

## **Recording of taxes and social contributions according to ESA95 Shifting to “time-adjusted” cash method**

According to ESA 95, taxes and social contributions should be recorded on an accrual basis. In order to comply with this principle, Council Regulation 2516/2000 details the rules to be followed on the time of recording and the amounts to be recorded. Two methods can be used:

**a) a method based on declarations and assessments** – In this case, an adjustment needs to be made for amounts assessed or declared but unlikely to be collected. These amounts have to be eliminated from government revenue, either by using a tax-specific coefficient based on past experience and future expectations or by recording a capital transfer for the same adjustment (ESA 95 code D.995) to the relevant sectors.

**b) 'time-adjusted' cash** – the cash is attributed when the activity took place to generate the tax liability or when the amount of taxes was determined in the case of some income taxes. This adjustment may be based on the average time difference between the activity and cash receipt

When accrual recording of taxes and social contributions has been introduced in Slovak republic, it was decided to use the “coefficient method” because this method was recommended for countries with significant outstanding amount in the tax and social security system. However, this method is very demanding on data of good quality. Ministry of Finance together with Statistical Office made every effort to provide good estimate of accrual tax revenue using “coefficient method”. It should be noted that good results were achieved only due to number of discussions, revisions of input data and also involving an analytical capacity of Ministry of Finance – Institute of Financial Policy (IFP). IFP is responsible for tax revenue forecasting and hence has a good basis for independent check of results. Using the “coefficient method” is very time consuming (data collection, estimation of coefficients), because it is necessary to contact up to 10 institutions (except MoF and SO SR). For all that effort there is still some risk which can lead to incorrect results and possible revisions. There are also other problems of “coefficient method”. For example, in corporate income tax the tax returns can be (in some cases) also filed in September (e.g. in September 2006 declaration of tax related to tax liability for the year 2005). It was impossible to incorporate it in the accrual corporate income tax because of the same date of data aggregation and the proceeding notification.

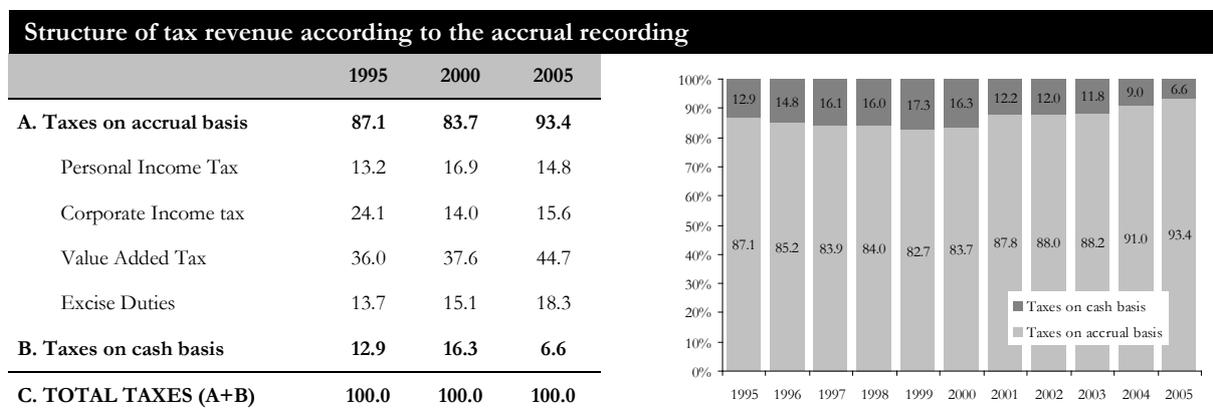
Using “time-adjusted” cash will help us to stabilize time-series, improve our prognoses and above all to provide data of good quality for the purposes of EUROSTAT notification.

### **Proposed methodology of accrual recording**

Time-adjusted cash method, from its definition, is based on detailed cash data. Proposed methodology reflects available and credible data, which were given by each of the relevant institution within the General Government (The Tax Directorate of the Slovak Republic, Social Insurance Agency, National Labour Office, Ministry of Health on behalf Health Insurance Companies, Ministry of Finance and also recently established State Treasury).

