

BROADER USE OF SNA FRAMEWORK AND MONETARY STATISTICS FOR HOUSEHOLD FINANCIAL WEALTH ANALYSIS

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<u>Outline</u>

- Concepts underlying macroeconomic statistics compilation after the 2008 crisis
- Measuring household financial wealth for Russia and cross-country comparability
 - Dynamic and structure of household financial assets and liabilities with the focus on standard components of monetary analyses
 - Household financial net worth and financial transaction
 - Cross-country comparison
- Main conclusion



Issues raised after the 2008 financial crisis:

The adequacy of macroeconomic theory and statistics; The reliability of current set of financial statistics.

The current set of macroeconomic statistics:

System of National Accounts
Monetary Statistics
Balance of Payments and International Investment Position
Government Finance Statistics
Business Statistics

SNA-2008 – new features for financial sector:

Measuring financial services
Further delineation of financial sector presentation

Krugman (2018) noted that there were no serious lack of data but a lack of attention to the right data. He paid attention to the data on the financial side, primarily, on shadow banking activity, housing prices, and, more significantly, on household debt.



The Stiglitz-Sen-Fitoussi Report (2010) focused on the importance of statistical indicators for designing policy decision aiming at the progress of society, influencing at the same time the functioning of the economy. The economic developments, including a broader use of new information technologies, improvements in education, and financial innovations, had much influenced society as a whole, which ultimately augmented the use of statistical data to perceive trends and decision-making by a wide range of users.

The Stiglitz-Sen-Fitoussi Report stressed concern about the relevant indicators as a measure of societal well-being.

The authors contemplated the lack of a timely and complete set of wealth accounts, namely balance sheet data, and the misplaced focus on GDP as a measure of economic well-being in the pre-crisis years.

In effect, they proclaimed the necessity to establish a complex statistical system that could be provide a full set of metrics to measure well-being.

The starting point should be household financial wealth, simultaneously considered with income and consumption indicators.



Household net financial transactions, as percentage of household net disposable income (OECD data)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Chile	1,3	1,4	5,2	6,8	4,2	6,3	6,5	6,4	5,1		
Czech Republic	3,1	2,4	5,1	3,8	3,6	6,9	3,7	5,0	4,1	3,2	0,7
Estonia	-10,4	-5,6	8,4	5,2	11,5	10,5	3,1	8,6	7,2	4,5	6,4
Hungary	3,3	2,3	6,7	8,2	9,7	9,4	8,9	11,7	15,4	10,1	11,1
Latvia	-12,4	-12,8	14,1	27,8	30,5	-10,8	-14,5	42,3	9,9	0,1	-0,3
Lithuania	-24,6	-6,4	8,5	-5,2	9,2	3,8	8,4	2,5	-6,7	-1,4	6,7
Poland	2,1	-5,5	5,5	5,9	2,4	9,6	6,8	4,5	5,1	8,2	1,4
Russia						2,0	3,4	2,0	8,3	8,7	7,4
Slovak Republic	-2,1	-2,9	0,0	0,7	-1,6	-0,8	-1,6	0,1	1,4	1,2	0,7
Slovenia	0,3	1,7	2,3	1,9	0,5	0,7	1,7	4,0	4,4	2,7	2,5
Brasil				0,7	0,6	0,7	0,4	0,9	2,9		

The vast majority of countries (including Russia) sustained positive household net financial transactions. Households usually acted as net creditors in relation to other sectors of the economy by increasing their financial assets to a greater extent than financial liabilities



Even in 1959, Goldsmith offered concise and distinct features for the statistical framework which contributed to the <u>comparative study of economic growth</u> and structure.

He assumed that the recently developed <u>system of national accounts could yield much for study</u> and noted that <u>classification and sectoring could provide full, sectoral, from-whom-to-whom matrices for stocks and flows.</u> Nowadays, this is a main paradigm of compiling sectoral financial accounts and financial balance sheets.

