

#### IV. REVENUES ASSIGNED TO ECONOMIC FUNCTIONS

The basis of this classification is the (empirical) fact that factor costs do influence the economic decisions of market participants. Effective for economic choices is the actual level of costs and even more so the expectation of the rising or falling of the relative costs of the alternatives in the foreseeable future.

Taxes that become due when a unit of a factor of production is deployed or a unit of goods or services is consumed do constitute part of the factor costs and hence do influence the economic choices: they may act as incentives and disincentives for the deployment of the different factors<sup>1</sup>. Indeed recommendations with respect to tax shifts have been made based on this principle of incentives and disincentives: A reduction of a high load of levies on labour, compensated by an increased taxation of natural resources and environmental goods is seen as an incentive for employment of labour and a disincentive for environmentally harmful activities; cf. the recommendations of the White Paper and the present tax reform in several Member States.

While these general considerations seem plausible enough, only in the last few years scientific efforts have been made to classify all statutory levies (i.e. all taxes, social security contributions and other unrequited compulsory payments to general government) according to economic functions, in particular according to production factors and consumption.

This classification stands in contrast to the traditional classification of taxes into fiscal categories like direct/indirect or income/wealth etc. Hence a universal methodology allowing each tax in any country to be uniquely ascribed to these economic categories is still under development.

##### IV.1. Construction of a Key for the Assignment of Revenues to Economic Functions

A desirable goal of such efforts is a breakdown of all taxes into the two main categories

- Taxes on Consumption

and

- Taxes & Contributions on Factors of Production.

A residual covers taxes on transfers and taxes not allocable to either of the two categories given above.

According to the disaggregation proposed in "*Structures of the Taxation Systems in the European Union*" taxes on factors of production consist of

- Taxes & contributions on Employed Labour, aggregated as "Levies on Employed Labour".

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<sup>1</sup> The registration of the time development of factor taxation in a given economy may, when combined with national accounts data, allow even a quantification of the elasticities of factor deployment with respect to factor taxation. Let  $t_i$  be the effective rate of tax  $n_i$  and  $D_j$  a measure of the deployment of the economic factor  $n_j$  in the period after a change of  $t_i$ , then  $d \ln D_j / d \ln t_i =: e_{ji}$  is the elasticity of factor  $j$  with respect to tax  $i$ . If  $e_{ji}$ , measured or inferred from the declared intentions of the relevant economic actors, is significantly negative, then a decrease of the rate  $t_i$  can be considered a tax incentive for the deployment of the factor  $j$ .

If it is true that relative factor costs do have an impact on relative factor deployment, then an estimate of the dominant negative elasticities may serve for the formulation of an economically rational tax policy.

- Taxes & contributions on self-employed labour, on entrepreneurial activities, on income from capital and property, on capital gains, on wealth, on ownership of land and buildings, on the transfer of property, on inheritances and gifts, aggregated as 'Levies on Capital & Business' (incl. self-employed labour).

All items in the ESA class 3 'Taxes Linked to Production and Imports' which have not been listed under one of these two categories are - from the point of view of economic function - to be classified as taxes either on final consumption (such as VAT, most of excise duties, large parts of import duties) or on intermediate consumption (such as taxes on energy for commercial use). Even though taxes on intermediate consumption might also be allotted to 'Levies on Capital & Business', this report follows the convention used in "*Structures of the Taxation Systems in the European Union*" and hence aggregates such taxes, duties and fees into one group 'Levies on Consumption'.

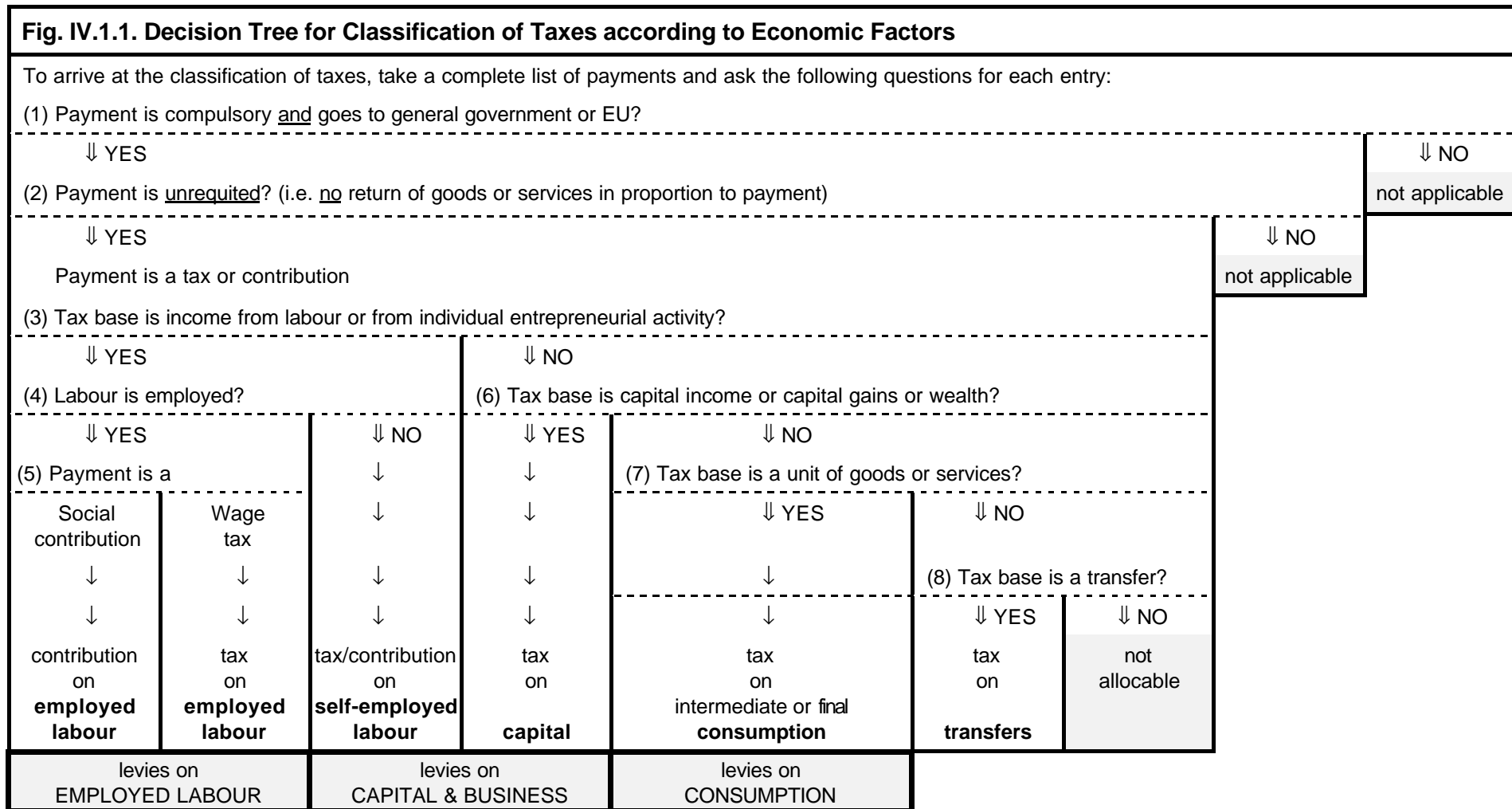
It should be emphasized that this assignment of taxes to factors applied here to the accession states is based on the decision orientation sketched above; as a rule this assignment differs both from the criterion of 'primary incidence' and of 'final resting place'. Example: ESA category '4.2: Employers' social contributions' has its primary incidence at the employer and its final resting place at the consumer of goods and services provided by the employer. In the classification used here it is assigned to 'employed labour', because a reduction of the rate decreases the cost of labour for the employer and hence is seen as an incentive for labour employment.

