ECOM181 Macroeconomics for Policy

2022/23 Semester 1

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Course overview

- Economic growth vs business cycle fluctuations (Topic 1)

- Economic growth (Topics 2-4)
    - Productivity
    - Innovation policy

- Business cycle fluctuations (Topics 5-9)
    - Monetary policy
    - Fiscal stimulus and consumption + investment
    - Fiscal policy and inflation + interaction with monetary policy

Plan for today: Government debt

- Automatic stabilizers
- Fiscal theory of the price level with sticky prices
- Fiscal deficits and inflation (empirically)
- Further discussion

What are automatic stabilizers?

Lee, Vivien and Sheiner, Louise, 2019

Brookings blog post,

https://www.brookings.edu/blog/up-front/2019/07/02/what-are-automatic-stabilizers/

Discretionary fiscal policy vs automatic stabilizers

- In the previous two topics, we discussed how tax cuts (or government spending increases) may stimulate the economy
- This can help to recover from a recession
- We talked here about **active policy decisions** that lead for example to a different tax rate or a direct transfer
- Such policies can transfer money/resources from the government to the private sector
    - If the private sector uses it for consumption/investment then this increases GDP
- Such a net transfer of money/resources from the government to the private sector in a downturn can, however, also occurs **automatically** without any active policy decision.

→ Main advantage of automatic over discretionary: no legislative action needed and takes effect immediately

Automatic stabilizers

- In a recession, more people become unemployed
    - The total amount of unemployment benefits paid by the government to the private sector hence increases
- In a recession, firms make less profits and households get lower wage income
    - The total amount of tax revenues received by the government therefore drops

→ Without making any active policy decisions, the government deficit increases in a recession, which means a net transfer to the private sector and hence fiscal stimulus

→ Automatic stabilizers give the most effective stimulus if they feature transfer to credit-constrained households (e.g. unemployment benefits) or other entities that spend immediately

Automatic stabilizers in the US

Source: CBO (Jan. 2019). Chart shows CBO's estimates of automatic stabilizers as a share of potential GDP.

