and relationships

2013: Material deprivation (SILC) & Income during periods of sickness and for the disabled. (Published June 2015).

Measuring poverty & income distribution

Statistics Denmark – distribution of income

In publications: Risk of Poverty, decile distributions, gini & the Robin Hood index

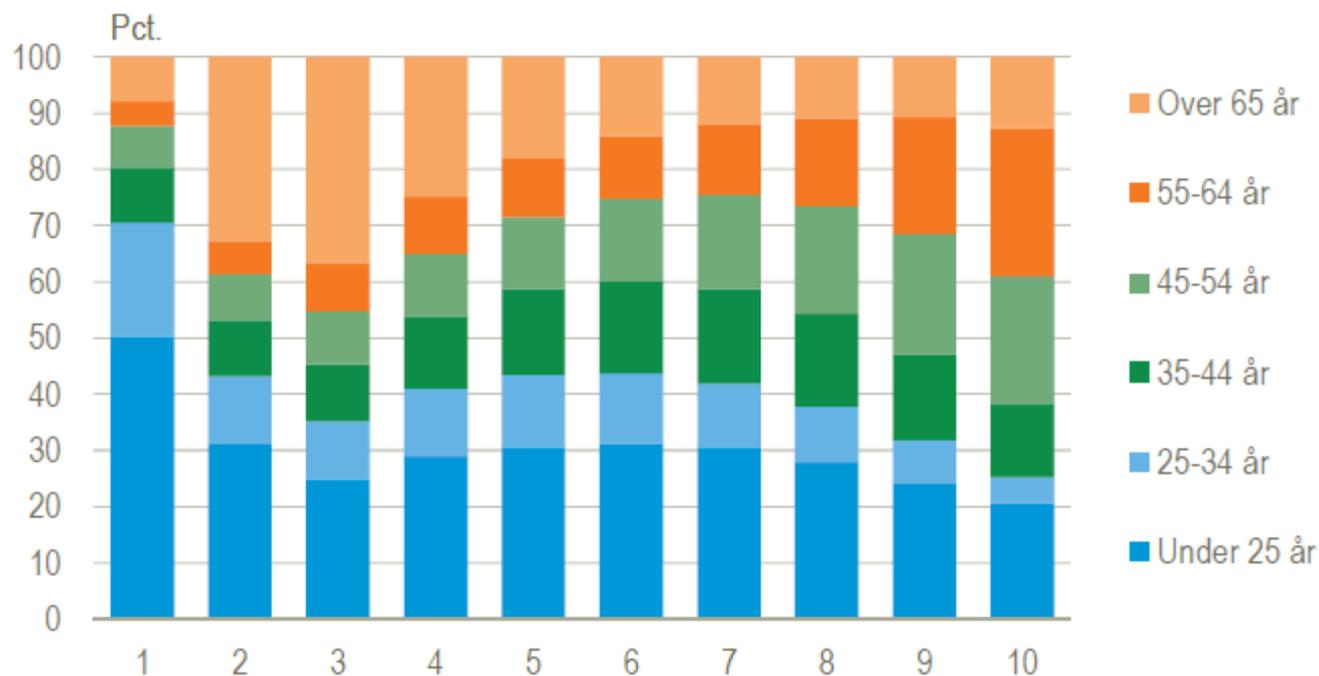
Statbank: Tables on the way, expected during the spring 2015.

- Complete register on wealth, ready for publication in about a year.



