

# Unconventional Monetary Policy: An interim assessment

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# Preliminaries

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- Thanks for inviting me.
- Much one could talk about
  - Pandemic
  - Fiscal and Monetary Response
  - Inflation
- Evolving situations – better talk about something we have more theory and evidence for.
- Unconventional Monetary Policy



# What is UMP?

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- Unconventional monetary policy occurs when tools other than changing a policy interest rate are used. These tools include\*:
  - forward guidance
  - asset purchases
  - term funding facilities
  - negative interest rates.
- I will focus on asset purchases
  - And to a lesser extent on term funding.

\*Source:<https://www.rba.gov.au/education/resources/explainers/unconventional-monetary-policy.html>



# Outline

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- How is UMP supposed to work and how has it worked in practice?
- What are the not fully intended/unintended effects?
- How do central banks normalize and what are the associated risks?



# How it works

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- Repairing markets
  - Conforming Mortgage Backed Securities (QE1) – De Maggio, Kermani, and Palmer (2020) show Fed MBS purchases in QE1 led to an increase in refinancing, a reduction in mortgage payments, and an associated increase in consumption.
  - OMT, peripheral sovereign debt, and the avoided fiscal consequences.
- Bank recapitalization
  - By enhancing the value of distressed assets held by banks, QE recapitalizes capital constrained banks through the backdoor, allowing them to lend more.
    - Stealth recapitalization of Brunnermeier and Sannikov (2016)
  - Rodnyansky and Darmouni (2017) – banks with considerable holdings of MBS lent more after QE1.
  - Acharya, Eisert, Eufinger, and Hirsch (2019) -- Banks that held more periphery country bonds when Draghi boosted their value by announcing OMT lent more.
    - Zombie loans



## How it works ...contd

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- Credit easing
  - Grosse-Rueschkamp, Steffen, and Streitiz (2019) – ECB purchase of corporate bonds reduces yields for eligible firms, allowing them to repay bank debt with bond issuances, which allows banks to lend to riskier firms.
  - Not quite directed lending, but nearly there...



## How it works...contd

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- Narrow portfolio balance:

- Scarcity (demand)

By buying up a desirable and specialized asset that has a clientele, the central bank creates unsatisfied replacement demand for that asset.

- Specialization (supply)

Specialized producers step up to produce that asset – Krishnamurthy and Vissing-Jorgensen about QEIII and MBS.



## How it works...contd

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- QE as signal about central bank intent
  - No interest rate hike till QE ends
  - Also signals asset price support/concern about wealth effects/central bank put
- Broad portfolio balance
  - Theoretically, central bank buying long duration assets out of balance sheets allows the private sector to rebalance toward long assets.
  - Pushes down long asset yields and incentivizes long term financing.
  - Hard to identify these effects because co-mingled with others.
  - Foley-Fisher, Ramcharan, Yu (2016): Maturity extension program by Fed or Operation Twist allowed firms dependent on long term debt to issue more of it, expanding employment and investment.
  - Swanson (2011) finds that LSAPs focused on Treasuries actually increased credit spreads for investment grade bonds.





# Assessment

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- Hard to find evidence for novel ways (e.g., portfolio balance) in which QE works.
- Instead seems to work by the central bank supporting markets with its balance sheet and effectively recapitalizing banks through the backdoor.
- Is this monetary policy or fiscal policy?
- More important, does it amount cumulatively to something significant? Did it work?



## Assessment...contd

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- Fabo et al. (2020) examine 54 studies on the effects of QE on output and inflation in the U.S., U.K., and the Euro area.
  - While all the papers by central bankers report a statistically significant QE effect on output, only half the academic papers do.
    - Bundesbank papers find even less effects of QE on output than the academic papers



# Bottom line on intended effects

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- Seems effective at repairing markets.
  - Central bank put?
- Relatedly, directed lending does support corporations.
- Direct effects of untargeted QE (e.g., buying Treasury bonds) less easy to discern.
  - Largely signaling effect?
- Does this mean that the more quasi-fiscal the UMP, the more effective it is?
- Central banks that use it seem convinced it is useful – having implemented QE makes a positive assessment 25 percentage points more likely (Blinder et al. 2016).
- Seems relatively harmless. So why not do it?
  - If nothing else, signals central banks not asleep at the wheel while underperforming their inflation target.



