Discussion of "Measuring the Debt Service Ratio in Russia: Micro-Level Data Approach" by Anna Burova

Horacio Aguirre - Economic Research, Central Bank of Argentina

Webinar on Research on Granular Credit Registry/History Data with Implications for Monetary Policy and (Macro-) prudential Regulation

Bank of Russia & New Economic School

Moscow, 8 October 2020

BANCO CENTRAL
DE LA REPÚBLICA ARGENTINA

Outline

1 | What the paper does & main takeways

2 | Looking at some critical aspects

3 | Points for further work

Note: all views are the discussant's own and do not necessarily represent those of the Central Bank of Argentina

Timely and relevant paper: uses micro data to analyze aggregate financial dynamics

Measures debt service ratio (DSR) in Russia, using credit registry data

- Domestic banks' credit to non-financial private sector
- Remaining maturities and interest rates
- 2017-2019, quarterly data
- At the economy level, for 15 aggregate industries, for 61 disaggregate industries

3

1. DSR higher than when measured using aggregate data (from 16% to 26%)

2. Critical: considering remaining maturity of loans

3. Higher debt servicing cost for debt with shorter remaining maturity

4. Different sectors with different DSRs

5. Domestic currency loans prevail

Non-financial private sector: businesses, what about households?

Descriptive statistics: some more would help interpretation.

- Min/max/avg median of debt service.

- Concentration around certain debtors?

DSR measured against national income (only partially a micro-level measure)

- How about business-level income? For publicly listed companies, revenues from P&L statements (eg: debt service in terms of EBITDA).

- Households: wages or household income.

Results driven by remaining maturity

- Micro-data DSR similar to aggregate data with actual remaining maturity
- *Can* use aggregate data with corresponding maturity ☺

Consistent with actual debt servicing reported by banks

- Why the difference (NPLs)? In two quarters: actual debt servicing higher than DSR

Changes in DSR due mainly to changes in credit-to-GDP

- So: credit to GDP not a bad approximation after all
- Consistent with most debt servicing short term (less than one year)

Currency denomination of debt servicing costs (85% in local currency)

- But: currency mismatches and sectoral distribution.
- Mind hidden mismatches: loans' currency denomination vis-a-vis income in FX currency –this can be very significant for certain debtors or banks

Sectoral differences in DSR

- 80% EVA, 50% debt, less than 50% DSR
- Do higher DSR sectors show actually more risk? (eg. higher NPLs)

Changes in DSR and lending rates

- "Changes in interest rates influenced the dynamics of DSR less significantly…
- So: lending rates were translated into maturity or amount changes (?)

Debt from credit registry + balance sheet data: an illustration (BCRA, 2019)
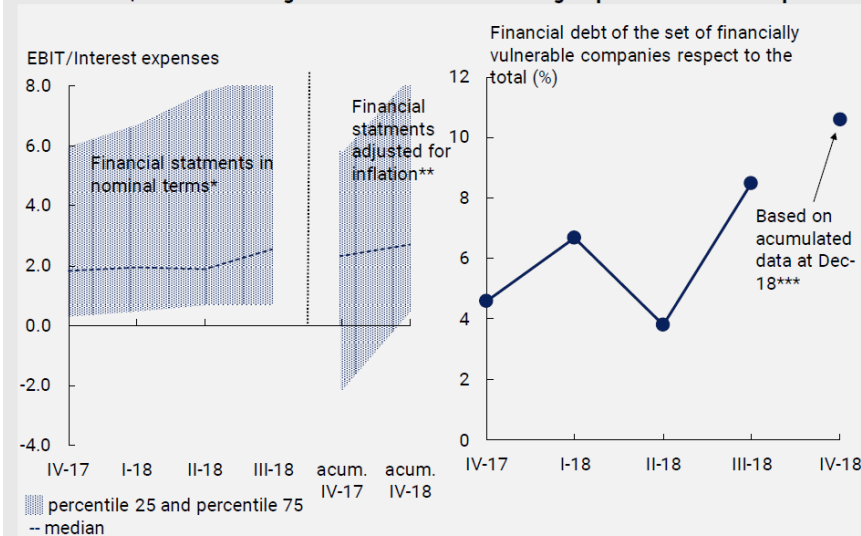

