# Fiscal Policy and Inflation Expectations

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<sup>\*</sup>Views are my own and do not represent the position of the Banque de France nor the Eurosystem.

# Fiscal theory of the price level and inflation expectations

- ▶ In a regime of monetary dominance, primary surpluses are set to satisfy the intertemporal government budget constraint for any given price level. The central bank controls the price level
- ▶ In a regime of fiscal dominance, primary balances are set regardless of fiscal solvency, hence the price level adapts to satisfy the budget constraint
- With fiscal dominance: high public debt should lead to higher prices → agents anticipate that and their inflation expectations go up
- ► This paper tests this hypothesis and investigates the relationships between budget deficit to GDP and inflation expectations

# Fiscal stance poses challenges for monetary policy's stabilization of expectations

	M1	M2	М3	M4	M5	М6
(1) Expected inflation rate	0.118***	0.143***	0.143***	0.122***	0.122***	0.122***
	(0.031)	(0.030)	(0.029)	(0.030)	(0.030)	(0.030)
(2) Inflation rate	0.314***	0.232***	0.226***	0.242***	0.243***	0.238***
	(0.012)	(0.012)	(0.013)	(0.012)	(0.012)	(0.012)
(3) Short term interest rate	-0.263***	-0.233***	-0.226***	-0.198***	-0.199***	-0.202***
	(0.021)	(0.022)	(0.023)	(0.022)	(0.023)	(0.023)
(4) Budget deficit to GDP (TC)		0.388***	0.390***	0.355***	0.350***	0.350***
		(0.036)	(0.036)	(0.036)	(0.036)	(0.036)
(3)x(4)			0.052**			
			(0.024)			
(5) Monetary contractivity index				-0.146***	-0.152***	-0.135***
				(0.010)	(0.011)	(0.011)
(4)x(5)					0.013	
					(0.011)	
(3)x(4)x(5)						-0.027**
						(0.013)
Obs	41.078	37.930	37.930	37.930	37.930	37.930
N-Groups	570	560	560	560	560	560
AR(1)-p	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)-p	0.501	0.970	0.956	0.899	0.923	0.887
Hansen-p	0.741	0.876	0.889	0.875	0.870	0.882
Annual fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Monthly fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

- ► A rise in budget deficit counteracts the intended stabilizing effect on inflation expectations of contractionary monetary policy
- Subsample analysis shows this effect may be worse in period of higher deficit (post-2013)

#### State-dependent effect

- What drives their attention to fiscal stance post-2013?
  - ▶ 1. Worries about fiscal sustainability
  - ▶ 2. Higher attention to news due to increased inflation
- Regarding 1., one could check whether the effect non-linear? (above a threshold?)

$$E_{it}(\pi_H) = \alpha_i + \beta_1 E_{it-1}(\pi_H) + \beta_2 \pi_{t-1} + \beta_3 i_t^{st} + \beta_4 E_{it}(F_t) + \beta_5 E_{it}(F_t)^2 + \beta_6 E_{it}(F_t)^2 E_{it}(F_t) + \epsilon_{it}$$

 Or use a fiscal sustainability index interacted with deficit to GDP (Lyziak and Mackewicz 2020)

#### State-dependent attention

- Regarding 2., the literature has shown that forecasters ignore small surprises but update their forecasting rule after large surprises: state-dependent attention
- ► Post-2013 also features higher forecast errors (eye-balling)



► It would be interesting to test the interaction of forecast error with expected deficit, or a measure of attention

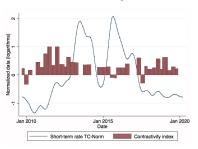
### State-dependent attention & the media

▶ Time-varying attention on inflation and deficit evidenced in the data



- ▶ Media coverage has been shown to influence expectations (Larsen et al. 2021), as well as driving business cycles (Nimark 2019, 2021)
- An alternative measure for expectation of fiscal deficit other than the past fiscal deficit is to build an expectation measure based on newspaper articles (Factiva newspapers word searches, or Acosta 2022)

# Contractivity index



- No clear correlation between the interest rate and the communication instrument: is it a strategy of the central bank?
- ► Are the results of both fiscal and monetary cancelling out because both monetary instruments contradict one another?
- Maybe it would be more convincing if plotting the difference with a measure of neutral rate or expectations of the neutral rate
- ▶ Does this index correlates with automated measures of sentiment?