



Inflation Expectations: Do we have **all** the story?

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EXPECTATIONS:

- Rational? Adaptive? Regressive? Whatever?
- Stubborn post-Covid inflation >>> think outside of the box
- Look at other things that may be happening and that the traditional models do not capture properly.

THREE SPECIAL FEATURES OF COLOMBIA:

- **Indexation**, especially in controlled prices
- Anchoring of **nominal contracts** – “power of the word”
- Impact of **supply shocks on expectations**

INDEXATION

COLOMBIA: INDEXATION OF CPI ITEMS		
COLOMBIA: Indexed CPI Items	Weight in CPI (%)	Indexed to
Group 1: Controlled prices indexed to CPI or Minimum Wage (MW)		
Tolls	0.15	CPI
Auto and truck official inspections	0.12	MW
Contribution to health insurance	0.07	MW
Notary public services	0.06	CPI
Subtotal	0.40	
Group 2: Controlled prices partially indexed to CPI, Producer Price Index (PPI) or Minimum Wage (MW)		
Utilities (Energy, Water, Trash removal, Sewage)	5.67	CPI, PPI, Other
Publicly owned parking	0.32	CPI, Other
Urban transport	4.62	CPI & MW
Preschool and elementary schooling	1.46	CPI & MW
Secondary schooling	0.92	CPI & MW
Subtotal	12.99	
TOTAL 1	13.39	
Group 3: Partially controlled prices indexed to CPI, Producer Price Index (PPI) or Minimum Wage (MW)		
Housing rents *	10.60	CPI
TOTAL 2	23.99	

* There is a legal cap on rent increases equivalent to inflation in the previous calendar year. The cap does not cover new rentals.

NOMINAL CONTRACTS

- **Nominal signals:** very strong impact on price and wage negotiations – beyond expectations
- Tradition in Colombia: **government adjusts minimum wage every end-year** by previous year's inflation plus increase in productivity
- **2019** – Minimum wage increase: **6.0%**
(2018 inflation: 3.18% Productivity increase: 0.52%)
- **2022** – Minimum wage increase: **10.07%**
(2018 inflation: 5.62% Productivity increase: 0.64%)
- **Median wage increases** across the economy end up **the same as the minimum wage increase**

