

# Monetary/fiscal policy mix in the current international context

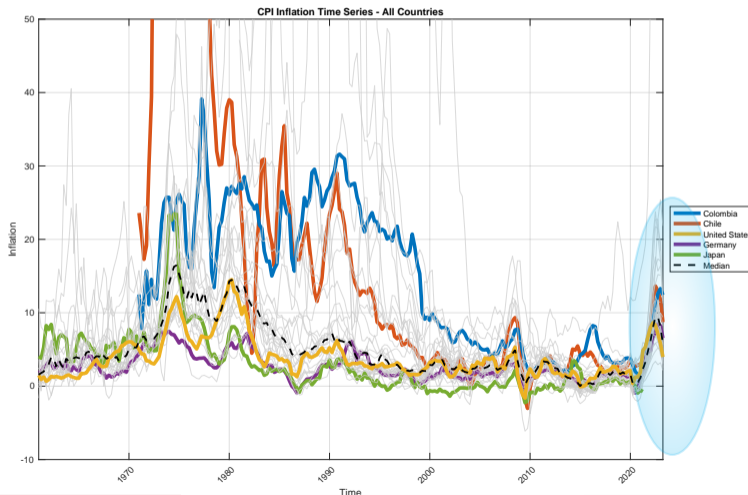
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Francesco Bianchi

Johns Hopkins University  
NBER & CEPR

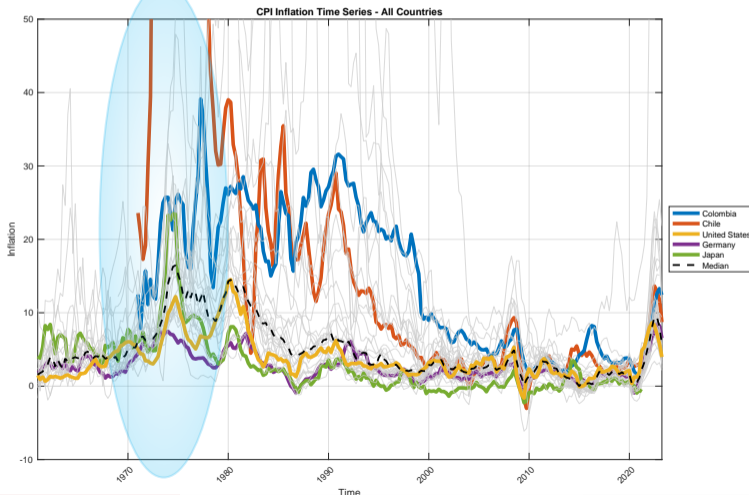
# Inflation across space and time

- How does the post-pandemic increase in inflation compare with the past?



