



# **Countering Future Recessions in Advanced Economies: Cyclical Policies in an Era of High Debt and Low Rates**

JUNE 11, 2020

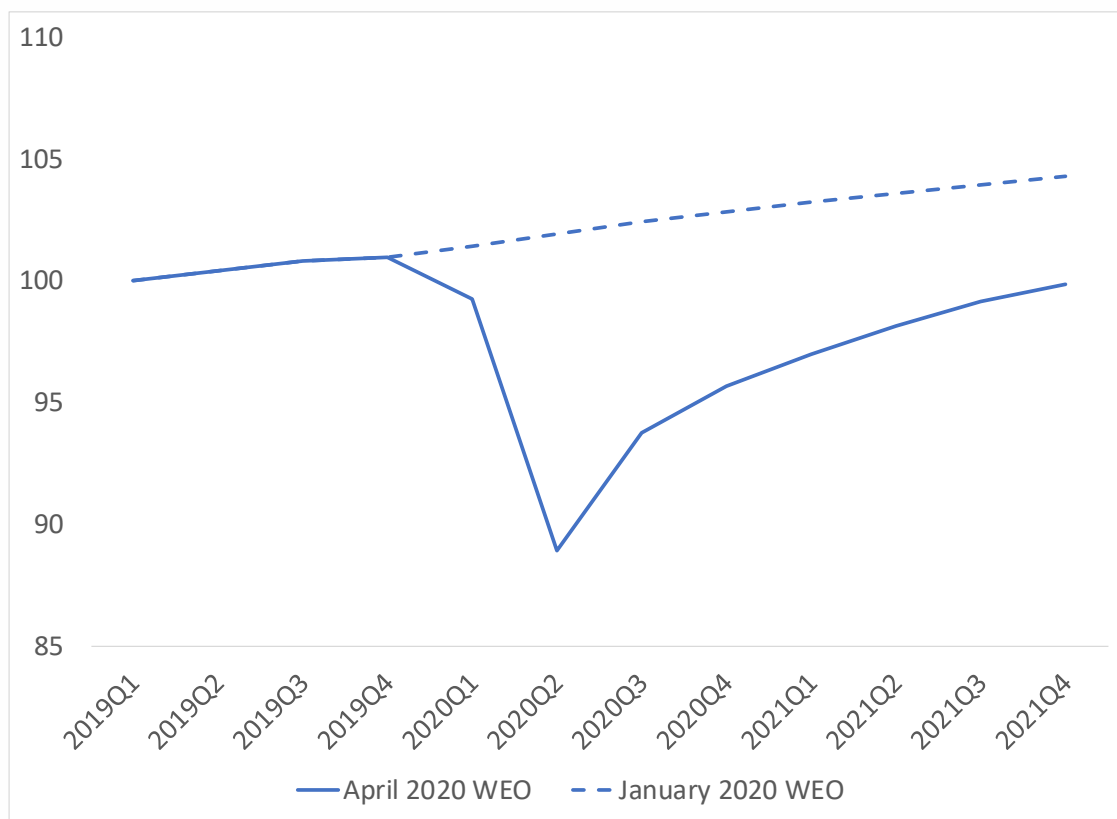
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# COVID-19 pandemic has caused severe economic fallout and prompted large-scale economic policy responses.

## Quarterly World GDP

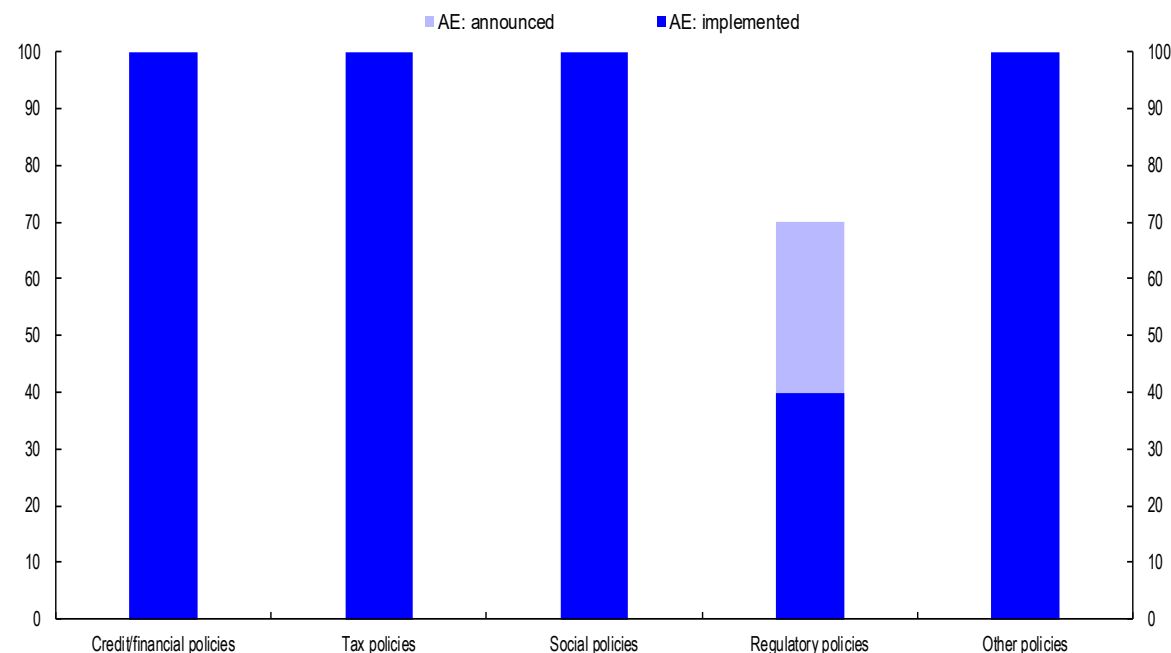
(2019Q1 = 100; dashed lines indicate estimates from Jan 2020 WEO update)



Source: IMF staff calculations.

