

# Potential Output, Cyclical Scars and Fiscal Policy

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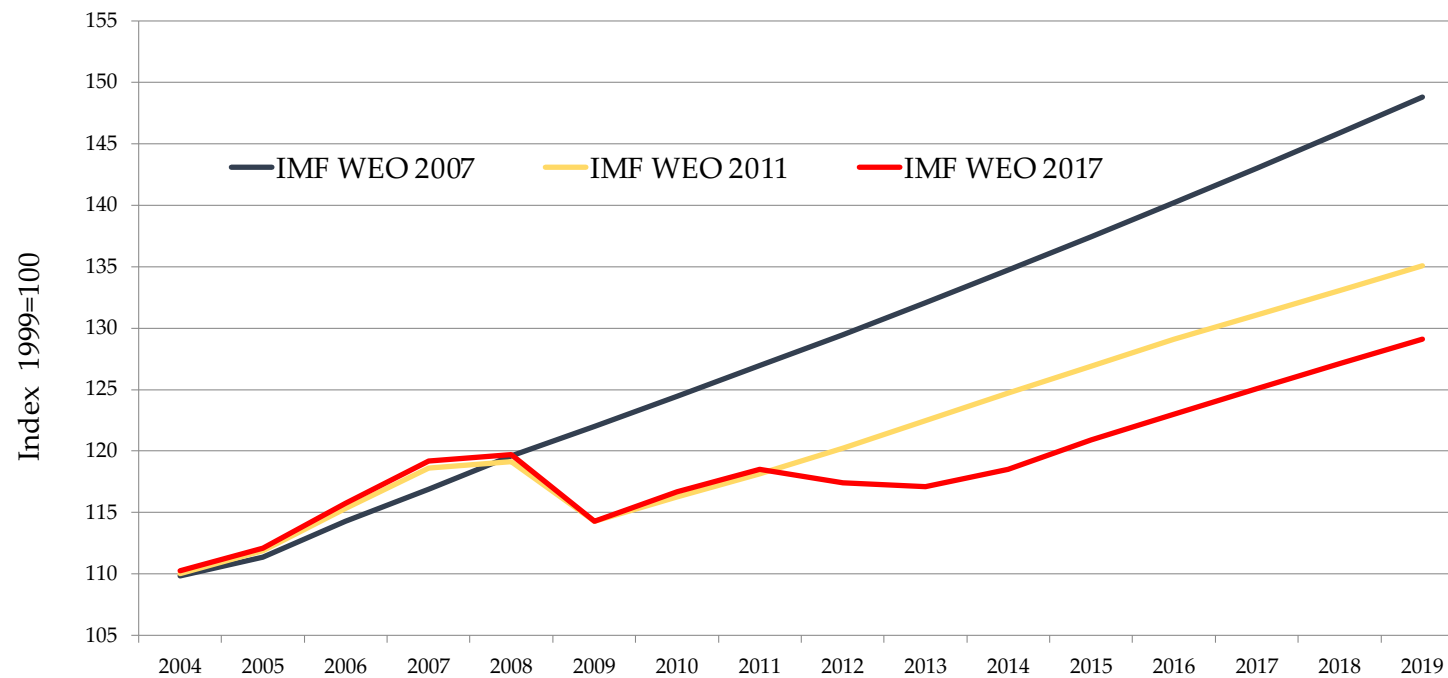
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# Scars

- “This crisis will likely leave **scars** well into the medium term”  
Gita Gopinath (October 2020)
- “Without further action, we risk a longer, more painful recession now — and **long-term scarring** of the economy later”  
Janet Yellen (January 2021)
- “Do Business Cycles Cast Long Shadows? Short-run Persistence and Economic Growth” (Fatas (1993 – first draft)).