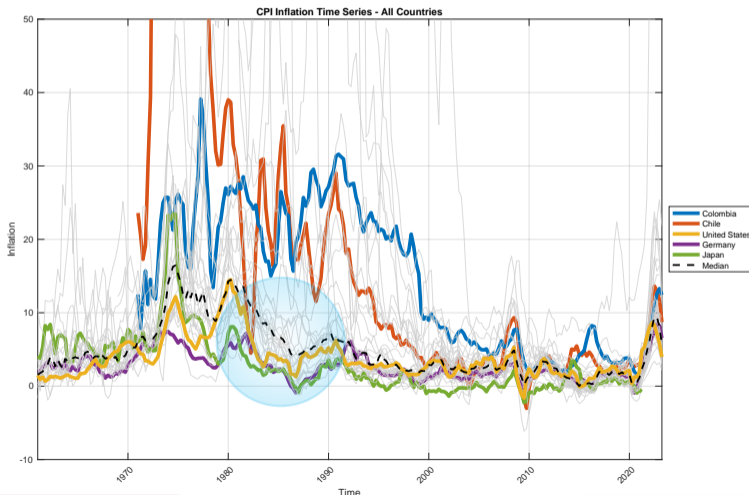
# Inflation across space and time

- High and volatile inflation in several countries in the 1960s and 1970s



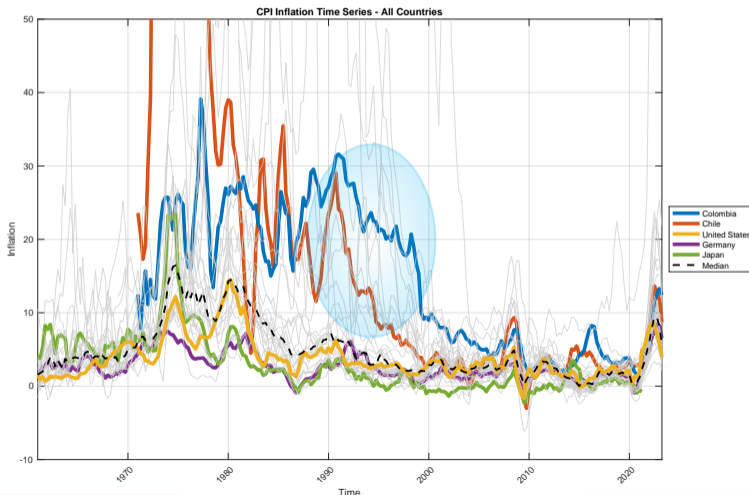
# Inflation across space and time

- Break for advanced economies starting from the 1980s



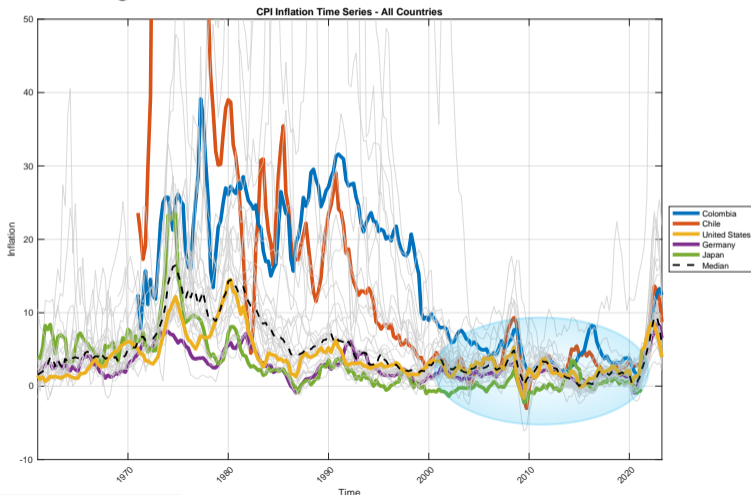
# Inflation across space and time

- Break in the late 1990s for the other countries



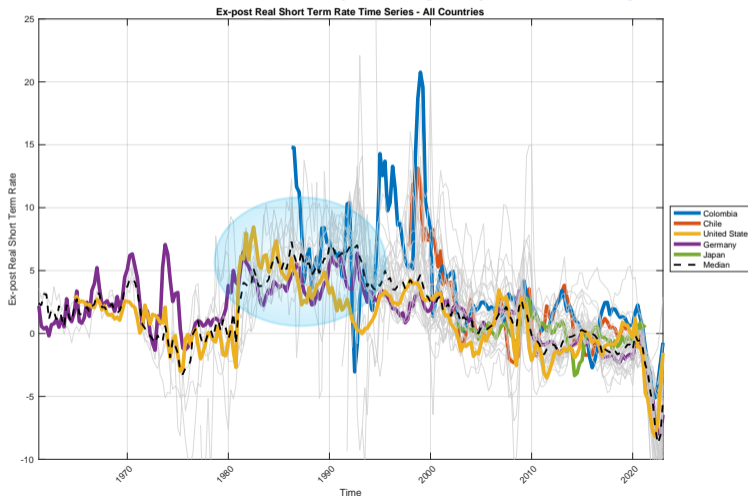
# Inflation across space and time

- Remarkable convergence to **low** and **stable** inflation across countries in the 1990s



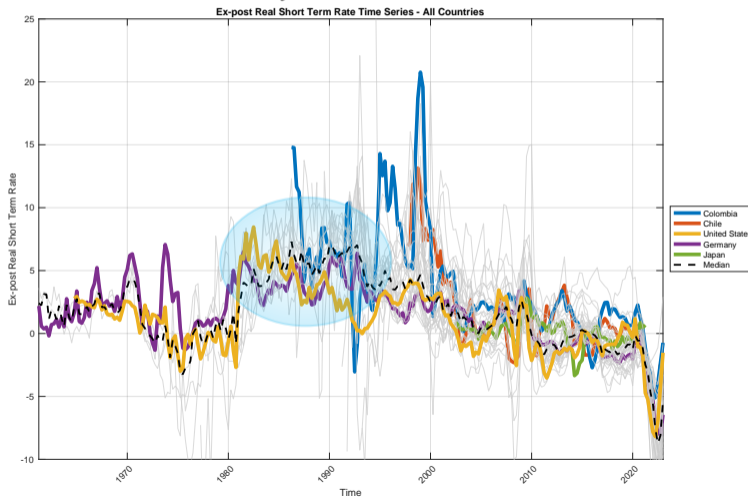
# Large swings in real interest rates

- Decline in inflation associated with a **prolonged period of high real interest rates**



# Large swings in real interest rates

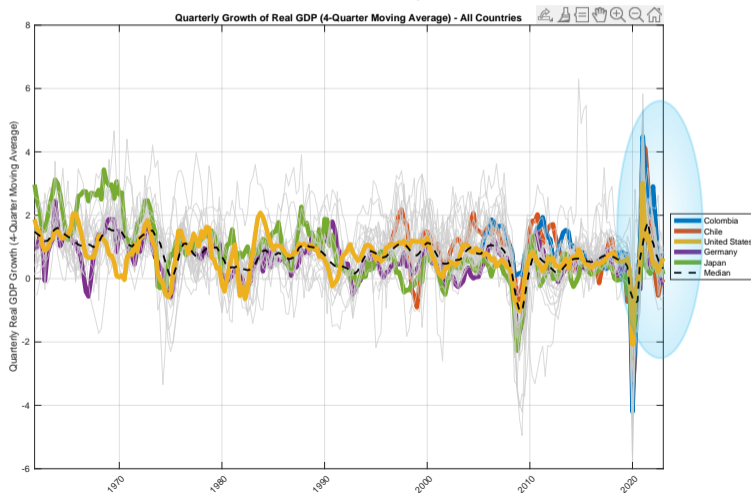
- Emerging economies traditionally vulnerable to these structural changes





# Post-pandemic recovery

- Post pandemic inflation associated with a **quick rebound in real activity**



# How to interpret the post-pandemic inflation?

- Decline in inflation often attributed to changes in monetary policy, but...
- ...conquest of inflation better understood as a monetary/fiscal policy phenomenon:
  - 1 Key role of central bank independence (US, UK, ...)
  - 2 Shift in fiscal practice (Euro Area, Chile, ...)
  - 3 Reduction in both the mean and volatility of inflation
- If the conquest of inflation is the result of a change from a Fiscally-led to a Monetary-led policy mix, how should we interpret the post-pandemic inflation?
  - 1 Return to a Fiscally-led policy mix?
  - 2 An emergency budget that generated a quick recovery?

# Overview

This talk is based on three papers that provide an **optimistic**, a **concerned**, and a **pessimistic** view on the post-pandemic surge in inflation:

- 1 **A Fiscal Theory of Persistent Inflation** with Renato Faccini and Leonardo Melosi (QJE, 2023)
- 2 **Inflation as a Fiscal Limit** with Leonardo Melosi (2022 Jackson Hole Economic Symposium)
- 3 **Who is Afraid of Eurobonds?** with Leonardo Melosi and Anna Rogantini-Picco (2023 NBER working paper)

