Comments on

Monetary Policy and Resilience By Markus Brunnermeier

FLAR: XVIII Annual Economic Studies Conference
Session I. Resilience and Central Banking

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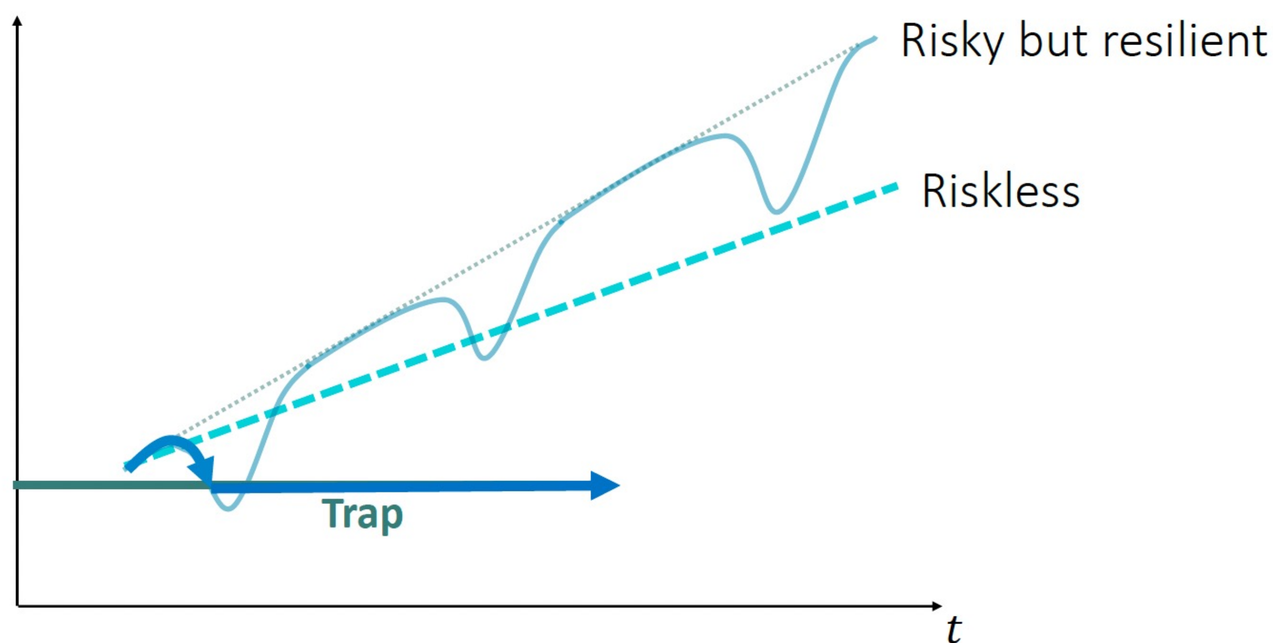
Cartagena, August 11, 2023

Resilience

- Resilience: Is a different approach to think about, face, and handle risk, shocks and policy responses
  - Resilience is different from risk avoidance or risk minimization, which involves reducing the probability of bad events happening
  - Resilience is also different from robustness, which can be thought of as being able to block every shock
- Resilience is about
  - Not avoiding a shock ….
  - … but being able to bounce back from it, hopefully quickly
  - To a large degree, requires flexibility to be able to absorb the shock and get out from the situation it creates
  - It is about being able to revert to the mean, not to reduce variance
  - Hopefully, being risky, but resilient, can have higher "expected returns"
  - Robust can be too rigid, and in a really bad shock can lead to worse outcomes, while lowering "expected returns"
- Today, Marcus applied the concept and ideas to issues for monetary policy, but its applications are general

My opinion: Very interesting and insightful way of thinking! It's a nice "application"/analogy of the risk-return trade-off