An operational approach to the classification of all statutory levies according to economic functions as defined in "*Structures of the Taxation Systems in the European Union*" is indicated in the decision tree presented below in fig. IV.1.1.

This procedure yields the three main categories used for the assignment:

- levies on employed labour,
- levies on capital & business,
- levies on intermediate and final consumption,

and the residual, made up of taxes on transfers and of unallocable levies.



In practice the precise and unambiguous assignment of revenues to one of these categories and subcategories may pose some problems; example: the correct split of individual income tax into the share to be assigned to employed labour, to self-employed labour, to individual income from capital and to transfers.

In the EU Member States this task has been carried out on the basis of coefficients either given by the respective Ministries of Finance / National Statistical Offices or estimated with the use of additional information from tax surveys, national accounts etc.

National tax statistics in some of the countries covered by this report do in fact display such a breakdown or at least proxies for the precise categorization. Nevertheless for all countries covered by this report the final allotment has been decided upon through questionnaires that have been sent to the respective national Finance Ministries. All data and assignments used in this report have been checked again by them.

As an example we present the questionnaire for the break-down of taxes on income of individuals for Hungary.

<b>Fig. IV.1.2. Questionnaire for the Break-down of Taxes on Income of Individuals - Example Hungary</b>					
		A. tax on <u>employed</u> labour	B. tax on <u>self-</u> employed labour	C. tax on personal income from capital	D. tax on transfers
1.1.	Individual income and profits tax	? .. %	? .. %	? .. %	? .. %
1.1a.	Dividend withholding	-	-	100 %	-
1.1b.	Interest withholding	-	-	100 %	-
1.1c.	Individual capital gains tax	-	-	100 %	-
1.2.	Corporate income tax	-	-	-	-
1.3.	(local) communal tax on enterprises	- ?	? .. %	? .. %	-
1.4.	Research and development fund levy	- ?	? .. %	? .. %	-
1.5.	(local) rehabilitation contribution	? .. %	? .. %	? .. %	-
1.6.	(local) training levy	? .. %	? .. %	? .. %	-
1.7.	(local) wage guarantee contribution	? .. %	- ?	- %	-
1.8.	Gambling tax	-	-	100 %	-

As a result the final report presents the economic classification of tax revenues in the Eurostat format to the best knowledge of the responsible officials in the respective countries.

In addition to this complete disaggregation into mutually exclusive categories, the report - following the 'Structures of the Taxation Systems in the European Union' - presents two 'of which' categories:

- Taxes on Energy and
- Taxes on Environment, aggregated from 'Taxes on Transport' (excl. fuels), 'Taxes on Resources' (excl. energy) and 'Taxes on Pollution'.

These two categories have been extracted from the taxes on consumption and are displayed in the second last column of the 'Country Specific Assignment Keys' given in sec. IV.3 below.

## IV.2. Allotment Problems and Borderline Cases

From a theoretical point of view the allotment of each tax to one economic factor leaves some grey areas where an unambiguous assignment is up to question. A detailed discussion of such problems is given in §§ 31 to 34 of ATW's 1997 study for the EU "*More Jobs, Less Tax Evasion, Cleaner Environment*"; in its most recent 1999 version the material is on file at <http://home.t-online.de/home/jarass>.