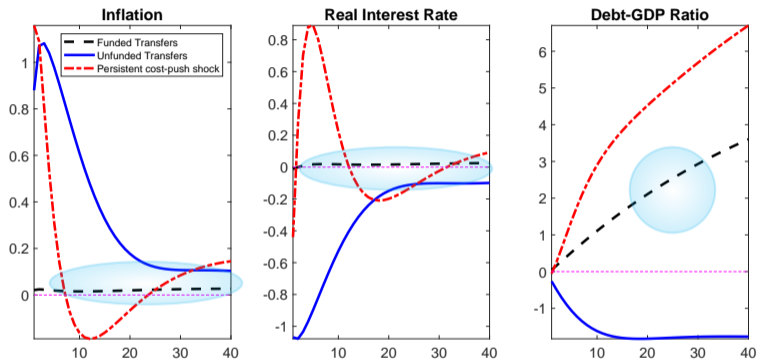
## Optimistic view (A Fiscal Theory of Persistent Inflation):

- Policy coordination generated a quick rebound of the economy from the pandemic
- Large spur of fiscal inflation was the cost
- **Mission accomplished**, we are on our way back to **normality**

# A Fiscal Theory of Persistent Inflation

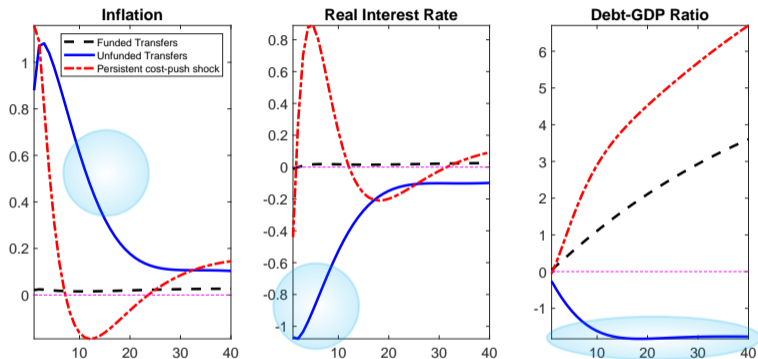
- New class of general equilibrium models with partially unfunded government debt
  - ① At any given point in time, part of the outstanding government debt is **unfunded**
  - ② Unfunded debt is **not** backed by future fiscal adjustments  $\Rightarrow$  Inflationary pressure **accommodated by the central bank**
  - ③ Debt stability achieved with a mix of fiscal adjustments and inflation
- With nominal rigidities, unfunded fiscal shocks cause **persistent** movements in **inflation** and in **real interest rates**  $\rightarrow$  **A fiscal theory of persistent inflation**
- We **estimate** a TANK model augmented with **unfunded fiscal shocks** on US data:  
 $\Rightarrow$  **Post-pandemic inflation and recovery** were the result of **unfunded fiscal shocks**:  
**Two massive fiscal stimuli** and a **new monetary framework**
- **Optimistic view**: Inflation expected to **slowly** revert to its 2% target

# Identification of unfunded transfers shocks



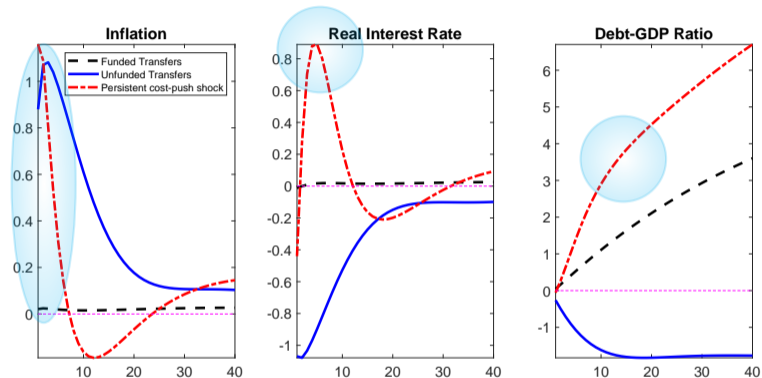
- **Funded transfers:** Modest impact on the macroeconomy, debt increases
- **Unfunded transfers:** Persistent inflation increases, real rate and debt decline
- **Phillips curve shifter:** Short-lasting inflation spike, real rate and debt increase

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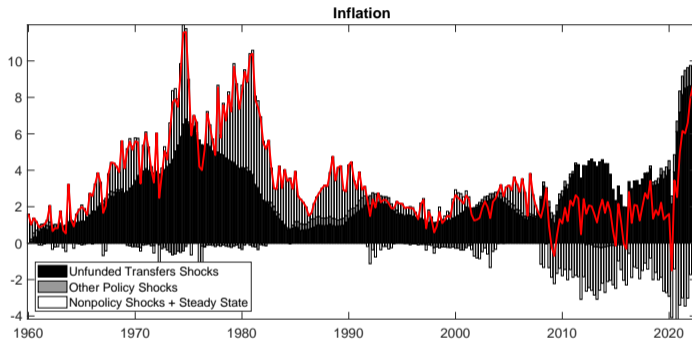
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# Drivers of Inflation

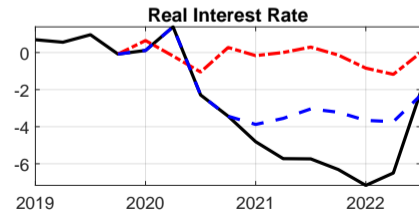
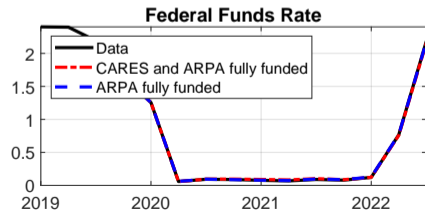
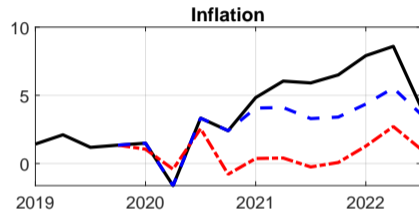
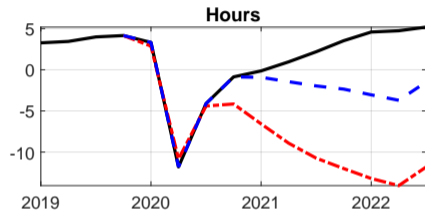


Unfunded transfers shocks: [► BEI](#)

- ① Accounts for **rise of trend inflation in the 1960s-1970s and decline in the 1980s**
- ② **Offsets the deflationary bias** that non-policy shocks have set off since early 1990s

