



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

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September 23, 2022

# 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**
- Impact of **supply shocks on expectations**

# INDEXATION

## COLOMBIA: INDEXATION OF CPI ITEMS

COLOMBIA: Indexed CPI Items	Weight in CPI (%)	Indexed to
<b>Group 1: Controlled prices indexed to CPI or Minimum Wage (MW)</b>		
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
<b>Subtotal</b>	<b>0.40</b>	
<b>Group 2: Controlled prices partially indexed to CPI, Producer Price Index (PPI) or Minimum Wage (MW)</b>		
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
<b>Subtotal</b>	<b>12.99</b>	
<b>TOTAL 1</b>	<b>13.39</b>	
<b>Group 3: Partially controlled prices indexed to CPI, Producer Price Index (PPI) or Minimum Wage (MW)</b>		
Housing rents *	10.60	CPI
<b>TOTAL 2</b>	<b>23.99</b>	

\* 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%
<b>50%</b>	<b>10.07%</b>	<b>6.00%</b>
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%

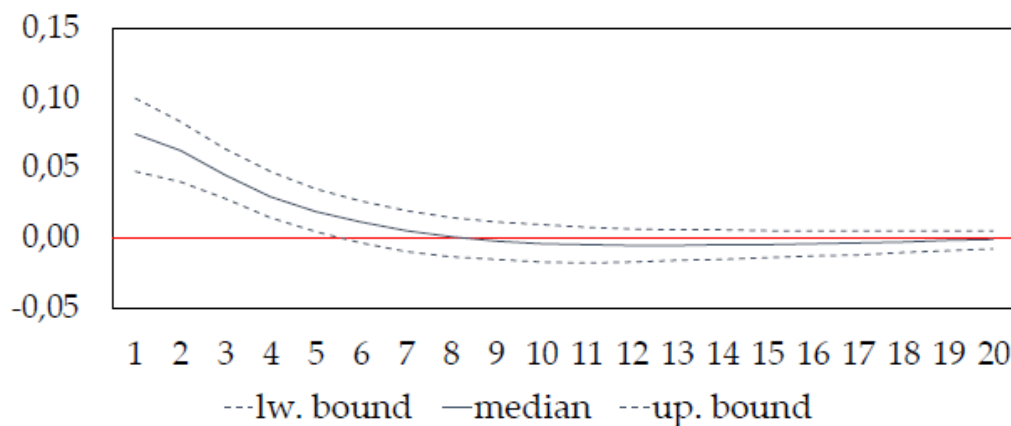
Source Banco de la Republica Estimates

# IMPACT OF **SUPPLY SHOCKS ON EXPECTATIONS**

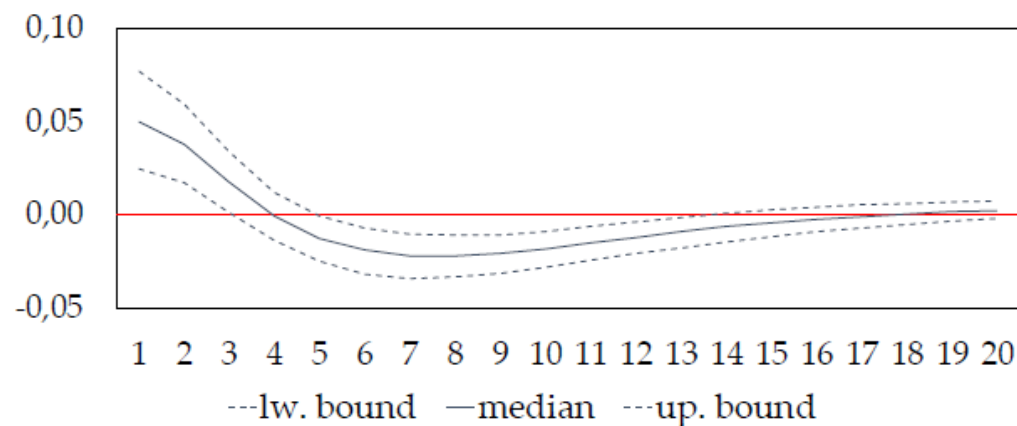
- **Fascinating research paper (Thanks Seco!):**  
Naranjo & Romero: *Weather Shocks and Inflation Expectations in Semi-Structural Models* (BR, Aug 22)
- **Main finding:** Supply shocks have an impact on expectations that:
  - Is independent of monetary policy stance
  - Lasts for **two quarters** after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

# SUPPLY SHOCKS ON EXPECTATIONS

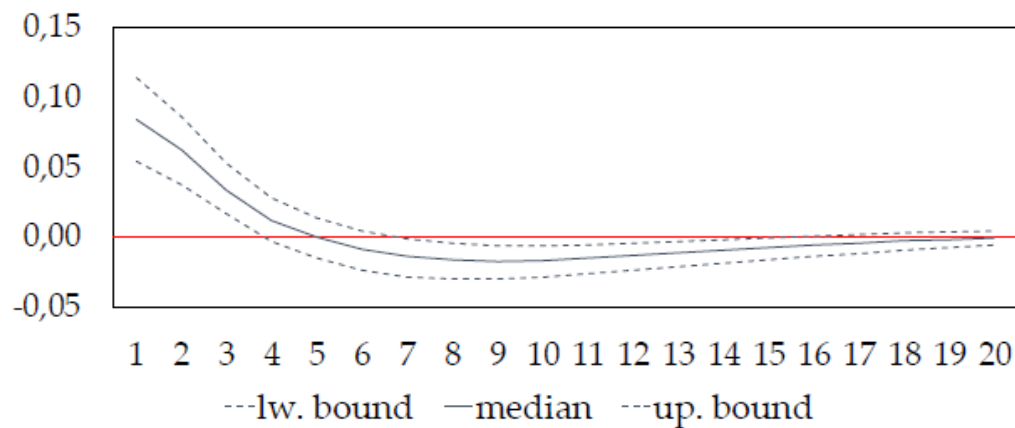
Response of short-term inflation expectations to ENSO shock