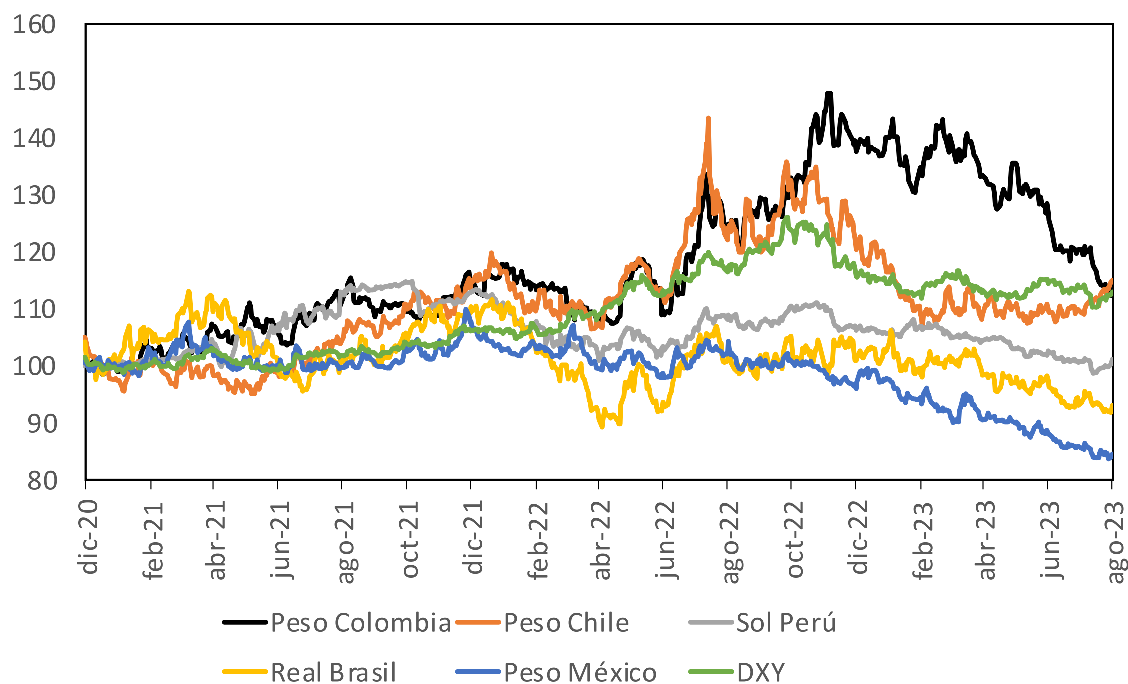
One initial keypoint: Volatility may be a good thing



- Riskless or robust may be too conservative and rigid, and with lower payoff
- Resilient is more volatile, but higher return

From my understading: we can think that there is GOOD volatility and also BAD volatility

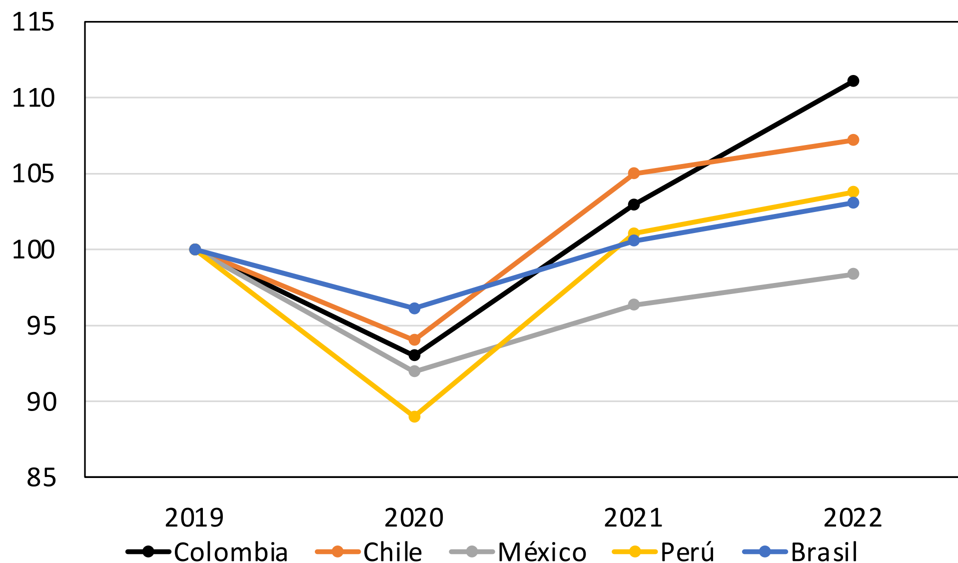
- There is endogeneity between volatility and resilience
- **Good volatility** for MP under IT: Exchange rate volatility, agents learn to deal with volatility, endogenously reduce FX exposure, makes the economy more resilient and MP more resilient

