

Understanding national accounts

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Chapter 3, Comparisons

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Compare growth rates

- Current prices – no good
- Constant prices – within the same country
- Per head indicators – not the whole story
- Exchange rate adjustment – not sufficient

Some differences

- Statistical methods, price indices
- Quality of populations, business registers
- Various administrative data
- Organisational differences
- Different currencies
- Exchange rates

More difficulties

- How to measure output of services?
- By help of wage index if no other alternative
- Requires break-down in groups of employees
- By hourly earnings
- But for non-market production ???

Output indicators

- Use the relation $V = p * q$
- Find a measure of q
- Requires very detailed information (genuine product)
- Requires both quantity and quality information on changes

Previous method

- Use of input variables, i.e. hours worked for constant price compilations
- No quality adjustment or ad hoc adjustment
- As output was estimated by help of input factors there was no chance to measure productivity changes
- This was not what politicians wanted to show

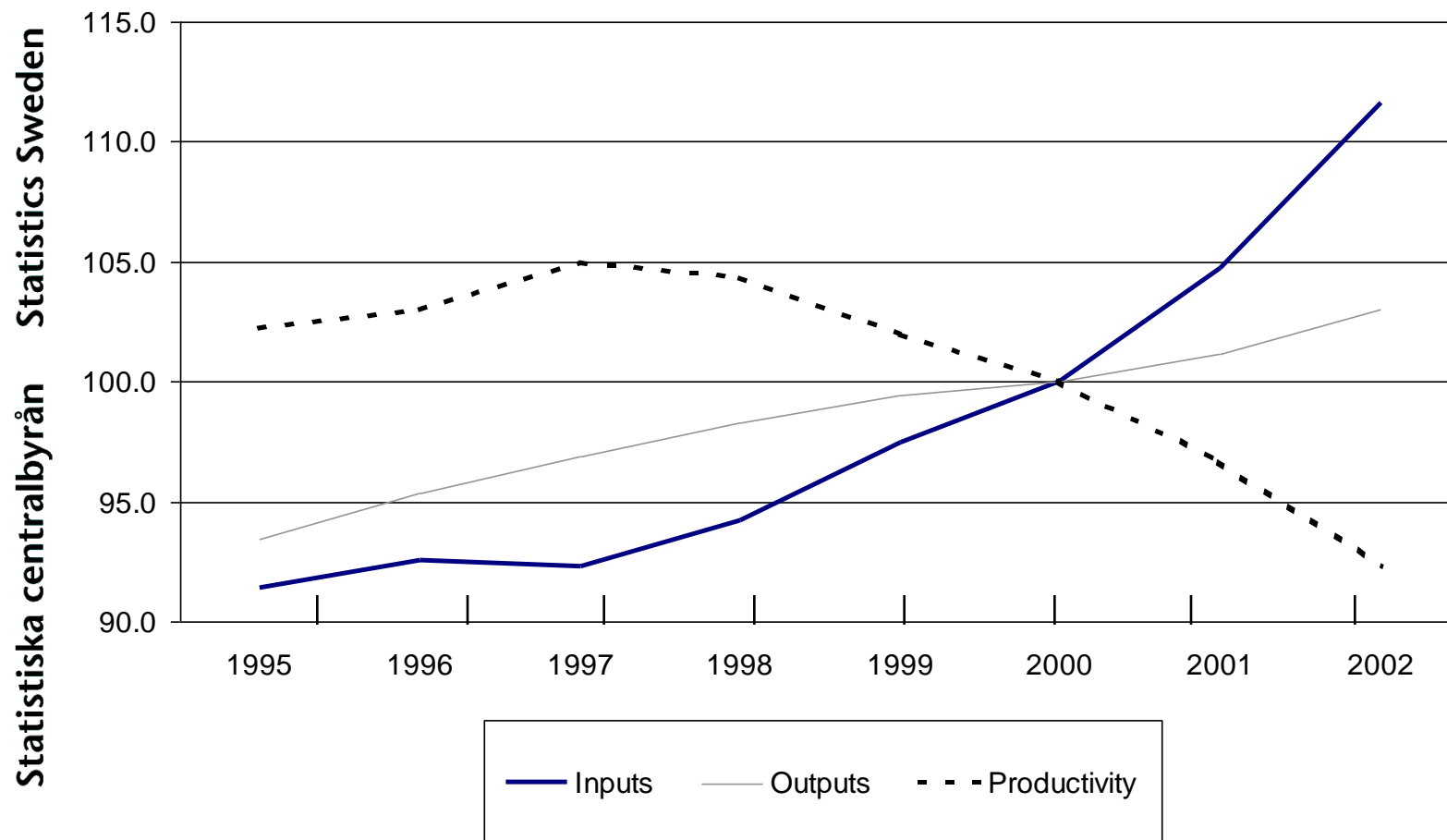
New method

- UK was in the front line
- Started to compile quantity indicators within health services and education
- They did not have very much access to much details
- Only three indicators of health in the beginning: doctor's visits, drugs and number of operations
- The results was a disaster

Government productivity

estimates implied by UK

National Accounts (2000=100)



Atkinson report, etc.