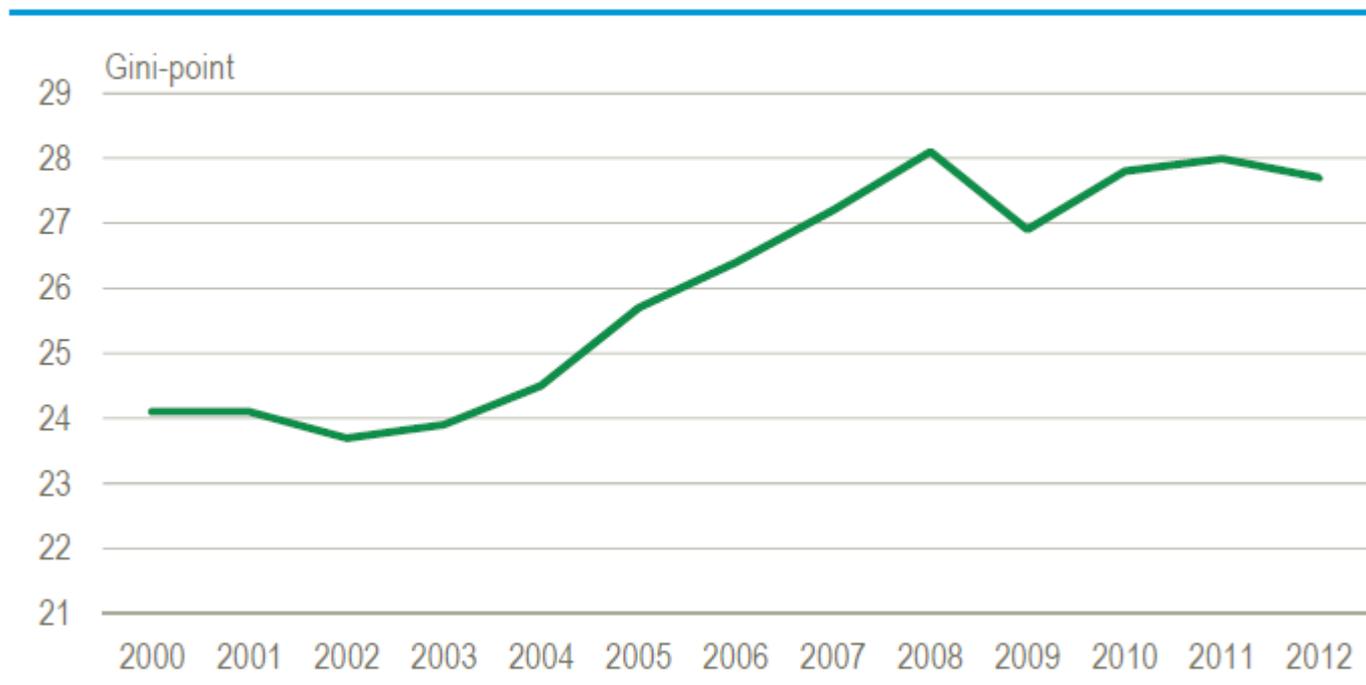
Measuring poverty & income distribution

Figur 9.2 Aldersfordeling i decilerne - ækvivaleret disponibel indkomst. 2012



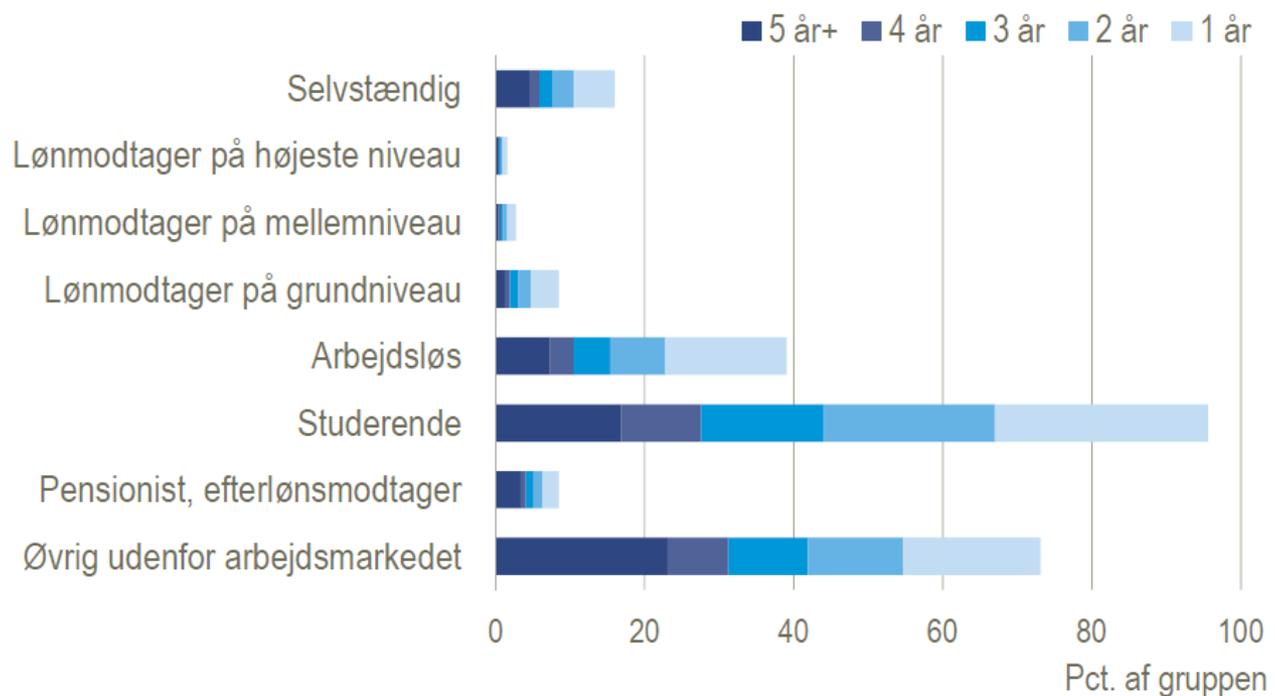
Measuring poverty & income distribution

Figur 9.6 Gini-koefficient. For ækvivaleret disponibel indkomst.



Persistent Risk of poverty