Automatic stabilizers in other countries

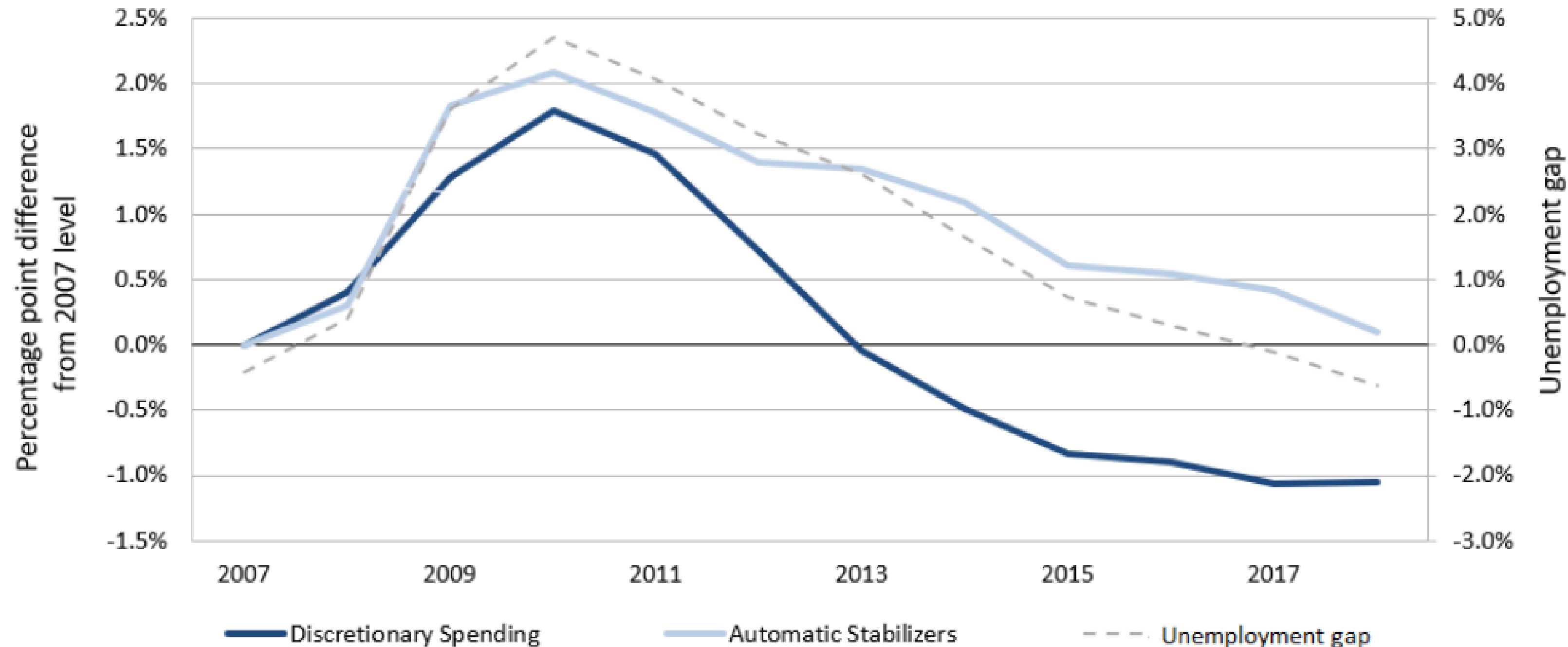
Automatic change in fiscal balance

0.60
0.50
0.40
0.30
0.20
0.10
0.00

Denmark
Sweden
France
Italy
Netherlands
Norway (mainland)
Belgium
Germany
Finland
Austria
Greece
Hungary
Luxembourg
Portugal
United Kingdom
Poland
Spain
Australia
Czech Republic
Canada
Ireland
Iceland
New Zealand
Slovak Republic
Switzerland
United States
Japan
Korea

Source: Girouard and Andre (2005). Chart shows the automatic change in the fiscal balance due to a 1 percentage point change in the output gap.

Automatic stabilizers in the great recession



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FTPL (Fiscal theory of price level)

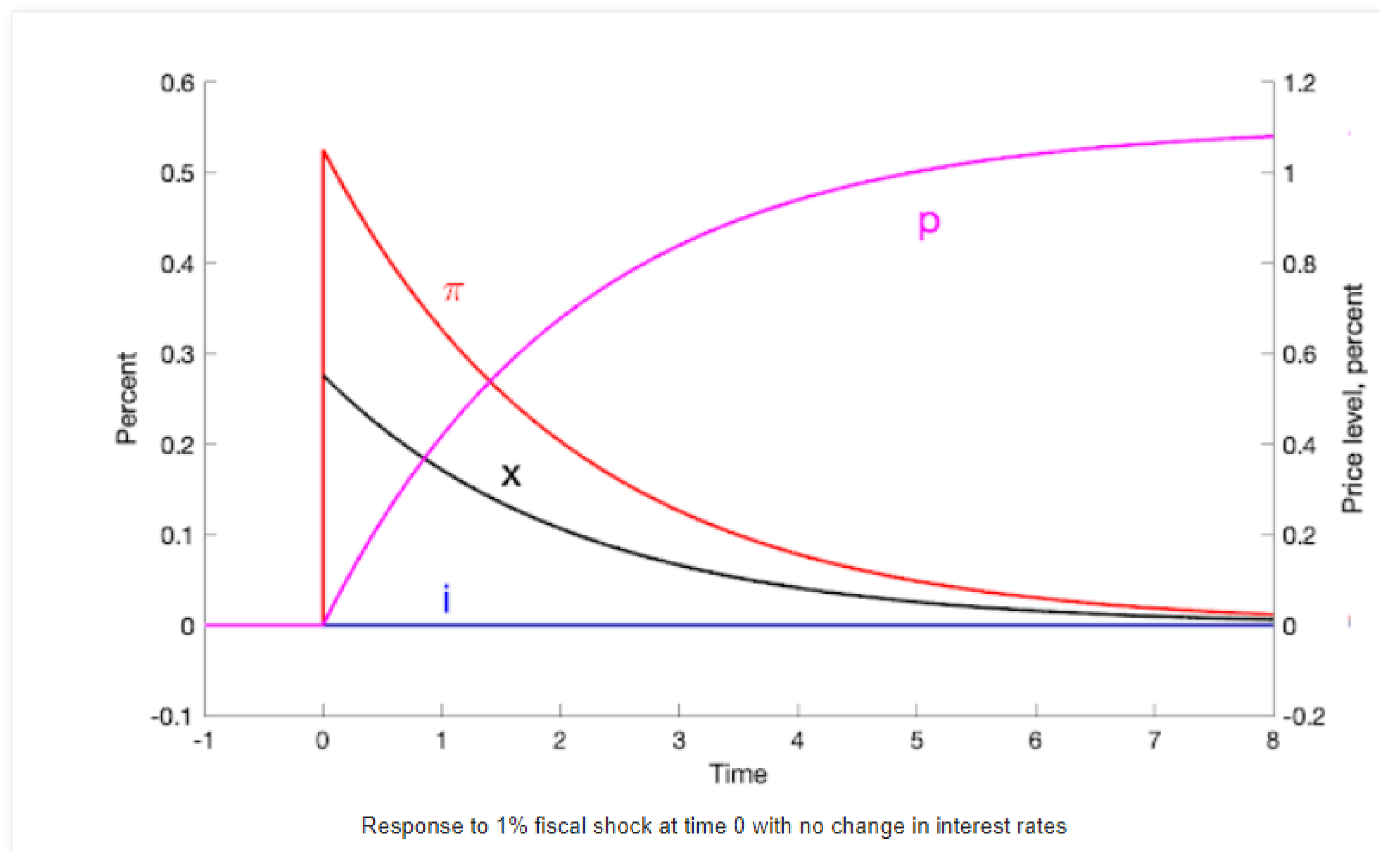
The real value of government debt equals the present value of real primary surpluses