Examples of borderline cases are:

- (1) Contributions, leading to social benefits, which may, in some countries, not comply with all criteria for a levy:
  - They may be payable to funds that are government controlled, but not institutions of general government.
  - They may contain a share that is not completely unrequited, as it leads to a predictable future return in proportion to the contributions made; nevertheless this share has been included in the numbers given in the tables of this report, even though they could also have been excluded from social contributions just like the payments to private pension funds.
- (2) Another case in question are excise duties on materials that are used for production (like natural gas for the production of synthetics or fuels for commercial traffic) which might be assigned to 'Levies on Capital & Business', but in this report, in agreement with "*Structures of the Taxation Systems in the European Union*", are assigned to taxes on intermediate consumption.
- (3) Likewise customs duties on materials used for production (like ores) might be assigned to the category 'Levies on Capital & Business'; instead here all customs duties are allotted to the category 'intermediate and final consumption'.

Thus for this report all borderline questions are resolved by strictly following the practice used for the Member States in accordance with "*Structures of the Taxation Systems in the European Union*". They are based on the ESA-assignments of the 'Tables of Revenues' given above in sec. III and on the precise definitions of each tax given in the respective 'Inventory of Taxes' for each country, cf. annex. Where necessary, additional informations have been obtained by tax officials in the respective countries.

### IV.3. Country Specific Assignment Keys

The procedure described in the last section combined with the answers to the questionnaires concerning the split, mostly of individual income tax (cf. sec. IV.1 above) allows to construct the following assignment keys:

For each tax listed in the given country's 'Table of Revenues' the shares (between 0.00 and 1.00) are given by which it should be assigned to one of the categories given as the 6 columns:

- (1) Employed Labour
- (2) Capital & Business, subdivided into
  - (2a) self-employed labour
  - (2b) individual income from capital
- (3) Consumption, subdivided into
  - (3a) intermediate consumption
  - (3b) final consumption

If an appreciable share of a tax on the 'intermediate and final consumption' falls to 'intermediate consumption', a factor of 0.5 has been ascribed to the two subcategories 'intermediate' and 'final' each.

- (4) Transfers

A further qualification of category '(2b) individual income from capital' and of 'environmental taxes' is given in the last two columns. For a detailed discussion of 'environmental taxes' see ATW's 1996 study for the EU/Eurostat "*Manual: Statistics on Environmental Taxes*"; in its most recent 1999 version the material is on file at <http://home.t-online.de/home/jarass>.

Example for calculation of total taxes & contributions on labour in 1998 for Estonia: Take 'Table III.1.1. Revenues - Estonia, General Government', multiply each figure there with the share given in column (1) of table IV.3.1. in the same line and add up.

Table IV.3.1. Key for the Assignment of Revenues - ESTONIA									
		(1)	(2a)	(2b)	(3a)	(3b)	(4)		
		Compensation of Employees	Operating Surplus		Consumption		Trans-fers	further qualification	
Taxes	General Government (S60)	Em-ployed labour	Self-em-ployed labour	Capital	Intermediat e	Final		of (2b) taxes on capital	of environmental taxes
<b>1</b>	<b>Current taxes on income and wealth - Total</b>								
1.1.	personal income tax	0.93	0.015	0.055				shares& savings	
1.2.	corporate income tax			1				income& profit	
<b>2</b>	<b>Capital taxes - Total</b>								
<b>3</b>	<b>Taxes linked to production and imports - Total</b>								
<b>3.1.</b>	<b>VAT and general turnover taxes - Total</b>								
3.1.1.	VAT on domestic goods					1			
3.1.2.	VAT on imported goods					1			
<b>3.2.</b>	<b>Import duties and agricultural levies - Total</b>								
3.2.1.	customs duty				0.5	0.5			
<b>3.3.</b>	<b>Excise duties - Total</b>								
3.3.1.	excise on alcohol				1				
3.3.2.	excise on tobacco				1				
3.3.3.	excise on fur				1				
3.3.4.	excise on motor fuel				0.5	0.5			transport
3.3.5.	excise on motor vehicle				0.5	0.5			transport
3.3.6.	excise on package					1			pollution
<b>3.4.</b>	<b>Taxes on services - Total</b>								
3.4.1.	gambling tax					1			
<b>3.5.</b>	<b>Taxes on ownership of land and buildings - Total</b>								
3.5.1.	land tax			1				real estate	
3.5.2.	natural resource tax			1				real estate	resource
3.5.3.	forestry tax			1				real estate	resource
<b>3.6.</b>	<b>Stamp, registration and similar duties - Total</b>								
3.6.1.	State duty			1				licensies & duties	
<b>3.7.</b>	<b>Other taxes linked to production and imports - Total</b>								
3.7.1.	local taxes			1				other	
3.7.2.	fin es			1				other	
3.7.3.	pollution fee					1			pollution
3.7.4.	revenue from exploitation of air-space and aquatory					1			resource
<b>4</b>	<b>Actual social contributions</b>								
4.1.	Employers' actual social contributions	1							

4.2.	Employees' actual social contributions	1							
4.3.	Social contributions by self-employed and non-employed persons		1						

**Remarks:**

(1) Line 1.1. personal income tax:

The split of personal income tax is acc. to Estonian Finance Ministry. Values are based on average data for the period '96 to '98: In 1997 taxes on employed labour were 4852 Mio Kroons from total personal income tax of 5240, in 1998 it was 5865 from total 6239; the Finance Ministry agrees to approximate at 93 %. Taxes on self employed were in 1996 40.4 Mio Kroons from total 4354 personal income tax, in 1997 58.7 from 5240, in 1998 99.9 from 6239; approximately 1.5 %.

(2) Columns (3a) and (3b):

If an appreciable share of a tax on the 'intermediate and final consumption' falls to 'intermediate consumption' a factor of 0.5 has been ascribed to the two subcategories 'intermediate' and 'final' each.



