



# Economic and Social Council

Distr.: General  
07 April 2014

Original: English

---

## Economic Commission for Europe

### Conference of European Statisticians

#### Group of Experts on National Accounts

##### Thirteenth session

Geneva, 6-9 May 2014

Agenda item 7

#### **Globalization and national accounts: accounting for global production**

## **Quantification of property income of non-residents**

**Prepared by Czech Statistical Office**

### *Summary*

The paper presents the experience of the Czech statistical office in implementation of the System of National Accounts 2008 / the European System of National and Regional Accounts 2010 and the sixth edition of the Balance of Payments and International Investment Position Manual. It mainly addresses the challenges in ensuring conceptual compliance between the two standards due to the recording of dividends arising from the hidden economy and reinvested earnings on direct foreign investment quantified based on business and national accounting principles.

## I. Introduction

1. Implementation of the System of National Accounts 2008 (2008 SNA) and the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) is widely declared as bringing in the full conceptual compliance. However, is this conceptual compliance achievable in practice? Two examples of the current Czech practice show that the full compliance will be very difficult to reach because some important inconsistencies between National Accounts and Balance of Payments approaches will follow: (1) dividends arising from the hidden economy, and (2) reinvested earnings on direct foreign investment quantified based on business and national accounting principles.

## II. Dividends arising from the hidden economy

2. According to our estimates, the non-observed economy represents almost 12% of gross domestic product (GDP) in the Czech Republic. The biggest part of this economy comprises the intentional misreporting of officially reported data, referred to under code N6 of Eurostat tabular approach types of non-exhaustiveness. This is a deliberate misreporting of data reported both by natural persons as well as legal business entities.

3. The estimates for natural persons are based on the balance of work, comparing labour productivity and rates of over-declared expenditure and under-declared revenues in official surveys. While for the legal persons they are based on the rates only. These rates are derived from an anonymous enquiry among accountants and tax advisers about their opinion on the degree of overestimation of expenditure and the under-estimation of incomes for different types of units, differentiated by size and activity. Now we use the results from the latest survey conducted in the year 2009 (see table 1). A similar survey was made also in 1999, then in 2006.

Table 1  
Rates of distortion in officially reported data by NACE

<i>Revenues</i>								
<i>Number of employees/ CZ-NACE</i>	A+B	D	F	G	H	I	K	M+N
<i>1-19</i>	6,67	2,78	9,59	4,26	21,31	1,25	0,68	6,77
<i>20-99</i>	1,80	0,20	7,23	0,35	1,75	1,77	0,14	1,43
<i>Material</i>								
<i>Number of employees/ CZ-NACE</i>	A+B	D	F	G	H	I	K	M+N
<i>1-19</i>	4,50	2,88	7,61	4,26	5,92	1,65	0,41	4,09
<i>20-99</i>	0,45	0,83	5,45	0,23	1,15	1,35	0,17	1,65
<i>Services</i>								
<i>Number of employees/ CZ-NACE</i>	A+B	D	F	G	H	I	K	M+N
<i>1-19</i>	1,50	2,53	8,63	4,26	6,79	4,30	0,66	4,09
<i>20-99</i>	0,45	1,17	7,39	0,14	0,70	2,02	0,40	3,99
<i>Non-reported wages</i>								
<i>Number of employees/ CZ-NACE</i>	A+B	D	F	G	H	I	K	M+N
<i>1-19</i>	4,47	1,68	8,61	9,33	15,12	14,10	2,11	4,99
<i>20-99</i>	0,45	2,00	9,13	4,14	7,75	11,00	1,66	5,16

4. On the basis of these data, we estimate the undeclared income, overestimated intermediate consumption and undeclared wages, or black work. The estimate is made for the small and medium units only, i.e. not for the big companies, which have a compulsory audit of their economic results. When dealing with the procedures of our estimates of the hidden economy we cannot avoid the question "Is there also any distorting of business accounts by companies owned by non-residents?" The reality is that foreign owners quickly adapt to local customs. And also, if the economic environment in the host country allows it there is no reason why not to do it, and also when they do it in their home country.