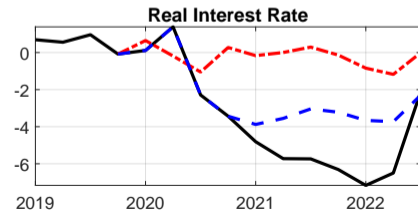
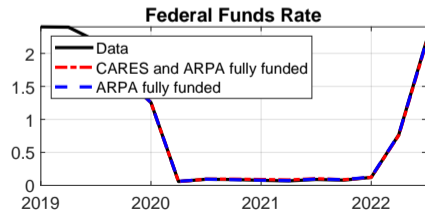
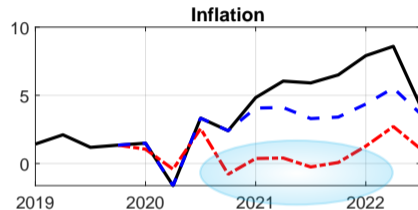
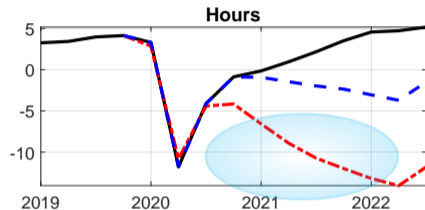
# Unfunded Debt and Reflation of the Economy

- Counterfactual simulations to assess the effects of unfunded share of fiscal stimuli



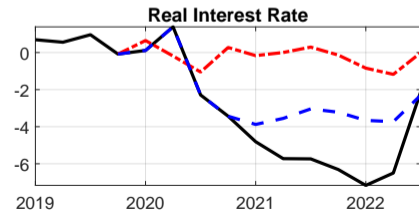
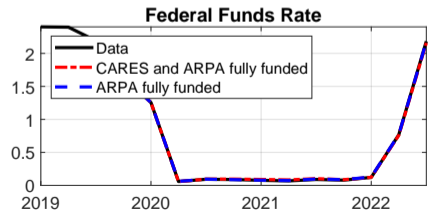
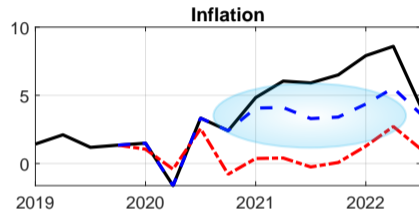
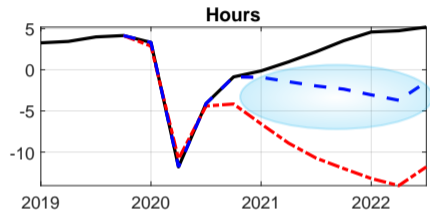
# Unfunded Debt and Reflation of the Economy

- No unfunded fiscal shocks



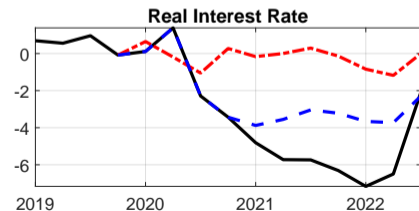
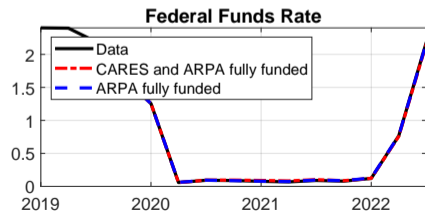
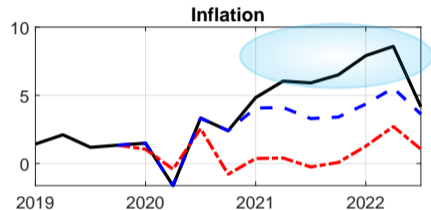
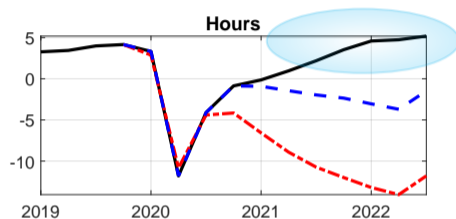
# Unfunded Debt and Reflation of the Economy

- Effect of CARES act



# Unfunded Debt and Reflation of the Economy

- Effect of CARES act + ARPA



## Concerned view (Inflation as a Fiscal Limit):

- Large fiscal stimulus shifted the perception about future policy mix
- Fiscal inflation due to changes in policymakers' behavior and **beliefs**
- **What if fiscal and monetary policy fail to coordinate?**
- Monetary policy has changed, fiscal policy not yet  $\Rightarrow$  **risk of fiscal stagflation**

## Agents' Beliefs and Fiscal Stagflation

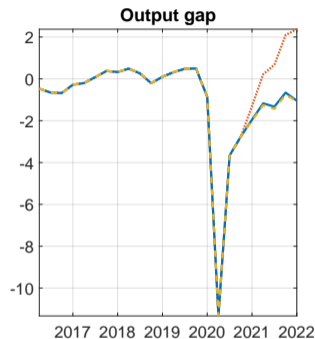
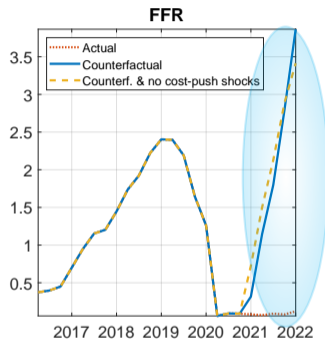
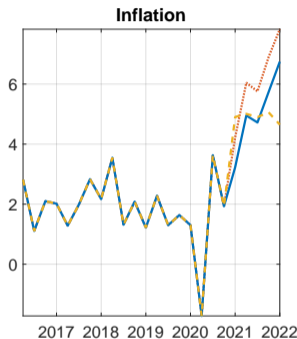
We estimate a model that allows for changes between a **Monetary-led** and a **Fiscally-led** policy mix and **changes in agents' beliefs about the future policy mix**:

- 1 Movements in trend inflation are explained by fiscal shocks and by changes in the policy mix. Cost-push shocks have only transitory effects.
- 2 Following the ARPA, the probability of a return to the Fiscally-led regime has increased, helping the recovery, but also causing a **jump in fiscal inflation**.
- 3 Monetary tightening alone would not have prevented the increase in inflation.