# Scars and the GFC

## Euro Area Real GDP

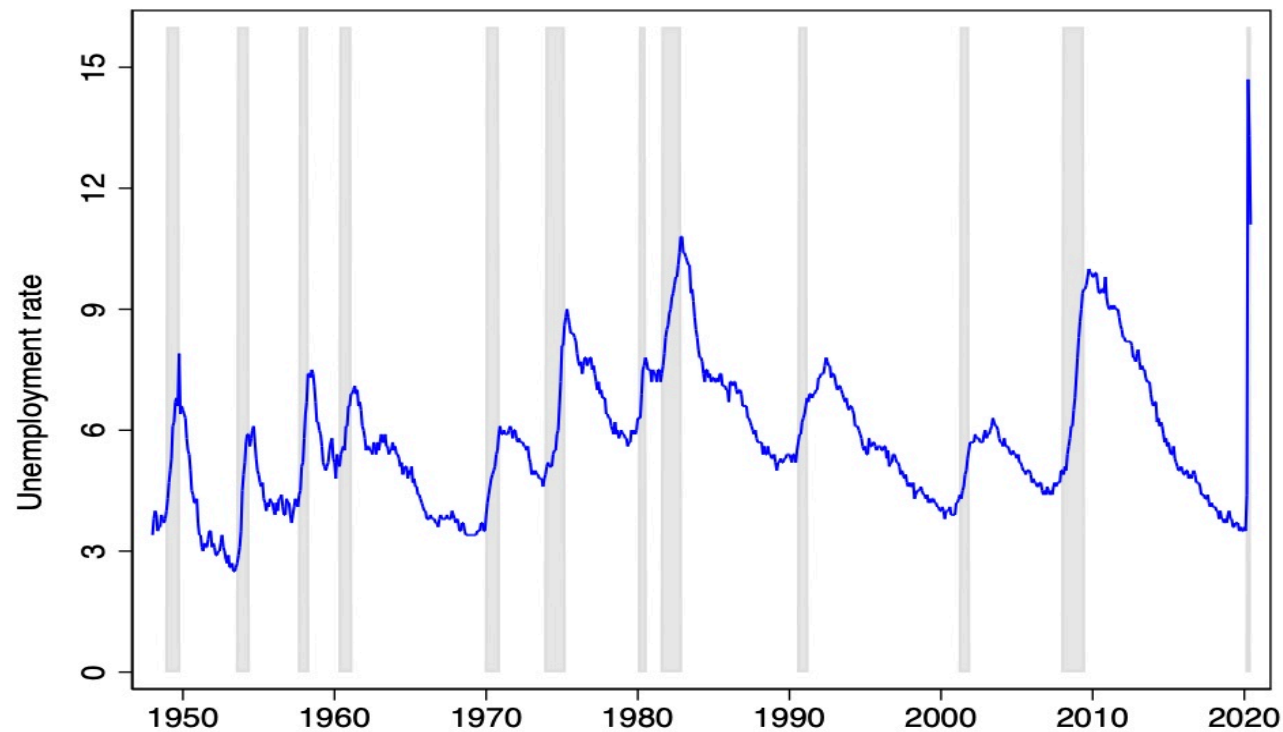


# Scars and Academic Research

- Growth is endogenous and potentially can react to the business cycle + dynamics of labor markets can be very persistent
- Default model should be one where cyclical events have persistent or permanent effects (Hysteresis). Cerra, Fatas and Saxena (2020)
- Stabilization policy much more powerful than thought → Errors much more costly
- Should we add asymmetries? (plucking model)

# Asymmetries (US)

- Full employment? Speed of adjustment?



# Potential Output and Policy

- In the presence of a shock: how much is permanent, how much is cyclical?
- Captures magnitude of cyclical deviation and appropriateness of response
- Informs fiscal policy about need for future consolidation

# The Fiscal Policy Framework

	Type of Shock	
	Permanent	Cyclical
Stabilization	Undo AS (if any)	Let AS work. Add DP if necessary
Sustainability	Large consolidation	Small consolidation (later?)