The Slovak Republic will apply new method only for those taxes and social contributions, which are currently recorded on accrual basis in the national accounts: PIT, CIT, VAT, Excise duties, social contributions paid to Social Insurance Agency and Health Insurance Companies. It is assumed that remaining part of the tax revenue will be on cash basis.

Proportion of tax revenue currently recorded on cash basis in the national accounts is very low, falling down from 12.9% of total tax revenue in 1995 to 6.6% in 2005. Moreover, this proportion contains a lot of relatively small taxes. It would be very difficult to describe legislation and gather necessary data and information for possible accrual recording of this part of tax revenue.



Source: Statistical Office, Ministry of Finance

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Key features of the new method:

1. Tax revenue on accrual basis:
  - a) Personal Income Tax (dependent activity and business activity), Corporate Income Tax, Value Added Tax and Excise duties.
  - b) Social Contributions paid to Social Insurance Agency (including contributions paid to National Labour Office till the end of 2003) and contributions paid to Health Insurance Companies
  - c) Other tax revenue will be recorded on cash basis
2. Data availability
  - a) Taxes - detailed monthly cash receipts since 1997
  - b) Social contributions paid to Social Insurance Agency - monthly cash receipts since 1996
  - c) Social contributions paid to Health Insurance Companies - monthly cash receipts since 1999
  - d) Social contributions paid to National Labour Office - monthly cash receipts since 1998
  - e) If no detailed cash data are available for above mentioned tax revenue, they will be recorded on cash basis (mainly period from 1993 till year where detailed cash receipts are available, usually 1997)
  - f) Other tax revenue will be recorded on a cash basis.

**Time-adjusted methodology – data availability**

	1993	1994	1995	1996	1997	1998	1999	2000 - 2005
Personal Income Tax	cash	cash	cash	cash	TA cash	TA cash	TA cash	TA cash
- PIT dependent activity	cash	cash	cash	cash	TA cash	TA cash	TA cash	TA cash
- PIT business activity	cash	cash	cash	cash	TA cash	TA cash	TA cash	TA cash
Corporate Income Tax	cash	cash	cash	cash	TA cash	TA cash	TA cash	TA cash
Value Added Tax	cash	cash	cash	cash	TA cash	TA cash	TA cash	TA cash
Excise Duties	cash	cash	cash	cash	TA cash	TA cash	TA cash	TA cash
Other taxes	cash	cash	cash	cash	cash	cash	cash	cash
SIA – social contributions	cash	cash	cash	TA cash				
HIC – social contributions	cash	cash	cash	cash	cash	cash	TA cash	TA cash
NLO – social contributions	cash	cash	cash	cash	cash	TA cash	TA cash	TA cash

Cash – accrual taxes equal to cash execution

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*TA cash (time-adjusted cash) – accrual taxes calculated with time-adjusted cash execution*  
*SLA – Social Insurance Agency, HIC – Health Insurance Companies, NLO – National Labour Office*

## Detailed description of computing of general government tax receipts on accrual basis

### 1. Personal Income tax – dependent activity

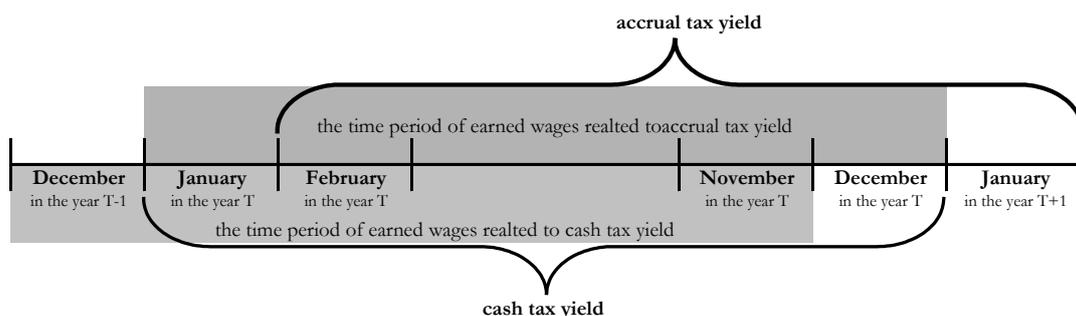
Personal Income Tax from dependent activity is a direct tax paid by employees from their incomes (wages, salaries, premiums ...).