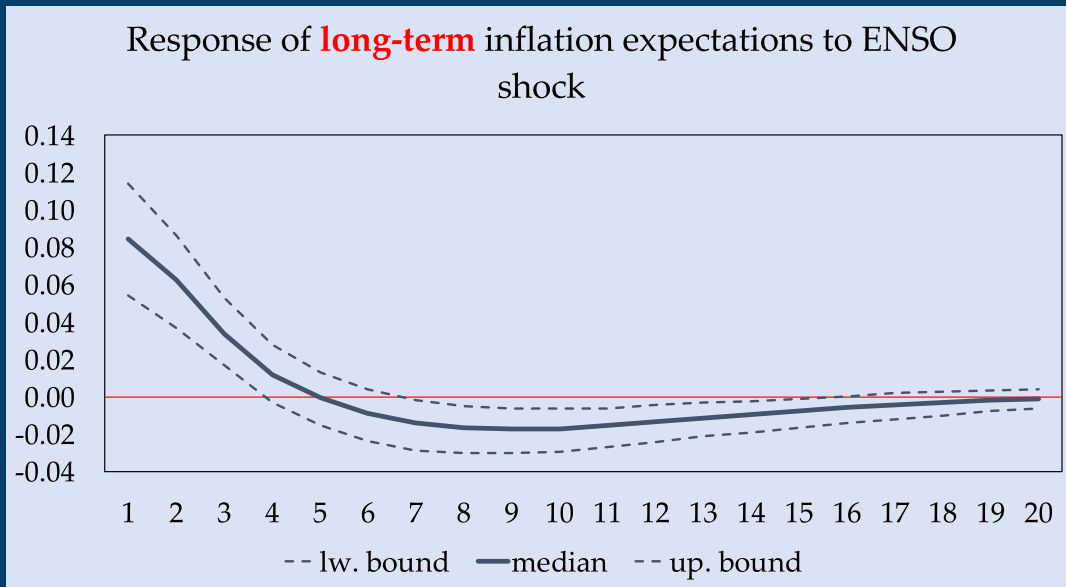
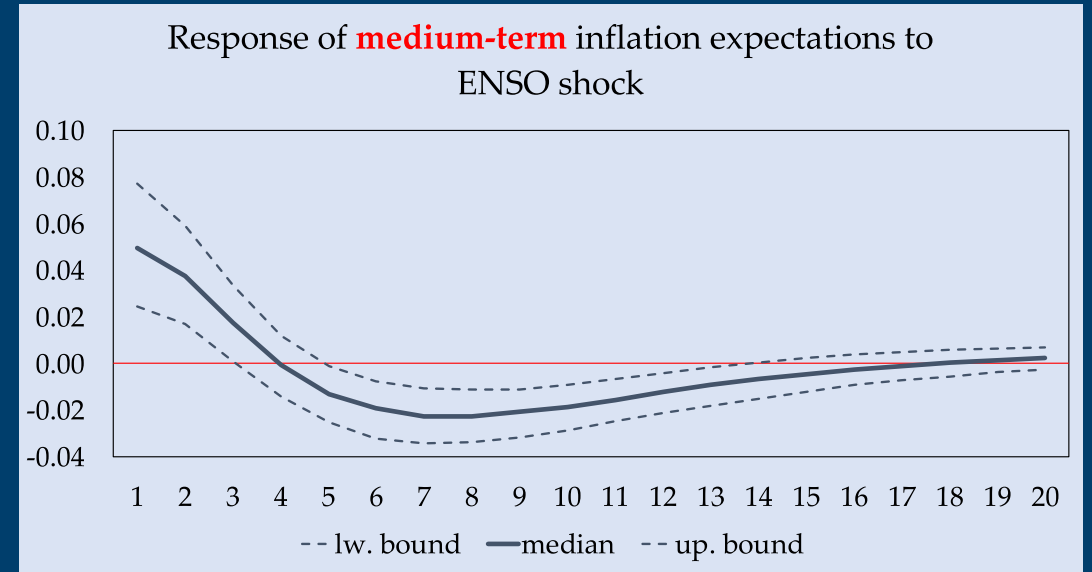
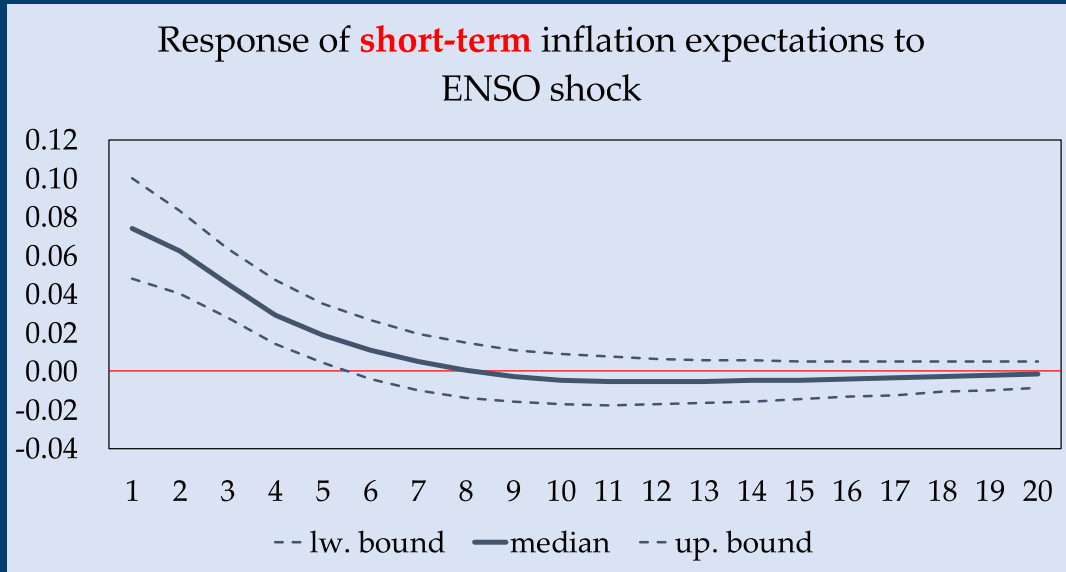
COLOMBIA: Wage Increases		
Percentile	2022	2019
1%	0.00%	-4.18%
5%	0.00%	0.00%
10%	0.00%	0.00%
25%	6.67%	3.18%
50%	10.07%	6.00%
75%	10.07%	6.00%
90%	12.60%	7.64%
95%	23.44%	15.49%
99%	60.89%	52.54%
Mean	9.93%	5.92%
Std. Dev.	11.14%	10.15%
Variance	1.24%	1.03%

Source Banco de la República estimates

IMPACT OF **SUPPLY SHOCKS ON EXPECTATIONS**

- **Fascinating research paper (Thanks Seco!):**
Naranjo & Romero: *Weather Shocks and Inflation Expectations in Semi-Structural Models* (BR, Aug 22)
- **Main finding:** Supply shocks have an impact on expectations that:
 - Is independent of monetary policy stance
 - Lasts for **two quarters** (roughly) after each shock
- **Analysis** based on *El Niño Phenomenon*, but perhaps may be extended to other supply shocks

