

The effects of monetary policy and the role of fiscal policy in the euro area

Dennis Bonam

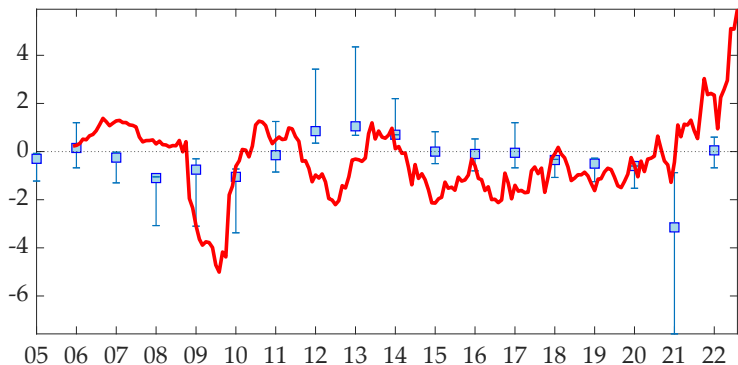
De Nederlandsche Bank
Vrije Universiteit Amsterdam



50th OeNB Economics Conference
and 60th SUERF Anniversary Conference, 23 May 2023

The views expressed do not necessarily reflect the official position of the De Nederlandsche Bank or the Eurosystem.

Monetary and fiscal policy in the euro area...

Figure 1: ...did not always move in tandem

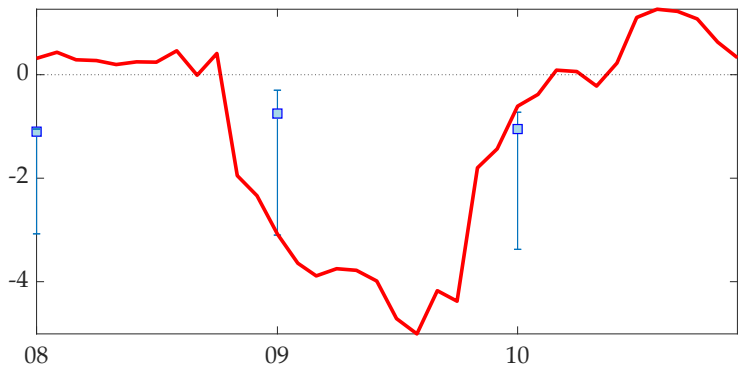




-  **Fiscal stance:** annual change in cyclically adjusted primary balance (% of trend GDP), median and interquartile range of 20 EA countries
-  **Monetary stance:** annual change in shadow rate (%)

Source: AMECO Online Database (cyclically adjusted primary balance) and Cynthia Wu's website (shadow rate).

Global financial crisis: moving in tandem

Figure 2: Monetary and fiscal policy in the euro area

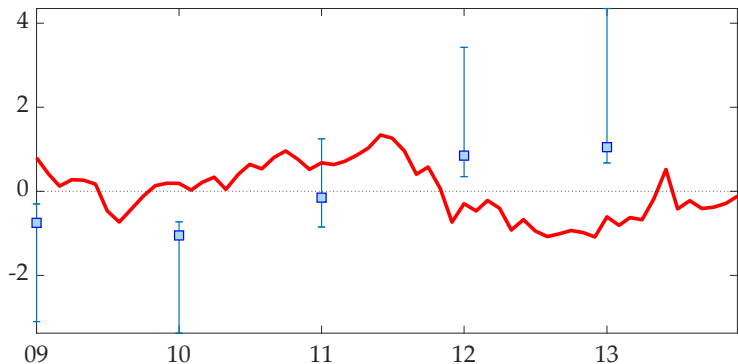




-  **Fiscal stance:** annual change in cyclically adjusted primary balance (% of trend GDP), median and interquartile range of 20 EA countries
-  **Monetary stance:** annual change in shadow rate (%)

Source: AMECO Online Database (cyclically adjusted primary balance) and Cynthia Wu's website (shadow rate).

