

MARGINS ON BUYING AND SELLING TRANSACTIONS AND THEIR CAPTURING IN THE SYSTEM OF NATIONAL ACCOUNTS

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Abstract

Margins on buying and selling transactions form one part of this complex system, apart from e.g. transport or trade margins. These financial services in acquiring and disposing of financial assets and liabilities in financial markets constitute an important role in output of financial institutions. Up to now, the Czech Statistical Office recorded only small part of “financial” margins in national accounts, but in the next revision being published in June 2020 the system should include all types.

The aim of this paper is to develop missing methodology of capturing margins and demonstrate all difficulties connected with their estimation. Preliminary results are deeply analysed and also included.

Our approach is affected by the fact that in the Czech Republic no suitable database with detailed information about transactions is available. That is why simplifications and assumptions needed to be formulated in order to obtain the best possible results. The paper contains time series of cross-border margins, experimental estimates of domestic margins on transactions with securities, shares, investment fund shares and foreign currencies.

Keywords: *National accounts, margins on buying and selling transactions, Czech Statistical Office*

JEL Codes: *E44, G20, O16*

1. Introduction

This paper deals with margins on buying and selling transactions with financial assets and their capturing in the system of national accounts. The system of national accounts is a complex model of total economy that tries to describe relations among economic entities as well as flows of money. The whole system consists of several various accounts that characterise the economic process from production and intermediate consumption through generation and redistribution of income up to financial account and balance sheets. Each economic activity should be recorded in national accounts on the corresponding accounts with

all consequences it has. All the tables (accounts) are published worldwide by official statistics, i.e. national statistical institutions (hereinafter NSIs). The system is in detail described, explained and standardised in manuals of national accounts – in European System of Accounts ESA 2010 (European Commission and Eurostat, 2013) in the European Union or in System of National Accounts SNA 2008 (European Commission *et al.*, 2009) in other countries.

Although the national accounts cover plenty of crucial information, items and phenomena, the far most important, discussed and cited are probably the gross domestic product (hereinafter GDP) and gross national income (hereinafter GNI). Giovannini (2008, p. 162) even states, that “of all the variables in the national accounts, the most prominent is gross domestic product (GDP)”. Both indicators assess performance of the economy, GDP using total output of a country produced by both residents as well as non-residents (Kramulová and Musil, 2013), GNI considering also “net primary incomes (mainly dividend, interests and reinvested earnings) with non-residents” (Vltavská and Sixta, 2015, p. 107). Margins on buying and selling transactions affect the final value of GDP as well as of GNI.

How is a margin defined? Business dictionary (2018) shows six different definitions, see Figure 1. The easiest and broadly known is probably the definition under number 2 – “difference between the cost price and selling price of a product”. When we focused on this topic, we would rather fall into societal field (see Degenshein, 2017).

Figure 1: Definitions of the term “margins” from Business dictionary.

1. Banking: (1) Difference between the market value of a collateral and amount of the loan advanced against it. Also called haircut. (2) Percentage added to a market rate of interest, or subtracted from a market rate of deposit, to provide a return to the bank.
2. Commerce: Difference between the cost price and selling price of a product.
3. Commodity trading: Difference between the spot price and forward price quoted for a commodity.
4. Currency trading: Difference between the spot price and forward price quoted for a currency.
5. Futures trading: Security deposit that buyers and sellers must place with the clearing house to guaranty they will perform as agreed (to make or take the delivery) on or before the futures contract's expiration date.
6. Securities trading: Difference between the amount of loan advanced by a stockbroker to a speculator and the current value of the securities deposited by him or her with the stockbroker as collateral.

Read more: <http://www.businessdictionary.com/definition/margin.html>

Source: Business dictionary (2018).

We will turn to margins in national accounts. ESA 2010 includes more types of margins – the main ones are trade and transport margins in the system of input-output tables (for details see also Streicher and Stehrer, 2015), then merchanting margins in services in export and import (for details see also Broussolle, 2015), interest margins (for details with examples see also Cullinane, 2010, Dietrich, 2016 or Fungáčová and Poghosyan, 2011) connected with FISIM (Financial Intermediation Services Indirectly Measured) and finally margins for the provision of financial services, called sometimes as margins on buying and selling transactions (see e.g. International Monetary Fund, 2014) or “financial” margins or financial services in acquiring and disposing of financial assets and liabilities in financial markets.