- UK research project
- A special working group established
- Much more detailed information had to be used
- OECD has published a new handbook
- Still no agreement on quality adjustments, seems too difficult

Output measures now used

- Individual non-market production
- Healthcare - DRG
- Education – no of pupils + grades
- Child and elderly care – no of persons
- Social insurance systems
- Cultural services – no of visits
- All indicators weighted together

Results old vs new method

<i>Sweden, Change in volume, percent</i>							
	2002	2003	2004	2005	2006	2007	2008
<i>New method</i>							
GFCE	2,1	0,9	-0,3	0,2	1,7	0,7	1,3
Central gov	2,2	2,0	-0,9	-2,6	1,3	-0,5	-0,6
Municipalities	1,3	1,5	0,6	0,4	1,8	0,8	1,9
County Councils	3,6	-1,3	-1,5	2,7	2,0	1,6	2,2
<i>Old method</i>							
GFCE	2,0	0,8	0,2	0,1	2,8	1,6	0,8
Central gov	2,3	1,8	-1,2	-2,8	1,6	-0,2	-0,6
Municipalities	1,5	0,1	1,0	0,7	3,3	2,2	1,0
County Councils	2,9	0,9	0,4	2,3	3,2	2,5	2,0
<i>Difference</i>							
GFCE	0,1	0,2	-0,6	0,0	-1,1	-1,0	0,5
Central gov	0,0	0,1	0,3	0,2	-0,3	-0,3	-0,1
Municipalities	-0,2	1,4	-0,4	-0,3	-1,5	-1,3	0,9
County Councils	0,7	-2,2	-1,9	0,5	-1,2	-0,9	0,3

Household saving rates

- Gross
- Net
- Difference consumption of fixed capital
- Treatment of pensions
- Pay-as-you-go or entitlements
- Saving behaviour - public policy

GDP not a welfare indicator

- GDP is only a measure of economic activity
- No aspects of freedom of speech, democracy, unemployment, distribution of incomes, environmental considerations, health indicators, living conditions, working environment, possibilities of education, etc.

HFCE vs actual individual consumption in different countries

- Organisational differences
- Government final consumption expenditures can be divided into individual and collective
- Individual are health care, education, child and elderly care and cultural activities

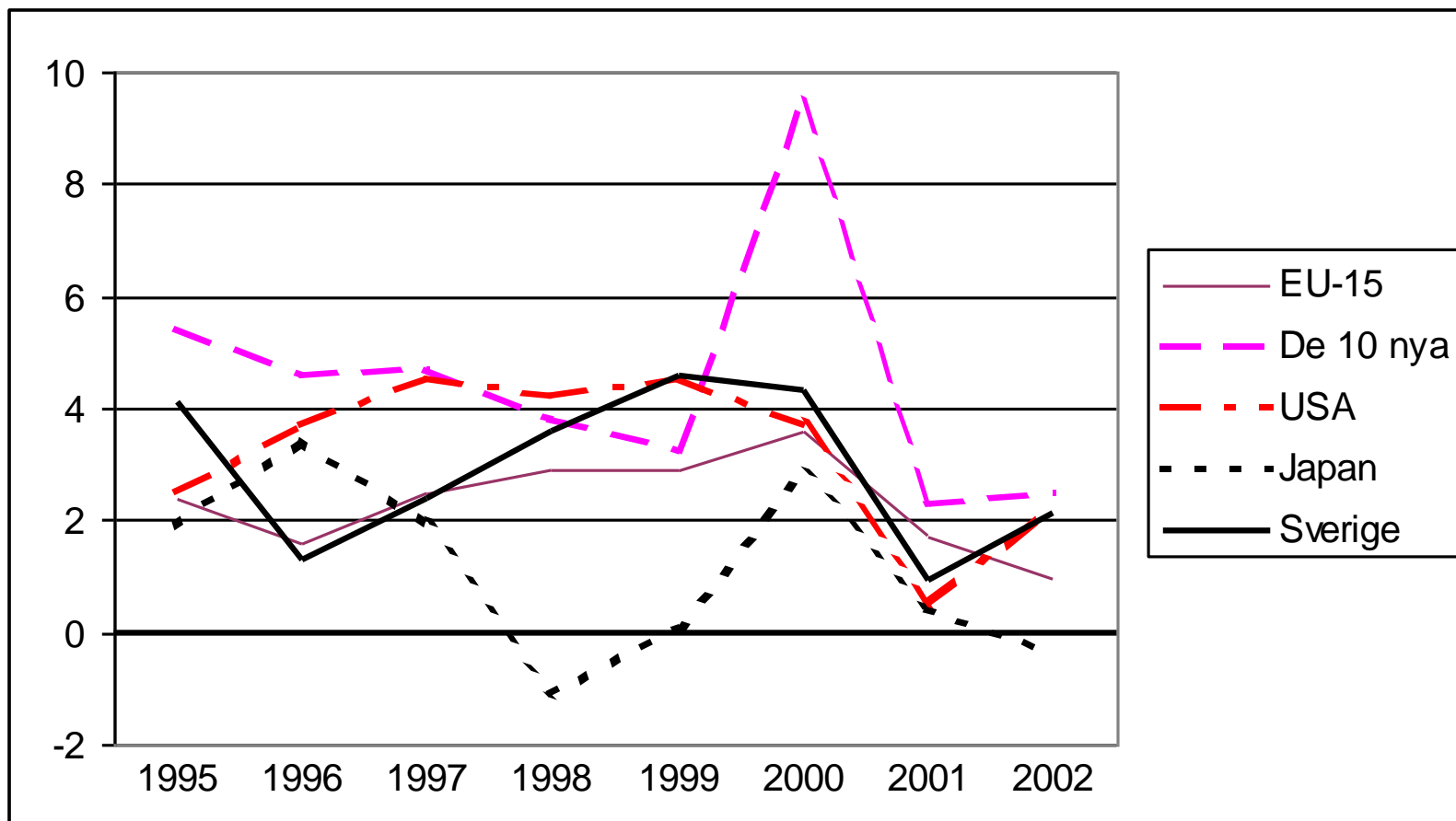
HFCE vs actual individual consumption in different countries