## G20: Economic Policy Responses to Covid-19

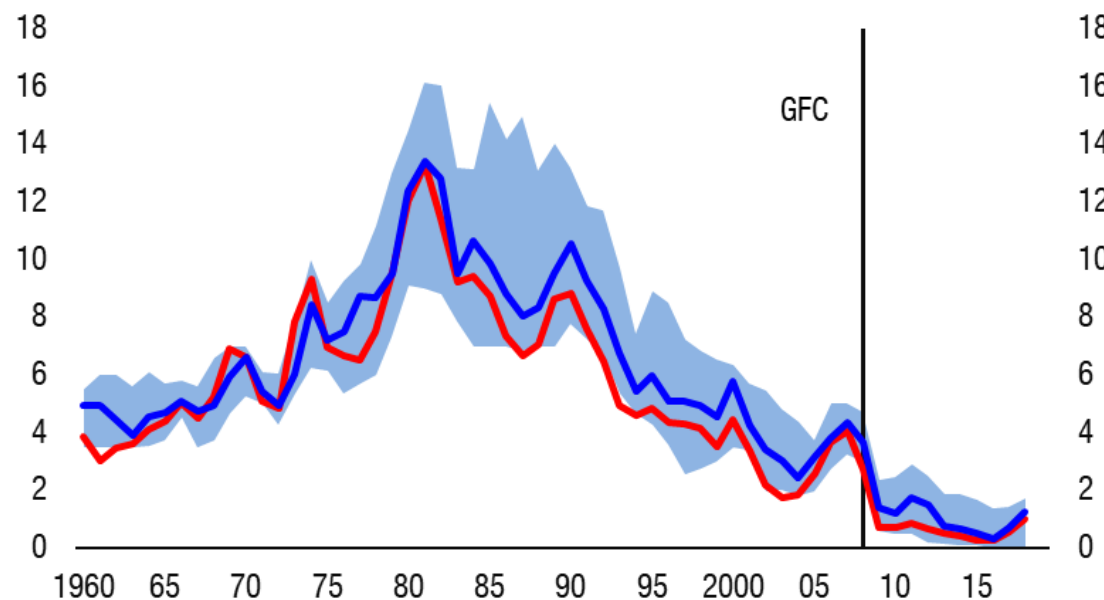
(percent of countries)



Source: IMF staff calculations.

# Ten years after the great financial crisis in advanced economies, countercyclical policy tools may be near their limits.

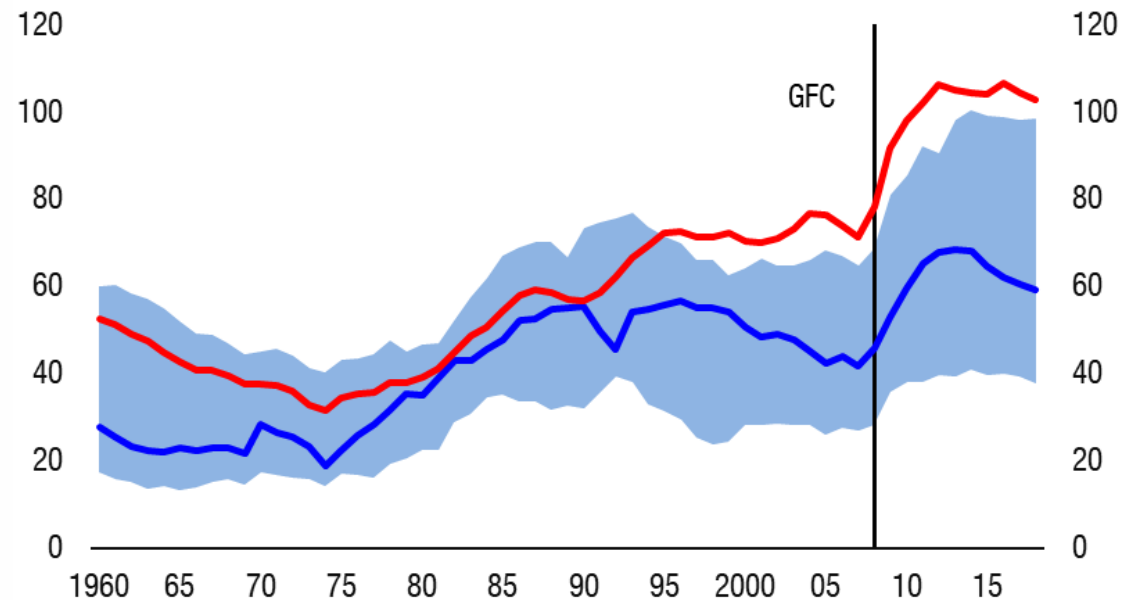
**Short-term Nominal Policy Rates**  
(Percent)



■ Interquartile range ■ Median ■ Weighted average

Sources: Bank of International Settlements, Global Data Source, Haver, International Financial Statistics, national sources, and IMF staff calculations.  
Note: GFC = Global Financial Crisis (2008). The sample includes 35 advanced economies. When a country joins the euro area, it drops out. The euro area policy rate (set by the ECB Governing Council) enters in 1999, replacing the policy rates for euro area member states. Time coverage across countries is unbalanced, with the bulk of data from 1960 onwards. The weighted average uses nominal US dollar GDP weights.