Figur 9.9 Antal år i træk med risiko for fattigdom (60-procentgrænsen) - efter socioøkonomisk status for personen med den højeste indkomst i familien. 2012



Data sources for the income register

- Key register
 - Central personal register (CPR)
- Primary sources
 - The final tax assessment
 - einkomst (Formerly COR)
- Supplement registers
 - The population register (Based on CPR)
 - The property tax register
 - Pension registers (CPS & PAF)
 - The central business register (CVR)
 - Labour market registers (Mainly unemployment funds)
 - Public benefits registers (mainly from municipalities)



Not included in the income statistics

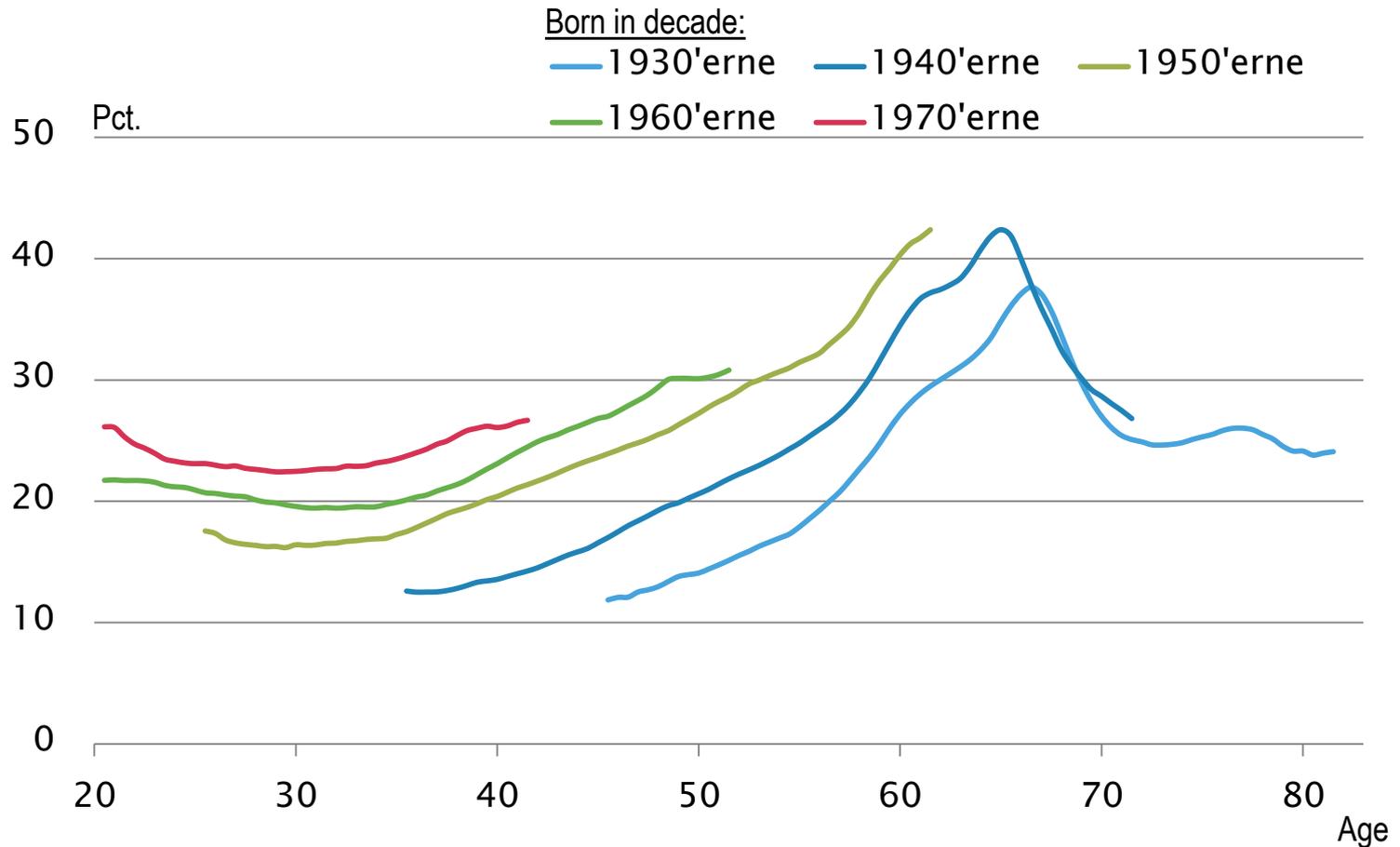
- Moonlighting (Undeclared income)
- Income from gambling
- Grants for medicine, dentists, daycare etc.