# (Un?)intended effects

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- Easing government funding and facilitating large deficits.
  - Central banks are reluctant to admit this since this was partly what they sought independence for.
  - Lowflation turned the tables?
- Search for yield, capital flows, and exchange rates (bug or feature)?
  - Large literature summarized in Agenor and Pereira da Silva (2018)
  - Rose (2018), Swanson (2015): A one standard deviation increase in LSAP causes the dollar to depreciate by 0.35%.
  - Bruno and Shin (2018) – vulnerability of EM corporates who borrow in dollars and hoard domestic cash to dollar depreciation
  - Diamond, Hu, and Rajan (2020 a) and Hoffman, Shin, and Villmizar-Villegas (2019) on exchange rates and domestic leveraging.



# (Un?)intended effects

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- Asset price increases (bug or feature)?
  - One standard deviation increase in LSAPs cause stock prices to increase by 0.2 percent.
  - Is this fundamentals (lower discount rate, higher investment) or temporary distortion (to be reversed when QT happens)?
- Are lower exchange rates and higher asset prices a way of committing to prolonged easy monetary policy because of a fear of headwinds when reversed?
  - Is this commitment or a trap?



# Unintended effects

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- Capital and leverage – persistence:
  - An enhancement in purchaser capital makes it easier to borrow against illiquid assets
    - Leading to an increase in asset prices
    - An increase in leverage
    - A fall-off in governance (e.g., covenant lite debt)
  - This could be problematic when UMP is withdrawn and asset prices reverse (Diamond, Hu, and Rajan (2020, forthcoming)).



# Unintended effects...

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- Liquidity dependence (Acharya and Rajan (2021)).
  - Central bank reserve issuance to finance QE has to be financed by banks, typically using demand deposits.
  - Unused liquid reserves are a drain on bank profits – typically their liquidity services are sold so they are “fully” utilized.
  - But demand deposits are also a claim on that liquidity.
  - So, in practice, whatever apparent liquidity is supplied by the central bank is quickly used up.
  - Dash for cash episodes in September 2019 and March 2020, despite reserves with banks 3 or 4 times what they were before the financial crisis.
  - Central bank balance sheet expansion may be harder to reverse than we think, especially in dynamic banking systems.
  - Ever growing central bank balance sheet?



# Unintended effects

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- Shortening effective maturity of official debt.
  - Central bank purchase of government debt shortens the effective maturity of outstanding consolidated debt.
  - UK average debt maturity 15 years, median maturity 11 years, median maturity after accounting for QE only 4 years.
  - US starts with average maturity 65 months!
  - Higher interest rates lead quickly to higher debt service and higher fiscal deficits when median debt is such short maturity.





# Overall assessment

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- Modest effects, largely through quasi-fiscal operations, with fiscal costs buried by success.
  - Could be aid to signaling monetary policy commitment
- Increases macroeconomic and financial fragilities
- Increases the interdependence between
  - The central bank and the government
  - More worryingly, the central bank and markets
    - December 2018
- Chakravayuh or whirlpool: Easy to get in, hard to get out.



# Conditions are ripening for exit

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- Conditions for effective UMP
  - Low fiscal deficits
  - Low inflation
  - Central bank credibility/independence
- Paradoxically, effective UMP undermines all these, partly for intended reasons, partly unintended.



# Exit

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- How to exit, especially in a situation of rising inflation?
  - Cessation of QE vs Quantitative Tightening (sale of stock)
    - Flows versus stocks versus signal
    - Different factors matter at different times?
  - What reverses and what does not?
    - Asset prices versus leverage
  - First mover disadvantage for lead central bank.
    - Exchange rate appreciation is another headwind.
    - Coordination?
- Possible scenarios
  - Bust => extreme accommodation => boom+leverage => withdrawal => normal world?
  - Bust => extreme accommodation => boom+leverage => withdrawal => Bust, repeat?
  - Bust => extreme accommodation => boom+leverage => no withdrawal => ?



# In conclusion

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- UMP is an experiment that may have been necessitated by central banks undershooting inflation targets even while seeing themselves as the only game in town.
  - Entry under the initial conditions was easy.
- Its effects are not fully understood, nor is exit under emerging inflationary conditions going to be easy.
- Are central banks key contributors to financial cycles (Borio (2014)) and do they need to incorporate the financial cycle into their thinking?
- The burden on central bankers will not be easy in the coming months.