Although the margins on buying and selling transactions were defined even before ESA 2010, up to now, the Czech Statistical Office (hereinafter CZSO) has recorded only small part

of “financial” margins in national accounts. As it is quite a complicated topic, Eurostat has recently been very active in investigation about proper recording of margins in national accounts throughout Europe. This topic is very up-to-date because CZSO is now developing methodology for estimation of these margins and will include them in big (extraordinary) revision in June 2020. Apart from ordinary revisions that are done each year and cover mainly changes due to better data sources, irregularly occur extraordinary revisions that are carried out usually due to changes in methodology or standard of national accounts.

The aim of this paper is to develop missing methodology of capturing margins and demonstrate all difficulties connected with their estimation. It starts with decision about national accounts sectors of margin producers, items that are affected or data that you need but cannot obtain. Preliminary results are deeply analysed and also included.

The paper is organized as follows: Section 2 presents different types of financial services defined in ESA 2010. Section 3 provides information about institutional sectors and items that are relevant for margins on buying and selling transactions. Section 4 introduces theoretical background and discussion about methodology in estimation of margins. In section 5 we discuss difficulties and obstacles we faced during our methodology development. Section 6 shows preliminary results of estimates in the Czech national accounts and different approaches that needed to be applied. Section 7 is devoted to conclusion.

2. Financial services

Corporations covered by the system of national accounts could be divided into two main groups: “units mainly providing financial services and those mainly providing goods and other services” (United Nations Statistics Division and European Central Bank, 2014, p. 44). Units providing financial services are financial corporations, classified in sector of financial institutions in the system of national accounts; their production is “the result of financial intermediation, financial risk management, liquidity transformation or auxiliary financial activities” (United Nations Statistics Division and European Central Bank, 2014, p. 44).

Financial corporations are not all the same; there are a lot of varied units (e.g. monetary institution, investment funds, holding companies, insurance companies) for which it is not possible to estimate the output using one universal method. ESA 2010 (European Commission and Eurostat, 2013, p. 63) defines three types of financial services:

- a) “financial intermediation (including insurance and pension services);
- b) services of financial auxiliaries; and
- c) other financial services.”

“Financial services may be paid for directly or indirectly. Some transactions in financial assets may involve both direct charges and indirect charges. Financial services are provided and charged for in four main ways”:

- a) “Financial services provided for direct payment” – in form of fees and commissions are usually implicitly included in profit and loss statement.
- b) “Financial services paid for through loading interest charges” – marked as FISIM, cannot be directly obtained from data sources; estimation is made under Council Regulation (EC) No 448/98 (Council of the European Union, 2003).
- c) “Financial services in acquiring and disposing of financial assets and liabilities in financial markets” represent indirect charges not directly included in business accounting system of corporations. Estimation method is not commonly set up by ESA 2010. Developing of method for estimation in the Czech national accounts is the main topic of this article.
- d) “Financial services provided in insurance and pension schemes, where the activity is financed by loading insurance contributions and from the income return on

savings” are estimated as model calculation under ESA2010, see chapter 16 (European Commission and Eurostat, 2013, p. 63).

All above mentioned parts of output should be recorded in the system of national accounts. For example if a NSI ignores the margins, the value of output of financial services arising from these transactions would be understated (United Nations Statistics Division and European Central Bank, 2014, p. 105) what subsequently leads to an understatement of GDP and GNI estimates.

3. “Financial” margins – institutional sectors and financial assets

Whereas other types of margins are cited in scientific papers, margins on buying and selling transactions are mainly subject of official statistics and are discussed among NSIs or national central banks (hereinafter NCBs). These financial services in acquiring and disposing of financial assets and liabilities in financial markets constitute an important role in output of financial institutions. Financial institutions (labelled S.12) form one of six main institutional sectors in the system of national accounts, apart from non-financial corporations (S.11), general government (S.13), households (S.14), non-profit institutions serving households (S.15) and rest of the world (S.2). They are further divided into nine institutional sub-sectors, see Table 1. Some other sectors are also divided, for details see European Commission and Eurostat (2013, p. 31).