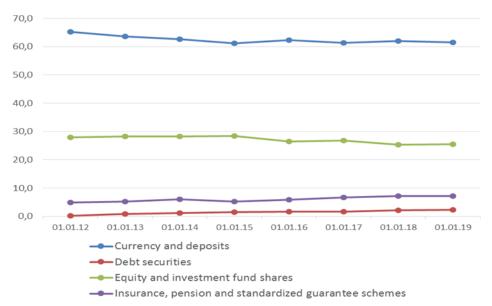
He developed <u>a set of statistical concepts which could be statistically implemented from sectoral balance sheets</u>, financial accounts, and supply & use tables.

In other words, he suggested a panel of main statistical indicators to be used in a study of financial structure and development.

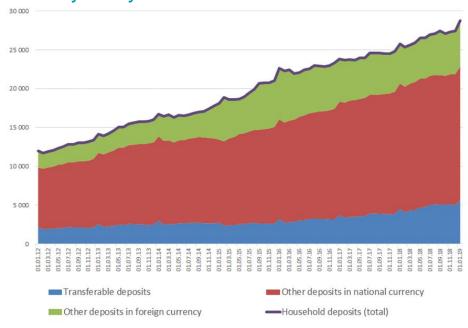


Measuring household financial wealth for Russia, main components

Dynamic and structure of **household financial assets** with the focus on standard components of monetary analysis



Currency and deposits have been the dominant component of the household financial assets for many years, forming the traditional preferences of the Russian citizens regarding the choice of bank deposits as the main form of their savings. Over the past seven years the share of currency and deposits in household financial assets was equal on average more than 60% of total assets, although in recent years it has decreased slightly compared to the beginning of 2012.



According to the **monetary statistics**, <u>deposits in the national</u> <u>currency</u> have the largest share in the structure of household deposits (about 80% on average during the period from 2012 to 2018). Deposits in national currency mainly consist of time deposits (about 63% on average), while the share of transferable deposits was about 15%. At the same time, the Russian households also invest in foreign currency deposits. Obviously, the value of foreign currency deposits is largely dependent on exchange rate fluctuations during periods of macroeconomic turbulence.



The role of bank and non-bank financing in providing households with financial resources

Banks and non-banks household debt, as percentage of total household debt



According to the **SNA sectoral financial balance sheets**, the greater amount of Russian household debt was accumulated in the banking sector.

The role of non-bank financial intermediaries as an additional source of household financing remained insignificant



Mortgages, as percentage of total household loans



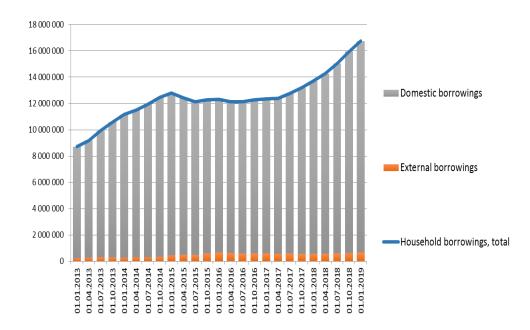
According to **the banking statistics**, over the past seven years, the mortgages indebtedness has almost doubled as a percentage of GDP (from 2.9 to 6.2%).

The share of mortgages in the structure of bank loans to households has increased from 24.4% at the beginning of 2012 to almost 40% at the beginning of 2019.

This type of financing, used by households to buy housing, has become increasingly important in the structure of bank loans to Russian households and may has an impact on household financial wealth as a whole.



Household domestic and external borrowings (as percentage of total household borrowings)



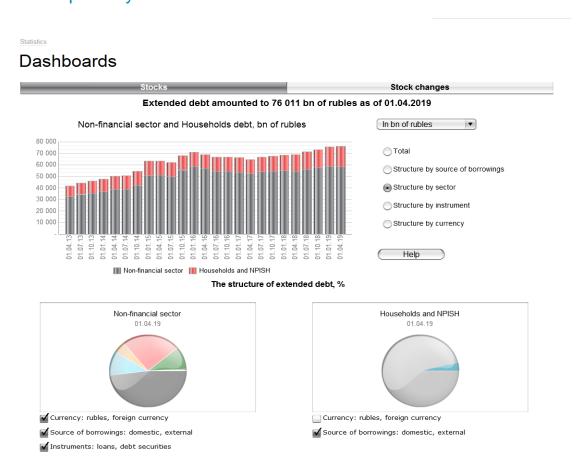
In 2018 the Bank of Russia began to publish on a quarterly dataset "Non-financial sector and Household debt, extended".