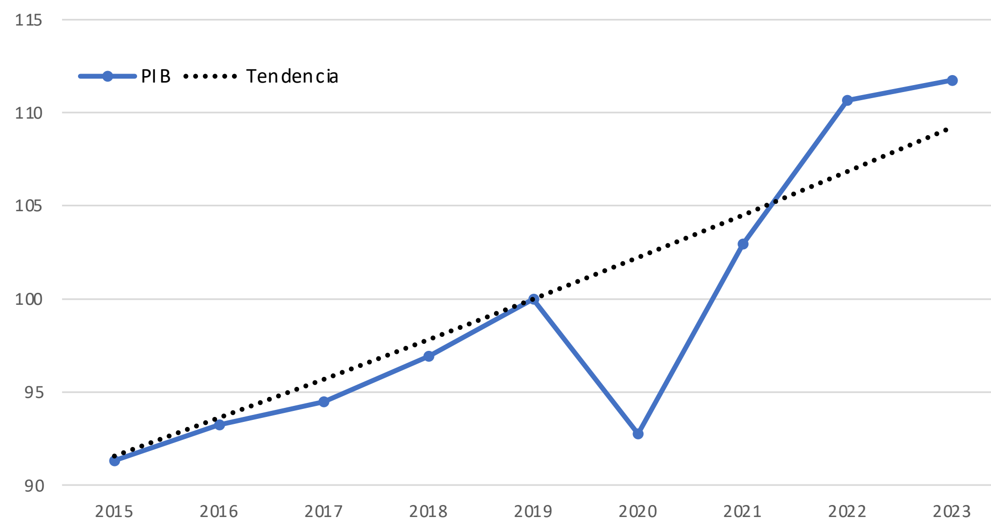


As a result of this exchange rate volatility: Currency mismatches are low, allowing the exchange rate to be the first line of defense against external shocks without creating concerns on financial stability and providing independence of monetary policy (chicken and egg)

Private Corporate Sector Debt as % of GDP, by FX Hedge

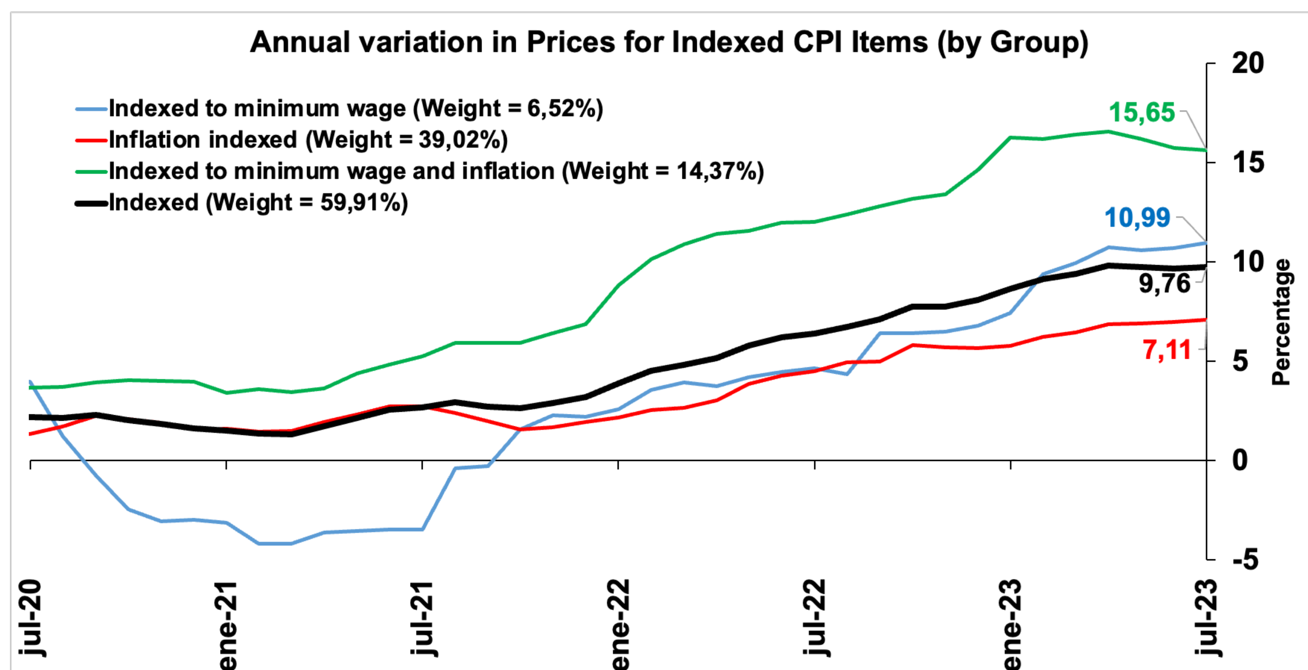
Colombia's economy behaved very resiliently after Covid-19, although we bounced too much



