

PPPs for Government Services

ICP 2004

General government

- The general government sector in the SNA consists of :
 - central government,
 - regional or state government units,
 - local government units,
 - social security units,
 - NPIs controlled and mainly financed by government units.

Government services

- The main economic functions of government units are either to produce goods and services that they then provide directly to individuals or the community, or alternatively to finance the provision of goods to households or the community that are produced by non-government units.
- Traditionally, therefore, governments have been major producers of goods, especially in the former socialist centrally planned economies.
- The tendency now in most countries is for countries to contract out production to commercial

Individual and collective services

- Individual services are provided to individual households: e.g., education, health, transport or housing service provided to individual household members or the household as a whole.
- Collective services provided simultaneously to the community as whole or sections of the community (large groups of households): e.g., maintaining public order and defence, street lighting and sanitation.

Government current and capital expenditures

- Government current expenditures consist of current expenditures on consumption goods and services plus the payment of current social transfers such as sickness and unemployment benefits, pensions and so on.
- Government capital expenditures consist of gross fixed capital formation plus capital transfers.
- Chapter 9 is concerned only with estimating PPPs for government current expenditures on consumption goods and services.

Actual consumption

- Households' actual consumption consists of their own expenditures on consumption goods and services *plus* the value of the individual consumption goods and services that are provided to them free or at reduced prices by government units. The latter are called *social transfers in kind*. This is the concept of household consumption used in the ICP.
- Government's actual consumption consists of their current expenditures on consumption goods and services *less* the value of the social transfers in kind that they provide to households.

Market and Non-market producers

- Market producers are producers that sell their output at prices designed to cover most or all of their costs. Usually they plan to make at least some net operating surplus or profit. They do not plan to continue to operate indefinitely at a loss.
- Non-market producers sell to households at prices that are deliberately meant not to cover their costs. They plan to operate at a loss. They may sell at zero prices: i.e., provide their outputs to households free.
- Non-market producers are owned by governments of NPIs. The losses they deliberately incur are

Non-market producers

- Non-market producers are owned and operated by governments or NPIs and typically produce services of one kind or another.
- In practice, collective services have to be produced by non-market producers because they are what economists call *public goods* where there is market failure.
- In addition, most governments choose to engage in the non-market production of at least some individual services such as health, education, transportation and housing, even though it would be possible to charge market prices for them, if

Government consumption expenditures

- Government consumption expenditures are incurred
 - either by implicitly purchasing the outputs of goods and services produced by non-market producers they own themselves themselves
 - or by purchasing similar kinds of goods and services from market producers and then providing these to households free or at reduced prices.

Numbers of basic headings

- As shown in Table 2 of the draft chapter, PPPs are estimated for 36 basic headings.
- 29 refer to goods and services produced by non-market producers and 7 refer to purchases from market producers, of which 6 refer to health and 1 to education.

PPPs for purchases from market producers

- Conceptually, the PPPs for the 7 basic headings referring to market transactions do not pose any special problems.
- In practice, no additional price collection is undertaken as the PPPs can be estimated from the prices already collected for household' purchases.
- To simplify matters, basic heading PPPs already calculated are used as proxies for the PPPs for government purchases from market producers, such PPPs being described as 'reference' PPPs in the draft chapter. The reference PPPs are listed in Table 3 of the chapter.

The valuation of non-market output

- The prices charged by non-market producers, which may be zero, do not reflect their utility to their consumers. They may also be quite different from the market prices of exactly the same individual goods and services when they are produced by market producers.
- The non-market prices charged by non-market producers are therefore deemed not to be suitable for ICP purposes.
- Their use would distort international comparisons or real household consumption and welfare when the ratios of market to non-market consumption

Valuation at current prices

- In the SNA and ICP, the total value of the output of a non-market producer is therefore estimated as the sum of its costs of production, These costs are:
 - intermediate consumption,
 - compensation of employees,
 - capital consumption, or depreciation,
 - net taxes on production.

The value of non-market output

- Some of the output of a non-market producer may be sold, typically at prices that are well below the market prices of such output. These sales do not increase the total value of the non-market producer, merely the split between the part financed from sales and the part that has to be financed by the government unit or NPI from other sources.
- The value of the expenditures incurred by government on non-market output is therefore equal to the total cost of production less any receipts from sales.