**Gross Public Debt**  
(Percent of GDP)



Sources: Jordà and others (2019), Mauro and others (2015), IMF Historical Public Debt Database, WEO, and IMF staff calculations.  
Note: GFC = Global Financial Crisis (2008). The sample includes 35 advanced economies. Time coverage is unbalanced across countries, with the bulk of data from 1960 onwards. The weighted average uses nominal US dollar GDP weights.

# Main Questions

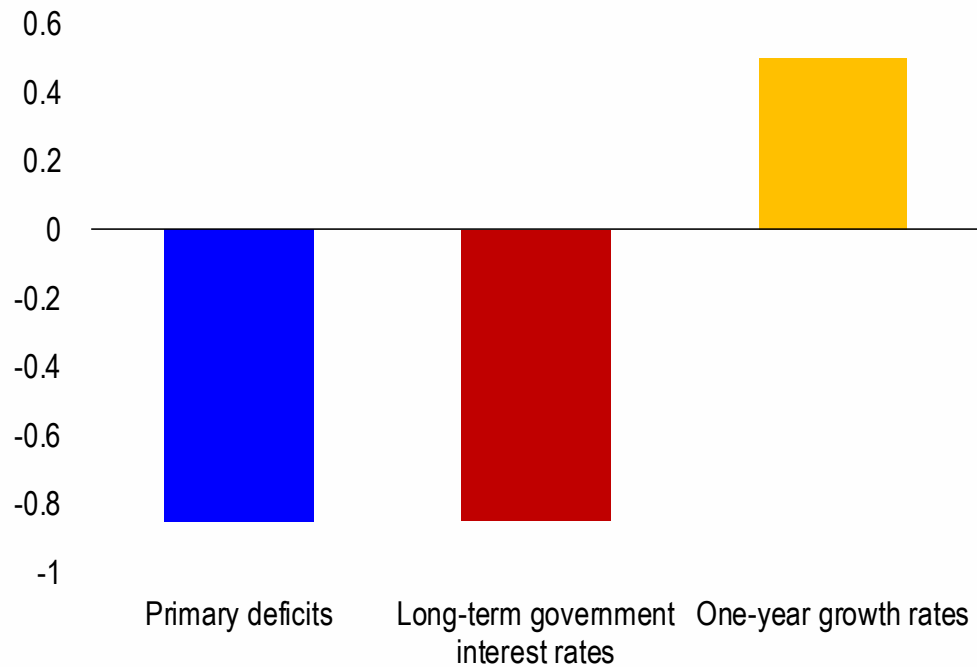
- **Monetary Policy Options to Counter the Next Recession**
  - Given already low rates in many advanced economies, how can monetary policy best support countercyclical fiscal policy actions?
- **Interest Rate-Growth Differentials, Drivers, and Consequences for Fiscal Policy**
  - Have recently declining interest rate-growth differentials affected countries' scope to undertake fiscal stimulus? How persistent is the interest rate-growth differential? What are its correlates?
- **Fiscal Policy Options to Counter the Next Recession**
  - What stimulus measures appear to be most effective? How does fiscal policy effectiveness differ with business cycle phase and the monetary policy stance? Could enhancements to automatic stabilizers—rules-based fiscal stimulus—help reduce economic fluctuations?

# Interest rate cuts are limited by their already low level, but what about unconventional monetary policies?

- Interest rates are near effective lower bounds in many advanced economies.
- Scope for further unconventional policies?
  - **Negative interest rates**
    - Experience with mildly negative rates so far (on commercial bank reserves at central bank)
    - *But deeper issues could arise if try to cut further:* paper currency hoarding, loss of bank profitability; could require legal, regulatory, and tax changes in some countries.
  - **Quantitative easing**
    - Large increases in central bank balance sheets with open market purchases of financial assets
    - *Concerns raised about further actions:* Efficacy when yield curves are already flat; potential risks of weaker asset quality on central bank balance sheets; distributional effects of asset price rises; concerns about money finance and loss of central bank independence.
- Given these concerns and deeper questions about monetary policy frameworks across countries being raised, fiscal policy will be key to counter a recession.  
*How has the scope for more fiscal actions changed with recent developments in  $r-g$ ?*

