

THE HANDOUT

TREATING
GOVERNMENT EXPENDITURE
& CAPITAL FORMATION
IN THE ICP

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Box 1: Selected Occupations				
Occupation	Individual Services		Collective Services	
	Health	Education	Defence	Other
01. Doctor, head of department	X			
02. Doctor, senior consultant	X			
03. Doctor	X			
04. Nurse, head of department	X			
05. Nurse, operating theatre	X			
06. Nurse	X	X		
07. Nursing auxiliary	X			
08. Physiotherapist	X			
09. Laboratory assistant	X			
10. Hospital chief executive	X			
11. Secretary I	X			
12. Cook	X			
13. Kindergarten teacher		X		
14. Primary school teacher		X		
15. Secondary school teacher		X		
16. Head teacher		X		
17. University lecturer		X		
18. Private of infantry regiment			X	
19. Commander of infantry regiment			X	
20. Able seaman			X	
21. Commander of frigate			X	
22. Airman			X	
23. Fighter pilot			X	
24. Finance department manager		X		X
25. Executive official (skill level III)		X		X
26. Executive official (skill level IV)		X		X
27. Computer operator		X		X
28. Bookkeeping clerk		X		X
29. Data entry clerk		X		X
30. Secretary II		X		X
31. Telephone switchboard operator		X		X
32. Messenger		X		X
33. Maintenance electrician		X		X
34. Building caretaker		X		X
35. Cleaner		X		X
36. Policeman/woman				X
37. Prison guard				X
38. Firefighter				X
39. Social worker				X
40. Town planner				X
41. Civil engineer				X
42. Draughtsman				X
43. Construction labourer				X
44. Driver				X
45. Agricultural scientist				X
46. Librarian				X

Note that all defence personnel – that is occupations 18 to 23 above – refer to members of the regular armed forces and not to conscripts.

Box 2: Compensation of Employees

Compensation of employees includes all payments in cash and kind made by general government in a year. These payments in cash and kind comprise:

- **Gross salaries and wages** (before deduction of taxes and social contributions payable by employees) cover:
 - Basic salaries and wages as laid down in the salary scales;
 - Other payments, over and above the basic salary or wage, such as: housing or residence allowance, passage or leave allowance, family allowance (for the purpose of Eurostat-OECD comparisons this is taken to cover a married employee with two dependent children), special duty allowance or acting allowance, 13th month pay and other cash payments other than overtime payments. It is very difficult to obtain data on overtime that are comparable across countries. *Therefore overtime payments are not to be included when calculating the gross salaries and wages of selected occupations for Eurostat-OECD comparisons.*
 - Benefits in cash or kind that are not related to the salary scale, such as free or subsidised housing, transport allowance, reimbursement of medical expenses and the like. These benefits are difficult to evaluate, as they can vary from one general government institution to another, and in most cases are negligible relative to the total. *Therefore such benefits are not to be included when calculating the gross salaries and wages of selected occupations for Eurostat-OECD comparisons.*
- **Employers' actual social contributions** consist of the payments made by general government institutions to insurers for the benefit of their employees. These payments cover contributions for the old age pensions, as well as against sickness, accident and disability. They are calculated on the basis of the schemes in operation in the various countries.
- **Imputed social contributions** represent the counterpart to social benefits paid directly by general government institutions without participating in, or establishing a fund, reserve or other special scheme for this purpose. Since these contributions do not involve actual cash flows, they have to be imputed. For example, government may pay pensions to retired employees from general revenue. In such a case the pension element in the employee's compensation during his term of employment is usually evaluated by reference to the average pensions paid over recent years. The ratio, pensions paid per compensation of employees, supplies the contribution in the form of a rate which can be applied to the basic salary for each occupation.

Box 3: Determining the basic salary for a selected occupation using a salary scale							
Grades and Categories	Steps						
	1	2	3	4	5	6	7
P4	88,900	91,400	93,900	96,400	98,900	101,400	103,900
P3	76,800	78,800	80,800	82,800	84,800	86,800	89,000
P2	66,100	67,900	69,700	71,500	73,300	75,100	76,900
P1	53,600	55,000	56,400	57,800	59,200	60,600	62,000
T4	47,900	49,500	51,100	52,700	54,300	55,900	57,500
T3	41,200	42,600	44,000	45,400	46,800	48,200	49,600
T2	35,500	36,700	37,900	39,100	40,300	41,500	42,700
T1	31,100	32,100	33,100	34,100	35,100	36,100	37,100
W4	34,700	35,700	36,700	36,800	36,900	37,000	37,100
W3	31,300	32,300	33,300	34,300	35,300	36,300	37,300
W2	28,400	29,200	30,000	30,800	31,600	32,400	33,200
W1	25,700	26,500	27,300	28,100	28,900	29,700	30,050