- Pension scheme balance
- Unlisted stocks



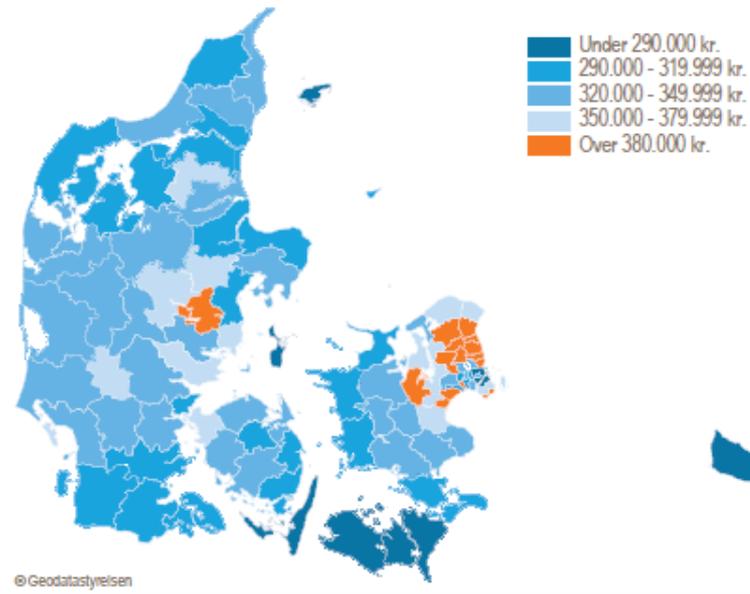
Alternate options? – Economic independence of women i relationships?

Share of women making more than men in relationships, by age and decade of birth. 1987-2012.



Maps

Figur 8.1. Gennemsnitlig disponibel familieindkomst - efter kommune. 2012



[Interactive maps](#)



An official Danish poverty line



Official poverty

- Published by the ministry of social affairs
- Calculated using the law model
- Data from SD, but slightly different definitions than ours