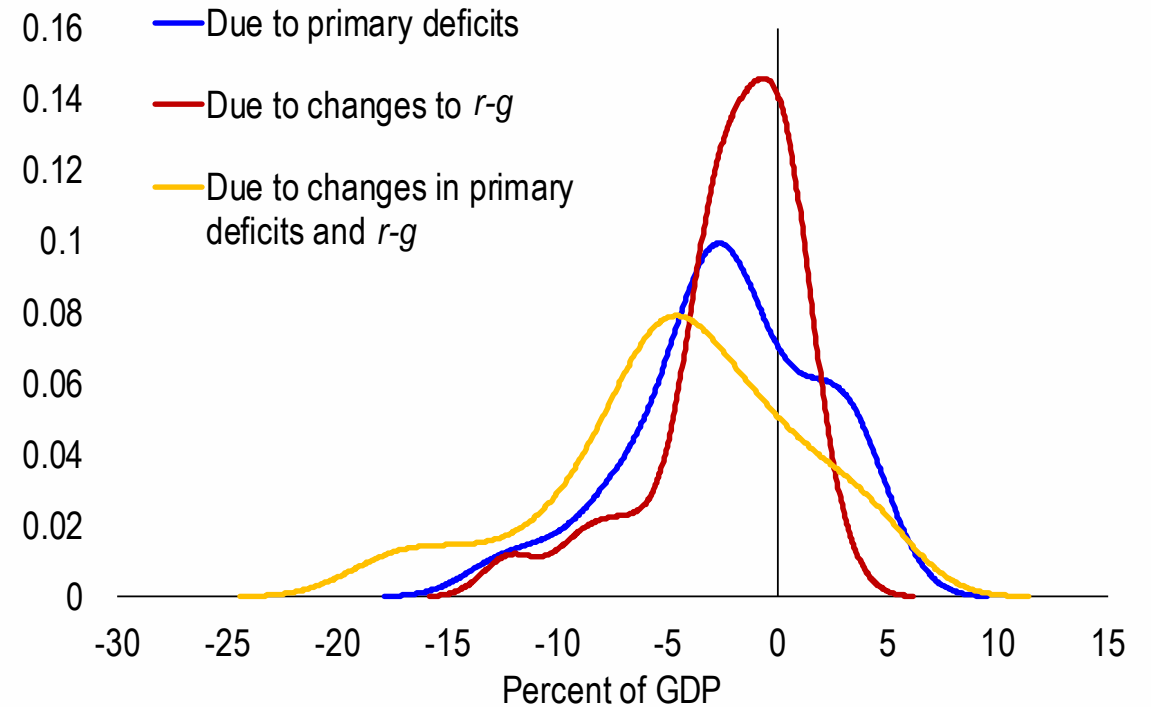
# Lower $r - g$ has slowed debt growth but changes in primary deficits have had a larger role.

**Average 2015 WEO Vintage Forecast Error**  
(Percentage points, over 2016-18)



Sources: WEO, IMF staff calculations.  
Notes: The forecast error for each indicated variable from the October 2015 WEO vintage is calculated for each year over 2016-18 and the average is taken.

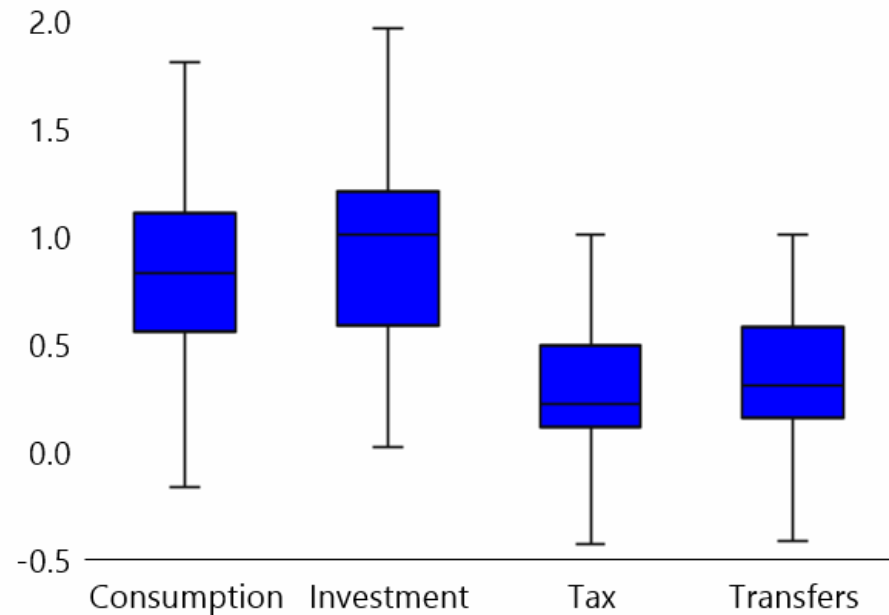
**Drivers of Changes in Gross Public Debt to GDP in 2018 Compared to What Was Expected in 2015**  
(Kernel Density)



Sources: WEO, IMF staff calculations.  
Notes: Densities show the distribution of impacts on 2018 debt ratios of changes to fiscal factors relative to their 2015 forecasts.

# The effectiveness of fiscal stimulus depends on the fiscal instrument used.

## Fiscal Multipliers: One-Year Horizon (Real output effects)



Source: Gechert and Rannenberg (2018).

Note: The chart reports the median, 25<sup>th</sup> and 75<sup>th</sup> percentiles, and the extremes of the distribution of fiscal multiplier point estimates from the literature.