01. Countries are not required to extract data on compensation of employees for the selected occupations from government payrolls. Instead they are expected to implement the simpler and more comparable approach outlined below. Underlying the compensations of employees paid by government are the basic salaries and wages that are laid down in government pay scales. Once the basic salary/wage has been established for an occupation, it is relatively straightforward to compute its compensation of employees because the other components of compensation of employees are normally related to the salary scale by being defined as percentage additions to the basic salary/wage. Therefore, to determine the compensation of employees for the selected occupations, countries have first to locate the basic salary/wage for each selected occupation in the government pay scales. The procedure is as follows.

02. Employees in public administrations are usually paid on the basis of a salary scale such as the simplified version shown in Box 3. The scale is divided into grades – P, T and W in Box 3. Grades generally correspond to levels of education or skills. The ISCO-88, for example, identifies four skill levels: level I is defined as five years of primary education; level II is defined as five to six years of secondary education supplemented or partly replaced by a period of on-the-job training; level III is defined as three to four years of post-secondary education leading to an award not equivalent to a graduate university degree; and level IV is defined as three or more years of post-secondary education leading to an award of a graduate or postgraduate university degree or it equivalent. In Box 3, the W grade corresponds to skill levels I and II, the T grade corresponds to skill level III and the P grade corresponds to skill level IV.

03. Within grades there are various career brackets over several categories – 1 to 4 in Box 3 - and each category is itself divided into steps - 1 to 7 in Box 3. Each step is usually 12 months, though steps of 18 or 24 months are not uncommon. For each selected occupation the category that is most representative in each country is to be identified. The criterion that should be used for this is the number of employees in each of the categories associated with the selected occupation and taking the modal category. The appropriate step within the category is indicated by the seniority specified for the selected occupation. For convenience, the same seniority is specified for all the selected occupations – namely, five years or five steps if each step is 12 months.

04. Take, for example, an executive official with skill level III – selected occupation number 19 in Box 1. Such officials would be associated with grade T, and possibly the lower categories of grade P, in the salary scale of Box 3. If the distribution of these officials over the relevant categories was 15 per cent T1, 25 per cent T2, 35 per cent T3, 20 per cent T4 and 5 percent P1, then T3 being the most frequent would be the modal category. If each step is 12 months, the salary for category T3 with five years seniority – equivalent to five steps – will be 46,800. If, however, each step was 18 months or 24 months, five years seniority would be equivalent to four steps and a salary of 45,400 in the case of 18 month steps and to three steps and a salary of 44,000 in the case of 24 month steps.

05. It can happen that the distribution of employees over the categories associated with a particular occupation is bimodal, or approximately bimodal. In such cases the salary of both categories should be determined and an arithmetic geometric average taken of the two. For example, if in the distribution of executive officials in the previous paragraph categories T2 and T3 were both 30 per cent, the salary – assuming steps of 12 months - would be 40,300 for T2 and 46,800 for T3. In this case the basic salary for an executive official with skill level III would be the arithmetic average of the basic salaries established for these two categories – which is $(40,300 + 46,800) / 2$ or 43,550.

06. The compensation of employees reported for each selected occupation must be annual. This is not a particularly difficult requirement. Salary scales usually show annual amounts. Moreover, any revisions to the salary scales that take place during the reference year are relatively straightforward to accommodate. When there are revisions, a weighted average needs to be calculated. This can be illustrated by returning to the example of an executive official with skill level III. If a five per cent increase in salaries came into effect in October of the reference year, then for the first nine months the salary for category T3 would be 46,800 and for the last three months it would be 49,140. The weighted average of the two – $([46,800 \times 9] + [49,140 \times 3]) / 12$ – provides the basic salary required, namely: 47,385.

07. The compensation of employees should also be the national average taking into account the discrepancies in compensation which may arise both between various levels of government – that is, between central, regional, state and local governments and within the same level of government – that is, between different ministries and departments of central government or between different regional governments, state governments or local governments. Unless there are national salary scales, this can be a problem because access to the various salary scales that need to be consulted is often not readily available. Moreover, even if access is obtained, there is still the question of how to combine them – in principle some form of weighted average should be used.