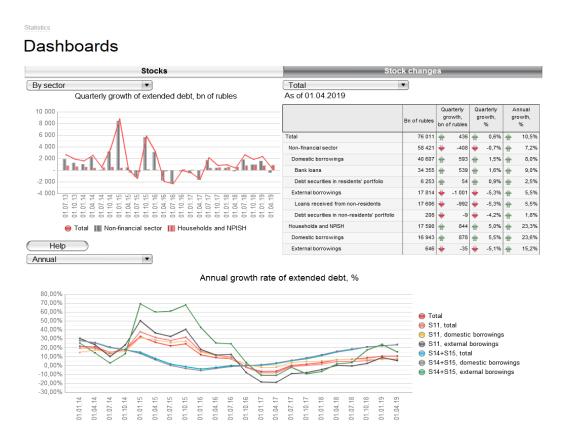
This dataset could be one of the additional sources of information for household wealth indicators analysis.

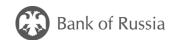
These indicators combine data from International Investment Position of the Russian Federation with monetary statistics, complementing household financial balance sheets of the System of National Accounts with more detailed data on external bank financing (relationship with the rest of the world).



To provide users with new instruments of ad-hoc analyses, The Bank of Russia published data on household debt in the form of interactive information panels (dashboards). It allows reviewing dynamics and structure of household debt indicators on a quarterly and an annual basis.







Household financial net worth and net financial transaction



Household financial net worth, bn rubles

Household financial net worth in Russia has been increasing during the past seven years due to the stable and sizable growth of household financial assets

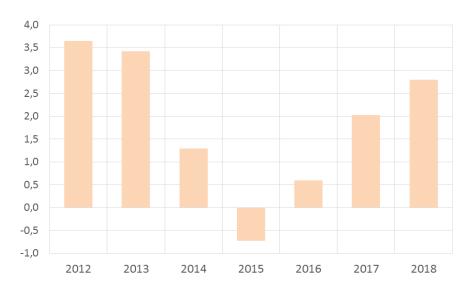


Household net financial transactions, bn rubles

Russian household sector was acting as a net creditor in respect of the other sector of economy. Rapid growth of consumer and mortgage loans caused the decline of net financial transaction in the last two years



Household financing (loans transactions, as percentage of GDP)

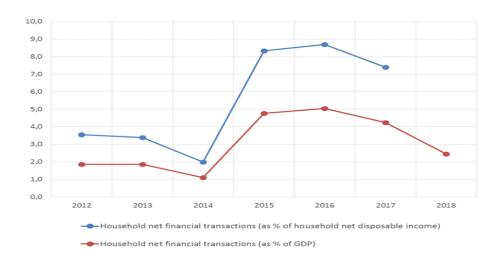


Financial accounts provide a look of how Russian households financing has changed over the past seven years. Households attracted loans most actively in 2012 and 2013 (the growth was equal to 3.6 and 3.4% in relation to GDP, respectively).

The period of economic instability, accompanied by a slowdown and reduction in GDP growth, as well as decline of household monetary incomes, led to a decrease (and to reduction in 2015) of household financial liabilities (in terms of loans transactions).

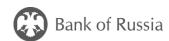
At the same time, starting from 2017, one can observe a renewed interest of households to attracting financing through lending (up to 2.0 as percentage of GDP). This trend continued in 2018 (up to 2.8 as percentage of GDP).