AS = Automatic Stabilizers

DP = Discretionary policy

# Mismeasurement of Potential Output

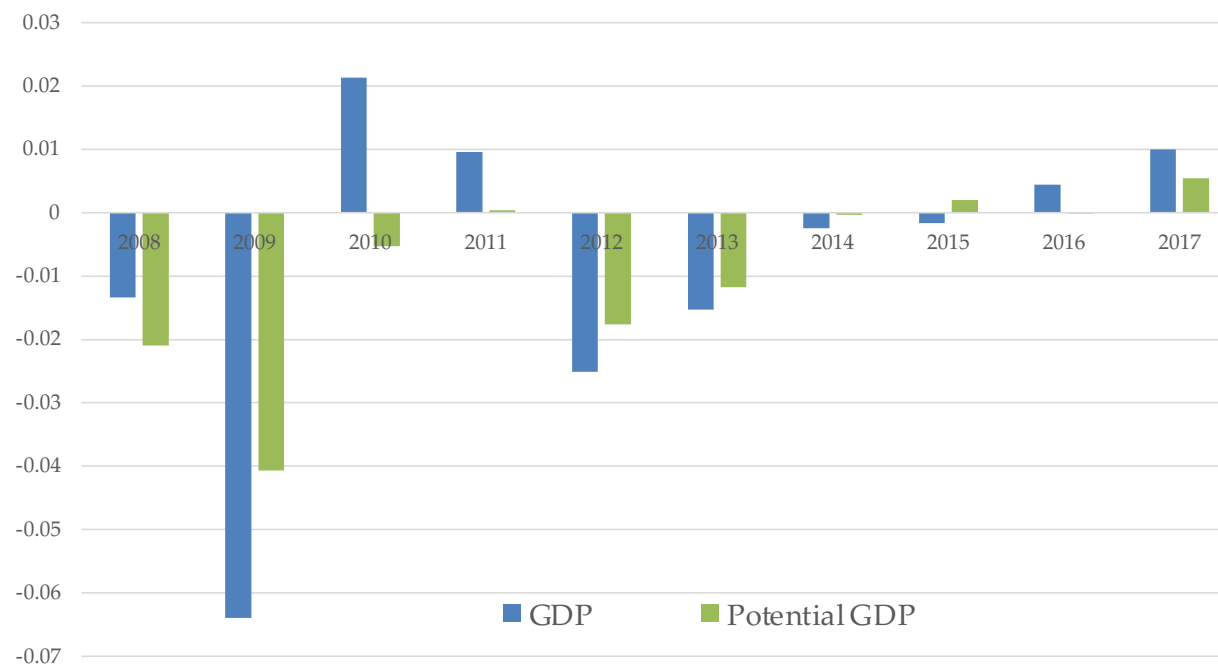
- Affects perception of permanent versus temporary nature of shock
- Affects measure of structural balance. This is both a target and *information* about fiscal stance. It can make reasonable policies look unreasonable.
- Two are related but not identical (e.g. procyclical tax elasticities)

# Estimates of Potential Output

- Tend to be too procyclical

# The 2008-2013 Shocks

Figure 2. Forecast Errors over 2-year horizon. Euro aggregate.



# Estimates of Potential Output

- Tend to be too procyclical
- Errors are always costly but cost much larger in the presence of hysteresis as they leave permanent scars

# Cyclical Turns Permanent

Table 5. Correlation forecast errors

6-Year Forecast Error Potential GDP (April 2010 WEO)		
	Europe	Euro
	(1)	(2)
2-Year Forecast Error	1.621***	1.848***
GDP (April 2010 WEO)	(0.418)	(0.413)
Constant	-0.0585***	-0.0648***
	(0.0137)	(0.0179)
Observations	26	18
R-squared	0.341	0.384