Wages are paid out retrospectively for one period (usually one month). Taxes are therefore paid retrospectively, too. For example, the employee pays taxes in January from income related to December. According to the law, any income from dependent activity gained up to January 31, shall be included in the tax base for a tax period of calendar year (January - December).

Employee has to ask the employer to perform the annual clearing. If the employee fails to apply for the annual clearing, he/she shall be bound to file a tax return. In the case of filling the tax return, the rules are the same as for PIT from self-employed. Contrarily, the annual clearing has to be made until the end of the March end up of the tax period. The overpayment shall be paid to the employee by the employer after completing the annual clearing, but not later than the date of paying the wages related to April in the year, in which the annual clearing of tax advances is performed. Underpayment shall be deducted by the employer from the taxable wage of the relevant employee by the last day of the tax period, in which the annual clearing is performed.

Cash receipts from PIT - dependent activity in one calendar year (t) (from January until December) include the taxes paid from wages related to the period from December in the year (t-1) until November in the year (t).

Due to of the character of PIT - dependent activity, the accrual tax revenue should be calculated as sum of cash receipts from February until January in the next year. In this case, the accrual PIT from dependent activity will be related to wage earned in one calendar year.



The formula for calculation of accrual PIT - dependent activity is:

$$Accrual (t) = cash receipts from February (t) to January (t+1)$$

Cash receipts of PIT – dependent activity (SKK mil.)	
Time period	Cash yield
February (t)	
March (t)	
April (t)	
May (t)	
June (t)	
July (t)	
August (t)	
September (t)	
October (t)	
November (t)	
December (t)	
January (t+1)	
<b>ACCRUAL TAX (t) =</b>	<b><math>\Sigma</math></b>

Disadvantage of this method is that the effect of annual tax clearing could be lost, because the annual clearing impacts the value of accrual tax in the next year.

The annual clearing is realized until the end of March. All effects (overpayments and underpayments) resulted from annual clearing will affect the cash and accrual value of PIT in the next year, not in the year, which these effects are related to. If the legislation does not change every year, these effects should be small, but if it does, the effect could be significant (see box).

***BOX: Example of legislation change and its impact on accrual tax receipts***

*Since 2005, there exists a tax allowance for special purpose savings in Slovakia. It can be applied only in the annual clearing. For the first time it was applied in March 2006. Cash receipts from March to May 2006 were lower because of overpayments from annual clearing of the year 2005. Hence, the accrual tax in 2006 will be lower and accrual tax in 2005 higher, approximately SKK 1.0 billion.*

*Similar example is digressive tax allowance for taxpayer and for spouse, which probably will come into force in 2007. The tax allowance is going to decrease by the formula given by the law. But this decreasing will be taken into account only in annual clearing, not at monthly period. Proposed methodology will increase accrual tax receipts in 2008 by 1.0 billion instead of 2007.*

## 2. Personal Income Tax – Business activity (self-employment)

Personal income tax from self-employment is a tax paid by advance payments. The advances are being paid by persons involved in the craft or small business. The amount of advances as well as the payment maturity (monthly, quarterly, yearly) depends on the last known tax liability. In case of a difference between the sum of advance payments paid by the tax payer within/during the year and the tax liability declared in the tax return, the overpayment or underpayment occurs. This has to be settled up within 40 days after the tax return has been filed. In case that individuals have another income from self-employment and dependent activity (capital gains and others), these individuals do not have to pay advances, but do have to pay the tax from this supplementary income directly when filing the tax return. The personal income tax from self-employment is the sum of tax liabilities from all the above mentioned types of taxpayers.