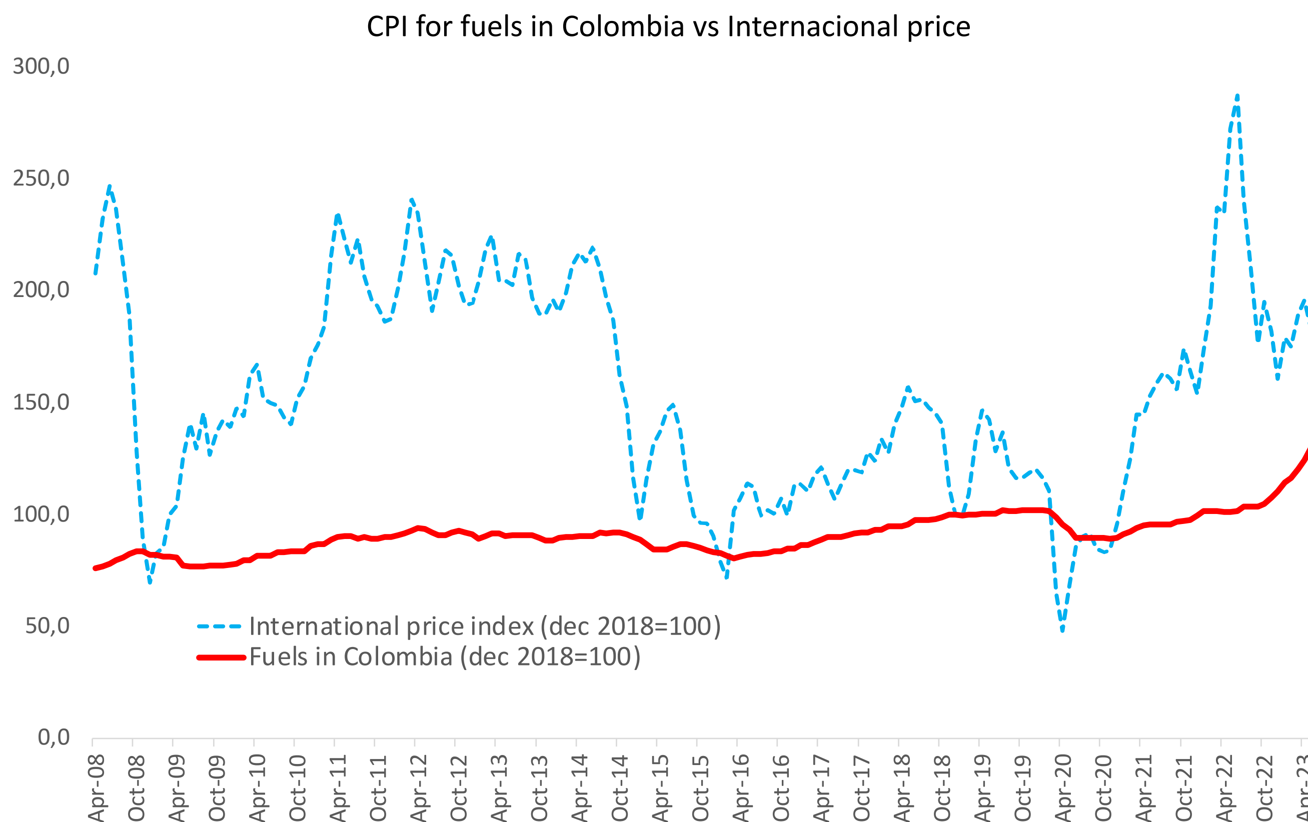


Now, there is also bad volatility…

- There is endogeneity between volatility, resilience and also CB actions/inaction
- **Bad volatility** for MP under IT: inflation volatility, agents learn to deal with volatility, endogenously creates mechanisms to protect themselves (indexation, path dependancy) and makes MP less resilient
- Example: Colombia has a high degree of indexation (minimum wage, rent prices, education, construction of new buildings, law)



Bad stability: example gas prices, reduce MP resilience, but are OUT OF the control of the CB



Resilience enhancers - My understanding:

Resilience requires time-consistent behavior, dynamic thinking

It is also about building a war chest to respond to a shock … similar to precautionary savings

- Some factors can enhance resilience: buffers and stocks
- Buffers: leave room for you to act in case a shock hits. For MP:
  - Avoid being at the ZLB
  - Do not overheat the economy

- Stocks: build them over time to use them when bouncing back is required after a shock
  - Central bank credibility
  - Strength of inflation anchor
  - Maybe following rules in "normal" times help you build those stocks so that you are able to use discretion to react to shocks

Resilience destroyers - My take:

You may need to combine risk avoidance / robustness if at some point you are not resilient
Some traps are outside the scope of the Central Bank, some are outside a country's economy
So society needs to think about building resilience as a whole

- Some factors can destroy resilience:
  - Traps: because once you are trapped you cannot bounce back
  - Tipping points: might send you to a bad equilibrium path where…
  - Feedback loops kick in and you have bad spirals

- In general you want to avoid risks that can lead to these destroyers
- Examples for monetary policy:
  - Price-wage spirals, Deflationary spirals /liquidity trap
  - Financial dominance trap, fiscal dominance trap

- Some important points about traps and avoiding them
  - Requires forward looking thinking
  - Macro-prudential policies can help avoid falling in a financial trap
  - Fiscal policy can have implications for MP (inflation and aggregate demand) but MP response can in turn have large fiscal implications especially when debt is high
  - This may result in tensions between central bank and the government, with independence at risk, especially if CB is undercapitalized, something likely after QE

It is hard to think about/build resilience after a sequence of bad shocks, especially when vulnerabilities have been built over time: You may need to combine risk avoidance / robustness if you did not build resilience or your resilience does not work for the shock

- A sequence of shocks can take you to a point where resilience does not work and you need to think risk/robust (not to every shock)