Sovereign debt crisis: policy misalignment

Figure 3: Monetary and fiscal policy in the euro area

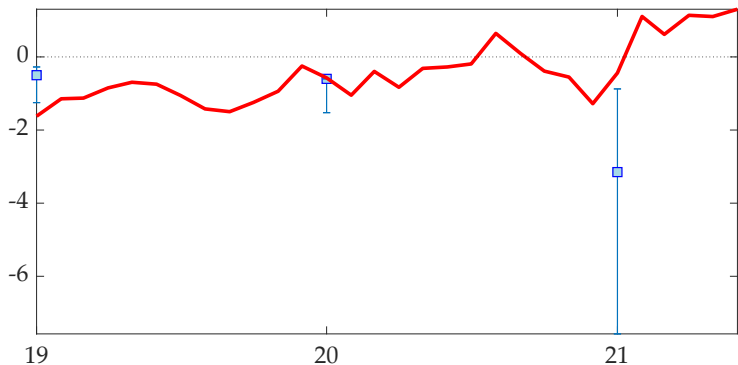




-  **Fiscal stance:** annual change in cyclically adjusted primary balance (% of trend GDP), median and interquartile range of 20 EA countries
-  **Monetary stance:** annual change in shadow rate (%)

Source: AMECO Online Database (cyclically adjusted primary balance) and Cynthia Wu's website (shadow rate).

COVID-19 crisis: harmonious policy response

Figure 4: Monetary and fiscal policy in the euro area

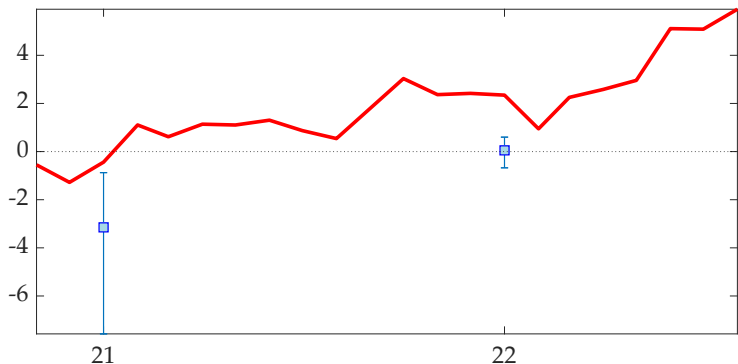




-  **Fiscal stance:** annual change in cyclically adjusted primary balance (% of trend GDP), median and interquartile range of 20 EA countries
-  **Monetary stance:** annual change in shadow rate (%)

Source: AMECO Online Database (cyclically adjusted primary balance) and Cynthia Wu's website (shadow rate).

Energy crisis: butting heads again?

Figure 5: Monetary and fiscal policy in the euro area



-  **Fiscal stance:** annual change in cyclically adjusted primary balance (% of trend GDP), median and interquartile range of 20 EA countries
-  **Monetary stance:** annual change in shadow rate (%)

Source: AMECO Online Database (cyclically adjusted primary balance) and Cynthia Wu's website (shadow rate).

Q: Do the effects of monetary policy depend on the fiscal stance?

Q: Do the effects of monetary policy depend on the fiscal stance?

A: Yes

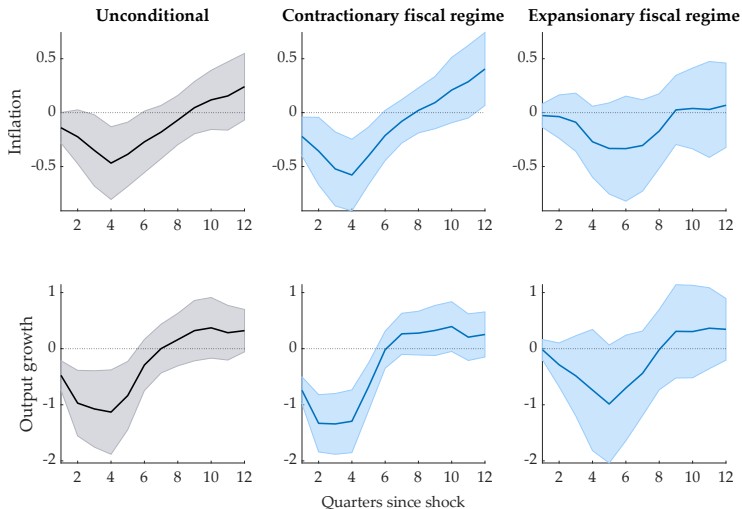
Q: Do the effects of monetary policy depend on the fiscal stance?