The tax revenue on the cash basis is the sum of advances in the period starting January and ending in December; the tax settlement and the sanctions (penalties and fines) in the common year. It is important to distinguish between the advances in the first three months, which are paid from the tax liability two years ago and the advances since April till December, which are being paid from the last known tax liability filed in the tax return. The tax settlement (over/under payment) is being reimbursed starting March till July. The Tax Directorate of the Slovak Republic differentiates all the above mentioned types of payments, which makes it possible to aggregate the tax on accrual basis from the payments, which are related to the same year.

$$\begin{aligned}
 \text{Accrual } (t) &= \text{Advances \{from January } (t) \text{ to December } (t)\}} \\
 &+ \text{Settlement \{from January } (t+1) \text{ to December } (t+1)\}} \\
 &+ \text{others}^1 \{ \text{from January } (t) \text{ to December } (t)\}
 \end{aligned}$$

Cash receipts from PIT - self-employment (SKK mil.)				
	advances	tax settlement	others *	SUM
	1	2	3	4=1+2+3
January (t)				
February (t)				
March (t)				
April (t)				
May (t)				
June (t)				
July (t)				
August (t)				
September (t)				
October (t)				
November (t)				
December (t)				
January (t+1)				
February (t+1)				
March (t+1)				
April (t+1)				
May (t+1)				
June (t+1)				
July (t+1)				
August (t+1)				
September (t+1)				
October (t+1)				
November (t+1)				
December (t+1)				
<b>ACCRUAL TAX (t)</b>				<b>Σ</b>

\* amercement, sanctions, receipts from the previous years

In October<sub>t+1</sub> completed data for tax settlement will not be available in the year *t+1*. For the purpose of accrual PIT from self-employment in year *t*, the MoF will predict the value of tax settlement for the whole year *t+1*. Due to this, for correct amount of accrual PIT it would be necessary to revise tax revenue again in April<sub>t+2</sub>. In case, that more taxpayers will file the tax

<sup>1</sup> amercement, sanctions and other payments

return at this time compare to the previous year and/or their tax liability differs markedly from the previous one a considerable inaccuracy may occur.

### 3. Corporate Income Tax

The corporate income tax works the same as the PIT from self-employment, it is being paid by advance payments. The amount of advances as well as the payment maturity (monthly, quarterly, yearly) depends on the last known tax liability. In case of a difference between the sum of advance payments paid by the tax payer within/during the year and the tax liability declared in the tax return, the overpayment or underpayment occurs. This has to be settled up within 40 days after the tax return has been filed.

The tax revenue on the cash basis is the sum of advances in the period starting January and ending in December; the tax settlement and the sanctions (penalties and fines) in the common year. It is important to distinguish between the advances in the first three months, which are paid from the tax liability two years ago and the advances since April till December, which are being paid from the last known tax liability filed in the tax return. The tax settlement (over/under payment) is being reimbursed starting March till July. The Tax Directorate of the Slovak Republic differentiates all the above mentioned types of payments, which makes it possible to aggregate the tax on accrual basis from the payments, which are related to the same year.

$$\begin{aligned} \text{Accrual } (t) = & \text{Advances \{from January } (t) \text{ to December } (t)\} \\ & + \text{Settlement \{from January } (t+1) \text{ to December } (t+1)\} \\ & + \text{others}^2 \text{ \{from January } (t) \text{ to December } (t)\} \end{aligned}$$

Cash receipts from CIT (SKK mil.)				
	advances	tax settlement	others *	SUM
	1	2	3	4=1+2+3
January (t)				
February (t)				
March (t)				
April (t)				
May (t)				
June (t)				
July (t)				
August (t)				
September (t)				
October (t)				
November (t)				
December (t)				
January (t+1)				
February (t+1)				
March (t+1)				
April (t+1)				
May (t+1)				
June (t+1)				
July (t+1)				