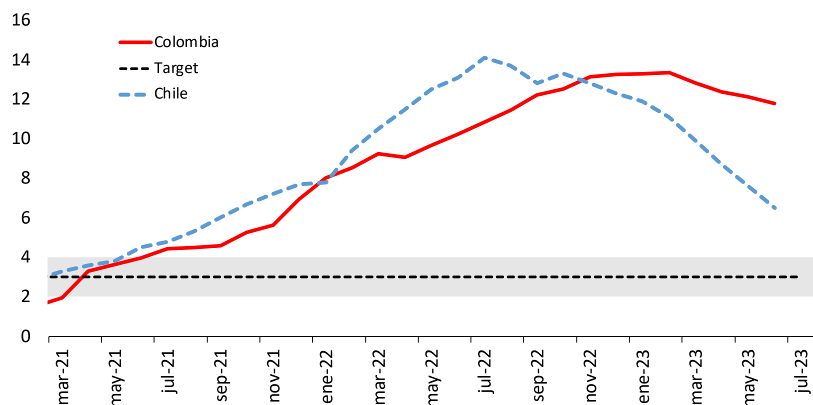
Example: Colombia

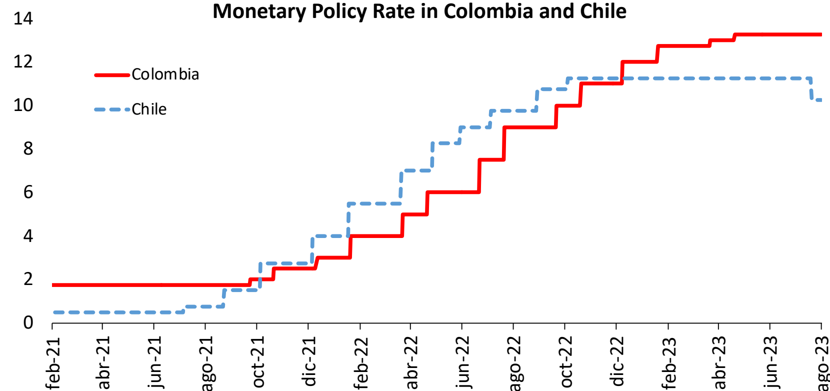
- Inflation peaked at 13.3%, now stands at 11,78%
- Interest rate currently at 13,25%, its peak level
- Years with inflation above target: 4 in 2024
- Expectations above target all horizons
- Resilience Destroyer: high indexation, which makes it really hard to lower inflation

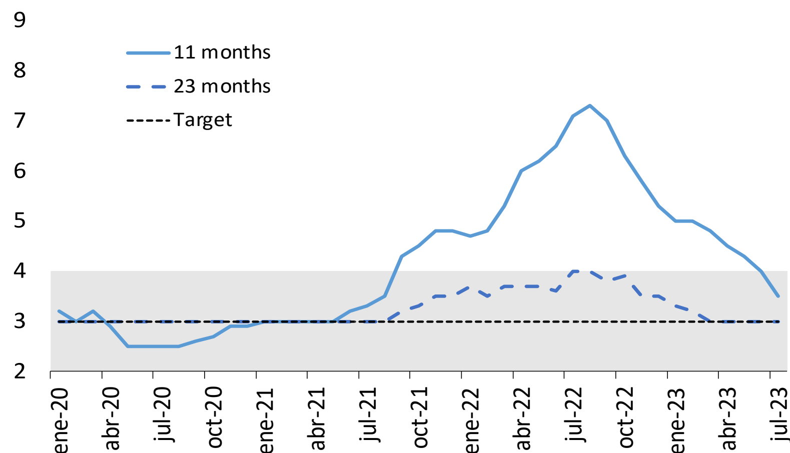
- Important inflation risks: El Niño phenomenon (food has a high weight on CPI), gasoline prices need to go up
- If risks materilize, feedback: loop higher indexation, less resilience in the future, higher costs of disinflation

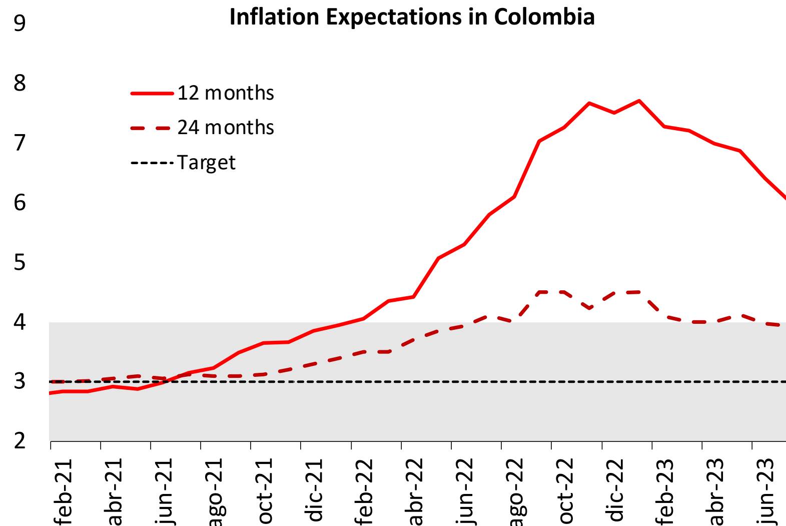
- Then, robust approach may be appropriate even though the economy is expected to slow down and the output gap to become negative. Have an interest rate that “blocks” those inflation shocks