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

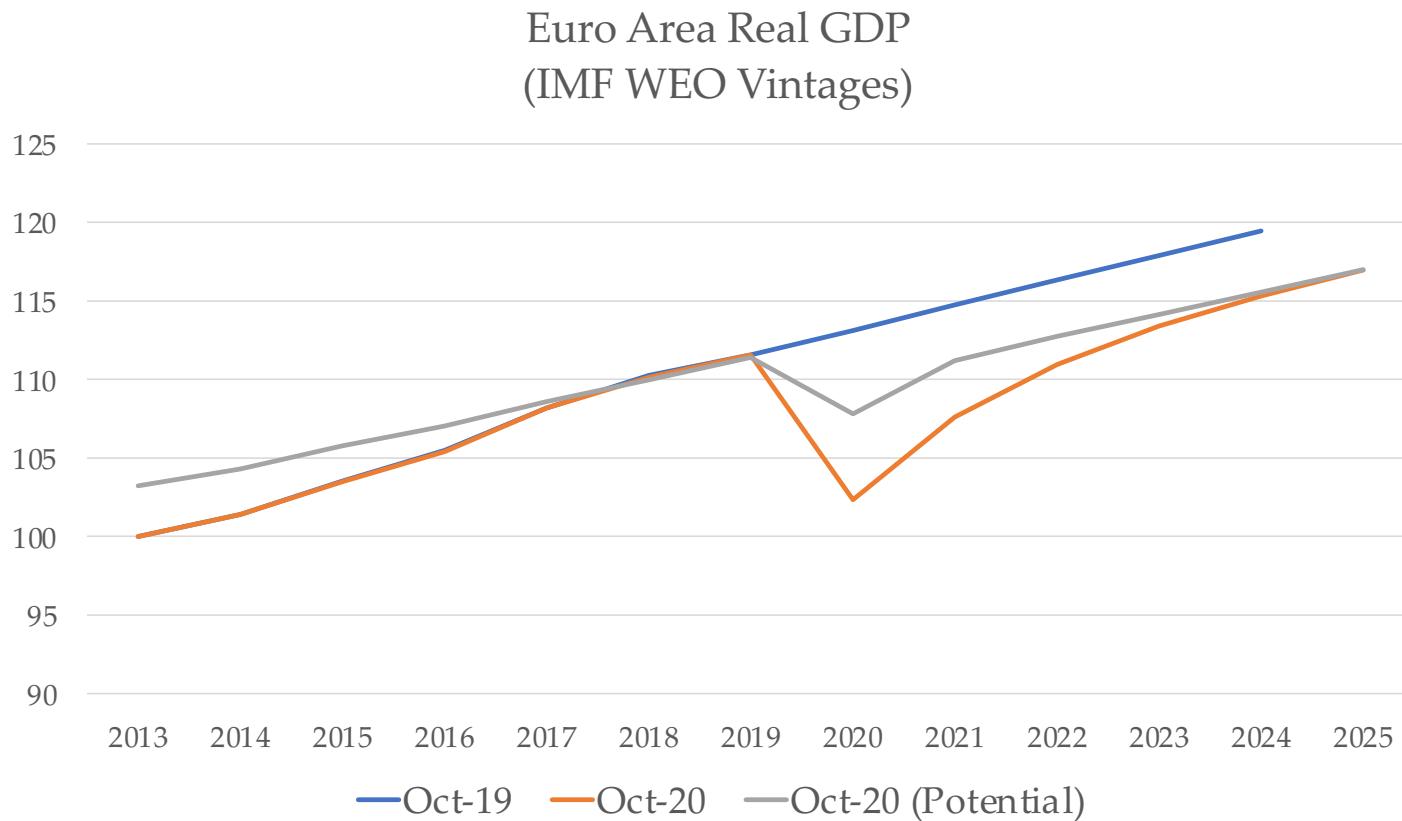
# Estimates of Potential Output

- Tend to be too procyclical
- Errors are always costly but cost much larger in the presence of hysteresis as they leave permanent scars
- Potential doom-loop: (Fatas (2019))
  - Assume no hysteresis
  - Use historical decomposition of permanent versus transitory shocks
  - Apply it to any current shock
  - Hysteresis can be entirely due to timid response of policy makers
  - But we will never find out: permanent effect of errors validates mistaken forecasts