	<i>Final</i>	<i>GFCE</i>	<i>Collective</i>	<i>Individual</i>		
	<i>consumption</i>		<i>consumption</i>	<i>consumption</i>	<i>HFCE</i>	<i>Household</i>
	<i>expenditure</i>		<i>expenditure</i>	<i>expenditure</i>		<i>actual final</i>
			<i>of Gen Govt</i>	<i>of Gen Govt</i>		<i>consumption</i>
	(1+4)	1=(2+3)	2	3	4	5=(3+4)
Danmark	75,6	25,9	7,7	18,1	49,7	67,8
Tyskland	74,7	18,7	7,7	11,0	56,0	67,0
Grekland	85,3	16,4	10,6	5,7	68,9	74,6
Spanien	78,7	18,0	7,5	10,2	60,7	70,9
Frankrike	81,8	23,7	8,2	15,5	58,1	73,6
Irland	61,9	15,8	7,9	7,9	46,1	54,0
Italien	80,0	20,3	..	..	59,7	59,7
Luxembu	57,5	17,0	6,7	10,3	40,5	50,8
Nederlän	73,4	24,1	10,6	13,5	49,3	62,8
Österrike	72,4	18,1	7,0	11,1	54,3	65,4
Portugal	89,3	21,1	..	..	68,2	68,2
Finland	72,8	22,1	7,6	14,5	50,7	65,2
Sverige	75,2	27,1	7,7	19,4	48,1	67,5
Storbritan	89,5	21,9	8,3	13,6	67,6	81,2
USA	86,5	15,9	..	..	70,6	70,6
Japan	72,7	18,0	..	..	54,7	54,7
Island	87,6	24,4	10,2	14,2	63,2	77,4
Norge	73,2	20,4	6,3	13,8	52,8	66,6
Schweiz	71,0	11,4	..	..	59,6	59,6

International comparison

- Percentage change constant prices



Spacial volume/price breakdown

- Purchasing Power Parities – PPP
- A volume/price break-down at a certain point in time (not between different time periods)
- Calculate a price ratio for identical products
- One country is used as a reference = 100
- Constant PPP: GDP in constant prices (ref year) divided by PPP for a fixed year

PPPs

- the procedure is
- to specify a precise set of goods and services whose
- prices have to be collected
- to calculate the ensuing price ratios or relatives
- and then to average the price ratios to arrive at an overall index.

PPPs

- compare the price of a "standard" good that is in fact identical across countries. Every year *The Economist* magazine publishes a light-hearted version of PPP: its "Hamburger Index" that compares the price of a McDonald's hamburger around the world. More sophisticated versions of PPP look at a large number of goods and services. One of the key problems is that people in different countries consume very different sets of goods and services, making it difficult to compare the purchasing power between countries.

PPPs

- Three country groups in EU: northern, middle and southern
- Representative products by country, 2000
- Represent consumption patterns
- Represent country averages
- Weighted by GDP expenditure
- Cover HFCE, GFCE, GFCF