Set by expert group with participation from SD

3 Approaches

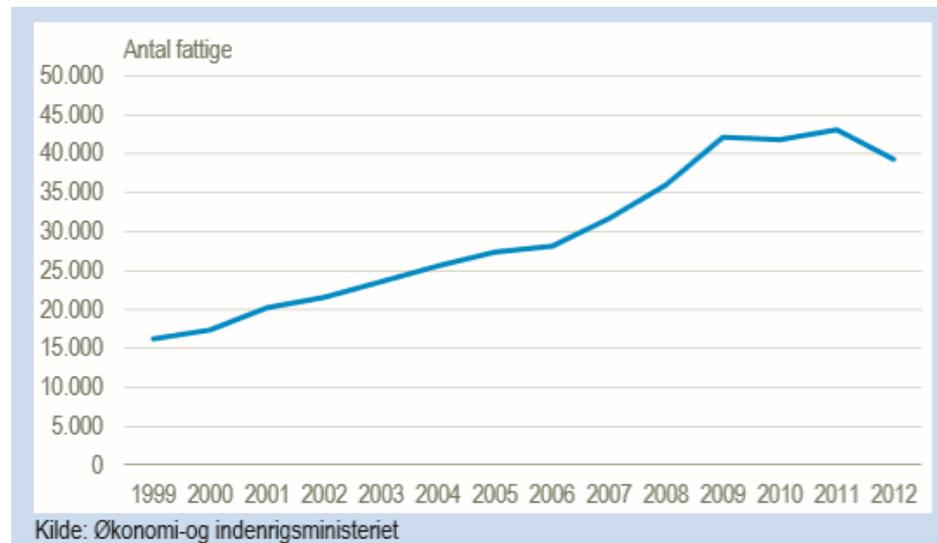
- The pure income approach (income/wealth)
- Material deprivation and exclusion
- Household minimum budgets



The income approach

Three criteria:

- ROP50, 3 years in a row &
- Financial Wealth under 100.000 DKK (64.000 NIS) &
- No students in the family



Material deprivation and exclusion

Focus on child poverty

- Survey being designed (Drafts got many similarities with the ICBS social survey).

Possibility for value in an exchange of experiences in the future.



SILC



EU-SILC – useful links...

European Statistics on Income and Living conditions

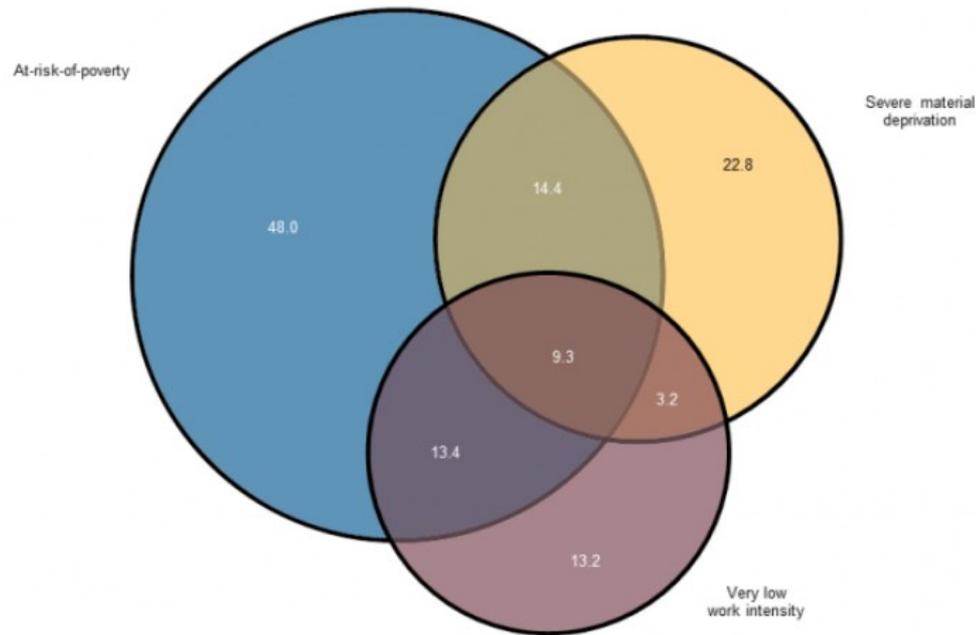
Read more about SILC [here](#)

[Desap - The selfassessment check list for survey managers:](#)

Advantage: A common framework. Comparability with data from other countries makes it easier to adopt and identify best practices for combatting poverty / inequality.



AROPE – At Risk of Poverty or Social Exclusion.



[Eurostat on social inclusion statistics](#)



Eurostat – Not all is perfect

AROPE – from the 21st of November 2014

Criticism of Eurostat:

1. Publishing an indicator, which will be interpreted as 1/5 of the population being poor. We have a hard time explaining the indicator. 2. Publishing data with to large statistical uncertainty.