<sup>2</sup> amercement, sanctions and other payments

August (t+1)				
September (t+1)				
October (t+1)				
November (t+1)				
December (t+1)				
<b>ACCRUAL TAX (t)</b>				<b>Σ</b>

\* amercement, sanctions, receipts from the previous years

In October<sub>t+1</sub> completed data for tax settlement will not be available in the year *t+1*. For the purpose of accrual CIT in year *t*, the MoF will predict the value of tax settlement for the whole year *t+1*. Due to this, for correct amount of accrual CIT it would be necessary to revise tax revenue again in April<sub>t+2</sub>. In case, that more taxpayers will file the tax return at this time compare to the previous year and/or their tax liability differs markedly from the previous one a considerable inaccuracy may occur.

#### 4. Value Added Tax

VAT is indirect tax, which taxes every sale of goods and services in all phases of production and distribution. VAT is paid by taxpayer, but tax burden is imposed on final consumers.

Within 25 days of the end of a tax period, a taxpayer shall be obliged to file a tax return, and to pay the due tax within the same time limit (E.g. Firm will file a tax return by October 25 but it is related to September. At the same date firm has to pay tax liability). If, during a tax period, a taxpayer becomes entitled to an excess deduction, he shall deduct this excess amount from the due tax in the next tax period. An excess deduction shall mean a positive difference between the total amount of deductible tax and the total amount of tax. If the taxpayer cannot deduct excessive deduction from its own tax obligation in the following taxation period, the tax office shall return the non-deducted excessive deduction or its non-deducted part no later than 30 days after filing the tax return for the taxation period following the taxation period, in which the excessive deduction was created. (Firm will file a tax return for January in February and claim to return an excess deduction. In subsequent tax return for February, which firm will file in March, firm shall deduct excess amount from the due tax. If the excess amount is still higher than tax liability, tax office shall return the difference by end of April.)

$$\begin{aligned}
 \text{Accrual (t)} &= \text{TAX COLLECTION BY TAX OFFICES \{from February (t) to January (t+1)\}} \\
 &\quad - \text{EXCESSIVE DEDUCTION \{from April (t) to March (t+1)\}} \\
 &\quad + \text{TAX COLLECTION BY CUSTOMS \{from January (t) to December (t)\}}
 \end{aligned}$$

Cash VAT (in SKK mill.)				
	Tax collection by tax offices	Excessive deduction (tax offices)	Tax collection by customs	Subtotal
	1	2	3	4=1+2+3
January (t)				
February (t)				
March (t)				
April (t)				
May (t)				
June (t)				
July (t)				
August (t)				
September (t)				

October (t)				
November (t)				
December (t)				
January (t+1)				
February (t+1)				
March (t+1)				
<b>ACCRUAL VAT (t)</b>				<b>Σ</b>

**5. Excise duties**

Excise duties are indirect taxes, which tax only selected goods. There are currently excise taxes on mineral oils, alcohol, wine, beer and tobacco products in the Slovak Republic. Excise duties are paid by producer or distributors; however tax burden is imposed on final consumers.

The rules of paying taxes are the same for all kinds of excises. A taxpayer, operating within the territory of EU25, is obliged to file a tax return within 25 day after tax period (tax period is usually one month). The taxpayer is also obliged to pay the due tax within the same time limit. Introduction of tax warehouses eliminated the amount of tax reimbursement that's why it is not necessary to break down cash collection further. The effect of tax reimbursement is negligible compared to the excessive deduction in VAT. If goods are imported from the territory which is not a territory of EU25 (third countries), an importer is obliged to pay excise duty immediately.

$$\text{Accrual (t)} = \text{Tax collection from tax return \{from February (t) to January (t+1)\}} \\
 + \text{Tax collection on imports \{from January (t) to December (t)\}}$$

Cash receipts from Excise duties (SKK mil.)			
	Cash collection (tax returns)	Cash collection (import from third countries)	SUM
	1	2	3 = 1+2
January (t)			
February (t)			
March (t)			
April (t)			
May (t)			
June (t)			
July (t)			
August (t)			
September (t)			
October (t)			
November (t)			
December (t)			
January (t+1)			
<b>ACCRUAL EXCISES (t)</b>			<b>Σ</b>

**6. Social Security Contributions**

There are 5 types of income in the social security system. The rules for accrual recording are the same for Social Insurance Agency, Health Insurance Companies and National Labour Office<sup>3</sup>. The rules are very similar to PIT from dependent activity because social contributions are paid from wages.