5. The calculations therefore include all private small and medium scale companies without any confirmation who is owner. The resulting income appropriated by their owners (resident and non-resident households) is in the form of "undeclared" dividend. However, this is a reason for significant discrepancy between the principles of recording in national accounts and balance of payments. While in the national accounts is a priority completeness of capture, the balance of payments emphasises targeting. To identify the dividends arising from hidden economy by country of origin of their owners does not make sense. The emphasis on territorial identification of flows is a reason why such dividends are not explicitly recorded in the balance of payments, and so there is a serious discrepancy between the figures from balance of payments and national accounts.

Table 2

**Deliberately misreporting, Czech Republic, 2011, (CZK, bill)**

		<i>Producers (legal units)</i>	
		<i>S.11002</i>	<i>S.11003</i>
P.1	Output	50,9	8,4
P.2	Intermediate consumption	-30,4	-6,1
D.11	Wages and salaries	15,4	3,0
B.2	Operating surplus	66,0	11,4
D.421	Dividends	66,0	11,4
B.6	Disposable income	0,0	0,0

6. Figures for the year 2011 can serve as an example. Our estimate of intentional misreporting of the reported data (N6) for legal entities and their recording in national accounts is shown in the Table 2. The total discrepancy between "Current external balance (B.12)" by BoP (CZK 104.0 billion) and by national accounts (CZK 133.7 billion) amounted to 29.7 billion CZK this year. The discrepancy arising from hidden economy (not declared dividends) represents almost half of total discrepancy.

### III. Reinvested earnings on foreign direct investment

7. Reinvested earnings on foreign direct investment (RIE) quantified based on business and national accounting principles give different results. The current method of the RIE estimation in the Czech Republic is directly based on the information from business accounting without any further adjustments. Under the main revision of the Czech national accounts, joined with the implementation of the European System of National and Regional Accounts 2010 (ESA 2010), the Czech statistical office introduced new method based on national accounts data.

8. The current calculation is provided by Czech National Bank using direct sample survey without grossing up. The population of the survey consists of 4500 reporting units. On each of them the calculation is applied by next formula: RIE = Profit after taxation – extraordinary profit – (Dividends – extraordinary Dividends)

9. All information is based on business accounting principles (Czech or International Financial Reporting Standards (IFRS)). As further adjustments are not applied this approach is not consistent with national accounts compiled by the Czech Statistical Office. Main methodological differences are definition of profit (business accounting (BA) profit includes financial profit), consumption of fixed capital vs. amortization by national legislation, excluding of holding gains and other conceptual differences.

10. The new approach introduced by the Czech Statistical Office directly follows the manual ESA 2010: § 4.64: Reinvested earnings on foreign direct investment (D.43) are equal to the operating surplus of the foreign direct investment enterprise, plus any property incomes or current transfers receivable, minus any property incomes or current transfers payable, including actual remittances to foreign direct investors and any current taxes payable on the income, wealth, etc., of the foreign direct investment enterprise.

11. This definition in fact corresponds to the balancing item Net disposable income (B.6n) in both non-financial and financial corporation sectors (S.11 and S.12).

12. Calculation for non-financial corporations (S.11) is made in three steps: (1) calculation of the net disposable income based on business accounts data, (2) calculation of the approximated share of foreign direct investment on net disposable income (ASFDI) and (3) application of the ASFDI on final net disposable income including all conceptual and exhaustiveness' adjustments. A numerical example for sub-sector foreign controlled non-financial corporations (S.11003) follows.