⇒ When inflation has a fiscal nature, monetary tightening can spark **fiscal stagflation**

⇒ **Conquering the post-pandemic inflation necessitates an overhaul of the fiscal framework** aimed at financing the present and future public expenditure.

# Could monetary policy have averted the recent rise in inflation?

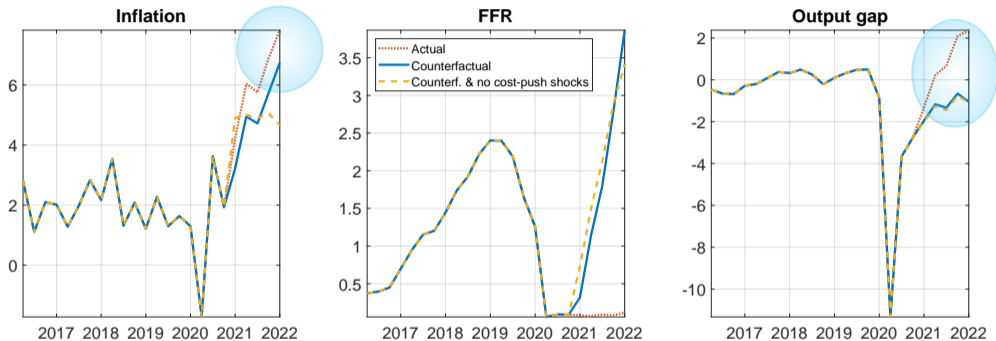


**Counterfactual:** Increase in interest rates, but with **same beliefs about future policy mix**

- 1 The Federal Reserve increases rates in response to inflation



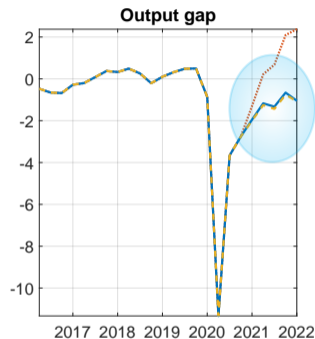
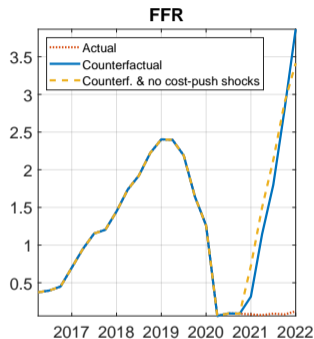
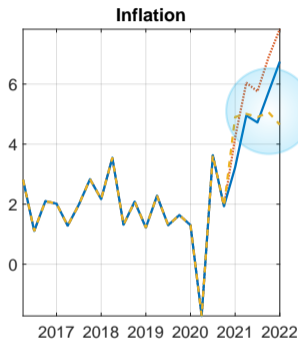
# Could monetary policy have averted the recent rise in inflation?



**Counterfactual:** Increase in interest rates, but with **same beliefs about future policy mix**

- ② Modest gain in terms of inflation, at the cost of a large output loss

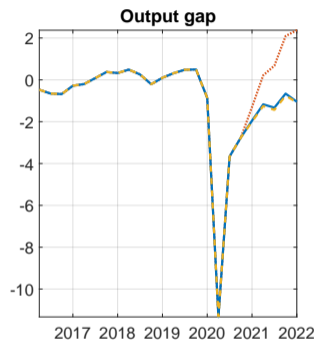
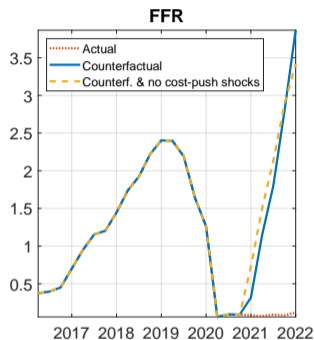
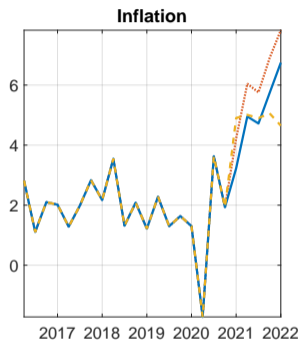
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**Counterfactual:** Increase in interest rates, but with **same beliefs** about future policy mix

- 3 The result is not driven by cost-push shocks

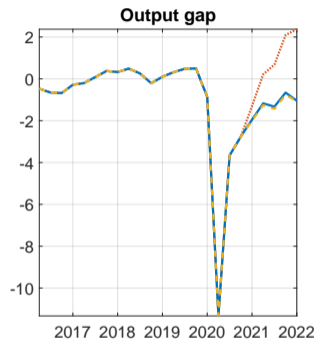
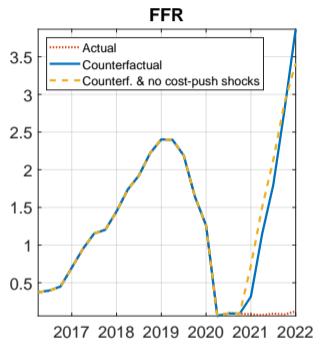
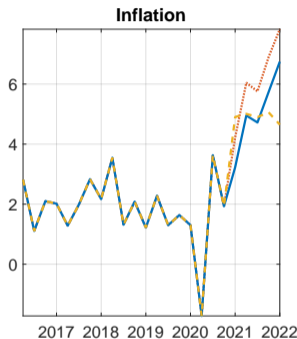
# Could monetary policy have averted the recent rise in inflation?