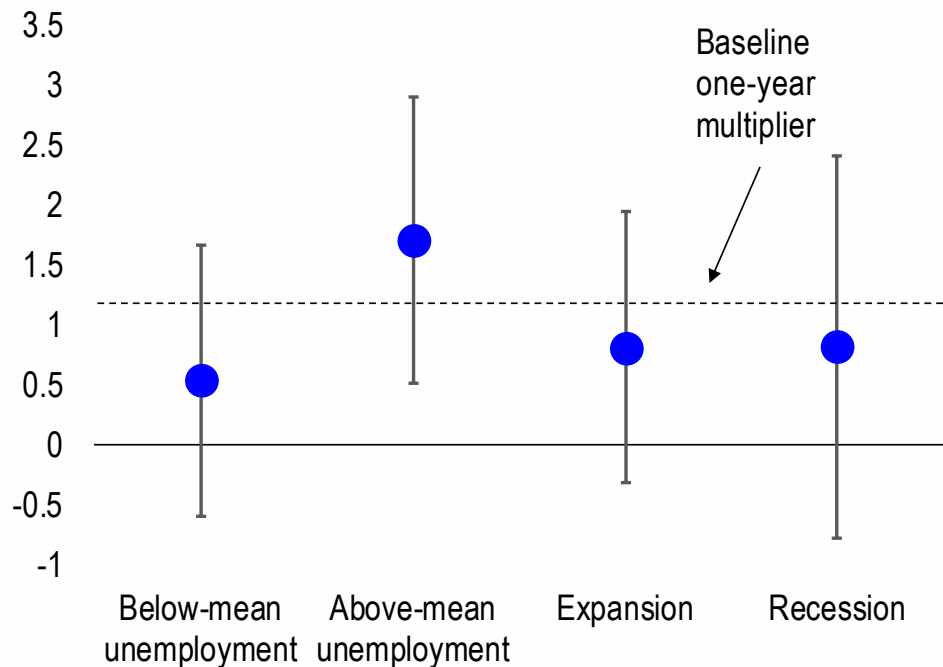
Recent meta-analysis of the literature indicates that:

- **Public consumption multiplier** close to 1 on average
- **Public investment multiplier** larger, but close to public consumption
- **Tax and transfer multipliers** tend to be lower
- **But limited evidence on transfers** because of identification challenges

High uncertainty around these estimates; research designs matter and can differ a lot across studies

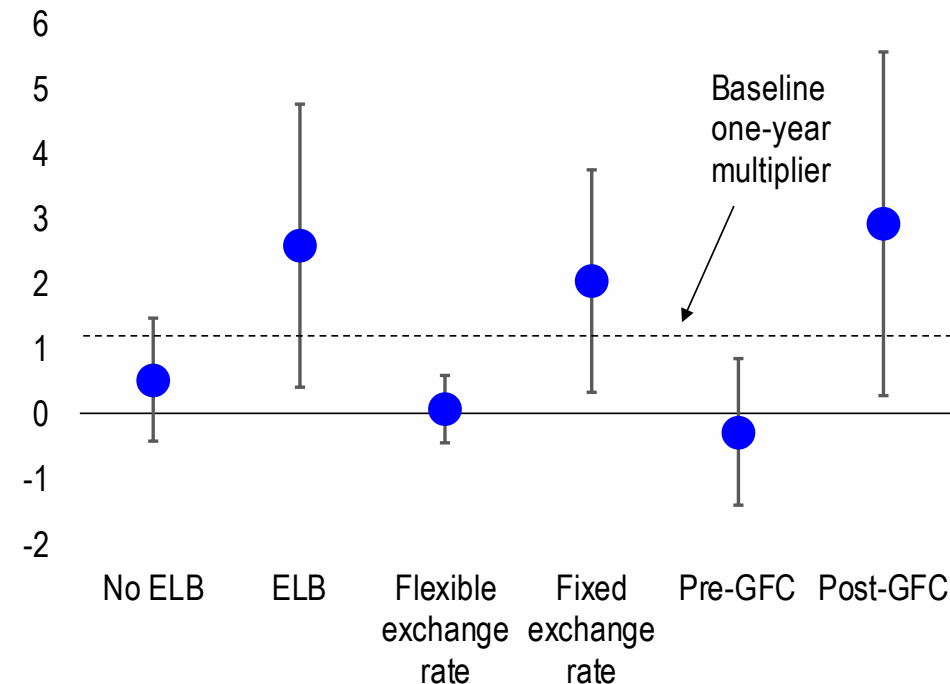
# Fiscal stimulus is more effective when there is slack and when monetary policy is accommodative.

**One-Year Multiplier under Various Slack Conditions**  
(Units of real output)



Sources: OECD Economic outlook, IMF World Economic Outlook, and IMF staff estimates.  
Note:  $t = 0$  is the year of the shock. Public spending shock is equivalent to a one percent of GDP increase in public consumption. The blue dots show the point estimates for the one-year multiplier under the indicated economic conditions. Black whiskers show the 90 percent confidence interval around the estimate. Below- and above-median unemployment are defined by country relative to their own experience.

**One-Year Multiplier under Different Monetary Conditions:**  
(Units of real output)



Sources: OECD Economic outlook, IMF World Economic Outlook, and IMF staff estimates.  
Note:  $t = 0$  is the year of the shock. Public spending shock is equivalent to a one percent of GDP increase in public consumption. The blue dots show the point estimates for the one-year multiplier under the indicated economic conditions. Black whiskers show the 90 percent confidence interval around the estimate. The effective lower bound (ELB) is considered to be binding when short-term policy rates are below 0.75 percentage points. GFC = global financial crisis.