Household net financial transactions (as percentage of household NDI and percentage of GDP)

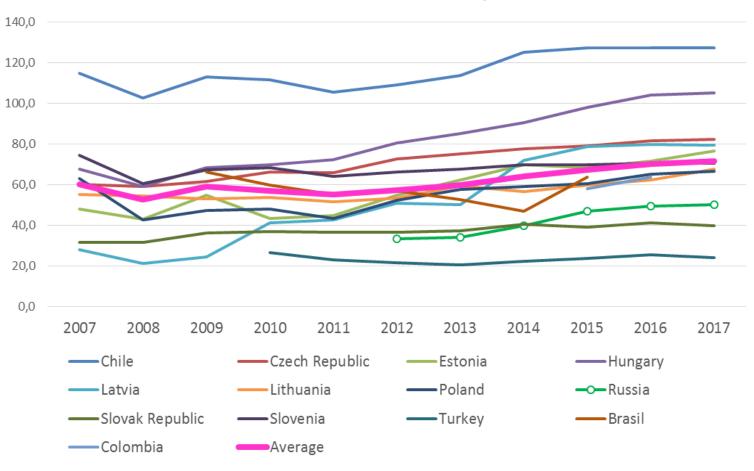


Household net financial transactions were positive during the observed period.

In general, the growth of Russian households financial investments (mainly in the form of cash and deposits) exceeded the accumulation of their liabilities, indicating a net creditor position of the household sector. In the last three years, the growth of household financial liabilities has significantly accelerated, which became one of the main reasons of decline in the household net financial transactions indicator



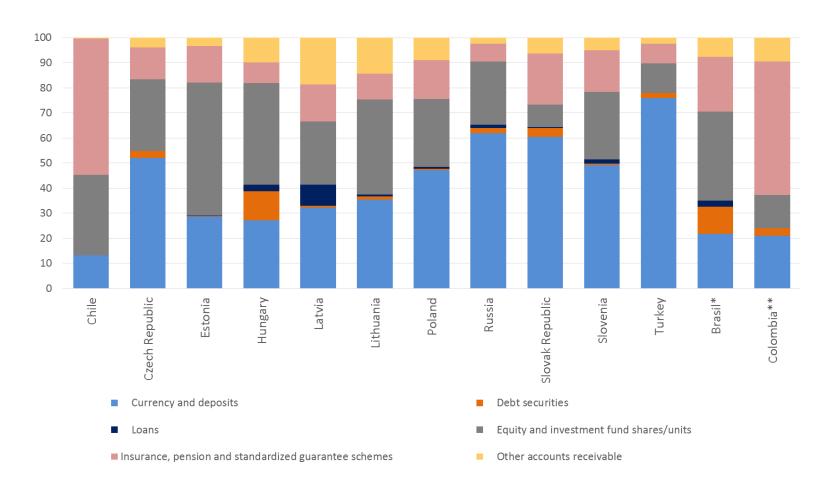
Household financial net worth, as percentage of GDP



The information from financial balance sheets of the SNA of the Russian Federation indicates a constant growth of household financial net worth in the reviewed period

It is in line with the with the upward trend of these indicators in other countries





The broader view on household financial assets complements the institutional monetary analysis with the information regarding how the household can invest money beyond the traditional allocation of funds into money supply components

Structure of household financial assets in 2017 (as percentage of total assets)

^{*} data on 2015

^{**} data on 2016



- The use of SNA framework and monetary statistics can provide researchers and policy makers with broader set of information resources required for household financial wealth analysis.
- Combining the SNA indicators with monetary statistics data enhance monetary analysis as such, which contain more detailed information regarding household financial assets and liabilities.
- Monetary statistics data give an additional information on currency structure.
- Banking statistics contribute to the additional details of the SNA indicators on household financial wealth, providing data on specific segments of credit market (e.g. mortgages)
- ➤ Broader use of different kind of statistics such as the financial accounts and financial balance sheets of the SNA combining with monetary statistics provide wider understanding of major determinants of household wealth accumulation.
- The further steps to provide analytical framework of household wealth should be a combination of micro and macro level data, namely, compiling distributional national accounts, and construction of satellite accounts to describe other objective indicators of well-being.
- The SNA concepts should be the base for these developments, in our opinion, to provide the consistency among different statistical data sets and to facilitate the systemic approach in analyzing economic performance.



THANK YOU FOR YOUR ATTENTION