$$\underbrace{\frac{B_t}{P_t}}_{\text{real value of debt}} = E_t \sum_{j=0}^{\infty} \left(\frac{1}{1+r}\right)^j \underbrace{\left(\frac{T_{t+j} - G_{t+j}}{P_{t+j}}\right)}_{\text{real surplus}}$$

What determines the overall level of prices? What causes inflation?

- Key is coordination of fiscal and monetary policy

FTPL with sticky prices



Response to 1% fiscal shock at time 0 with no change in interest rates

- https://johnhcochrane.blogspot.com/2022/08/the-fiscal-theory-of-inflation.html

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FTPL (Fiscal theory of price level)

Traditional ideas:

Fiscal policy: Ricardian (increase tax rates and cut spending)

Monetary policy: active (setting price level)

FTPL:

Fiscal policy: Non-Ricardian (no need to adjust tax and spending)

Monetary policy: (passive)

Fiscal deficits and inflation risks: the role of fiscal and monetary policy regimes

Ryan Banerjee, Valerie Boctor, Aaron Mehrotra, Fabrizio Zampolli, 2022

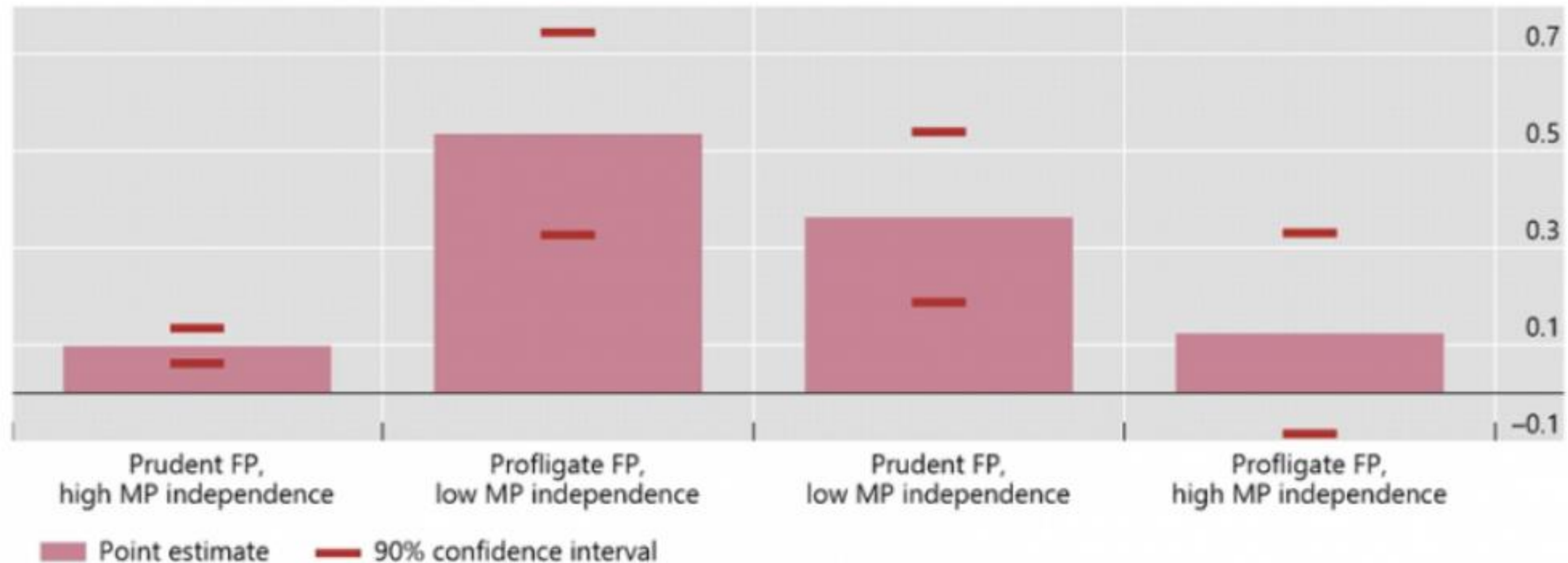
SUERF Policy Brief, No 445

https://www.suerf.org/suer-policy-brief/55051/fiscal-deficits-and-inflation-risks-the-role-of-fiscal-and-monetary-policy-regimes

