Discussion of “An empirical behavioral model of households’ deposit dollarization” by Ramis Khabibullin and Alexey Ponomarenko

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Webinar: “Financial dollarization: causes and consequences”

Bank of Russia & New Economic School

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Outline

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

Highly relevant paper for EMDEs: uses behavioral model to analyze link between households' deposit dollarization and FX developments in Russia.

Authors build and estimate behavioural model

- Households switch between deposit dollarization strategies: extrapolating or mean-reversing FX expectations
- Hypothesis: higher FX volatility discourages adaptive expectations
- Estimation: stochastic gradient variational Bayes
- 5-day observations, Jan 2002-Jan 2019, of deposit dollarization ratio
- Forecast performance compared to a set of nonlinear time series models

1. **Reaction of households to FX appreciation weakens as FX volatility increases**

2. **Behavioral model outperforms nonlinear time series model in forecasting** changes in dollarization during transition to flexible FX regime

3. **Behavioral elements facilitate models faster adjustment to new environment,** while non-structural models require a large number of observations to alter parameters for the new regime

4. Results suggests that **adopting floating FX stabilizes rather tan amplifies fluctuations** in deposit dollarization

Deposit dollarization- but how about FX currency holdings?

- Can be just as significant
- Involve higher FX pressure (international reserves)

Did DD decrease following the new FX regime from 2014 onwards? See figure 2

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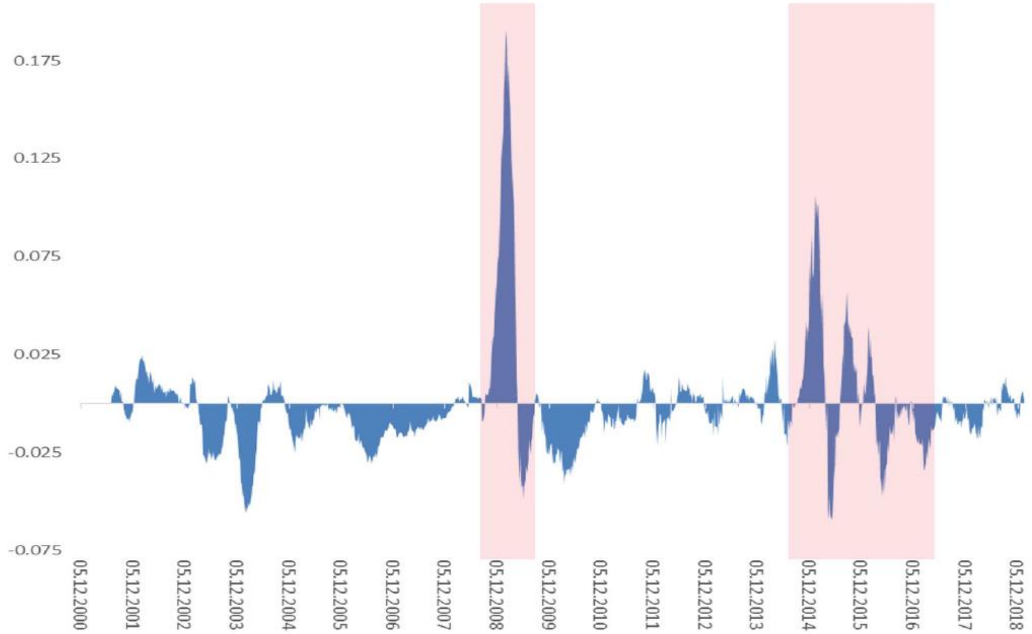


Model: "chartists" vs "fundamentalists"

- Is the FX random walk the "equilibrium" value of FX?
- Why not look at another specification (eg ARIMA) for e*?

Estimation: why Bayes?

- Significant out-of-sample or prior information
- "Curse of dimensionality"
- What other methods can you use?
- We would like to know more about your priors and estimation results
- Also: estimation period choice

Regime switching

- You know when this happened, can use this information?