Box 1

**Calculation for non-financial corporations of sub-sector S.11003**

The 1st step: At first the net disposable income is calculated for total and for "foreign direct investment (FDI)" part of individual units based on business accounts data sources. The "FDI net disposable income" is calculated by individual shares of FDI in total equity of individual units based on SBS data source. Both, total and "FDI" net disposable income are sum of disposable incomes calculated for individual units as follows:

$$B.6n = (P.1 - P.2 - D.1 - D.2 + D.3 + D.4r - D.4u - D.5u + D.7r - D.7u - K.1] * (\% \text{ of share of foreign owners})$$

B.6n for total S.11003 = 126.344 mill. CZK

B.6n for "FDI part" in S.11003 = 84.446 mill. CZK

The 2nd step represents a calculation of the approximated share of net disposable income derived from FDI (ASFDI) as sum of individual shares of foreign owners multiplied by the share of "FDI net disposable income" on total net disposable income by appropriate subsector:

$$ASFDI (S.1xxxx) = \text{sum} (\% \text{ of share of foreign owners} \times B.6n \text{ of FDI unit}) / B.6n(S.1xxxx)$$

$$ASFDI(11003) = 84.446 / 126.344 = 0,668$$

The 3rd step: Then approximated share of FDI is applied on the final net disposable income including all NA adjustments (85.984 mill.CZK) which ensure that indicators are fully consistent with ESA standards and the whole System of National Accounts.

$$D.43 = ASFDI \times B.6n \text{ (including all NA adjustments)}$$

$$D.43 (11003) = 0,668 \times 85.984 = 57.463 \text{ mill. CZK}$$

13. Calculation for financial corporations (S.12) is similar like for non - financial corporations with two exceptions: (1) there are differences in calculation of ASFDI due to differences in data sources and (2) for pension funds from the "FDI net disposable income"

has to be subtracted the change in pension entitlements (D8), so there is used “FDI net savings”

Table 3

**Reinvested earnings by new and current method, Czech Republic, 2011, (CZK, bill)**

<i>Institutional sector</i>		<i>ASFDI</i>	<i>New approach</i>	<i>Current approach</i>	<i>Difference</i>
		(%)	<i>mill.CZK</i>	<i>mill.CZK</i>	<i>mill.CZK</i>
S.11001	Public non-financial corporations	0,09%	0	464	-464
S.11002	National private non-financial corporations	-16,46%	-740	-5 905	5 165
S.11003	Foreign controlled non-financial corporations	66,80%	57 463	32 932	24 531
<b>S.11</b>	<b>Non-financial corporations</b>	<b>X</b>	<b>56 723</b>	<b>27 491</b>	<b>29 232</b>
S. 122	Deposit-taking corp. except the central bank	75,00%	30 476	10 414	20 062
S. 124	Non-MMF investment funds	-10,00%	-192	-71	-121
S. 125	Other financial intermediaries, except IC and PF	42,70%	8 871	-8 785	17 656
S. 126	Financial auxiliaries	59,60%	5 068	366	4 702
S. 127	Captive financial institutions and money lenders	64,00%	7 938	21 621	-13 683
S. 128	Insurance corporations	84,00%	-3 103	-7 139	4 036
S. 129	Pension funds	26,00%	184	1 185	-1 001
<b>S.12</b>	<b>Financial corporations</b>	<b>X</b>	<b>49 242</b>	<b>17 591</b>	<b>31 651</b>
<b>S.1</b>	<b>Total economy</b>	<b>X</b>	<b>105 965</b>	<b>45 082</b>	<b>60 883</b>

14. The results calculated by new method and differences compare to old method shown in table 3 are preliminary and will be refined during ongoing compilation work on main revision of national accounts. We expect that the differences will be higher according to ESA 2010 due to new conceptual adjustments, like capitalisation of research and development and others.

15. New results ensure not only compliance with ESA standards but also follow the real meaning of reinvested earnings from FDI. Previous calculation caused that Czech corporations seemed be richer than in reality. Reinvested capital increased expression of net worth value of these corporations instead of increasing the value of cross-border shares.

16. The new approach will include all necessary adjustments to achieve consistency with ESA 2010 standard but these calculations could not be accepted by Czech National Bank for compiling of Balance of Payment because of Eurostat's requirement (BoP) - mainly due to absence of direct territorial structure. So, it will be next reason of relatively big differences between National Accounts and Balance of Payment figures in future.