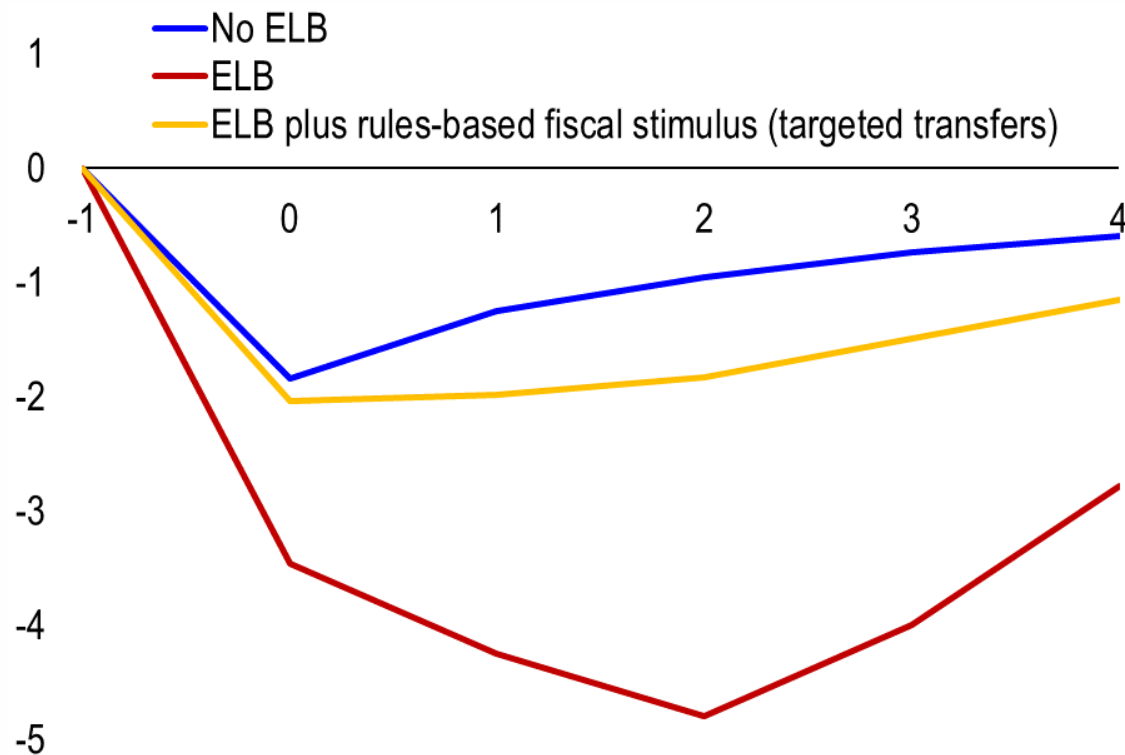
# Can rules-based fiscal stimulus help counter a negative shock when monetary policy is constrained?

- Recent proposals for strengthening automatic stabilizers:
  - Increase sensitivity of existing automatic stabilizers to the cycle (tax code, unemployment benefits, ...)
  - **Rules-Based Fiscal Stimulus:**  
Link a portion of government spending explicitly to the state of the economy  
→ When unemployment rate rises, increase public spending.
- IMF's **G20mod (FSGM)** is used to evaluate proposals
  - General equilibrium model with multiple regions
    - Rich fiscal structure, stock-flow consistency, endogenous monetary policy rule
    - Forward-looking and liquidity-constrained households, profit-maximizing firms
  - Representative advanced economy used for the simulations.

# Rules-based fiscal stimulus can be extremely effective in countering a downturn when monetary policy is constrained.

## Responses of Real GDP to a Negative Demand Shock

(Percent deviation from baseline)



Source: IMF staff calculations.

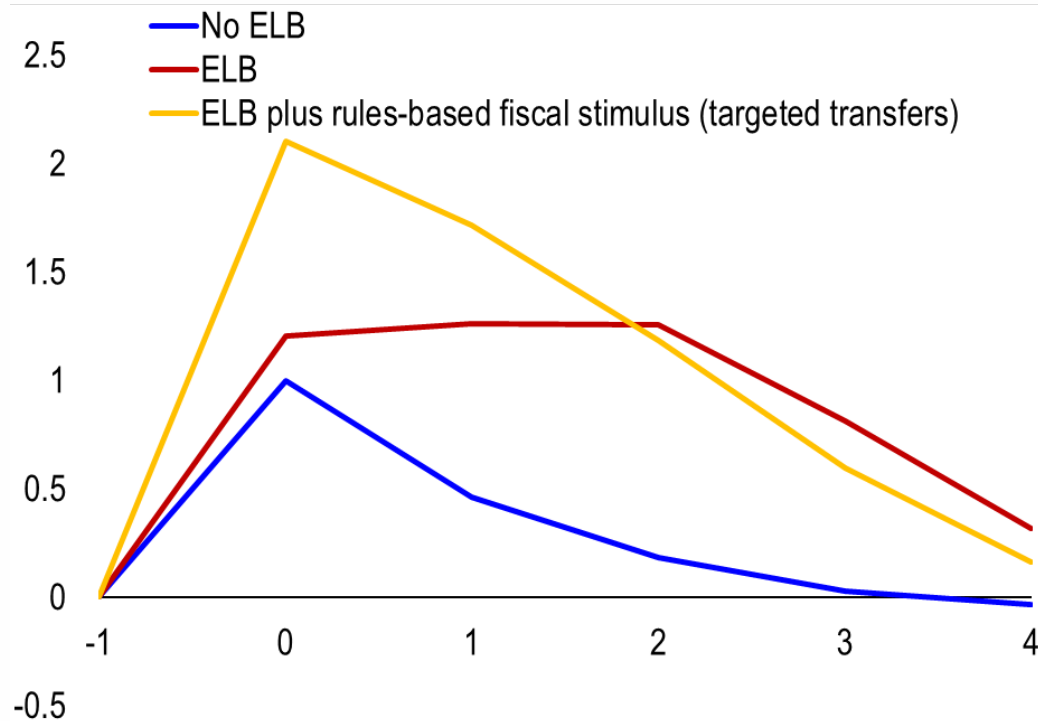
Note: ELB = effective lower bound on interest rates. Targeted transfers go to liquidity constrained households.