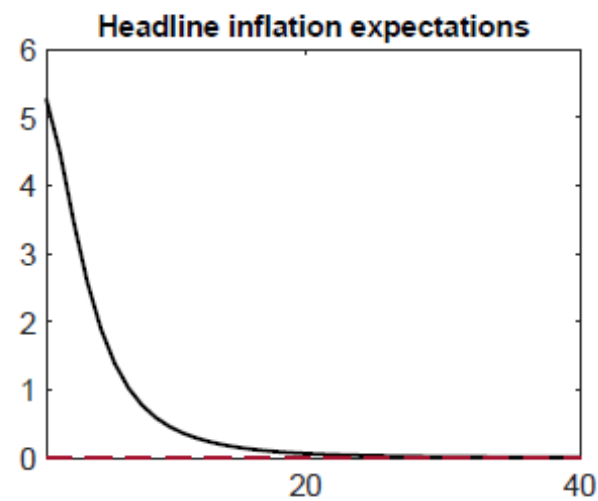
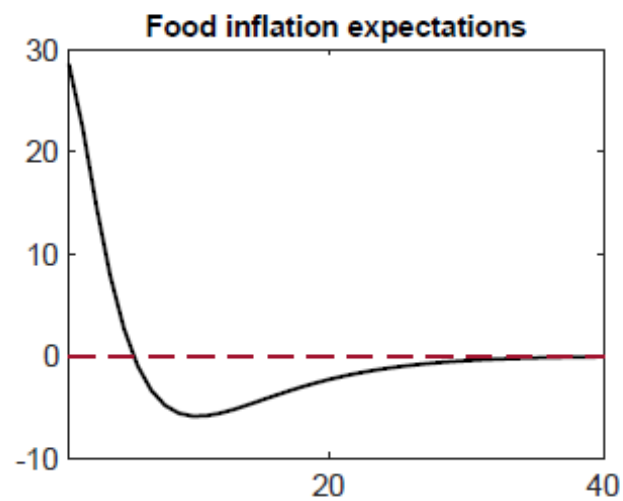
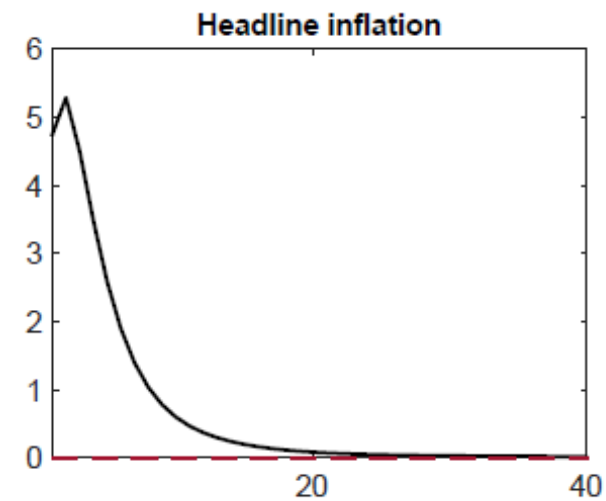
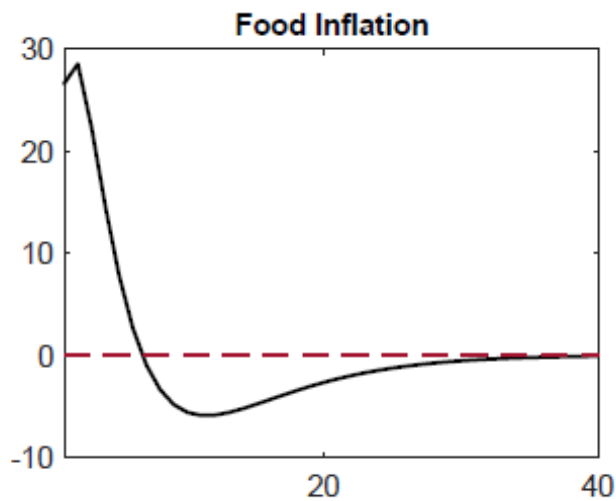
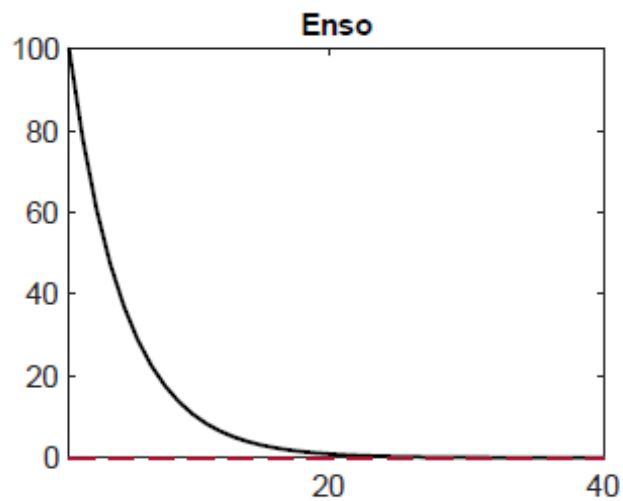
Response of medium-term inflation expectations to ENSO shock



Response of long-term inflation expectations to ENSO shock



# SUPPLY SHOCKS -- IMPULSES





# DO WE HAVE ALL THE STORY?

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- Anchoring of **nominal contracts**
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**LET'S WORK ON IMPROVING OUR MODELS!**

**THANK YOU!**