Accrualisation technique of social contributions – time-adjusted cash	
Social Insurance Agency (SIA) / Health Insurance Companies (HIC)/National Labour Office (NLO)	
Types of income :	Technique of time-adjustment :
1. Social Contributions from economically active persons	accrual income (m) = cash receipts (m+1)
2. Outstanding social contributions	accrual income (m) = cash receipts (m)
3. Contributions on behalf of certain groups	accrual income (m) = cash receipts (m)
4. Internal transfer within SIA	accrual income (m) = cash receipts (m)
5. Penalties	accrual income (m) = cash receipts (m)

*note : (m) - month*

### 1. Social Contributions from economically active persons:

Social contributions are paid by employees, employers and self-employed. Cash receipts of social contributions need to be time-adjusted so that the cash is attributed when the activity took place to generate the liability. The time difference between the activity and cash receipt of contributions is one month. Annual social contributions on accrual basis in year (t) are equal to the sum of cash receipts from February (t) to January (t+1). This category includes also voluntary insured persons.

$$\text{Accrual (t)} = \text{cash receipts from February (t) to January (t+1)}$$

### 2. Outstanding social contributions:

Outstanding social contributions receipts are receipts of contributions due in previous years (i.e. are not related to current year). As Ministry of Finance does not have information regarding the period, that are the receipts of outstanding contributions related to, we propose not to time-adjust these receipts.

$$\text{Accrual (t)} = \text{cash receipts from January (t) to December (t)}$$

### 3. Contributions on behalf of certain groups:

When government pays social and health contributions on behalf of legally defined groups of population (unemployed, dependent children etc.), there is no time difference between accrual incomes and cash receipts, because government pays in the same period as the liability arises. Thus there is no need for time-adjustment of receipts stemming from the contributions paid by state to social security funds.

$$\text{Accrual (t)} = \text{cash receipts from January (t) to December (t)}$$

### 4. Internal transfer (only SIA):

Social Insurance Agency pays old-age insurance on behalf of disabled persons what is de facto an internal transfer within SIA. Similarly as in the case of government paying on behalf of certain groups, there is no time difference between accrual incomes and cash receipts.

$$\text{Accrual (t)} = \text{cash receipts from January (t) to December (t)}$$

<sup>3</sup> National Labour Office was abolished as of 1.1.2004.

### 5. Penalties:

Similarly as in the case of outstanding social contributions receipts, Ministry of Finance does not have information regarding the period, that are the receipts of penalties related to. Thus, we propose not to time-adjust receipts of penalties.

### Disadvantage of using time-adjusted cash:

In September 2006, the annual clearing of 2005's advances for the account of health insurance (annual clearing) took place for the first time in Slovak history (there is no annual clearing for social insurance in Slovakia). According to the latest information, the result of the annual clearing will be positive for General Government. It means, that people has to pay off their underpayments. Thus, when using time-adjusted cash, accrual incomes in 2006 will be overvalued and accrual income in 2005 undervalued. We do not expect significant year-on-year change of underpayments, therefore the problem of annual clearing exists only in 2005/2006.

Social contributions – time-adjusted cash						
	Social Contributions	Outstanding social contributions	Government (paid from state budget)	Internal transfer (within SIA)	Penalties	SUM
	1	2	3	4	5	6 = 1+2+3+4+5
January (t)						
February (t)						
March (t)						
April (t)						
May (t)						
June (t)						
July (t)						
August (t)						
September (t)						
October (t)						
November (t)						
December (t)						
January (t+1)						
<b>Social contributions (t)</b>						<b>Σ</b>