# Can we do better?

- Incorporate hysteresis in policy-relevant models
- Remember the possibility of self-defeating consolidation
- Academics need to do more work:
  - What drives growth?
  - The “hysteresis parameter”
- In the presence of uncertainty:
  - Rely on smoother potential output estimates (expenditure rules?)
  - Maximize stimulus (given other constraints such as political or market constraints)

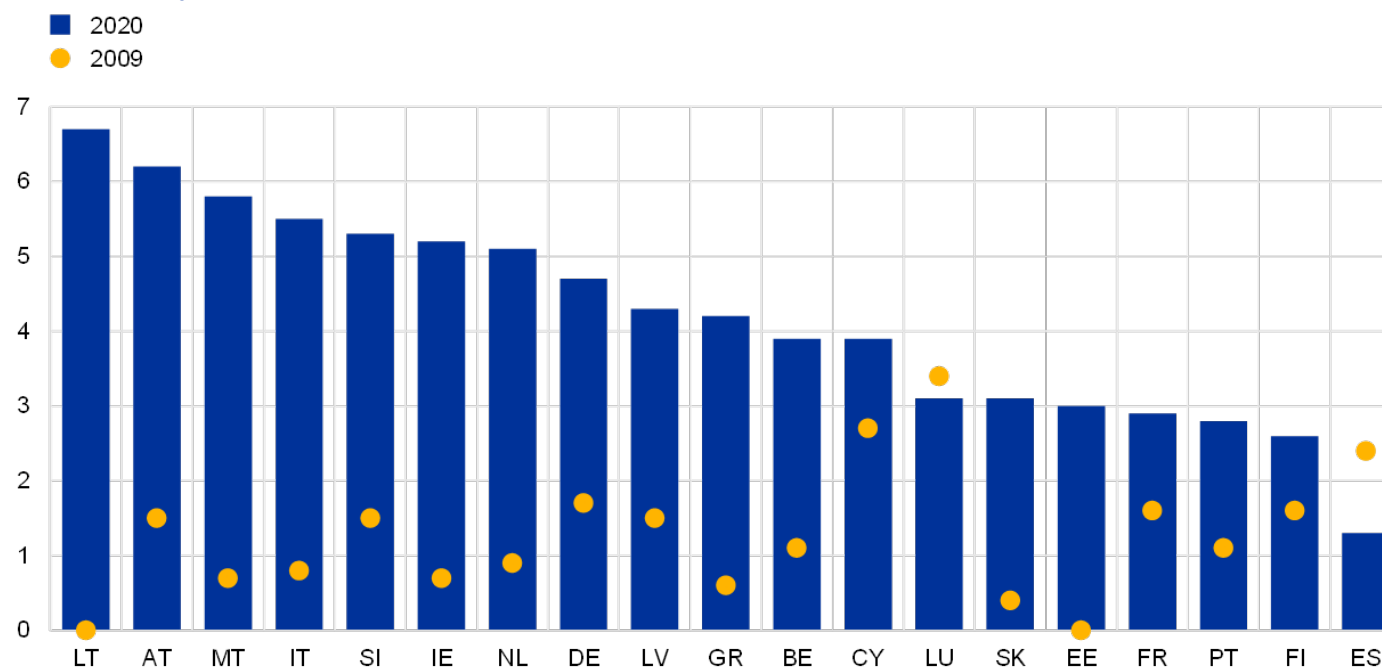
# The COVID-19 Recession



# The Response to the COVID-19 Recession

**Chart 2**

Sum of fiscal measures related to COVID-19 with a budgetary impact in 2020 compared with gross discretionary stimulus in 2009 (percentages of GDP)

