Fiscal Events and Anchored Inflation Expectations

Ethan Ilzetzki

London School of Economics

May 2023

Inflation in Four Economic Areas



-2%

Source: National Statistical Agencies

Outline

- 1. Conceptual framework: What would inflation expectations look like?
- 2. Five Case studies: Have inflation expectations become unanchored?

Conceptual Framework

Conceptual Framework

Assume investors have **consistent** (not necessarily rational) expectations based on simple New Keyensian model as in Galí 2015.

Three equations:

- Aggregate supply (Expectations augmented Phillips Curve)
- Aggregate demand
- Central bank rule (Taylor rule)

$$\mathbf{i}_{t} = \rho + \phi_{\pi} \left(\pi_{t} - \bar{\pi} \right) + \phi_{\mathbf{y}} \left(\mathbf{y}_{t} - \bar{\mathbf{y}} \right)_{t} + \upsilon_{t}$$

 ϕ_{π} and ϕ_{y} may or may not satisfy "Taylor principle".

Movement of long- and short-term bonds inform us in real time of the type of "shock" markets think we are facing.

Shock	Inflation (π)		Real interest rate (r)	
	SR	LR	SR	LR
Conventional				
Supply (cost)	Ť	-	↑	-
Demand	↑ (-)	-	↑	-
Monetary	↑	-	\downarrow	-
Unanchoring				
Inflation target	Ť	$\uparrow\uparrow$	\downarrow	-
Fiscal Dominance	Ť	↑(↑)	\downarrow	- (↓)

Supply/Cost-Push Shock

Inflation \uparrow Unemployment \uparrow

Taylor rule \rightarrow nominal and real interest rate \uparrow

But partially accommodates inflation

Shock	Inflation (π)		Real interest rate (r)	
	SR	LR	SR	LR
Conventional				
Supply (cost)	↑	-	Ť	-
Demand	↑ (-)	-	↑	-
Monetary	1	-	\downarrow	-
Unanchoring				
Inflation target	1	$\uparrow \uparrow$	\downarrow	-
Fiscal Dominance	\uparrow	↑ (↑)	\downarrow	- (↓)

Demand Shock

Inflation \uparrow Unemployment \downarrow

Taylor rule \rightarrow nominal and real interest rate \uparrow

Potentially crowds out shock entirely

Shock	Inflation (π)		Real interest rate (r)	
	SR	LR	SR	LR
Conventional				
Supply (cost)	Ť	-	↑	-
Demand	↑ (-)	-	↑	-
Monetary	1	-	\downarrow	-
Unanchoring				
Inflation target	\uparrow	$\uparrow\uparrow$	\downarrow	-
Fiscal Dominance	Ť	↑ (↑)	Ļ	- (↓)

Monetary Policy Shock

Deviation from Taylor rule \rightarrow nominal and real interest rate \downarrow

• For example: delayed monetary policy response to inflation

Inflation \uparrow

Shock	Inflation (π)		Real interest rate (r)	
	SR	LR	SR	LR
Conventional				
Supply (cost)	Ť	-	Ť	-
Demand	↑ (-)	-	↑	
Monetary	1	-	Ļ	-
Unanchoring				
Inflation target	\uparrow	$\uparrow\uparrow$	\downarrow	-
Fiscal Dominance	↑	↑ (↑)	Ļ	- (↓)

Shock to Inflation Target



Shock	Inflation (π)		Real interest rate (r)	
	SR	LR	SR	LR
Conventional				
Supply (cost)	↑	-	↑	-
Demand	↑ (-)	-	↑	-
Monetary	1	-	\downarrow	-
Unanchoring				
Inflation target	↑	$\uparrow\uparrow$	Ļ	-
Fiscal Dominance	1	↑ (↑)	Ļ	- (↓)

Shock	Inflation (π)		Real interest rate (r)	
	SR	LR	SR	LR
Conventional				
Supply (cost)	\uparrow	-	1	-
Demand	↑ (-)	-	\uparrow	-
Monetary	↑	-	Ļ	-
Unanchoring				
Inflation target	↑	$\uparrow\uparrow$	\downarrow	-
Fiscal Dominance	1	↑ (↑)	\downarrow	- (↓)

Case Studies

US: American Rescue Plan



US: Debt Ceiling



UK: Mini-budget



Brazil since Covid-19



Brazil: Monetary Policy vs. Inflation Expectations



Turkey: Political Dominance



Japan: Under-anchored Inflation Expectations



Source: Bloomberg

Conclusions

Market-based data on expectations give a glimpse into the implicit narratives of the marginal investor.

Treating them "as if" the marginal investor had a conventional NK model as their mental model tells us their views on the nature of the shock.

Little sign (so far) of unanchored inflation expectations in high income countries, but some unanchoring in emerging markets.