- **Calibration of the cyclical rule:** When unemployment rate rises 0.5 percentage points above its natural level, government spending increases by 0.7 percent of GDP.
- Depending on the type and magnitude of fiscal instrument, its countercyclical effect can be almost as large as conventional monetary policy unconstrained by the effective lower bound on interest rates.

# Debt dynamics are better with a rules-based fiscal stimulus than without when interest rates are at effective lower bound.

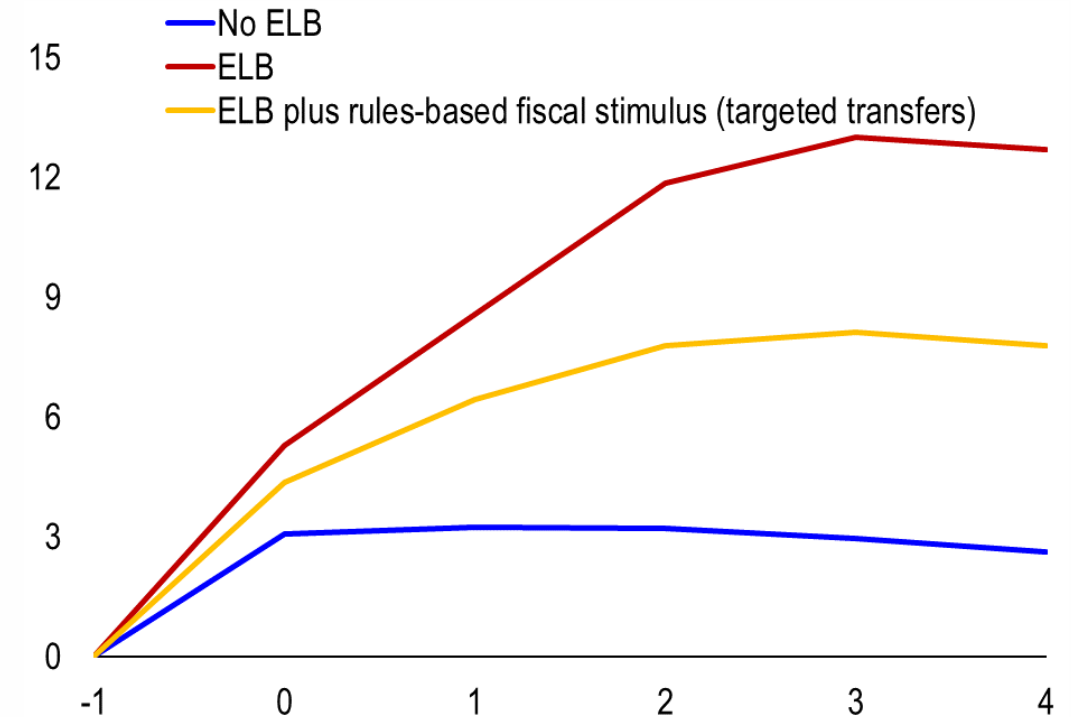
## Responses of Fiscal Deficit to GDP to a Negative Demand Shock

(Percentage point deviation from baseline)



## Responses of Public Debt to GDP to a Negative Demand Shock

(Percentage point deviation from baseline)



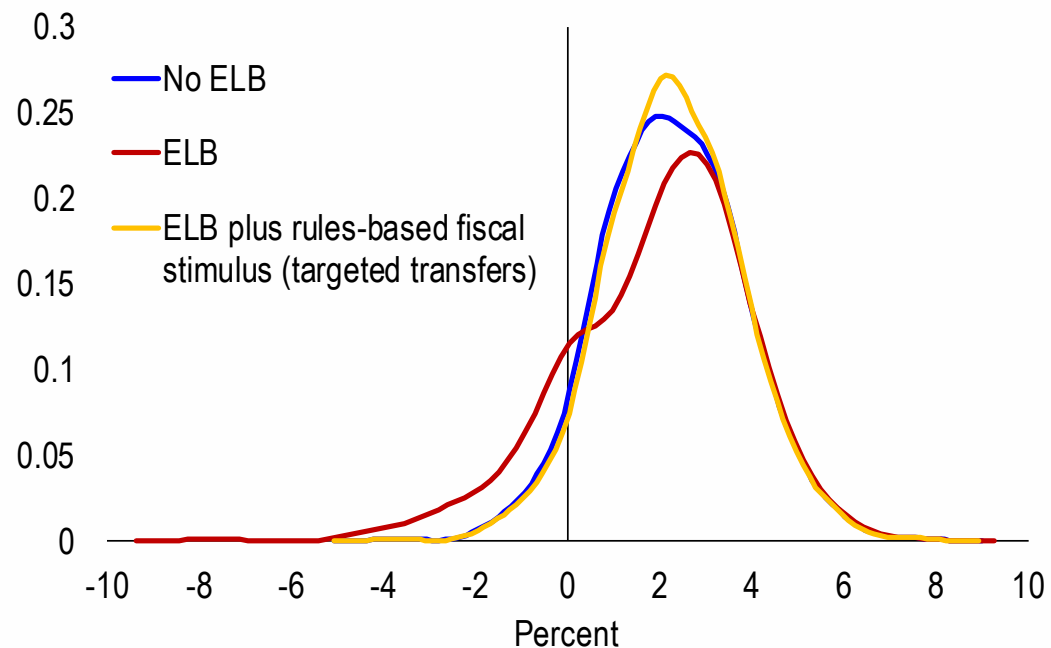
Source: IMF staff calculations.