Table 1: Nine sub-sectors of financial institutions (S.12)

Sub-sector	Label
Central bank	S.121
Deposit-taking corporations except the central bank	S.122
Money market funds (MMF)	S.123
Non-MMF investment funds	S.124
Other financial intermediaries, except insurance corporations and pension funds	S.125
Financial auxiliaries	S.126
Captive financial institutions and money lenders	S.127
Insurance corporations	S.128
Pension funds	S.129

Source: adapted from European Commission and Eurostat (2013, p. 511 and following).

One of our first tasks was to select institutional sectors (see Table 1) and financial assets (see Table 2) that are affected by “financial” margins. The Financial Handbook (United Nations Statistics Division and European Central Bank, 2014) suggests in paragraph 3.126 as producers of margins three financial sub-sectors: S.122 (banks), S.125 (security and derivative dealers) and S.126 (foreign exchange bureaux). From user side, volume of margins should be according to paragraph 3.128 allocated in national accounts into final household consumption expenditures (FHCE) in case of S.14, into intermediate consumption in case of other residential sectors (S.11, S.12, S.13 or S.15) and into export of services for S.2. This approach is similar to the case of FISIM, for more details see Section 4.

Concerning financial assets (see Table 2) that should be covered, ESA 2010 in paragraph 3.73 proposes to apply margins on securities (AF.3), equities (AF.51), investment fund shares (AF.52) and foreign currencies (AF.21). The Financial Handbook (United Nations Statistics Division and European Central Bank, 2014, p. 105) recommends in Chapter 3 to estimate

margins for “foreign exchange, shares, debt securities – such as bills and bonds – financial derivatives and investment fund shares”, i.e. only AF.71 in addition to what ESA proposes.

Table 2: Financial assets in national accounts

Financial item	Label	Financial item	Label
Monetary gold and SDRs	AF.1	Investment fund shares/units	AF.52
Monetary gold	AF.11	Money Market Fund shares/units	AF.521
SDRs	AF.12	Non-MMF investment fund shares/units	AF.522
Currency and deposits	AF.2	Insurance, pension and standardised guarantee schemes	AF.6
Currency	AF.21	Non-life insurance technical reserves	AF.61
Transferable deposits	AF.22	Life insurance and annuity entitlements	AF.62
Inter-bank positions	AF.221	Pension entitlements	AF.63
Other transferable deposits	AF.229	Claims of pension funds on pension managers	AF.64
Other deposits	AF.29	Entitlements to non-pension benefits	AF.65
Debt securities	AF.3	Provisions for calls under standardised guarantees	AF.66
Short-term	AF.31	Financial derivatives and employee stock options	AF.7
Long-term	AF.32	Financial derivatives	AF.71
Loans	AF.4	Options	F.711
Short-term	AF.41	Forwards	F.712
Long-term	AF.42	Employee stock options	AF.72
Equity and investment fund shares/units	AF.5	Other accounts receivable/payable	AF.8
Equity	AF.51	Trade credits and advances	AF.81
Listed shares	AF.511	Other accounts receivable/payable, excluding trade credits and advances	AF.89
Unlisted shares	AF.512		
Other equity	AF.519		

Source: adapted from European Commission and Eurostat (2013, p. 521 and following).

4. Methodology

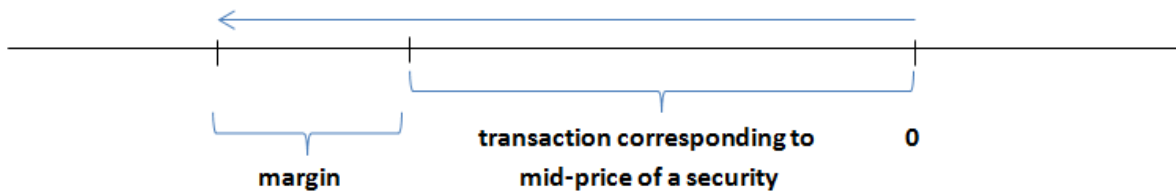
It should seem that the best model for computation of margins from trade with securities would be similar financial service indirectly measured, that is FISIM. In both cases the main effort of financial institutions is to increase their revenues in a way that is not at first sight obvious and is especially for a common client complicated to assess total costs or compare different options. The problem of this hidden costs impacts negatively not only decision-making of consumers, but also significantly complicates the attempts of their accurate measurement.