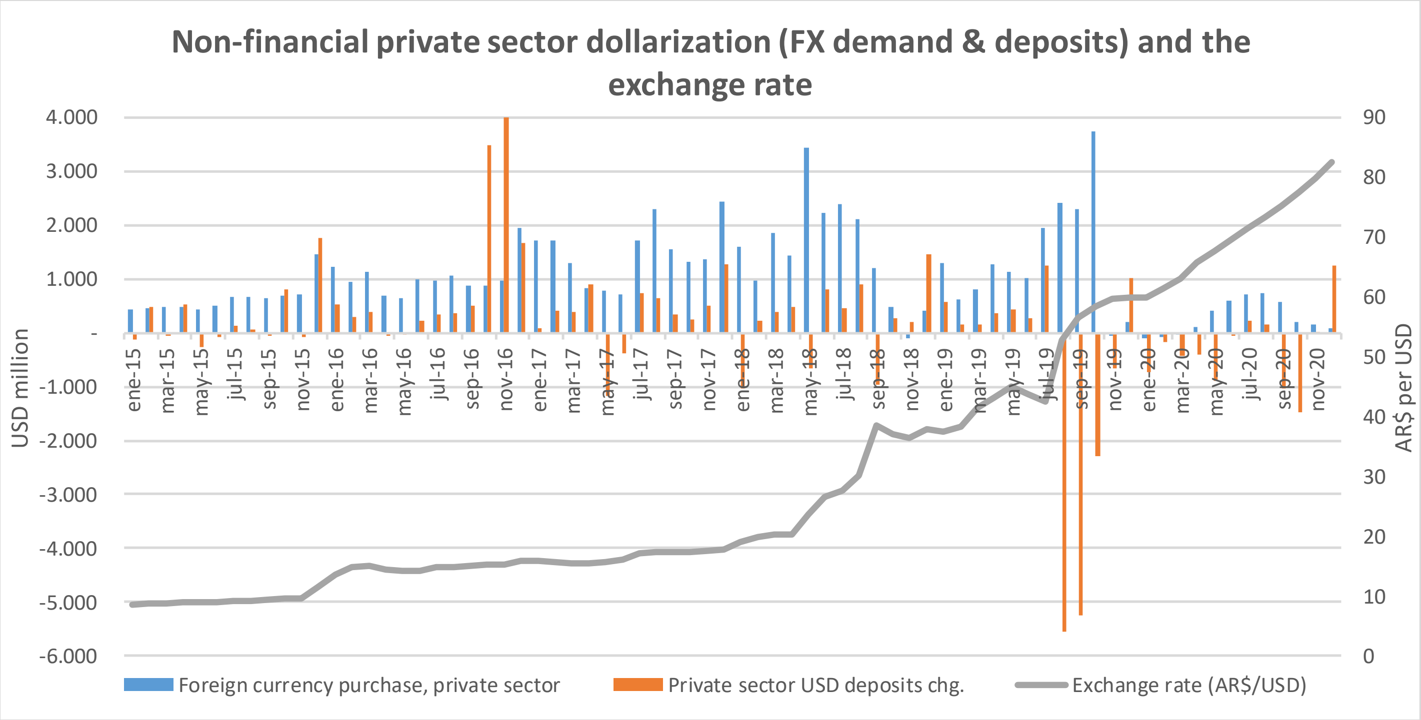
Forecasting exercise

- RMSE is symmetric, but investors' (desired) wealth is not.
- **Forecast evaluation criterion should reflect loss function** of those making decisions.

Forecasting performance vs. economic interpretation

- Results establish superior performance of behavioural model from 8-periods (40 days onwards)
- Naïve model (AR) Works better in shorter term
- Authors add economic interpretation: adoption of floating FX linked to lower volatility
- Need something more to make causal claims
- What role for other relevant factors (eg: capital controls)?
- How about FX demand outside the financial system?

Foreign currency or FX deposits? An example from Argentina



Congratulations!