	Nationals		Foreign citizens		Of which			
	Males	Females	Males	Females	EU citizens (*)		non-EU citizens	
					Males	Females	Males	Females
EU-28	23.3	25.3	37.9	38.2 ^(u)	25.9 ^(u)	29.2 ^(u)	45.8 ^(u)	44.2 ^(u)
BE	17.4	20.3	40.6	42.2	30.2	30.3	58.2	61.2
BG	45.2	46.5	:	56.8	:	:	:	63.6 ^(u)
CZ	12.1	16.9	20.6	26.0	10.9	10.9 ^(u)	29.7 ^(u)	22.9 ^(u)
DE	19.5	22.7	20.5	24.7	14.3	18.1	28.1	31.3
EE	21.5	21.9	32.1	40.5 ^(u)	11.4	:	32.8	40.7
IE	31.7	31.1	26.1	31.0	25.3	29.5	29.4	35.5
EL	33.7	36.8	63.2	62 ^(u)	53.9	42.0	64.0	69.7
ES	27.0	26.7	48.5	47.3	34.7	38.4	55.0	51.3
FR	16.7	19.4	43.6	41.8	19.8	20.3	57.0	54.2
HR	31.5	31.0	47.9 ^(u)	42.3 ^(u)	:	:	53.4 ^(u)	45.2 ^(u)
IT	27.1	30.7	43.1	44.4	36.4	42.1	45.5	45.5
CY	20.7	24.5	39.8	40.4	35.0	35.8	54.9	44.4
LV	34.1	33.9	41.4	49.8	:	:	41.3	50.0
LT	31.1	31.4	36.7 ^(u)	29.3 ^(u)	:	:	37.5 ^(u)	29.3 ^(u)
LU	11.9	13.8	22.7	26.8	19.6	23.8	40.8	40.6
HU	31.8	33.4	14.1 ^(u)	:	:	:	:	:
MT	18.6	22.5	20.4	27.1	21.9	26.5	17.7 ^(u)	27.8
NL	13.7	18.5	26.1	18.4	14.1	9.9	49.0 ^(u)	28.2 ^(u)
AT	14.9	17.3	33.2	34.3	40.5	38.2	29.1	31.7

Data collection for the EU-SILC

SILC – Statistics on Income and Living Conditions

Guidelines

Why SILC?

Adopting the SILC questions and methodology will allow for instant comparability with the 30+ European countries in the SILC.



Data collection for the EU-SILC

Statistics Denmark use registers to provide data on

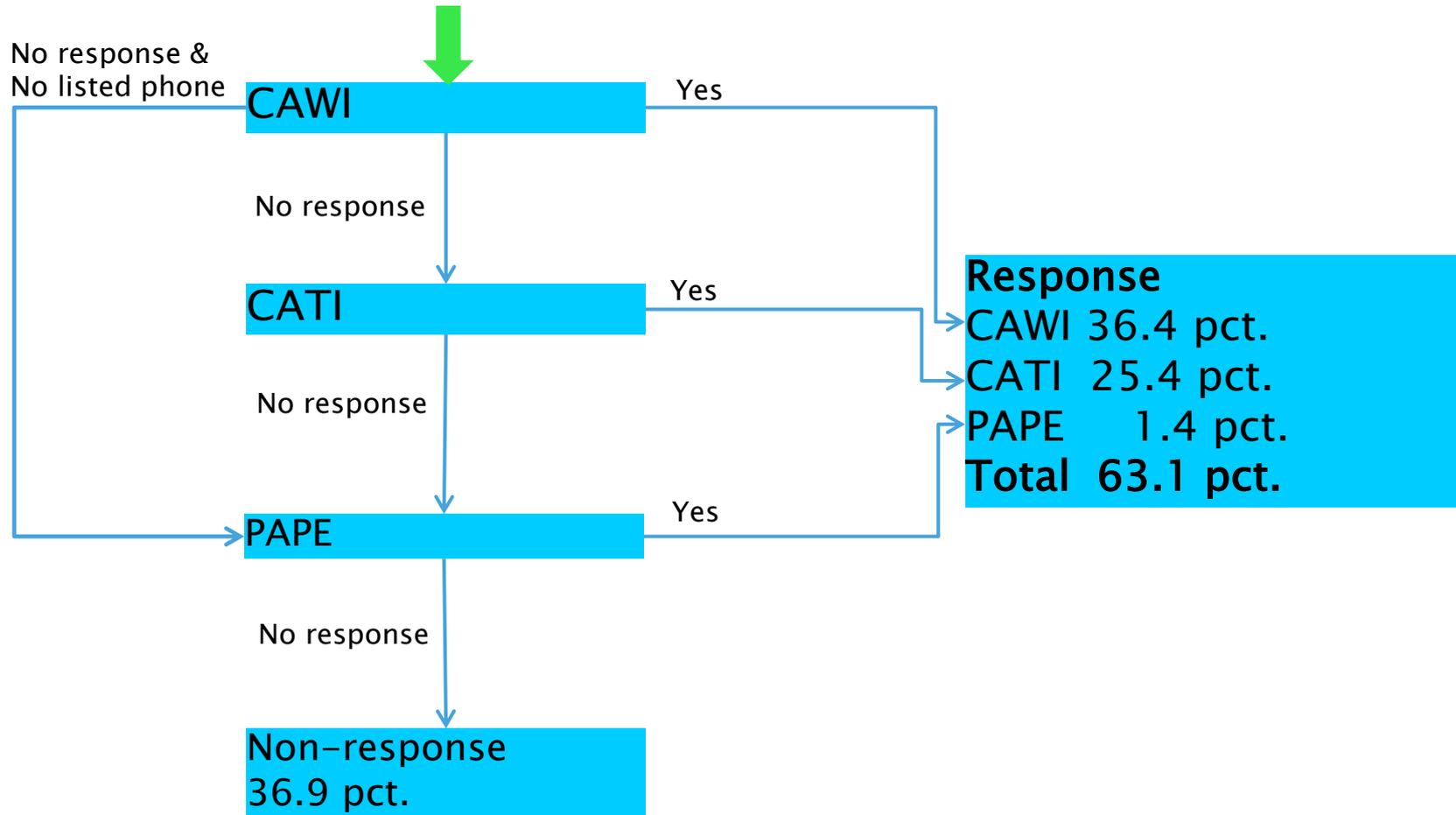
- Demographics
- Incomes and taxes
- Education
- Housing

