# Macro-Prudential Policy in Colombia

Hernando Vargas

Technical Deputy Governor

Banco de la República Colombia

September 2017

### 1. Use of MPP in Colombia

- 2. Effectiveness of MPP
- 3. Some Challenges

## 1. Use of MPP in Colombia

 Aside from few permanent MPP measures (limits on mortgage credit LTV and DTI, limits on banks' currency mismatches, "countercyclical" provisions),...

... There has been no systematic use of MPP in Colombia

They have been used occasionally and discretionally to confront buildup of financial imbalances

- More specifically, they have been used in two episodes...
- ... The most relevant one occurred in <u>2006-2008</u>: Banks shifted their portfolio from public bonds to loans
  Credit growth skyrocketed
  - New loan quality deteriorated (vintage analysis)
  - Current account deficit widened and inflation rose
  - The IT CB raised policy interest rates,...
  - ... But the increased loan supply hindered transmission

### **Excess Credit Indicator**



#### **Policy and Consumer Loan Nominal Interest Rates**



Hence, simultaneous threats to price and financial stability emerged

Policy response:

- CB imposed Marginal Reserve Requirements (MRR) on domestic deposits + Unremunerated Reserved Requirements (URR) on foreign loans
- MoF imposed Unremunerated Reserve Requirements (URR) on foreign portfolio investment
- Financial Superintendency brought earlier the implementation of a new, tighter provisioning system

Rationale:

MRR: Not used in conventional IT (stabilization of short term interest rate), …

BUT useful to affect loan interest rates when CB credit is an imperfect substitute for other bank funding sources

URR: Aimed at containing leverage and currency mismatches in the presence of MRR

Adopted in May 2007

Deactivated in December 2008, ...

... after credit growth fell and the GFC hit the economy

### 2. Effectiveness of MPP

- In general, the MPP have been effective in reducing systemic risk by dampening credit cycles and increasing bank robustness
- Reserve requirements were found to raise some corporate loan interest rates as well as some deposit rates in Colombia (Vargas et al., 2010)
- Reserve requirements were found to temporarily reduce aggregate loan growth in a panel of Latin American economies (Colombia included) (Tovar et al., 2012)

- Based on individual loan data, dynamic provisions were found to dampen the credit cycle in Colombia (López et al., 2013)
- Using data at the bank and firm level, dynamic provisions, MRR and a variable summarizing MPP were found to have a significantly negative effect on commercial loan growth in Colombia (Gómez et al., 2017)
- These effects were larger for riskier firms and weaker banks

- Using data at the individual bank level, dynamic provisions were found to increase bank capital and liquidity ratios, while MRR increased liquidity ratios (Vargas et al., 2017)
- Using data at the individual loan level, both dynamic provisions and MRR were found to reduce the ex-post probability of default (Vargas et al., 2017)

 This evidence of effectiveness lends support to MPP as a useful tool to preserve macro and financial stability...

... However, more knowledge of their effects is necessary to:

- Properly calibrate it (hopefully in a general equilibrium setting)
- Understand unintended consequences (e.g. avoidance may lead to underestimation of hidden risks)
- These are some of the reasons why policy makers may be reluctant to use MPP more frequently

## 3. Some Challenges

• So far MPP have been used in the same direction of monetary policy, ...

... as financial and price stability risk have coincided

This may be partly due to the fact that the Colombian economy is still relatively closed (trade represents 39% of GDP),...

... so that large capital inflows raise credit and expenditure, and these effects increase inflation more than what the accompanying currency appreciation reduces it (low pass-through) Hence, as trade and capital openness is deepened, the probability of financial and price stability trade-offs may increase: ...

... Reductions in the external cost of funds may imply downward pressures on inflation (passthrough of currency appreciation) at the same time as local credit and expenditure grow rapidly

This could require a wider use of MPP, ...

... BUT capital account increased openness may reduce the effectiveness of some MPP measures

• Similarly, financial innovation may shift financial intermediation outside the perimeter of regulated institutions,...

... Making risk detection/evaluation more difficult, and conventional MPP less effective

#### References

- Gómez, E, A Lizarazo, J Mendoza and A Murcia (2017): "Evaluating the impact of macroprudential policies on credit growth in Colombia", BIS Working Papers, no 634.
- López, M, F Tenjo and H Zárate (2014): "Credit cycles, credit risk and countercyclical loan provisions", Ensayos sobre Política Económica, vol 32, no 74, pp 9–17.
- Tovar, C, M García-Escribano and V Marti (2012): "Credit growth and the effectiveness of reserve requirements and other macroprudential instruments in Latin America", IMF Working Papers, no 12/142.
- Vargas, H, C Varela, Y Betancourt and N Rodríguez (2010): "Effects of reserve requirements in an inflation targeting regime: the case of Colombia", Banco de la República Working Paper Series, no 587.
- Vargas, H, P Cardozo and A Murcia (2017): "The macroprudential policy framework in Colombia", Banco de la República Working Paper Series, no 1014.

# Thank You