**Counterfactual:** Increase in interest rates, but with **same beliefs about future policy mix**

- ④ When inflation has a fiscal nature, increasing rates, in itself, is not enough

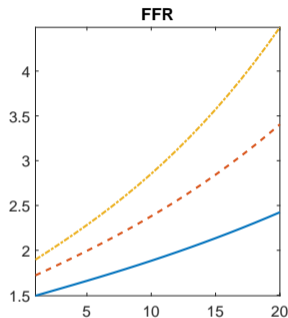
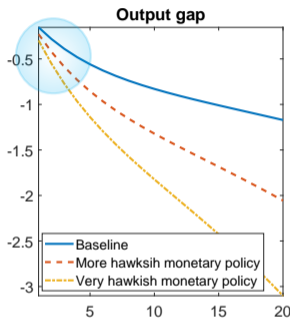
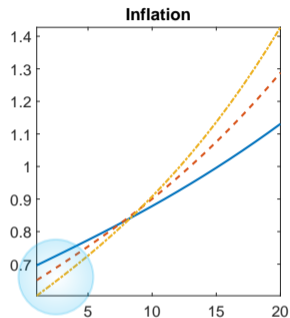
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**Counterfactual:** Increase in interest rates, but with **same beliefs** about future policy mix

- 5 The whole policy mix needs to adjust to avoid **fiscal stagflation**

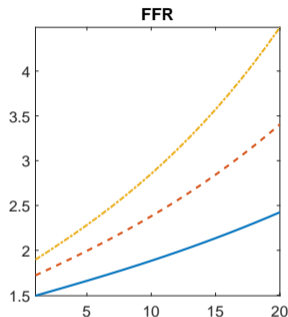
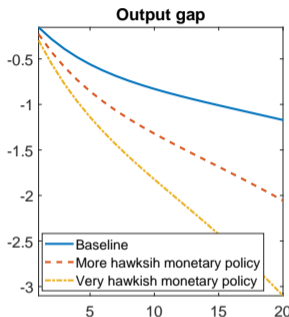
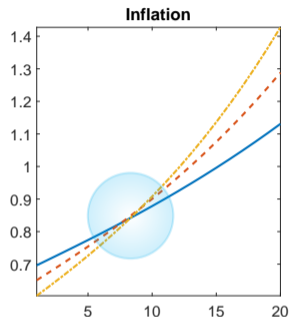
# How to conquer the post-pandemic inflation?



More hawkish monetary policy?

- 1 Inflation lower in the short run, at the cost of a larger output loss
- 2 Short-term inflation gain is ephemeral, as inflation paths eventually cross

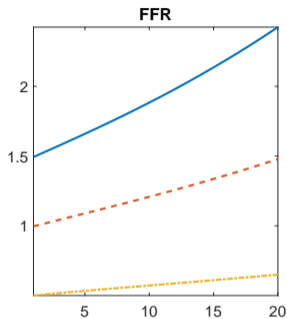
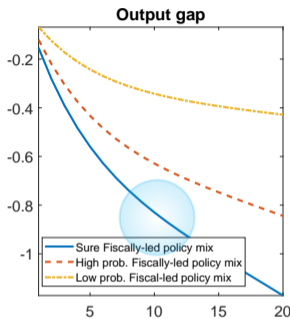
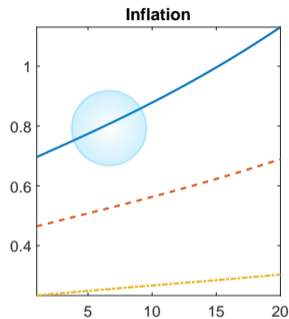
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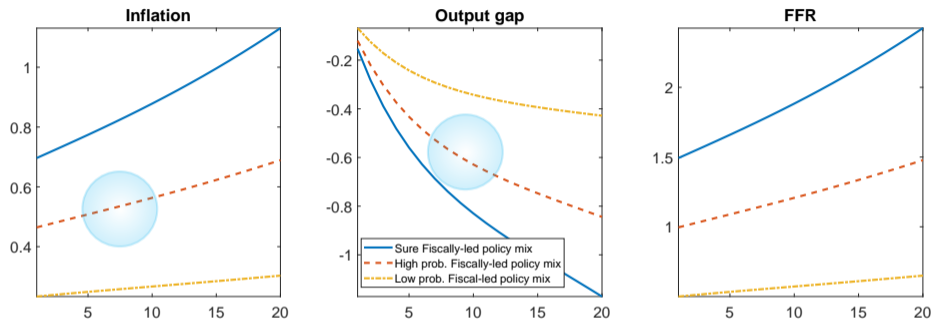
# How to conquer the post-pandemic inflation?



More sustainable fiscal policy?

- 1 As we progressively reduce the probability of a change to the Fiscally-led policy mix, the inflationary pressure goes down and fiscal stagflation is mitigated
- 2 If a change to the Fiscally-led policy mix is completely ruled out, the inflationary pressure and fiscal stagflation disappear

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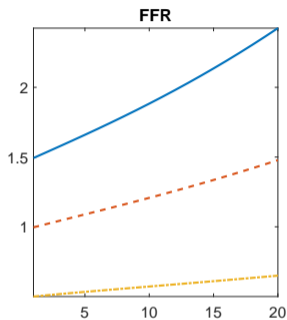
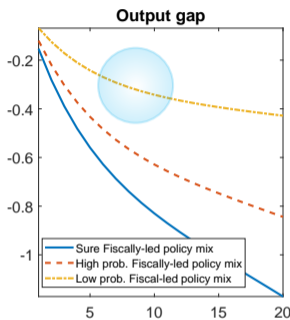
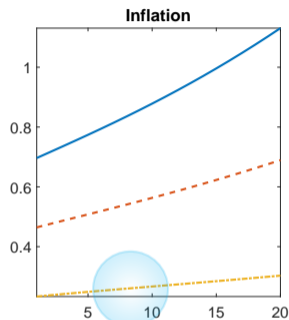


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## Pessimistic view (Who is Afraid of Eurobonds?):

- Large fiscal imbalances  $\Rightarrow$  fiscal and monetary authorities on a **colliding course**
- Euro area **suspended fiscal rules** to avoid **risk of deflation**
- Fiscal inflation due to changes in policymakers' behavior and **beliefs**
- **If one large country keeps deviating  $\Rightarrow$  risk of fiscal stagflation**

## The Euro Area at a Crossroad

In the Euro Area, **coordination is harder to achieve**  $\Rightarrow$  beliefs matter even more:

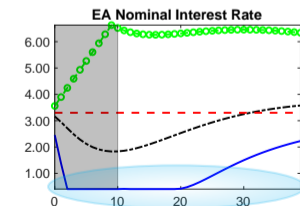
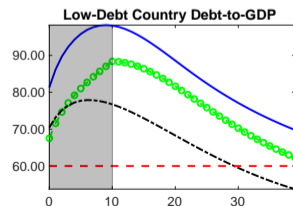
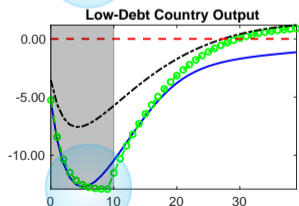
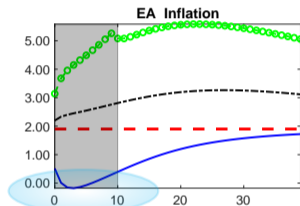
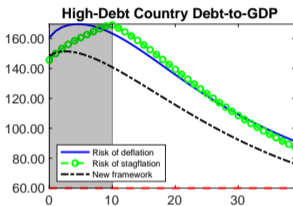
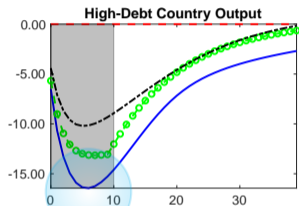
- + Hard to implement quick fiscal interventions
- + Hard to guarantee long-run fiscal sustainability

Deterioration of fiscal positions and high inflation put Euro Area at crossroads:

- + Reintroduce **old monetary/fiscal framework**. Risk of:
  1. **Deflation** because of the lack of stabilization tools
  2. **High inflation** if fiscal rules are **suspended**
  3. **Fiscal stagflation** if incentives for high debt countries not to comply with fiscal rules
- + Adopt a **new monetary and fiscal framework** based on **Eurobonds** and a **EA Treasury** to **separate** stabilization policies from the need of long-run fiscal sustainability

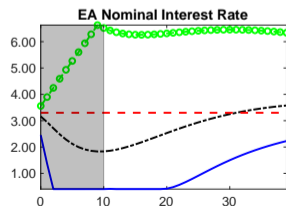
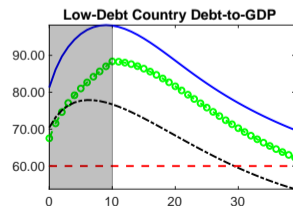
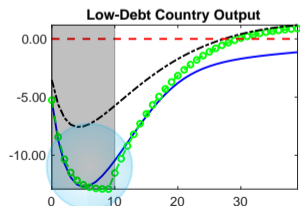
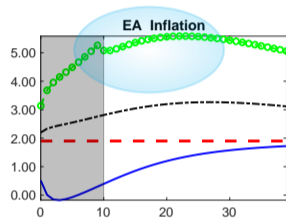
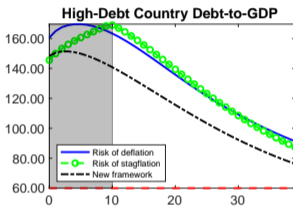
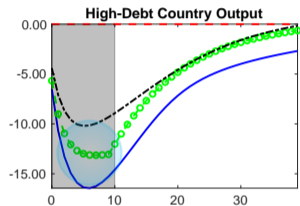
# Euro Area: From risk of deflation to risk of stagflation

- Strict fiscal rules + zero lower bound  $\Rightarrow$  Risk of deflation and deep recession



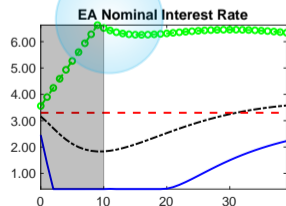
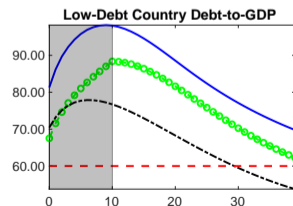
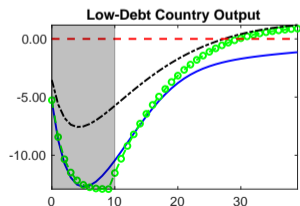
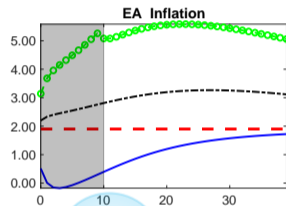
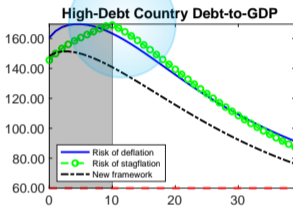
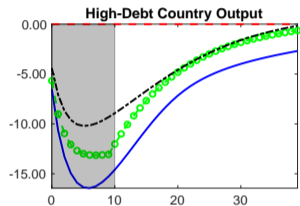
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- Suspend fiscal rules  $\Rightarrow$  **Risk of stagflation** if one country unwilling to revert to them



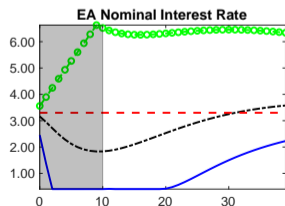
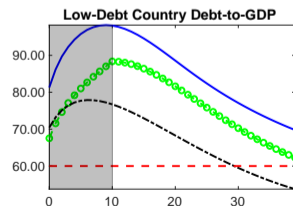
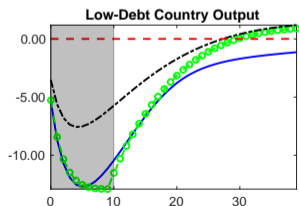
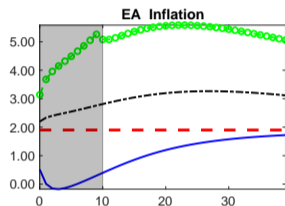
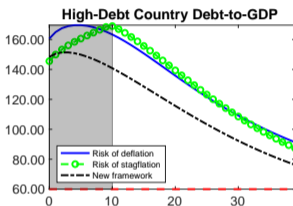
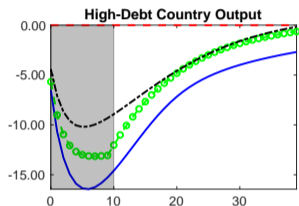
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- Monetary tightening further increases debt-to-GDP in high-debt country