**Table IV.3.2. Key for the Assignment of Revenues - POLAND**

		(1)	(2a)	(2b)	(3a)	(3b)	(4)		
		Compensation of Employees	Operating Surplus		Consumption		Transfers	further qualification	
Taxes	General Government (S60)	Employed labour	Self-employed labour	Capital	Intermediate	Final		of (2b) taxes on capital	of environmental taxes
<b>0.</b>	<b>Taxes and social contributions</b>								
<b>0.1.</b>	<b>Total tax receipts</b>								
<b>1.</b>	<b>Current taxes on income and wealth - Total</b>								
<b>1.1.</b>	<b>individual income tax</b>	0.58	0.21	0.02			0.19		
1.1.1.	individual income tax							shares& savings	
1.1.2.	individual income tax - local							shares& savings	
1.1.3.	presumptive income tax - local							shares& savings	
1.1.4.	income equalization tax							shares& savings	
1.1.5.	income equalization tax - local							shares& savings	
<b>1.2.</b>	<b>corporation tax</b>								
1.2.1.	income from legal entities			1				income/p rofit	
1.2.2.	income from legal entities - local			1				income/p rofit	
<b>2.</b>	<b>Non-current taxes on income and wealth (capital taxes) - total</b>								
2.1.	inheritance and gift tax - local			1				wealth	
<b>3.</b>	<b>Taxes linked to production and imports - Total</b>								
<b>3.1.</b>	<b>VAT and general turnover taxes - Total</b>								
3.1.1.	VAT on goods and services					1			
3.1.2.	VAT on imported goods					1			
3.1.3.	previous turn over tax					1			
<b>3.2.</b>	<b>Import duties and agricultural levies - Total</b>								
3.2.1.	customs duties				0.5	0.5			
3.2.2.	import tax				0.5	0.5			
3.2.3.	compensatory fees on agricultural imports				0.5	0.5			
<b>3.3.</b>	<b>Excise duties - Total</b>								
3.3.1.	on domestic spirits					1			
	on imported spirits					1			
3.3.2.	on domestic fuels				0.5	0.5			energy
	on imported fuels				0.5	0.5			energy
3.3.3.	on domestic tobacco					1			
	on imported tobacco					1			
3.3.4.	on domestic beer					1			
	on imported beer					1			
3.3.5.	on domestic wine					1			

	on imported wine					1			
3.3.6.	on domestic other products					1			
	on imported other products					1			
<b>3.4.</b>	<b>Taxes on services - Total</b>								
3.4.1.	gambling tax					1			
<b>3.5.</b>	<b>Taxes on ownership of land and buildings - Total</b>								
3.5.1.	agricultural property tax - local (Fn4)			1				real estate	
3.5.2.	forest property tax - local			1				real estate	
3.5.3.	real estate property tax - local			1				real estate	
<b>3.6.</b>	<b>Stamp, registration and similar duties - Total</b>								
3.6.1.	tax on means of transportation - local					1			transport
<b>3.7.</b>	<b>Other taxes linked to production and imports - Total</b>								
3.7.1.	local fees			1				license& duties	
3.7.2.	abolished taxes			1				other	
3.7.3.	abolished taxes - local			1				other	
3.7.4.	tax on wages	1							
3.7.5.	tax on wages - local	1							
3.7.6.	tax on salaries	1							
3.7.7.	tax on salaries - local	1							
3.7.8.	rehabilitation fund contribution	1							
3.7.9.	employment fund contribution	1							
3.7.10.	penalties for excessive payroll increases	1							
3.7.11.	excessive wage tax	1							
<b>4.</b>	<b>Actual social contributions</b>	<b>0.73</b>	<b>0.27</b>						
<b>4.1.</b>	<b>Employers' actual social contributions</b>								
4.1.1.	to soc. insur. fund, labour fund and farmers ins.fund								
<b>4.2.</b>	<b>Employees' actual social contributions</b>								
4.2.1.	to soc. insur. fund, labour fund and farmers ins.fund								
<b>4.3.</b>	<b>Social contributions by self-employed and non-employed persons</b>								
4.3.1.	to soc. insur. fund, labour fund and farmers ins.fund								

**Remarks:**

(1) Line 1.1. Individual income tax:

The split of individual income tax is based on data from the Polish Finance Minister, email of Jan 20, 2000. A detailed list of taxpayers acc. to income source and with respect to source of income has been supplied (this list is shown in the EXCEL sheet, Poland, in the file key. The detailed calculations are also shown in this file. Values are based on average data for the period '97 to '98.

The share of self-employed is high because acc. to Eurostat 10.9 Mio persons have been employed and 4.3 Mio persons have been self-employed in 1997.

The share of transfers is high because pensions are taxed as ordinary income without any exemptions and the respective taxes are listed separately in the Polish data. Unfortunately all other countries were not able to deliver separate tax data for taxation of pensions.

(2) Columns (3a) and (3b) consumption:

If an appreciable share of a tax on the 'intermediate and final consumption' falls to 'intermediate consumption' a factor of 0.5 has been ascribed to the two subcategories 'intermediate' and 'final' each.

(3) Line 4. Social contributions

The Polish authorities could not supply data for disaggregation of line 4. Actual social contributions into lines 4.1, 4.2 and 4.3. To produce a first estimate for the orders of magnitude of the respective fractions of contributions the following split has been applied:

Employers' and employees' social contributions on the one side and social contributions by self-employed and non-employed persons on the other side have been split according to the '98 fraction of individual income tax: 0.58 and 0.21, see table V.2, line 1.1.1. This results in shares of 73 % ( $=0.58/(0.58+0.21)$ ) and 27 % respectively; see also remark below table III.2.1.