Compare Chile and Colombia: Chile may be acting now more resilient and Colombia more robust? It may be that Chile has a stronger anchor and/or Colombia a stronger destroyer







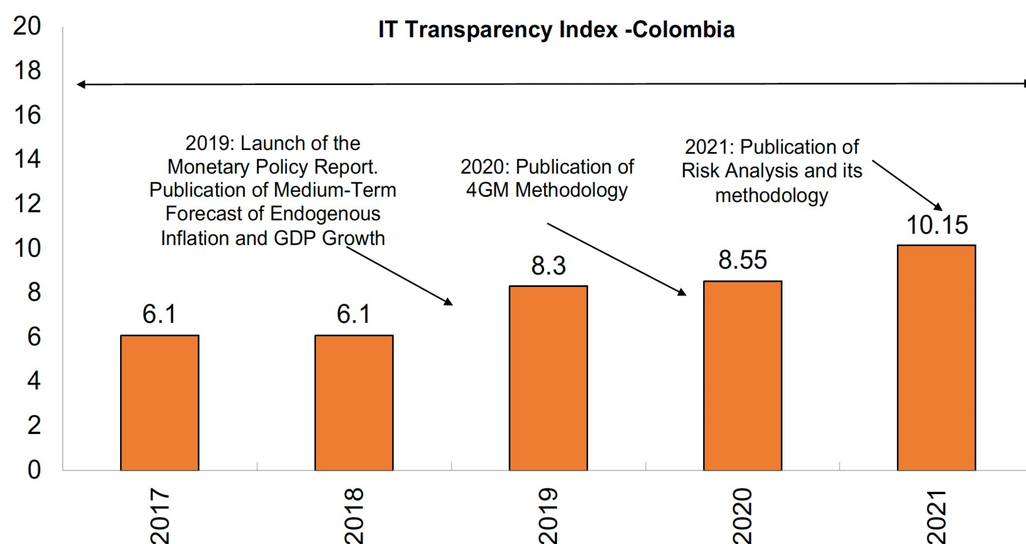


Compare Chile and Colombia: Chile may be acting now more resilient and Colombia more robust? It may be that Chile has a stronger anchor and/or Colombia a stronger destroyer

- When/where do you want to be robust? As an observer, Chile today is running a risk that Colombia may not want to run, but Chile seems more resilient
- What risks do you want to run? For example, in Colombia today real rates are high, that could trigger financial stability issues
- … But so far we do not see anything to worry about, because we have strong (stronger than in the US) macroprudential policies
- But a large part of the regulation is very strict (more of the robust type). Are we giving up something by not running risks?

Changes in normal times can help MP become more resilient

- Between 2018 and 2019 we made big changes to our MP decision-making process and communication:
  - Reduced number of meetings of the Board (in part to have more time to produce better analysis)
  - We changed how (the process) we did the forecasting and the macro analysis that leads to the MP interest rate decision
  - We implemented a process that we follow strictly and makes our analysis more more resilient (we adapt it and learn over time)
  - We were able to produce a more timely, forward-looking, and transparent MP report
  - We were able to change the communication scheme of the board and the staff with minutes and MP report being released within 3 business days of the MP decision



- Recent research (e.g. Cepeda, Villamizar and Taboada, 2023) provides evidence that MP actions have more impact/effectiveness (resilience, bounce back) when you increase transparency

But, don’t let a crisis go to a waste

- Resilience is also about learning
- Colombia’s Central Bank expanded its set of tools in different dimensions during covid-19, those facilities will be there when the next crisis comes along