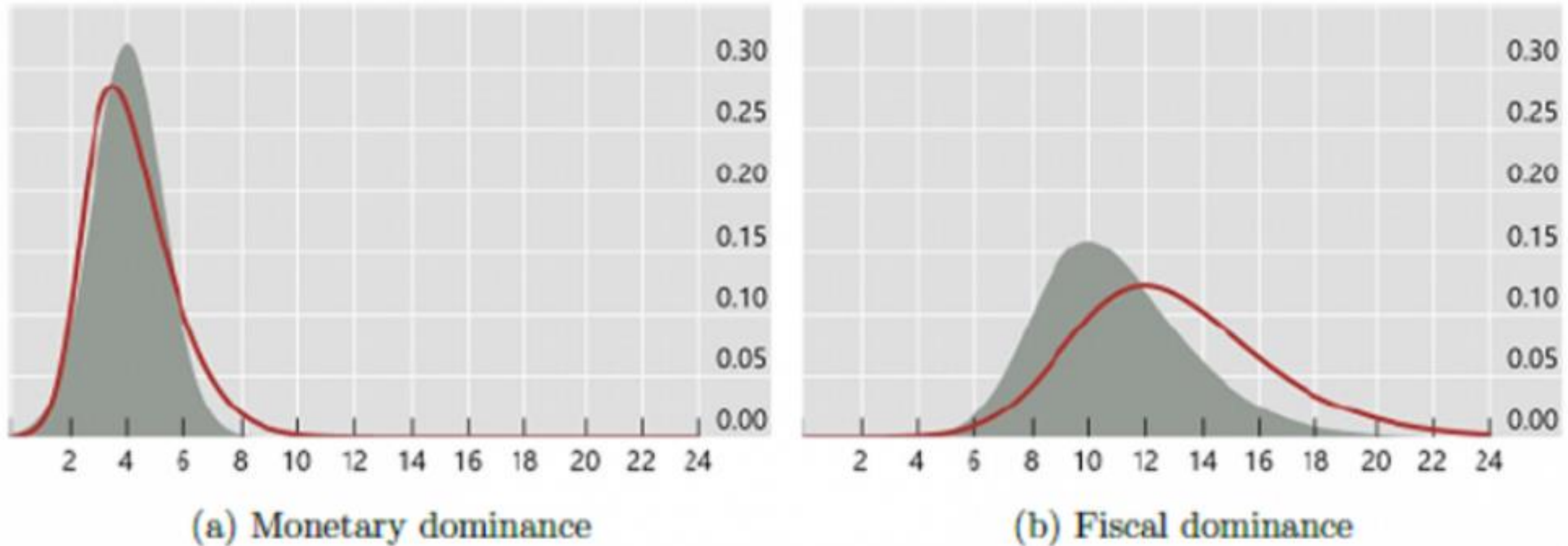
• Inflation after the pandemic: a fiscal phenomenon?

- Governments unleashed a massive wave of fiscal stimulus in the wake of the Covid-19 pandemic
  - Leading to increases in government debt of around 15 percentage points of global GDP between 2019 and 2021.
- Is higher inflation after the pandemic a fiscal phenomenon?
- To investigate this Banerjee, Boctor, Mehrotra and Zampolli (2022) consider how the fiscal and monetary policy regimes affect inflation outcomes.
  - They estimate an open-economy Phillips curve augmented with the fiscal balance using data from 21 advanced economies over four decades
  - They examine how the Phillips curve depends on the prevailing fiscal and monetary policy regime.