**Table IV.3.3. Key for the Assignment of Revenues - HUNGARY**

		(1)	(2a)	(2b)	(3a)	(3b)	(4)		
		Compensation of Employees	Operating Surplus		Consumption		Transfers	further qualification	
Taxes	General Government (S60)	Employed labour	Self-employed labour	Capital	Intermediate	Final		of (2b) taxes on capital	of environmental taxes
<b>0</b>	<b>Taxes and social contributions</b>								
<b>0.1.</b>	<b>Total tax receipts</b>								
<b>1</b>	<b>Current taxes on income and wealth - total</b>								
<b>1.1.</b>	<b>individual income tax</b>								
1.1.1.	personal income tax	0.8	0.15	0.05			0	shares & savings	
1.1.2.	of which: interest withholding tax			1					
<b>1.2.</b>	<b>corporation tax</b>								
1.2.1.	corporate income tax			1					
<b>1.3.</b>	<b>other taxes on income and wealth</b>								
1.3.1.	previous research and development contribution			1				profit	
1.3.2.	previous profit tax on shares in state property			1				profit	
<b>2</b>	<b>Non-current taxes on income and wealth (capital taxes) - total</b>								
2.1.	duty on inheritance			1				wealth	
2.2.	duty on gifts			1				wealth	
<b>3</b>	<b>Taxes linked to production and imports - total</b>								
<b>3.1.</b>	<b>VAT and general turnover taxes - total</b>								
3.1.1.	value added tax					1			
3.1.2.	local business tax			1				other	
<b>3.2.</b>	<b>Import duties and agricultural levies - total</b>								
3.2.1.	customs duties				0.5	0.5			
3.2.2.	previous differential producer's turnover tax			1				other	
<b>3.3.</b>	<b>Excise duties</b>								
3.3.1.	consumption tax on coffee					1			
3.3.2.	excise duty on alcohol products					1			
3.3.3.	excise duty on tobacco products					1			
3.3.4.	excise duty on petrol				0.5	0.5			energy
3.3.5.	excise duty on diesel				0.5	0.5			energy
3.3.6.	excise duty on other oil products				0.5	0.5			energy
3.3.7.	other consumption taxes					1			
3.3.8.	contract distillation spirits tax					1			
3.3.9.	previous road fund contribution				0.5	0.5			transport
<b>3.4.</b>	<b>Taxes on services - total</b>								

3.4.1.	local tourism tax on staying					1			
3.4.2.	tourism contribution			1				profit	
3.4.3.	cultural contribution			1				profit	
3.4.4.	gambling tax			1				profit	
<b>3.5.</b>	<b>Taxes on ownership of land and buildings - total</b>								
3.5.1.	land parcel tax			1				real estat	resourc e
3.5.2.	building tax			1				real estat	
3.5.3.	local tourism tax on buildings			1				real estat	
3.5.4.	land protection contribution			1				real estat	resourc e
3.5.5.	communal tax payable by private individuals			1				real estat	
3.5.6.	previous land tax			1				real estat	
3.5.7.	previous building taxes			1				real estat	
<b>3.6.</b>	<b>Stamp, registration and similar duties - total</b>								
3.6.1.	duty on onerous transfer of property			1				real estat	
3.6.2.	motor vehicle tax					1			transpor t
<b>3.7.</b>	<b>Other taxes linked to production and imports - total</b>								
3.7.1.	breeding contribution			1				operat. a busines s	resourc e
3.7.2.	fishing development contribution			1				operat. a busines s	resourc e
3.7.3.	game-preserving contribution			1				operat. a busines s	resourc e
3.7.4.	water resource contribution			1				operat. a busines s	resourc e
3.7.5.	forest maintenance contribution			1				operat. a busines s	resourc e
3.7.6.	environmental protection product charges					1		operat. a busines s	resourc e
<b>3.7.7.</b>	<b>other taxes linked to environmental protection</b>					1			
3.7.7.1.	environmental protection fee								pollution
3.7.7.2.	air pollution levy								pollution
3.7.7.3.	water pollution levy								pollution
3.7.7.4.	toxic waste levy								pollution
3.7.7.5.	noise abatement levy								pollution
3.7.8.	communal tax payable by entrepreneurs	1							
3.7.9.	rehabilitation contribution	1							
3.7.10.	training levy	1							
3.7.11.	previous wage guarantee contribution	1							

3.7.12.	unallocable tax penalties; unallocable between class 1, 2 and 3			1					
<b>4</b>	<b>Actual social contributions</b>								
<b>4.1.</b>	<b>Employers' social security contributions</b>								
4.1.1.	pensions	1							
4.1.2.	health	1							
4.1.3.	employers' contribution	1							
<b>4.2.</b>	<b>Employees' social security contributions</b>								
4.2.1.	pensions	1							
4.2.2.	health	1							
4.2.3.	employee's contribution	1							
<b>4.3.</b>	<b>Social security contributions paid by others (self-employed &amp; non-employed)</b>								
4.3.1.	pensions		1						
4.3.2.	health		1						

Remarks:

(1) Line 1.1. Individual income tax:

Note: The split of personal income tax is acc. to Hungarian Finance Minister email of Dec 27, 99. We have used the average of values for 1996, 1997 and 1998.

(2) Columns (3a) and (3b) consumption:

If an appreciable share of a tax on the 'intermediate and final consumption' falls to 'intermediate consumption' a factor of 0.5 has been ascribed to the two subcategories 'intermediate' and 'final' each.