Note: ELB = effective lower bound on interest rates. Targeted transfers go to liquidity constrained households.

# With rules-based fiscal stimulus, recession likelihood at ELB can almost match what unconstrained monetary policy achieves.

## Distribution of GDP Growth under Alternative Policy Tools, 1 year ahead

(Kernel Density)

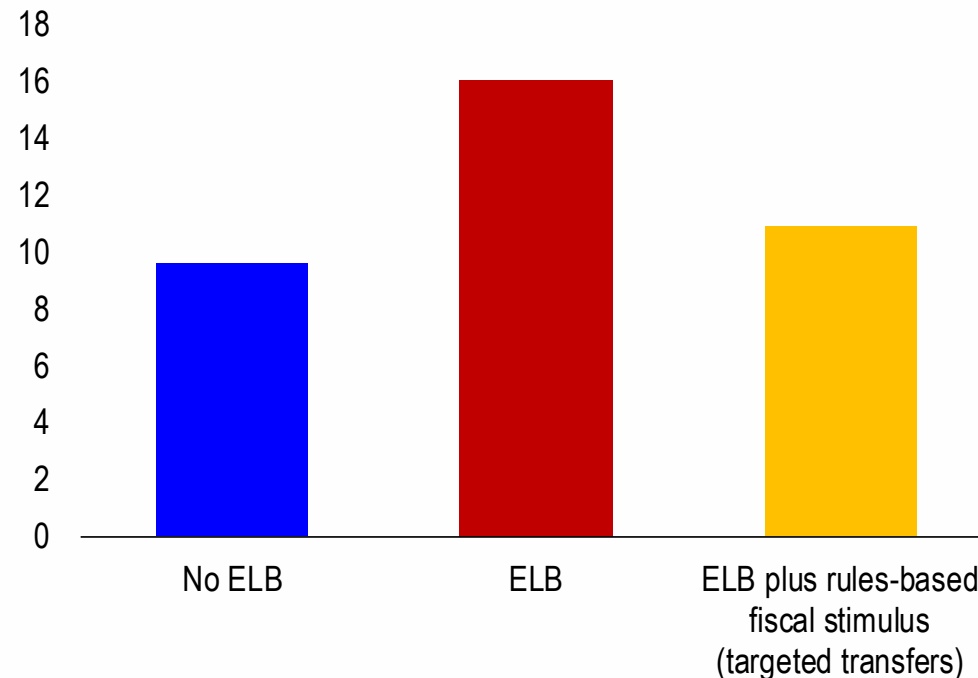


Sources: IMF staff calculations.

Note: ELB = effective lower bound on interest rates. Targeted transfers go to liquidity constrained households. Stochastic simulations are used to generate the distribution of output and debt under the indicated scenario. The simulations draw from demand shock distributions centered at the baseline growth projection. The demand shocks come from the normal distribution calibrated to the empirical variance of the shocks.

## Recession Probabilities under Alternative Policy Tools, 1 year ahead

(Percent)



Sources: IMF staff calculations.

Note: ELB = effective lower bound on interest rates. Targeted transfers go to liquidity constrained households. Stochastic simulations are used to generate the distribution of output and debt under the indicated scenario. The simulations draw from demand shock distributions centered at the baseline growth projection. Demand shocks come from the empirical distributions. A recession is defined as a year with negative annual growth.

# Summary of Findings and Policy Implications

- Scope for further interest rate cuts limited. Unconventional monetary policy tools still available but some concerns about effectiveness and trade-offs faced. Central banks can support fiscal stimulus in a recession by keeping yields low.
- Countercyclical fiscal policy will be key to counter the next recession.
  - In many economies,  $r-g$  developments have relaxed budget constraints, although role is relatively small compared to primary surpluses. Low  $r-g$  looks to be very persistent.
  - Public spending stimulus is most effective and even more so when there is slack and monetary policy supportive. Discretionary measures have helped but often with delay.
  - Model-based analysis suggests that automatic stabilizers can almost overcome the constraints of the effective lower bound on rates if designed properly.
    - Increasing sensitivity of traditional automatic stabilizers may not be enough.
    - New asymmetric automatic stabilizers with macroeconomic triggers (rules-based fiscal stimulus) can be highly effective against a downturn.
- To ensure a timely and effective response to a recession, policymakers should enhance automatic stabilizers and adopt rules-based fiscal stimulus measures. Doubly important when the economy is operating close to the effective lower bound on interest rates and the lags with discretionary fiscal measures are long.



# **World Economic Outlook April 2020**

**FIND CHAPTER HERE: [IMF.ORG/WE0APRIL2020](https://www.imf.org/WE0APRIL2020)**

**THANK YOU!**