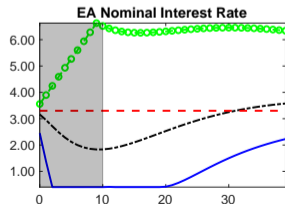
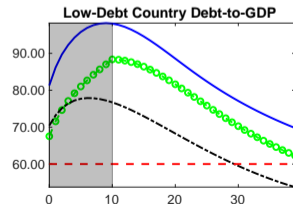
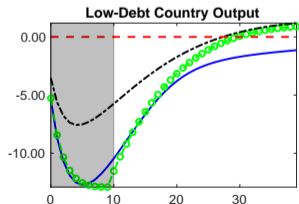
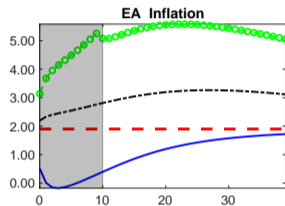
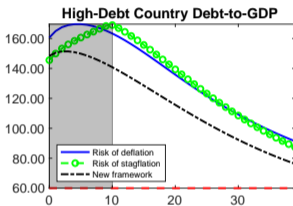
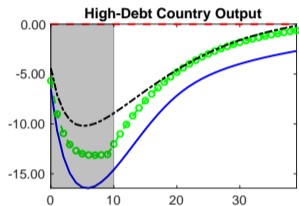
# Euro Area: From risk of deflation to risk of stagflation

- Spiral of growing inflation, deeper recession, and debt accumulation



# Euro Area: From risk of deflation to risk of stagflation

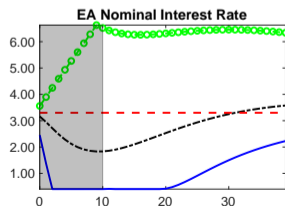
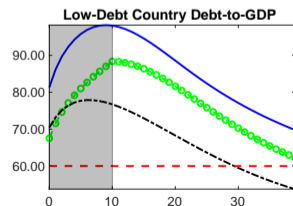
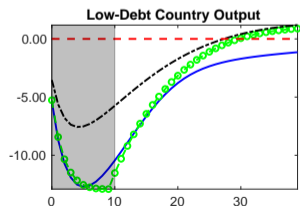
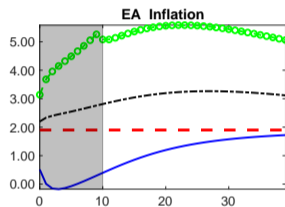
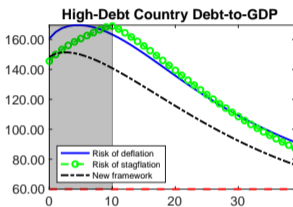
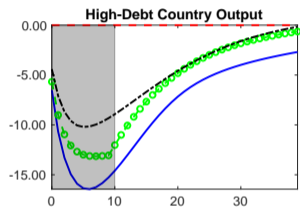
- New policy framework based on Eurobonds and EA Treasury eliminates both risks





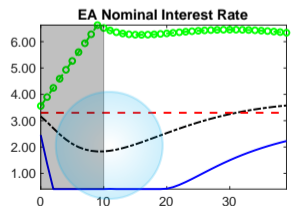
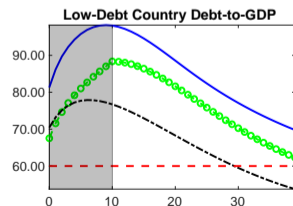
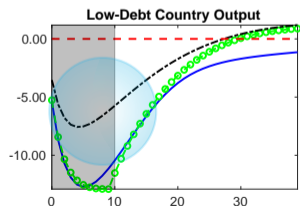
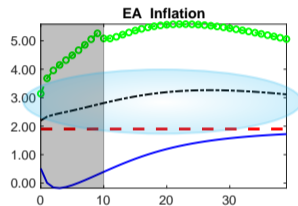
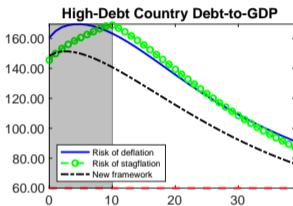
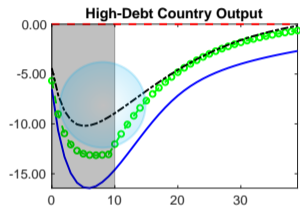
# Euro Area: From risk of deflation to risk of stagflation

- No need to suspend the rule + ability to coordinate policies at ZLB



# Euro Area: From risk of deflation to risk of stagflation

- No ZLB, milder recession, contained increase in inflation



## Summary

- An implicit **fiscal limit** exists to the extent that **a low and stable inflation target requires fiscal policies that are consistent with this goal**
- Following the COVID pandemic, several countries have implemented robust fiscal interventions ⇒ **Quick rebound of the economy**, but also **surge in fiscal inflation**
  - **Optimistic view**: Central banks are now increasing rates ⇒ Signal about future policy changes ⇒ **inflation will slowly decline** as unfunded share of spending fades away
  - **Pessimistic view**: Fiscal situation is very different from the 1980s  
⇒ Risk of **fiscal stagflation**
- **Euro area** in need of a **new policy framework** that facilitates policy coordination without jeopardizing credibility for long-run fiscal sustainability
- **Emerging economies** subject to the **risk of large swings in global real interest rates**

## What is the most likely scenario?

- Inflation is **cooling down** in most countries, supporting the most optimistic view.
- However, there are **three reasons for concern**:
  - ① **Threats to central bank independence**. These can be more or less explicit, but they are common across countries and across the political spectrum
  - ② **Large fiscal imbalances** have not been addressed and pressure will increase on central banks if a new recession were to occur
  - ③ **Geopolitical conflicts** might prevent a return to pre-pandemic level of integration
- Experience of the 1960s and 1970s is a warning not to declare victory too early
- **Low inflation requires mutually consistent monetary and fiscal policies** providing a clear path for both inflation and debt sustainability