**Table IV.3.4. Key for the Assignment of Revenues - CZECH REPUBLIC**

		(1)	(2a)	(2b)	(3a)	(3b)	(4)		
		Compensation of Employees	Operating Surplus		Consumption		Transfers	further qualification	
Taxes	General Government (S60)	Employed labour	Self-employed labour	Capital	Intermediate	Final		of (2b) taxes on capital	of environmental taxes
<b>1</b>	<b>Current taxes on income and wealth - Total</b>								
<b>1.1.</b>	<b>personal income taxes - total</b>								
1.1.1.	income tax of individuals		1						
1.1.2.	wages and salaries withholding	1							
1.1.3.	withheld on interest and dividends paid to individuals			1				shares & savings	
1.1.4.	previous individual income tax		1						
<b>1.2.</b>	<b>taxes on corporations - total</b>								
1.2.1.	corporate income tax			1				income/p profit	
1.2.2.	withheld on interest and dividends paid to corporations			1				income/p profit	
1.2.3.	previous profit taxes on corporations			1				income/p profit	
<b>2</b>	<b>Non-recurrent taxes on income and wealth ('capital taxes') - total</b>								
2.1.	inheritance tax			1				wealth	
2.2.	gift tax			1				wealth	
2.3.	levy on withdrawal of land from agriculture			1				real estate	
2.4.	levy on withdrawal of land from forestry			1				real estate	
<b>3</b>	<b>Taxes linked to production and imports - Total</b>								
<b>3.1.</b>	<b>VAT and general turnover taxes - Total</b>								
3.1.1.	VAT					1			
3.1.2.	previous turnover tax					1			
<b>3.2.</b>	<b>Import duties and agricultural levies - Total</b>								
3.2.1.	customs duties				0.5	0.5			
3.2.2.	previous import surcharge				0.5	0.5			
<b>3.3.</b>	<b>Excise duties - Total</b>								
3.3.1.	on hydrocarbon fuels and lubricants				0.5	0.5			energy
3.3.2.	on alcohol and liquor					1			
3.3.3.	on beer					1			
3.3.4.	on wine					1			
3.3.5.	on tobacco products					1			
3.3.6.	Duty on CFC				1				pollution
3.3.7.	restaurant sale of alcoholic beverages and tobacco products					1			
<b>3.4.</b>	<b>Taxes on services - Total</b>								

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3.4.1.	fees on entry tickets					1			
3.4.2.	resort and recreation fees on visitors					1			
3.4.3.	fees on advertising facilities				1				
3.4.4.	fees on operated gambling machines			1				operat. a busines s	
3.4.5.	fees on recreational units (based on capacity)			1				operat. a busines s	
<b>3.5.</b>	<b>Taxes on ownership of land and buildings - Total</b>								
3.5.1.	real property tax			1				real estate	
<b>3.6.</b>	<b>Stamp, registration and similar duties - Total</b>								
3.6.1.	highway fee (beginning in 1995)				0.5	0.5			transpor t
3.6.2.	motor vehicle entry fees				0.5	0.5			transpor t
3.6.3.	tax on use of public space				1				resourc es
3.6.4.	previous notary fees			1				real estate	
3.6.5.	misc. license and permit fees			1				operat. a busines s	
3.6.6.	real property transfer tax			1				real estate	
3.6.7.	dog fees					1			
3.6.8.	lump sum commercial car tax (called road tax)			1				real capital	
3.6.9.	levy on temp. withdrawal of land from agriculture			1				real estate	
<b>3.7.</b>	<b>Other taxes linked to production and imports - Total</b>								
3.7.1.	water pollution fee				1				pollution
3.7.2.	air pollution fee				1				pollution
3.7.3.	waste deposit fee				1				pollution
3.7.4.	unallocated previous taxes and levies				1				
3.7.5.	previous payroll tax	1							
<b>4</b>	<b>Actual social contributions</b>								
4.1.	Employers' actual social contributions	1							
4.2.	Employees' actual social contributions	1							
4.3.	Social contributions by self-employed and non-employed persons		1						

**Remarks:**

(1) Line 1.1. Individual income tax:

The split of of taxes on individuals is acc. to email of Czech Finance Ministry of Nov 12, 1999. Values are based on average data for the period '96 to '98.

(2) Columns (3a) and (3b) consumption:

If an appreciable share of a tax on the 'intermediate and final consumption' falls to 'intermediate consumption' a factor of 0.5 has been ascribed to the two subcategories 'intermediate' and 'final' each.



Table IV.3.5. Key for the Assignment of Revenues - SLOVENIA									
		(1)	(2a)	(2b)	(3a)	(3b)	(4)		
		Compensation of Employees	Operating Surplus		Consumption		Transfers	further qualification	
Taxes	General Government (S60)	Employed labour	Self-employed labour	Capital	Intermediate	Final		of (2b)	of environmental taxes
								taxes on capital	
<b>0</b>	<b>Taxes and social contributions</b>								
<b>0.1.</b>	<b>Total tax receipts</b>								
<b>1</b>	<b>Current taxes on income and wealth - total</b>								
1.1.	individual/personal income tax	0.87	0.06	0.055			0.015	shares & savings	
1.2.	corporate income tax			1				income/profit	
<b>2</b>	<b>Non-current taxes on income and wealth ('capital taxes') - total</b>								
2.1.	(local) inheritance and gift tax			1				wealth	
<b>3</b>	<b>Taxes linked to production and imports - total</b>								
<b>3.1.</b>	<b>VAT and general turnover taxes - total</b>								
3.1.1.	VAT (sales tax till 7/99)					1			
3.1.2.	(local) sales taxes on services					1			
3.1.3.	(local) special sales tax on services					1			
<b>3.2.</b>	<b>Import duties and agricultural levies - total</b>								
3.2.1.	customs duties and other import taxes				0.5	0.5			
<b>3.3.</b>	<b>Excise duties - total</b>								
3.3.1.	duties on petrol and mineral oils				0.5	0.5			energy
3.3.2.	cigarette and tobacco duty					1			
3.3.3.	duty on alcohol drinks					1			
<b>3.4.</b>	<b>Taxes on services - total</b>								
3.4.1.	(local) tax on lottery winnings					1			
3.4.2.	(local) fees on gambling machines			1				operat. a businesses	
<b>3.5.</b>	<b>Taxes on ownership of land and buildings - total</b>								
3.5.1.	(local) taxes on property			1				real estate	
3.5.2.	(local) duties on use of agriculture land			1				real estate	resources
3.5.3.	(local) charges for the use of building ground			1				real estate	resources
<b>3.6.</b>	<b>Stamp, registration and similar duties - total</b>								
3.6.1.	(local) administrative fees			1				operat. a businesses	
3.6.2.	(local) tourist fees			1				operat. a	