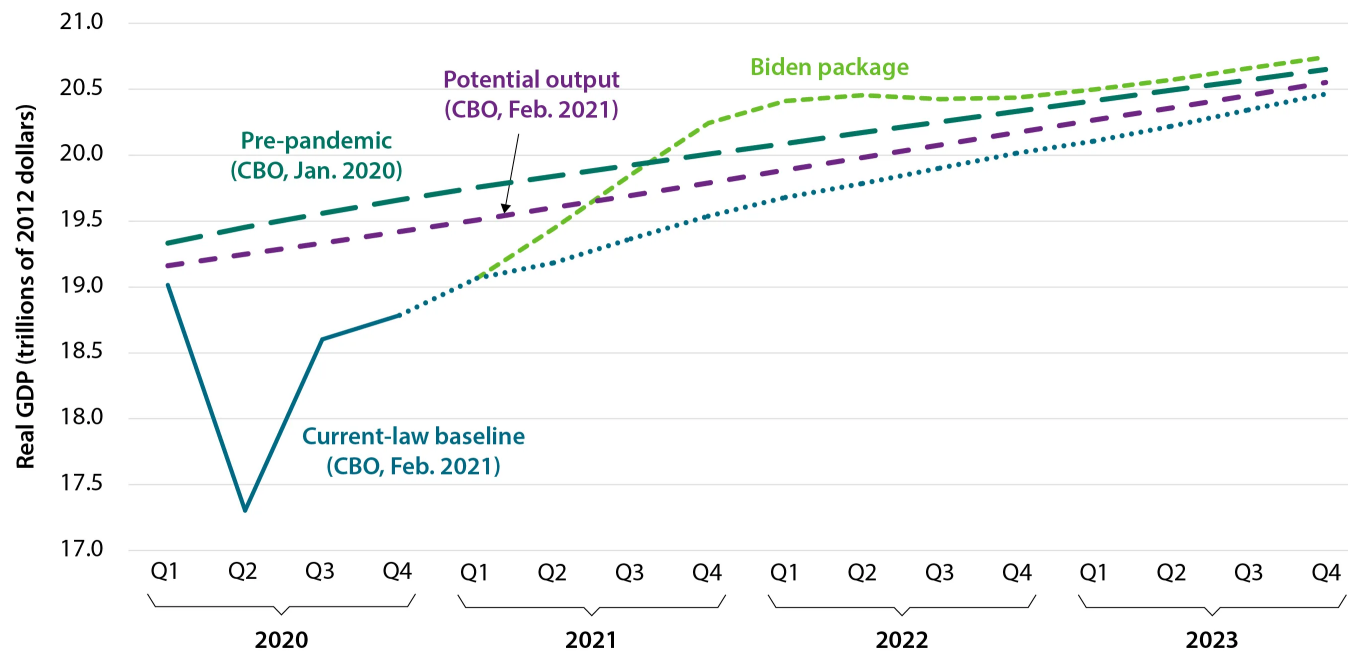


Source: [https://www.ecb.europa.eu/pub/economic-bulletin/articles/2021/html/ecb.ebart202101\\_03~c5595cd291.en.html](https://www.ecb.europa.eu/pub/economic-bulletin/articles/2021/html/ecb.ebart202101_03~c5595cd291.en.html)

# An Experiment?

FIGURE 2.

Projection of Real GDP under Biden Package and under Various CBO Paths



Source: Bureau of Economic Analysis; Congressional Budget Office; authors' calculations.

Note: For details on the underlying methodology, please refer to the technical appendix. The "Biden Package" results are layered over CBO's current law GDP projection. Our previous analysis of the Biden package, published in *The Macroeconomic Implications of Biden's \$1.9 Trillion Fiscal Package* in January 2021, used a slightly different projection of real GDP that similarly assumed no additional fiscal support. The results presented here are little changed from those previously published.



Hutchins Center  
on Fiscal & Monetary Policy  
at BROOKINGS



Source: <https://www.brookings.edu/blog/up-front/2021/02/03/a-macroeconomic-analysis-of-a-senate-republican-covid-relief-package/>

# Concluding Comments

- Good to see scarring at the forefront of policy discussions
- Need for consensus on models incorporating hysteresis
- In the absence of consensus, time to err on the side of overheating?