A: Yes

- Kloosterman et al. (2022)
- Estimate **effects of monetary policy** shocks on inflation and output growth in the euro area...
- ...across regimes of **contractionary and expansionary fiscal policy**
 - ▶ **Contractionary fiscal policy**: characterized by positive change in cyclically adjusted primary balance
 - ▶ **Expansionary fiscal regime**: characterized by negative change in cyclically adjusted primary balance
- Panel smooth transition local projection model, 10 EA countries, 1999Q1-2019Q4

It takes two to tango

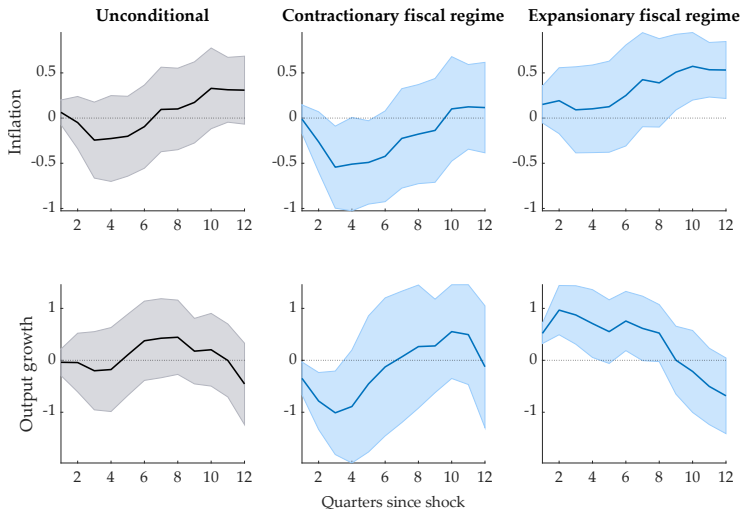
Figure 6: Responses to a contractionary monetary policy shock



Notes: First column shows responses to an unconditional one st. dev. monetary policy shock. Second and third columns show responses to a monetary policy shock conditional on being in the contractionary and expansive fiscal regime, resp. Shaded areas reflect the 90% confidence interval based on Driscoll-Kraay standard errors. Source: "The effects of monetary policy across fiscal regimes" by Kloosterman et al. (2022).

It takes two to tango

Figure 7: Responses to an expansionary monetary policy shock



Notes: First column shows responses to an unconditional one st. dev. monetary policy shock. Second and third columns show responses to a monetary policy shock conditional on being in the contractionary and expansionary fiscal regime, resp. Shaded areas reflect the 90% confidence interval based on Driscoll-Kraay standard errors. Source: "The effects of monetary policy across fiscal regimes" by Kloosterman et al. (2022).

What (else) do we find?

- The effects of monetary policy depend on whether monetary and fiscal policy move in the same direction

What (else) do we find?

- The effects of monetary policy depend on whether monetary and fiscal policy move in the same direction
- The difference in the output response to monetary policy shocks across fiscal regimes is mainly driven by the response of private consumption
- The importance of the fiscal stance for the effects of monetary policy is more pronounced during recessions

What (else) do we find?

- The effects of monetary policy depend on whether monetary and fiscal policy move in the same direction
- The difference in the output response to monetary policy shocks across fiscal regimes is mainly driven by the response of private consumption
- The importance of the fiscal stance for the effects of monetary policy is more pronounced during recessions
- Results underscore the **importance of proper alignment of monetary and fiscal policy** for the effectiveness of monetary policy, especially during economic crises

What's going on?

Two (non-mutually exclusive) views: results reflect...

- 1 two shocks hitting the economy at the same time, in clashing or complementing ways
- 2 importance of **wealth channel** of monetary and fiscal policy:
(Leeper, 2016; Caramp and Silva, 2022)
 - ▶ Monetary policy: interest rate receipts, valuation of bond holdings
 - ▶ Fiscal policy: disposable income, amount of bond holdings

Transmission of monetary policy and wealth channel

Consider an increase in the interest rate:

- **Intertemporal substitution effect** makes households want to consume *less*
- **Positive wealth effect** could make households want to consume *more*:
 - ▶ if higher interest rate raises interest rate receipts on savings
 - ▶ if negative revaluation effect on asset holdings not too strong

Transmission of monetary policy and wealth channel

Consider an increase in the interest rate:

- **Intertemporal substitution effect** makes households want to consume *less*
- **Positive wealth effect** could make households want to consume *more*:
 - ▶ if higher interest rate raises interest rate receipts on savings
 - ▶ if negative revaluation effect on asset holdings not too strong
- Which of the two effects dominates depends on how fiscal policy responds to the rise in interest expenses and increase in public debt
 - ▶ Is fiscal policy sufficiently geared towards stabilizing public debt?
 - ▶ Is there a risk of fiscal dominance?