								business	
3.6.3.	(local) communal fees			1				operat. a business	
3.6.4.	other (general government) administrative fees			1				operat. a business	
3.6.5.	motor vehicle registration duties households					1			transport
3.6.6.	motor vehicle registration duties - enterprises			1				real capital	transport
3.6.7.	Other motor vehicle registration duties (nonresidents)			1				real capital	transport
3.6.8.	tax on banks and insurance companies			1				operat. a business	
<b>3.7.</b>	<b>Other taxes linked to production and imports - total</b>								
3.7.1.	environment tax					1			pollution
3.7.2.	tolls on highways				0.5	0.5			transport
3.7.3.	charges for water works				0.5	0.5			resources
3.7.4.	(local) taxes on use of goods					1			
3.7.5.	tax on payroll/wages	1							
<b>4</b>	<b>Actual social contributions</b>								
4.1.	Employers' actual social contributions (consolidated)	1							
4.2.	Employees' actual social contributions	1							
4.3.	Social contributions by self-employed and non-employed persons		1						

### Remarks

(1) Line 1.1. Individual income tax:

The split of individual/personal income tax is acc. to Slovenian Finance Ministry, email of Jan 20, 2000 with a detailed listing of all subclasses of personal income tax. Values are based on average data for the period '96 to '98.

(2) Columns (3a) and (3b) consumption:

If an appreciable share of a tax on the 'intermediate and final consumption' falls to 'intermediate consumption' a factor of 0.5 has been ascribed to the two subcategories 'intermediate' and 'final' each.

#### IV.4. Factor Specific Taxation - Implicit Tax Rates

An implicit tax rate on an economic factor is defined as the ratio of the total tax revenue assigned to this factor divided by the total income (incl. all taxes) or cost (incl. all taxes) of this factor, expressed in percent.

However, since tax statistics do not furnish numbers for the value of the tax base, the calculation of implicit factor tax rates poses a systematic problem: while the numerator is taken from tax statistics, the denominator or a proxy for it has to be taken from National Accounts Statistics and other sources.

(1) The total sum of the base on which 'taxes on employed labour' and 'social contributions' are levied is obviously 'Compensation of employees'. Thus the implicit rate of taxes and social security contributions is defined as

$$\rho_{\text{LABOUR}} = \frac{\text{paid 'taxes \& social contributions on employed labour'}}{\text{'compensation of employees'}} * 100 [\%].$$

(2) The tax bases for the different taxes on self-employment, capital income (incl. capital gains) and on wealth are quite varied. However almost all of them tax (potential) net wealth increases (=capital income) which are due to self-employment or the deployment of capital. 'Net operating surplus' is the generally accepted proxy for this net wealth increase of the overall economy. Therefore the implicit tax rate on capital & business (incl. self-employed labour) can be defined as:

$$\rho_{\text{CAPITAL}} = \frac{\text{paid 'taxes on capital \& business (incl. self-employed labour)'}}{\text{'net operating surplus'}} * 100 [\%].$$

'Net operating surplus' equals 'gross operating surplus' minus 'consumption of fixed capital'. Gross operating surplus is the residual after subtracting compensation of employees from national income. The process of estimating values for consumption of fixed capital is difficult and not yet finished for Poland and Hungary, only for '95 and '96 for Czech Republic. It is therefore at present not possible to calculate implicit tax rates for 'capital and business' for all countries investigated.

(3) The implicit tax rate on final consumption is 'taxes on final consumption' per 'final consumption expenditure':

$$\rho_{\text{CONSUMPTION}} = \frac{\text{paid 'taxes on final consumption'}}{\text{'final consumption expenditure'}} * 100 [\%].$$

Final consumption expenditure

= private consumption expenditure

+ general government consumption expenditure of (police, armed forces, education etc.)

+ consumption expenditure of non-profit institutions serving householda  
(education, health services etc.)

Consumption expenditure of general government and of non-profit institutions are mostly exempted from general consumer taxes like sales tax or VAT (around 2/3 of consumption taxes), but not from customs and excise taxes (around 1/3 of consumption taxes).

Using only private consumption expenditure (70% - 80 % of total consumption in the countries investigated) for the denominator would give the tax rate for that part of the consumption which is mainly taxed. But it would make the implicit tax rate on consumption dependent on the share of private consumption per total consumption.

Note: At present part of consumption taxes, mainly customs duties and excise duties on oil products, are charged on 'intermediate' consumption of producers. If an appreciable share of a tax on the 'intermediate and final consumption' falls to 'intermediate consumption' a factor of 0.5 has been ascribed to the two subcategories 'intermediate' and 'final' each in tables IV.3.x; see footnote (2) below tables IV.3.x. At the time being this share of taxes on intermediate consumption has been included in the total of 'taxes on final consumption' which leads to an overestimation of the implicit tax rate on final consumption.