The under-valuation of non-market output

- It is now widely accepted that the value of the input of capital services into production should be estimated as depreciation *plus* the interest, or capital, cost incurred on the fixed assets used in production. Capital inputs are therefore systematically under-estimated in the present SNA.
- It is likely that in the forthcoming revision of the SNA the estimation of the value of outputs from the costs of their inputs will be changed to include the interest, or capital, costs.

Under valuation and volume comparisons

- If the cost structure of non-market producers were the same in all countries, the omission of one cost component might not introduce any systematic bias into the relative sizes of the outputs valued at current prices and the volume comparisons derived from using PPPs.
- However, if the relative size of the missing capital cost component is much higher in some countries than others because they use a lot more capital goods, both structures and equipment, then a downward bias will be introduced into the relative sizes of the real outputs of those countries.

PPPs based on inputs

- The output PPPs for non-market producers are estimated from the PPPs for the various inputs. This assumes that the outputs produced by a given set of inputs are the same in different countries: i.e., there are no international differences in the productivity of non-market producers.

PPPs for inputs into non-market production

- The PPPs for intermediate inputs are based on the purchasers' prices of the inputs. They utilise price data already collected elsewhere.
- The PPPs for capital consumption, depreciation are rather crude and may be based on PPPs for the corresponding kinds of gross fixed capital formation.
- The major task for the ICP is to estimate PPPs for the labour inputs valued by compensation of employees.

PPPs for compensation of employees

- Compensation of employees is the largest cost component typically accounting for over 50%, 60% and 70% respectively of the costs of producing non-market collective, health and education services.
- The survey of compensation of employees is the only price collection conducted specifically for the calculation of PPPs for government expenditures.
- Surveys are undertaken for employees in two basic headings covering government administration and defence, three basic headings for health and four basic headings for education

The definition of compensation of employees

- The components of compensation of employees to be used for purposes of the compensation surveys are given in Box VII of the draft chapter.
- The definition of compensation is not quite the same as in the SNA because overtime payments and also benefits in cash or kind not related to the salary scale are not included.
- Although this results in volume comparisons that are marginally inflated, past experience indicates that comparability is improved by omitting overtime and benefits in kind.

The occupations covered by the compensation survey

- As shown in Table 2 of the draft chapter there are 9 basic headings that refer to nine broad categories of employees: 3 in health, 4 in education and 2 in collective services.
- The PPPs for these basic headings are calculated using the compensation of employees that countries report for a selection of occupations in each heading.
- In previous ICP work, the surveys have covers 46 different occupations. The occupations are listed in Table 4 of the chapter.

The list of occupations

- The list last used in the OECD/Eurostat comparisons was based on the 1988 ISCO list compiled by the ILO.
- The list is periodically revised and is in need of further revision and updating.
- The revision and updating will be accomplished in consultation with the ILO.

The use of government payroll data

- The compensation of employees to be reported for the selected occupations is not to be extracted from from government payroll data.
- Dividing the total compensation of employees paid to employees in selected occupations by the total number of full time equivalent employees gives an average that is representative of the country, but one that is not comparable between countries.
- The reason is that the distribution of employees over the various grades and steps that make up the salary scale differs from country to country.

Exploiting the salary scales

- Underlying compensation of employees are the wages and salaries laid down in the government wage or salary scales.
- Given the basic salary it is straightforward to compensation of employees because the other components are normally related to the salary scales as percentage additions.
- To determine compensation of employees it is necessary to establish the basic salary or wage for each selected occupation.

Determining the basic salary

- Each scale is usually divided into categories which generally correspond to levels of education and experience. Each grade is itself divided into several steps.
- For each grade, the one that is most common – that is, the modal grade in terms of numbers of employees - should be selected as being most representative in each country.
- The appropriate step within the grade is determined similarly.
- The procedure for determining the basic salary is described in more detail in Box 6 of the draft

Annual national averages

- The compensation reported for each selected occupation should be the annual national average. If the salary scales are adjusted during the course of the year, the modal salary should be adjusted accordingly.
- The compensation should also refer to general government. In principle, it should be a weighted average of the compensations payable in the different levels of government. In practice, the averages may be difficult to estimate and the estimates may have to be based on central government only.