Within the effort to find the optimal estimation method of margins we tend to find inspiration in computation of FISIM. Nevertheless, because of partial dissimilarities of both services (the main one is, that adjustment of FISIM relates to interest from deposits and loans and margins are derived from transactions with securities), we will face different obstacles.

When thinking about estimation of margins, we can mention a parallel with FISIM, where interest is adjusted in order to correspond to real value of money i.e. internal rate of return (IRR). In case of margins, transactions should be adjusted to correspond to market value of a security.

Let us inspect this theory firstly from the position of margin producer. Security dealer sells a security and he adds a margin to its price as a commission for its services. Sell price (ask price) is a sum of security market value and margin determined by the security dealer. Figure 2 illustrates the transaction in this case.

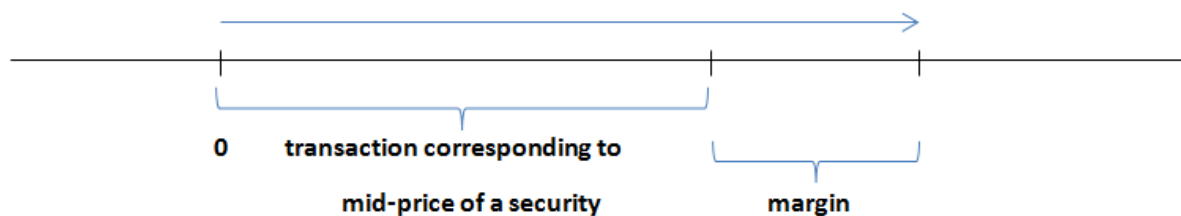
Figure 2: Transaction with securities from intermediary point of view / corresponding money transactions in case of security purchase by the buyer.



Source: Own elaboration.

Figure 2 shows that in case of security sell by intermediary, his transaction is negative, because he loses the security. This negative is made deeper by the margin. If we wanted the transactions to correspond to market value of securities, it would be necessary to add to the transaction also the margin in absolute value and correspondingly to increase the output. This transaction is of course apparent as mirror image at the side of a buyer, where it is necessary contrarily in absolute value to subtract the margin and increase the intermediate consumption (or final household consumption expenditure), see Figure 3.

Figure 3: Transaction with securities from buyer point of view/ corresponding money transactions in case of security sell by the intermediary.



Source: Own elaboration.

Nevertheless, it is also crucial to assess, how the transaction should be valued in national accounts. The paragraph 5.156 (European Commission and Eurostat, 2013, p. 144) introduces: “Transactions in shares in circulation are recorded at their transaction value. When the transaction value is not known, it is approximated by the stock exchange quotation or market price for listed shares and by the market-equivalent value for unlisted shares.” From the cited paragraph it is obvious, that the transaction can be recorded in national accounts in value corresponding to payment for the security. This would be in line with above mentioned changes. But in some cases the transaction can be valued according to market value of a security and in such a case the adjustment would be meaningless with reflect to the fact that our aim is to have transactions with securities in national account in market value without transactions connected with payment for particular service (a margin). Nevertheless, this step is despite all aforementioned reservations essential due to balancing the whole adjustment. So, it is necessary to determine, how the adjustment will be entered in the national accounts.

Up to now we turned our attention only to security transactions. Figure 3 also shows the corresponding money transactions in case of security sell by the intermediary. It is evident, that the intermediary gets higher payment than it would comply with the market value of this security. Similar situation arises by the buyer, who in the contrary pays more than market value (also the margin), this is shown in Figure 2.

Considering money transactions there is no problem with their valuation, so it seems that there is necessary only to subtract the margin from the transaction. However, it is essential to realise, that in national accounts it is not possible to distinguish if the money flows were spent on the security or on the service. Potential subtraction would be a mistake and would lead to distortion and reduction of evidence in national accounts. This consideration will be also important in estimation of margins in the field of services of exchange bureaux, which needs a special approach.

Production of margins in this field takes part only in the sub-sector S.126 (for institutional sectors see Table 1). We neglect non-bank exchange bureaux, because they realize only 2–3% of exchanges. The main principal is to charge fees for the services provided by exchange bureau when exchanging foreign currency. These fees are again hidden in offered exchange rate that is not equal to market exchange rate. It can be even dramatically different; we can point out documented cases of exchange with the exchange rate 15 CZK/EUR.