IV.5. National Accounts Data

<b>Table IV.5.1. National Accounts Data - ESTONIA</b>								
<b>Summary</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
<b>Mio of EEK</b>								
<b>(1) Gross Domestic Product</b>			<b>21,610</b>	<b>29,600</b>	<b>40,705</b>	<b>52,446</b>	<b>64,324</b>	<b>73,213</b>
(1a) Final National Consumption								
(1b) Compensation of Employees			11,384	16,968	23,146	27,910	33,392	36,885
(1c) <u>Net</u> Operating Surplus			4,716	5,026	7,452	11,551	14,001	17,149
<b>(2) Tax total</b>			<b>8,125</b>	<b>11,721</b>	<b>15,829</b>	<b>19,766</b>	<b>24,736</b>	<b>27,500</b>
EEK / ECU			15.5	15.4	14.8	15.1	15.7	15.8

Data for the denominator for the implicit tax rate for 'capital and business', namely 'net operating surplus' may have large uncertainties for the earlier years. Therefore we only show the results of the calculations for implicit tax rates for 'capital and business' from 1995 onwards.

<b>Table IV.5.2. National Accounts Data - POLAND</b>								
<b>Summary</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
<b>billion PLN</b>								
<b>(1) Gross Domestic Product</b>			<b>156</b>	<b>224</b>	<b>306</b>	<b>385</b>	<b>469</b>	<b>549</b>
(1a) Final National Consumption			130	175	238	307	374	433
(1b) Compensation of Employees			69	93	128	167	207	239
(1c) <u>Net</u> Operating Surplus								
<b>(2) Tax total</b>			<b>66</b>	<b>91</b>	<b>122</b>	<b>153</b>	<b>183</b>	<b>208</b>
PLN / ECU			2.1	2.7	3.1	3.4	3.7	3.9

The denominator for the implicit tax rate for 'capital and business' is net operating surplus = gross operating surplus minus consumption of fixed capital.

The Central Statistical Office of Poland is only in the process of estimating values for consumption of fixed capital. It is therefore for the present impossible to calculate implicit tax rates for 'capital and business'.

<b>Table IV.5.3. National Accounts Data - HUNGARY</b>									
Summary	1991	1992	1993	1994	1995	1996	1997	1998	1999
billions of HUF									
<b>(1) Gross Domestic Product</b>	<b>2,498</b>	<b>2,943</b>	<b>3,548</b>	<b>4,365</b>	<b>5,614</b>	<b>6,894</b>	<b>8,541</b>	<b>10,075</b>	<b>11,420</b>
(1a) Final National Consumption	2,012	2,478	3,131	3,679	4,342	5,120	6,198	7,342	8,433
(1b) Compensation of Employees	1,386	1,606	1,906	2,216	2,635	3,147	3,839	4,562	5,176
(1c) Net Operating Surplus									
<b>(2) Tax total</b>	<b>1,167</b>	<b>1,354</b>	<b>1,669</b>	<b>1,939</b>	<b>2,380</b>	<b>2,797</b>	<b>3,336</b>	<b>3,924</b>	<b>4,409</b>
HUF / ECU	92.7	102.1	107.7	124.8	162.7	191.2	210.9	241.0	253.7

The denominator for the implicit tax rate for 'capital and business' is net operating surplus = gross operating surplus minus consumption of fixed capital.

The Central Statistical Office of Hungary is only in the process of estimating values for consumption of fixed capital. It is therefore for the present impossible to calculate implicit tax rates for 'capital and business'.

<b>Table IV.5.4. National Accounts Data - CZECH REPUBLIC</b>								
<b>Summary</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
<b>billions of CZK</b>								
<b>(1) Gross Domestic Product</b>			<b>1,021</b>	<b>1,183</b>	<b>1,381</b>	<b>1,572</b>	<b>1,680</b>	<b>1,821</b>
(1a) Final National Consumption			733	863	977	1,123	1,223	1,302
(1b) Compensation of Employees			465	553	650	766	819	871
(1c) <u>Net</u> Operating Surplus					330	361		
<b>(2) Tax total</b>			<b>438</b>	<b>489</b>	<b>553</b>	<b>615</b>	<b>648</b>	<b>697</b>
CZK / ECU			34.1	34.1	34.3	34.0	35.8	36.2

The Central Statistical Office of the Czech Republic has final numbers for 'consumption of fixed capital' only for the years 1995 and 1996. It is therefore at present only possible to calculate implicit tax rates for 'capital and business' for 1995 and 1996.



<b>Table IV.5.5. National Accounts Data - SLOVENIA</b>								
<b>Summary</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
<b>billions of SIT</b>								
<b>(1) Gross Domestic Product</b>			<b>1,435</b>	<b>1,853</b>	<b>2,221</b>	<b>2,555</b>	<b>2,907</b>	<b>3,243</b>
(1a) Final National Consumption			1,142	1,424	1,735	1,978	2,237	2,473
(1b) Compensation of Employees			862	1,074	1,272	1,400	1,559	1,697
(1c) <u>Net</u> Operating Surplus			36	128	182	229	300	392
<b>(2) Tax total</b>			<b>610</b>	<b>784</b>	<b>922</b>	<b>1,039</b>	<b>1,165</b>	<b>1,316</b>
SIT / ECU, end of year			132.3	152.4	153.5	169.5	180.4	186.3

Data for the denominator for the implicit tax rate for 'capital and business', namely 'net operating surplus' may have large uncertainties for the earlier years. Therefore we only show the results of the calculations for implicit tax rates for 'capital and business' from 1995 onwards.