Objectives Actions	Protect the payments system	Preserve the supply of credit	Stabilize key financial markets	Provide economic stimulus
Temporary liquidity (repo operations) Increase in the allotment counterparties, collaterals, and maturities	X	X	X	
Outright purchases of public and private securities	X	X	X	
Reduction of banks’ reserve requirements	X	X		X
Auction of FX Non-delivery forwards			X	
Auctions of FX swaps	X	X	X	
Reduction of MP interest rates		X		X

- We also learned from our models, their deficiencies and defects
- We innovated in their use and developed new tools (example: predictive densities to measure and communicate risks)

Some comments on transitions

Transitions and size of Shocks

- Large shocks: easier to identify (Covid)
- Small or slow shocks: hard to identify, but they give you time to respond
- **I worry about these slow shocks because if they are hard to identify, it is not easy to learn how to respond to their consequences**

Transitions and Monetary Policy

- It is hard for MP to know how to acommodate these shocks, by how much, and then how to communicate without losing credibility
- For example: fragmentation of global economy and reacommodation of international trade (nearshoring and friendshoring)
- May be this structural change needs some changes in the level of some prices, changes in relative prices, and some inflation, to be able to take place
- This poses a challenge for the CB because
  - It needs to identify the effect of the shock and measure its impact on inflation
  - Then it needs to allow for higher inflation for some time
  - Then it needs to communicate that it will have some higher inflation for some, uncertain time
  - Despite all this difficulties, not acommodating the shock would be a policy mistake, since the adjustment that has to take place is a real one

Some comments on a safe asset for emerging economies

- Safe assets are supplied asymmetrically by AEs
- There are spillovers from shocks and policy changes in AE to EME
- Idea: create a security like an MBS by pooling sovering bonds from many countries and then tranching with different levels of risk

- Interesting idea:
  - Increases supply of safe assets, some coming from EMEs
  - Reduces effects of flight to quality
  - May help reverse falling trend of r* to the extent that one of its determinants may be increased demand for safe assets

- Concerns:
  - Design: especially with aggregate shocks (like Covid-19) because defaults become correlated (Subprime crisis)
  - Liquidity: the pooled assets may be illiquid (RMBS were illiquid)
  - It may soak up lots of AEs bonds worsening liquidity and price discovery
  - Even in US Treasuries we have seen liquidity issues

Some questions for Markus

- The landscape today is full of traps
  - Government debt is high, which threatens CB Independence and who is to blame for what happened and what happens next
  - High private debt levels and inflation: trade-off between demand management, price stability and financial stability
  - Lots of shocks to inflation, which makes it hard to predict and also hard to apply theory that MP does not respond to transitory supply shocks
  - Transitions

Questions

- Is this the right time to think about resilence? Or is it too late?
- How do you think about resilience, which needs to be built over time, in this setting?
- How do you coordinate building resilience given that there are lots of things outside MP/CB scope?
- What happens when there are negative trends? How do you think about resilience (and bulding it) when the environment (e.g climate) tends to deteriorate, or when demographics will push r* down and make it hard for the CB to avoid traps like ZLB?
- From MP perspective: what are the risks that are worth running?
- In general, what other risks should society run in this environment?

Some Challenges for Central Banks

- De-anchoring of expectations, costs depend on expectations formation
  - But expectations formation are endogenous to CBs actions and inflation experiences (for example indexation, it is path dependent)
  - Inflation expectations are formed in multiple ways (shopping, Reading newspapers, other experiences)
  - We do not know fully understand how inflation expectations are formed, so hard to send one message to everybody…this makes it hard to strengthen the nominal anchor

- Resilience sometimes means more volatility: hard to communicate and tell stories…
- Monetary vs fiscal dominance: think about long run effects of your policies
- Spillovers to EMDC: look at vulnerabilities build up over long periods of time
- Bad trends, vulnerabilities or traps outside your scope of action

- Models will always go back to SS
  - In forecasts, you can go back to 3% because of models… but you can also say… no, given these shocks we will not go back too target
  - But then it is hard to communicate unless you say something about the interest rate…
  - But forward guidance is hard

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