We can say that currency is also a security and according to this statement the approach will be the same. But in the system of national accounts these transactions are captured as AF.2 (see Table 2) and though a special approach is needed. As it was already mentioned above – in case of money flows you must not do any adjustment due to margins.

The only thing which has to be solved is allocation of margins produced in S.126. We have no information about who exchanges. But we suppose that foreign currencies are bought only by S.14, so the whole production coming from these transactions will be allocated in their final consumption (FHCE). On the other side we suppose that the foreign exchange bureaux buy foreign currencies only from S.2 and in this case produced margin will be exported. We omit other sectors such as S.11, because we expect, that they are able to reach better exchange rate than S.14 with almost no margin included.

5. Difficulties and obstacles (data)

Although ESA 2010 define in paragraph 3.73 (European Commission and Eurostat, 2013, p. 64) financial services consisting of acquiring and disposing of financial assets and liabilities in financial markets, there is no more specific description, how to estimate these margins.

The best way under the handbook of United Nations Statistics Division and European Central Bank (2014, p. 105) is “to develop a securities database capturing each transaction in the financial asset together with the bid and offer prices so that it can calculate the margin for each transaction”. But in practise such a database doesn’t exist and creating it is impossible, too costly and also badly feasible for NSI.

Starting situation is that no source of best practice from Eurostat or other NSIs exists. Each country should elaborate so called GNI inventory, i.e. procedure of step-by-step estimation of total GNI. In all available documents up to now (12 countries in April 2018) no evidence of “financial margins” is present. It is a question if it would be truly useful, because various countries have different conditions at the market, different data available and can be able to use various estimation methods. During March 2018 all 28 EU countries were surveyed in order to get comprehensive information about financial services in acquiring and disposing of financial assets and liabilities in financial markets.

From Table 3 we can see aggregated results of EUROSTAT questionnaire on financial services. We can point out, that there are imperfections in this field almost by all EU

countries. These were invited to bring the financial services in line with the manual ESA 2010. It is therefore probable, that EUROSTAT will focus in the following months deeply on this topic.

Table 3: Overview of the country practices concerning services associated with the acquisition and disposal of financial assets and liabilities (ESA2010 paragraph 3.73)

Question	Yes	Partly	No	N/A	No answer
Output from trading financial assets reported to be included in GNI?	13	6	6	0	3
Output derived from a model using value of transactions and an average percentage margin?	0	2	18	5	3
Margins deemed to be explicitly included in the source item?	16	0	3	6	3
Does the category in the source used to calculate output explicitly refer to “margin” or “spread”?	1	2	13	9	3
Adjustments to the source item made?	0	1	15	8	4
Adjustments made on the use side to reflect the consumption of services associated with trading financial assets?	11	0	7	6	4

Source: adapted from European Commission and Eurostat (2018).

The other possible obstacle is unavailability of data. You simply do not have data you need. This problem can have more forms. You do not have data in such a time series you need, so often you need, in the form you need or no one can give you the data you need. Let us show an example. The task (now, in the year 2018) is to estimate “financial” margins of exchange bureaux in the Czech Republic for the whole time series Czech national accounts are published (i.e. since 1993), if possible in quarterly periodicity. If the necessary assumptions are formulated, there could be the chance to estimate let’s say all quarters of the year 2017. But what is the situation like with the estimation of older years?

The Figure 1 introduced the definitions of margins. Using Japanese case (Takeda, 2013) we can formulate an equation (1) for calculation of margins.

$$\text{Margins} = \text{Transaction volume} * \text{Spreads (as a ration to mid - price)} \quad (1)$$

It means that we need for estimation of margins transactions and spreads, the assumptions relate to both parts of the equation. Firstly we have some requirements on data about buy price; sell price and also mid-price. Mid-price is for simplicity defined as the middle between buy and sell price (or alternatively bid and ask) as in equation (2), because usually the “real” mid-price is not known. The mid-price is then used for calculation of the spread according to equation (3).

$$\text{Mid - price} = \frac{\text{bid} + \text{ask}}{2} \quad (2)$$

$$\text{Spread} = \frac{\text{ask} - \text{mid}}{\text{mid}} \quad (3)$$

But secondly we have other requirements also on data about transactions. Not in all cases we even have the transactions and sometimes we have to replace it by another indicator, e.g. transaction as closing balance less opening balance.