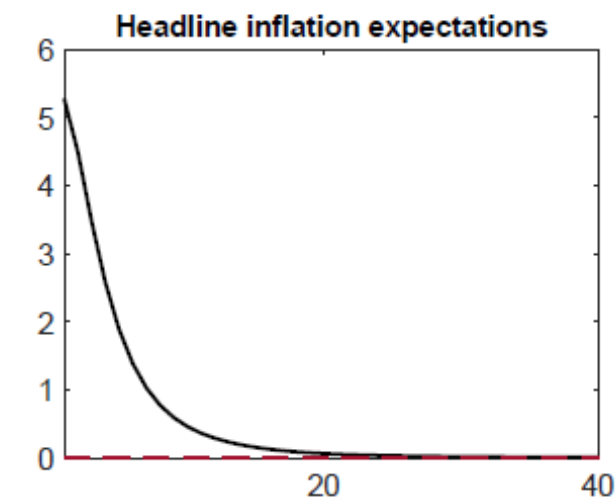
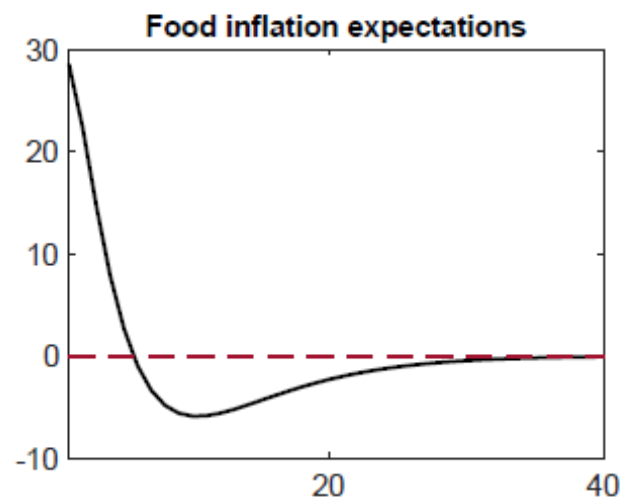
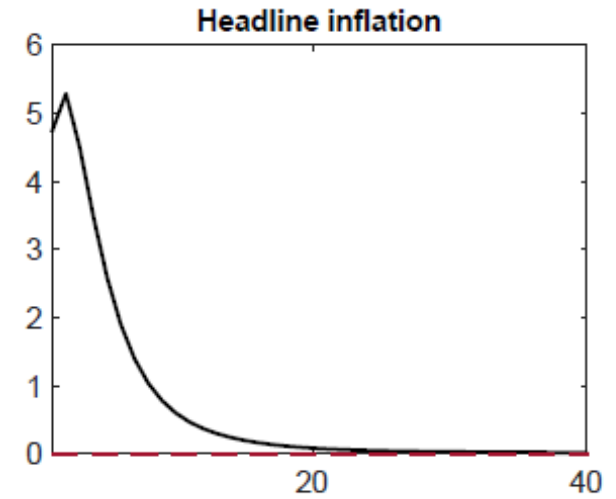
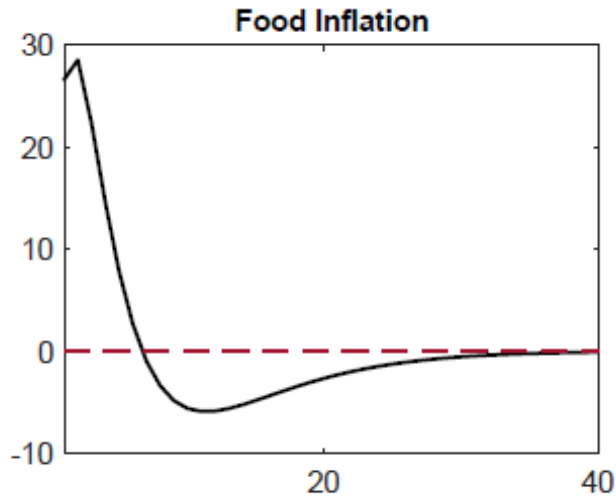
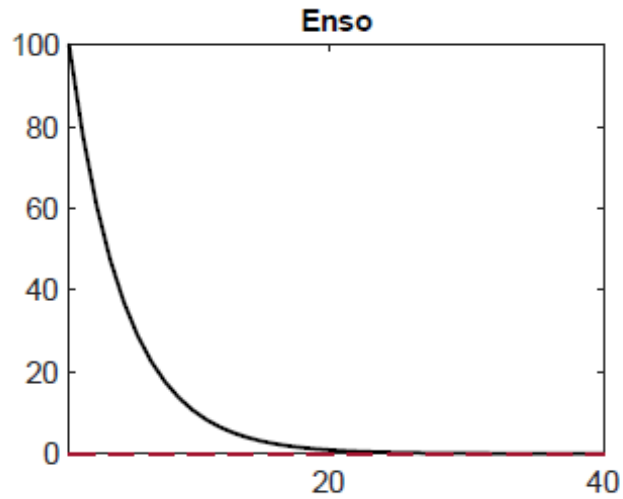
SUPPLY SHOCKS ON EXPECTATIONS



Bayesian vector autoregression (BVAR)

Parameters: random variables with prior probabilities

SUPPLY SHOCKS – IMPULSES (4G MODEL)



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LET'S WORK ON IMPROVING OUR MODELS!

THANK YOU!