for all household members

Because we don't have to interview respondents on these subjects, the average interview time is 10–15 minutes on CATI.

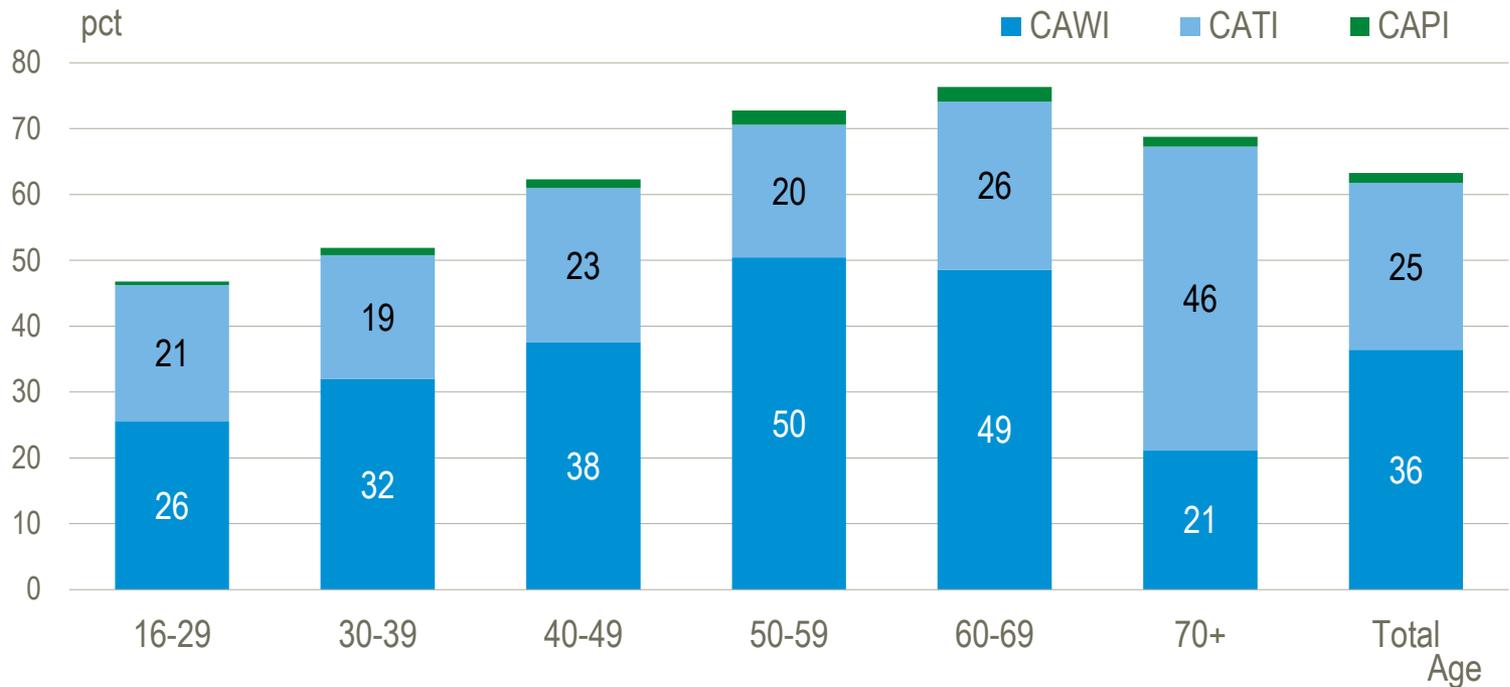


The interview process 2013



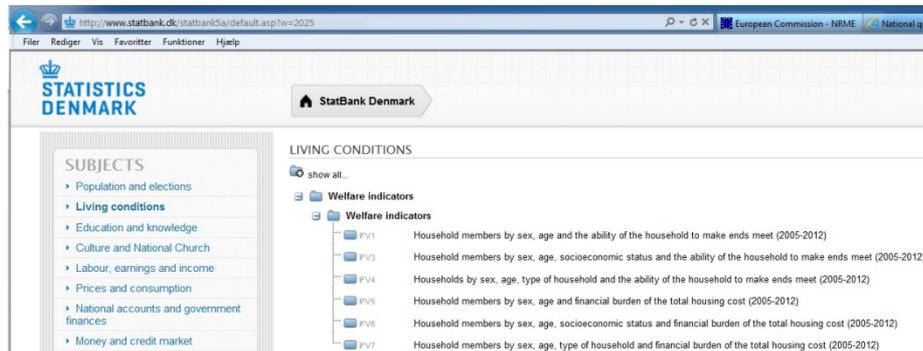
Response rates 2013 - Age

Response rates SILC 2013 for age groups



Dissemination of SILC in Denmark

Statbank. Two indicators, six tables.



Annual newsletter

Publication – Autumn 2012



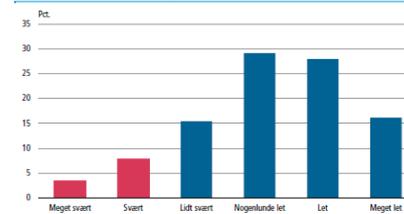
Indikator for velfærd
2012
Levevilkår



Mange har pengeproblemer

11 pct. af befolkningen lever i husstande, hvor det i følge den interviewede person er svært eller meget svært at få pengene til at slå til. Yderligere 15 pct. har det lidt svært. Tallene stammer fra en interviewundersøgelse, som Danmarks Statistik gennemførte i foråret 2012. I undersøgelsen året forinden var det 10 pct., der svarede, at de havde svært eller meget svært ved at få pengene til at slå til.

Hvor let eller svært er det for husholdningen at få pengene til at slå til? 2012



Halvdelen har ingen pengeproblemer

For 1 pct. af befolkningen var det ifølge den interviewede person meget svært for

Examples of international classifications

EU – Metadta server (RAMON)

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

NACE:

http://ec.europa.eu/eurostat/ramon/relations/index.cfm?TargetUrl=LST_LINK&StrNomRelCode=NACE%20

[REV.%202%20-%20NACE%20REV.%201.1&StrLanguageCode=EN](http://ec.europa.eu/eurostat/ramon/relations/index.cfm?TargetUrl=LST_LINK&StrNomRelCode=NACE%20REV.%202%20-%20NACE%20REV.%201.1&StrLanguageCode=EN)

ISCO:

<http://www.ilo.org/public/english/bureau/stat/isco/>

UN classifications:

<http://unstats.un.org/unsd/cr/registry/regct.asp>