Chart E.1.1 | Financial ratios of publicly-traded companies
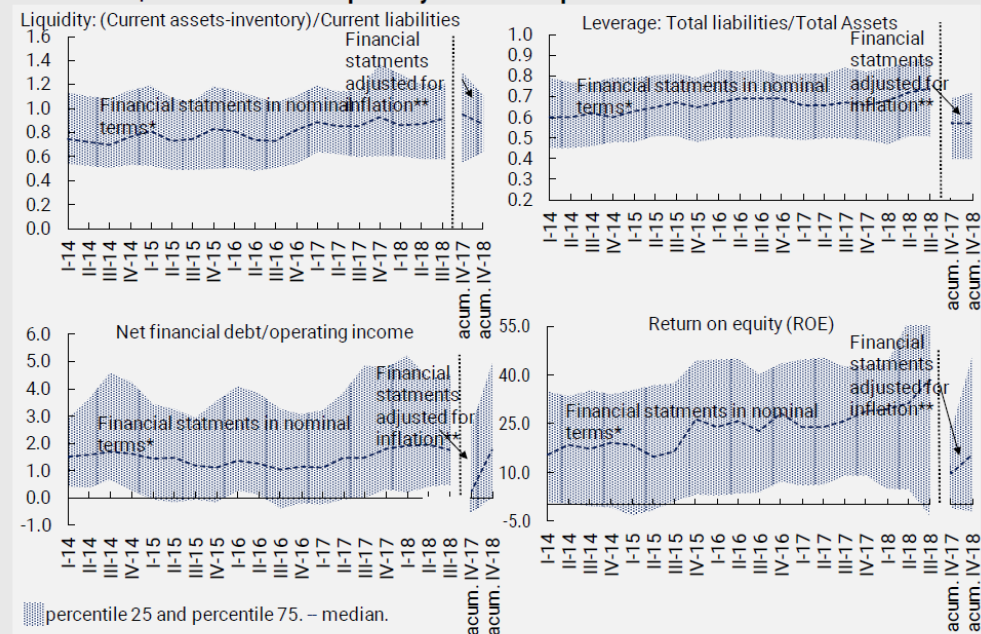
Note: (*) Three-months period. (**) Annualized flows to the end of each year (12-months only for companies that close its annual statements in december)
Source: BCRA based on CNV and BCBA

Chart E.1.2 | Interest coverage and financial debt for the group of vulnerable companies

Note: (*) Three-months period. (**) Annualized flows to the end of each year (12-months only for companies that close its annual statements in december). (***) Financially vulnerable companies at Dec-18 (constant currency terms) plus financially vulnerable companies during 3Q-18 vulnerable al IIIT-18". Source: BCRA based on CNV and BCBA

8

Debt from credit registry + wage data: an illustration (BCRA, 2019)

Chart E.2.1 | Debt ratios according to annual remuneration strata
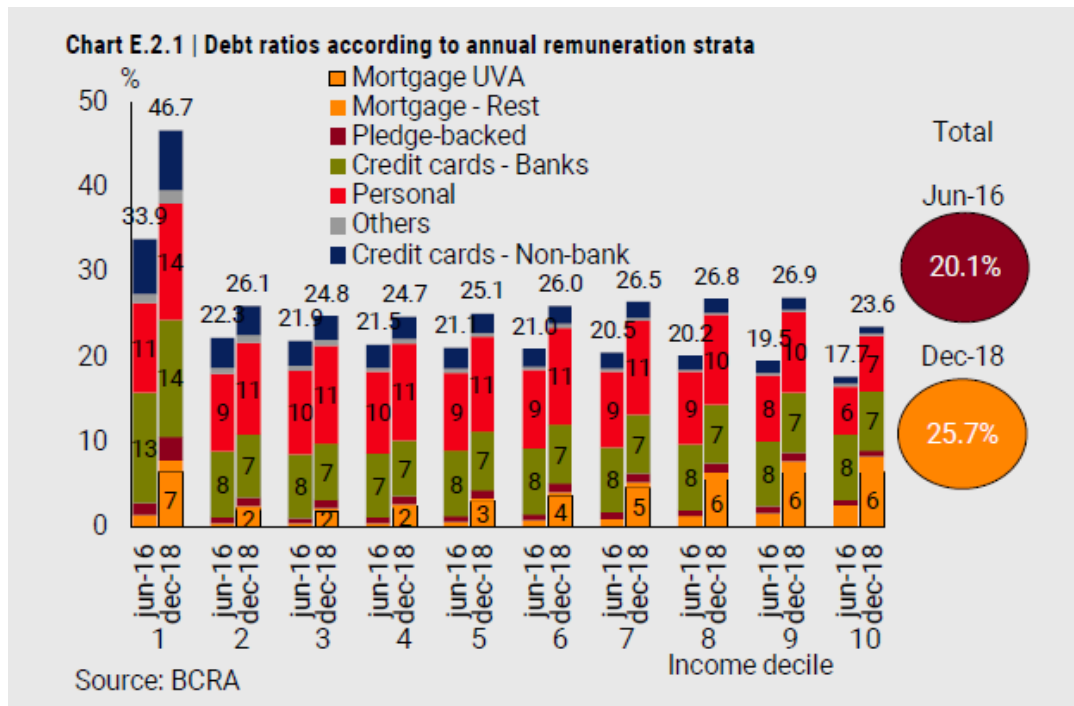
Bank-level data: what about the supply side?

- Concentration, sectoral distribution, etc

- Important for ultimate aim of DSR

Macro-level data: what does DSR tell us that other indicators do not?

Relationship: macro-and bank-level data with DSR

Type of loans and asset prices (eg: mortgages and housing prices)

DSR considers interest rate, what about FX rate?

Congratulations!