08. One solution which countries have adopted to the absence of national salary scales for general government is to use only the salary scales of central government. The validity of this approach depends on the extent to which the wages and salaries paid by central government are representative of those paid by general government. Some adjustments may be necessary to make them more representative such as excluding the allowance paid to compensate for the higher costs associated with working in the capital city. However, it not a complete a solution because there are occupations – such as teachers or doctors in some countries – that are employed by regional, state or local governments and not by the central government. For the selected occupations that fall into group, the need to refer to the salary scales of the appropriate level of government remains. The most obvious, although not necessarily the most feasible, approach to this situation would be to draw – either purposively or at random - a small sample of the relevant government levels with “probability proportional to size”.

Box 4: Product Specification & Price Reporting Form				
EQUIPMENT GOODS 2003				Country
(351-c.26): 16.11: Tractor unit				Austria
Product		Proposed		Priced
Make (and nationality):		Mercedes Benz (German)		Scania (Swedish)
Model:		Actros 1840 LS 4x2		R144 LA 4x2A
Specifications		Metric	Imperial	National
01	GVW.	18000 kg	17.7 tons	19000 kg
02	Wheelbase	5700 mm	224 in	3600 mm
03	Engine capacity	11,946 l	729 cu in	12.0 l
04	Engine power output	292 kw	394 bhp	338 kw
05	Gearbox: number of forward speeds	16	16	14
06	Type of suspension: front	spring	spring	spring
07	Type of suspension: rear	air	air	air
08	Type of braking	abs	ABS	ABS
09	Type of cab	1845 mm	73 in	1900 mm
10	With standard roof	yes	yes	yes
11	Fixed fifth wheel coupling	included	included	included
12				
Terms and conditions				
a	Order quantity	one	one	one
b	Unit price	one	one	10,500
c	Currency	specify	specify	euros
d	Delivery costs to be included	yes	yes	yes
e	Installation costs to be included	no	no	no
f	Discount to be included	yes (%)	yes (%)	(5 %) - 525
Total unit price without non-deductible taxes				9,975
g	Non-deductible taxes	<i>(from national accounts)</i>		<i>(7.5%) + 748 0</i>
Total unit price with non-deductible taxes				10,723
Options				
<i>Price of standard model</i>				
Notes				
<i>Delivery costs not invoiced separately. Included in unit price.</i>				
website address: www.mercedesbenz.com				

Box 5: Standard Construction Projects

Residential buildings

01. European single-family house
02. Portuguese single-family house
03. Nordic single-family house
04. Apartment in a multi-apartment building
05. *North American single-family house*
06. *Japanese single-family house*
07. *Australasian house*

Non-residential buildings

08. Agricultural shed
09. European factory building
10. Office building
11. Primary school
12. *Japanese factory building*

Civil engineering works

13. Asphalt road
14. Concrete road
15. Bridge
16. Concrete main sewer

The choice of pricing projects 05, 06, 07 and 12 is restricted to countries working directly with the OECD

Box 6: Elementary components				
<i>Item specification</i>	<i>Unit</i>	<i>Quantity</i>	<i>Unit Price</i>	<i>Total Price</i>
3. Masonry			(national currency)	(national currency)
3.1 Ground floor double-skin external wall:				
• 20 cm sand-lime brickwork + 11 cm facing brickwork, inclusive of pointing and acid cleaning	m ²	257	17	4369
• Plastering	m ²	257	8	2056
3.2 Upper floors double skin external wall:				
• 11 cm sand lime brickwork + 10 cm facing brickwork, inclusive of pointing and acid cleaning	m ²	413	18	7434
• Plastering	m ²	413	8	3304
3.3 Gable ends, 11 cm facing bricks, inclusive of pointing and acid cleaning	m ²	625	18	11250
3.4 Fair-finish 7 cm plaster block work	m ²	585	7	4095
Total				32508

Box 7: Summary by major components	
	(national currency)
01. Earthworks	2489
02. Concrete	28985
03. Masonry.	32508
04. Roofing	16220
05. Joinery	26732
06. Metal joinery	2443
07. Sanitary installations	12825
08. Central heating	10182
09. Electrical installations	6777
10. Ventilation	715
11. Coverings	35097
A. Overall price of work done excluding VAT and fees	178638
B. VAT ⁽¹⁾ on overall price of work done (10 % of A)	17864
C. Architect's and engineer's fees (5 % of A)	8932
D. VAT ⁽²⁾ on Architect's and engineer's fees (10 % of C)	893
Total price (A + B + C + D)	206327

⁽¹⁾ Actual rate of non-deductible VAT paid obtained from the national accounts.

⁽²⁾ Standard rate of non-deductible VAT.