The implications of fiscal dominance

- **Monetary dominance:** central bank actively targets inflation, government ensures debt sustainability
- **Fiscal dominance:** forego inflation and debt targets, and let price level ensure debt sustainability

The implications of fiscal dominance

- **Monetary dominance:** central bank actively targets inflation, government ensures debt sustainability
- **Fiscal dominance:** forego inflation and debt targets, and let price level ensure debt sustainability
- In theory, if risk of moving to regime of fiscal dominance is sufficiently high, then positive wealth effect could dominate:
 - ▶ **Rise in interest rate** raises interest rate receipts...
 - ▶ ...and leads to an increase in government debt...
 - ▶ ...which households do not expect to be (fully) offset by future taxes...
 - ▶ ...making them feel wealthier and want to raise consumption...
 - ▶ ...which **raises inflation**

(Sims, 2011)

Risks of fiscal dominance in the euro area?

Perceptions of fiscal burden $\xRightarrow{?}$ long-run inflation expectations

- Under fiscal dominance, would expect positive impact

Risks of fiscal dominance in the euro area?

Perceptions of fiscal burden $\xrightarrow{?}$ long-run inflation expectations

- Under fiscal dominance, would expect positive impact

Table 1: Perceptions of fiscal burden did not raise long-term inflation expectations

<i>Dependent variable: Daily change in 5-y, 5-y forward inflation swaps</i>		
<i>Explanatory variables:</i>	Sovereign debt crisis (2010 – 2012)	COVID-19 crisis (2020 – 2021)
Fiscal burden, Spain	-0.022* (0.01)	-0.12** (0.05)
Fiscal burden, Italy	-0.022 (0.01)	-0.07** (0.03)
Fiscal burden, France	0.00 (0.02)	0.09 (0.06)
<i>N</i>	782	308

Notes: The table reports results for the regression of daily changes in five-year, five-year forward inflation swaps on the first common factors of various indicators of sovereign risk for Spain, Italy and France. To preserve space, the coefficient estimates of other control variables (e.g. macroeconomic news variables, the Euro-Bund future implied volatility and Stoxx Europe 600 indices) are omitted. Standard errors are in parentheses. * and ** indicate significance levels at 90% and 95%, respectively. *Source:* “Do markets see risks of fiscal dominance in the euro area?” by Bonam et al. (2021).

Summing up

- The effects of monetary policy depend on the fiscal stance
- Monetary and fiscal policy interact through the wealth channel
- Wealth effects depend on risks of fiscal dominance

How to better align monetary and fiscal policy?

- More coordination helpful, but could threaten CB independence
 - ▶ Need sound fiscal rules that help ensure long-run fiscal solvency...
 - ▶ ...and rule out fiscal dominance

How to better align monetary and fiscal policy?

- More coordination helpful, but could threaten CB independence
 - ▶ Need sound fiscal rules that help ensure long-run fiscal solvency...
 - ▶ ...and rule out fiscal dominance
- Fiscal rules important, but should allow for counter-cyclical fiscal policy
 - ▶ Effectively respond to crises, create policy headroom during booms
 - ▶ Use transparent and cyclically-adjusted operational targets
 - ▶ Establish credible and country-specific debt reduction paths

How to better align monetary and fiscal policy?

- More coordination helpful, but could threaten CB independence
 - ▶ Need sound fiscal rules that help ensure long-run fiscal solvency...
 - ▶ ...and rule out fiscal dominance
- Fiscal rules important, but should allow for counter-cyclical fiscal policy
 - ▶ Effectively respond to crises, create policy headroom during booms
 - ▶ Use transparent and cyclically-adjusted operational targets
 - ▶ Establish credible and country-specific debt reduction paths
- May require more fiscal space in the face of large adverse shocks
 - ▶ Occasionally activate escape clauses
 - ▶ Enhance public risk sharing within the euro area



Olivier Blanchard

@ojblanchard1



A naive (ok, maybe not so naive) question.
Given how hard it appears to slow down the
US economy through monetary policy, maybe
fiscal policy could help?

References

References I

- Bonam, D., Galati, G., Ozden, T., and Poelhekke, S. (2021). Do markets see risks of fiscal dominance in the euro area? *ECB Occasional Paper Series. Work stream on monetary-fiscal policy interactions*, 273.
- Caramp, N. and Silva, D. H. (2022). Fiscal policy and the monetary transmission mechanism. Mimeo.
- Kloosterman, R., Bonam, D., and van der Veer, K. (2022). The effects of monetary policy across fiscal regimes. Technical Report 755, De Nederlandsche Bank.
- Leeper, E. M. (2016). Why central banks should care about fiscal rules. *Sveriges Riksbank Economic Review*, 3:109–125.
- Sims, C. A. (2011). Stepping on a rake: The role of fiscal policy in the inflation of the 1970s. *European Economic Review*, 55(1):48–56.