Another important requirement in this field is a necessity of a narrow cooperation between NSI and NCB. The difficulty may occur when these two institutions do not communicate; fortunately this is not the case of the Czech Republic. CZSO and Czech National Bank (CNB) cooperate on a long-term basis in both financial accounts and balance of payment / international investment position areas. Margins are then the result of both sides according to a joint methodology.

6. Preliminary results – first estimates in the Czech national accounts

Due to data limitations and various types of financial assets different approaches had to be used, what we introduced in previous sections. As we are in the first year of our grant, we have so far just first preliminary results for margins. All results would be impossible without perfect cooperation with our colleagues from CNB. We can divide the results into three categories.

Firstly, we can present export and import of margins on securities, shares and investment fund shares. This part is included in Czech national accounts already a longer time. Secondly, new estimates of domestic margins on securities and shares are newly available. And finally, the first estimates of margins on foreign currencies are at our disposal. Let us show the results.

6.1. Export and import of margins on securities, shares and investment fund shares

Calculation of cross-border margins is based on two items sourced from the CNB – on portfolio investment and foreign exchange reserves hold by the CNB (namely sub-item foreign securities as a part of reserve assets). From these two sources the CNB gets export of services (i.e. purchase or sale of domestic securities by non-residents) and import of services (i.e. purchase or sale of foreign securities by residents). “The basis for the estimation procedure is net monthly purchase/sale of each kind of security on a market in a reference period (month). Each financial market has its own (percentage) spread assigned.” (European Commission and Eurostat, 2018, p. 21). The spread is computed as transaction rate less mid-rate, compare equation (3). “The estimation of spread is based on supplement data provided by Financial market supervision by the CNB” and is consulted with CNB dealing centre. “Estimated spreads are applied to purchases and sales of securities by instrument and territory of an issuer.” (European Commission and Eurostat, 2018, p. 21).

Table 4 below shows export and import of margins on securities, shares and investment fund shares in quarterly time series (since the first quarter of 2014 to the last quarter of 2017). These are aggregated upon the whole world. These data are also available on the level of other, smaller, supranational units (e.g. EURO-area 19, EU-28 countries and other).

Table 4: Export, import and their balance of margins on securities, shares and investment fund shares – whole world – in mil. CZK

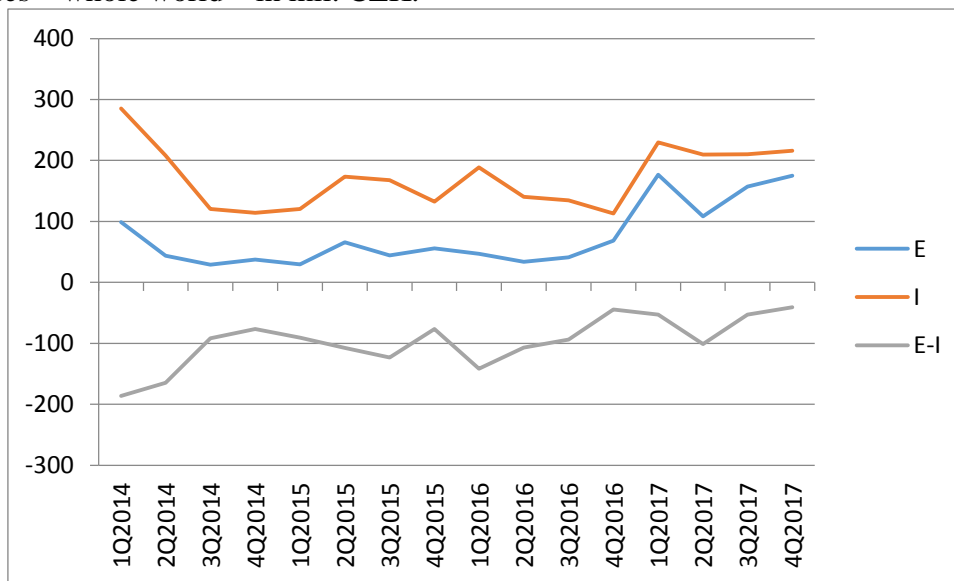
	1Q2014	2Q2014	3Q2014	4Q2014	1Q2015	2Q2015	3Q2015	4Q2015
E	99.055	43.625	28.811	37.446	29.623	65.969	44.391	56.070
I	285.052	208.289	120.379	114.131	120.316	173.589	167.567	132.344
E-I	-185.997	-164.664	-91.568	-76.685	-90.693	-107.62	-123.176	-76.274
	1Q2016	2Q2016	3Q2016	4Q2016	1Q2017	2Q2017	3Q2017	4Q2017
E	46.875	33.597	40.856	68.526	176.818	108.102	157.222	175.097