Effect of fiscal deficit shock on inflation depends on policy regime



Also inflation forecast distribution depends on regime



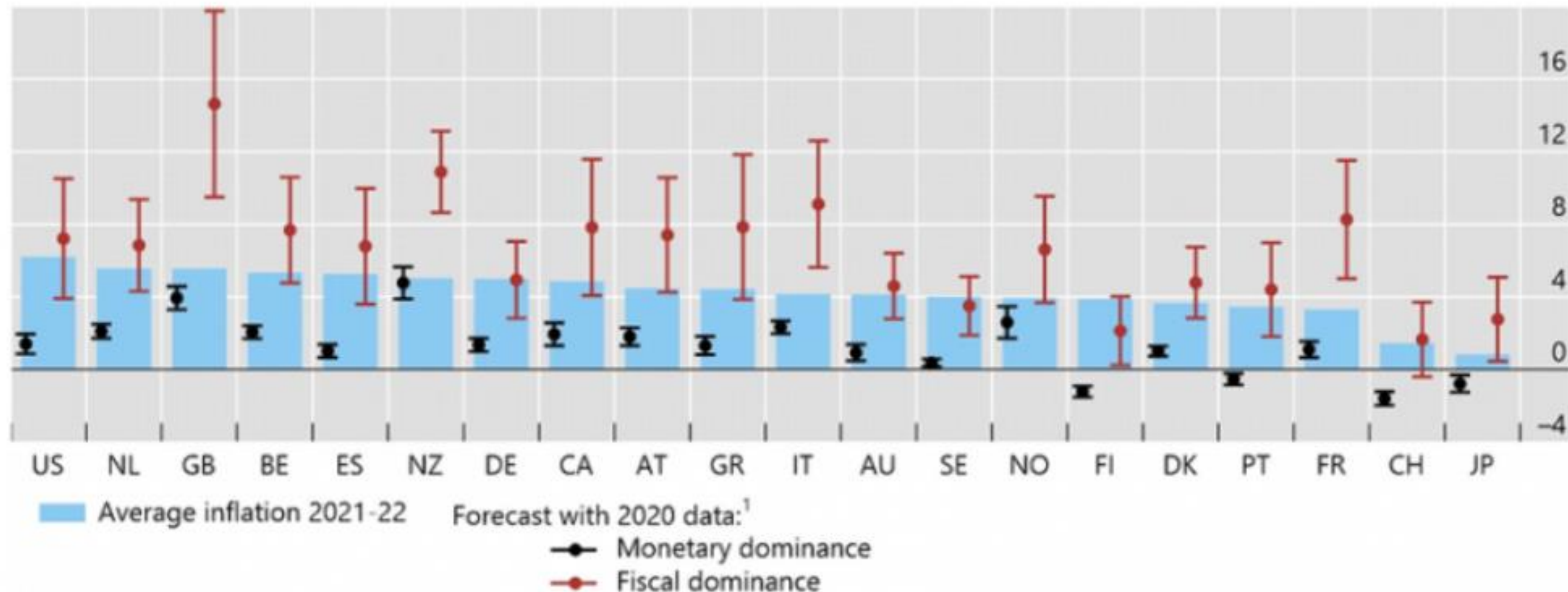
• Inflation after the pandemic: a fiscal phenomenon?

- Before pandemic:
  - “persistently low inflation and interest rates may have strengthened the belief that economies could sustain higher public debt levels and that countries should not rush to reverse fiscal policy lest they jeopardise the recovery. “
  - with inflation persistently low and nominal policy rates at or close to their effective lower bound, central banks were more worried about preventing deflation and a recession rather than preventing inflation from rising

→ Recent years may potentially represent a shift from monetary dominance towards fiscal dominance.

→ Could changes in fiscal and monetary policy regimes have influenced inflation outcomes after the pandemic?

Inflation data more in line with fiscal than monetary dominance regime



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Helicopter money: The time is now (Galí, 2020)

“such a strategy would only transfer the problem to governments, which would need to raise taxes (thus increasing the burden of households or firms, counterproductively) or to borrow in capital markets and increase their debt burdens (and be forced to raise taxes in the future). Even if the EU were to relax the restrictions on that further borrowing, it would be a risky strategy given the high debt ratios (above 100% of GDP in some cases) in many of the most affected countries, with the consequent risks of a debt crisis and an immediate rise in spreads.”

“An eventual massive purchase of the newly issued debt by the central bank through an expanded quantitative easing programme would certainly facilitate its absorption but would not prevent the increase in governments' debt ratios, with the risks of putting some countries' public finances on an unsustainable path.”

Live session

“Fortunately, there is an alternative to a strategy based on higher taxes and/or more government debt in order to finance such an emergency fiscal programme, albeit one that has remained a taboo among most economists and policymakers – namely, direct, unrepayable funding by the central bank of the additional fiscal transfers deemed necessary, an intervention commonly known as ‘helicopter money’.”

Further Questions to discuss

- Assuming that Ricardian Equivalence holds, what predictions does it make for the financing patterns (of a given government spending plan) we should see in the real world? Does it imply that government spending has no effect?

- Can austerity be stimulative? How might it depend on context?