I	188.563	140.485	134.672	113.109	229.521	209.553	210.166	216.054
E-I	-141.687	-106.887	-93.815	-44.583	-52.704	-101.45	-52.944	-40.957

Source: Czech National Bank.

From Figure 4 it is evident, that since 3Q2014 the balance remains stable around or under —100 mil. CZK. Export and import have usually similar course during the whole examined period.

Figure 4: Export, import and their balance of margins on securities, shares and investment fund shares – whole world – in mil. CZK.



Source: Own elaboration from CNB data.

6.2. Estimates of domestic margins on securities and shares

These margins are again estimated in association with the CNB. The methodology of computation is based on the same principle and assumptions as in case of cross-border margins (see section 6.1). We have obtained the first estimate for 4Q2017 and the provisional number can be object to changes and investigation. Table 5 points out the aggregated results for financial assets AF.3, AF.511, AF.512 and AF.52 (for explanation see Table 2).

Table 5: Estimates of domestic margins on securities and shares – in mil. CZK

Financial asset	4Q2017
AF.3	79.30
AF.511	2.94
AF.512	13.88
AF.52	1.92
Total	98.04

Source: Own computation from CNB data.

6.3. Margins on foreign currencies

First of all we analysed exchange bureaux market. Table 6 summarises results of this analysis. We can see that only almost 50% of exchange bureaux are classified in S.126 (for institutional sectors see Table 1), but their share on purchases as well as sales raises up to 78%

or 80%. From these data we could formulate some assumption, e.g. that the producers' sector will be limited only to S.126.

Table 6: Shares of exchange bureaux, purchases and Sales according to sector classification – in %

Sector	Exchange bureaux	Purchases	Sales
S.11	35.96	14.48	17.20
S.125	0.44	0.06	0.03
S.126	47.37	78.30	80.17
S.141	7.46	2.15	0.87
S.142	8.77	5.01	1.73

Source: Own computation.

The data for margins on foreign currencies are surveyed by CNB using statistical statement Dev(ČNB) 26-04 entitled “Purchase and sale of foreign currency”. By this statement approximately 200 big exchange bureaux are surveyed quarterly. They cover approximately 90% of all cash transactions with foreign currencies.

The first preliminary results for 3Q2017 are in Table 7 below. They are divided to margins from purchases and margins from sales.

Table 7: Margins on foreign currencies – in mil. CZK

Financial asset	3Q2017
AF.2 purchases	202.93
AF.2 sales	235.59

Source: Own computation from CNB data.

7. Conclusion

This paper is prepared under the support of EUROSTAT and is limited by rules of official statistics. Some research can naturally be done, but estimates must correspond to manuals that are crucial for NSIs. The paper summarises available theory and practical issues connected with estimation of margins as part of financial services, which are hidden in transactions with financial assets. At the beginning the role of these margins in the system of national accounts is introduced. In our opinion the main contribution of this paper stands in overview of the main possible obstacles associated with calculation of above mentioned margins.

One of the most important is non-existence of overall guideline for computation of this kind of margins that is why we try to find the best methodological way for the Czech Republic. Future research will be focused on possible cooperation with other countries and on analysis of best practice from abroad. Among others we can point out e.g. problems with estimation of spreads.

Despite aforementioned limitations, the paper contains the first ever preliminary results estimated for the Czech Republic as well as assumptions that should be formulated and taken into account. Section 6 is divided into three independent parts; each of them dealing with different types of margins in financial services and showing our attempt to calculation of them. The preliminary result could be subject to change and further obtained knowledge will be incorporated.

Our future task is not only to develop final results but also to add margins to output of financial services in the whole time series of the system of the Czech national accounts. This data will be included in national accounts by June 2020 for period of 1995-2019 as a result extraordinary revision.

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