#### Financial Advisory Roundtable Meeting <sub>May 2022</sub>

## How do QE and QT affect financial stability? Are the effects symmetric? Background

- QE operates mostly via stock effect and forward guidance
  - Stock effect: reduce term and liquidity premia
  - Strengthening interest rate forward guidance suppresses volatility
- Both channels ease financial conditions by increasing risk taking
  - Stock effect via portfolio rebalancing towards riskier assets
  - Forward guidance via larger positioning/gross risk. VaR may not increase at same rate
- QT operates in a similar manner
  - Stock effect: increase term and liquidity premia
  - Weakening of interest rate forward guidance: increase volatility
- Both channels tighten financial conditions by reducing risk taking
  - Stock effect via portfolio rebalancing towards less risky assets
  - Forward guidance via lower gross positioning/higher VaR

# How do QE and QT affect financial stability? Are the effects symmetric? Discussion

- Asymmetry of QT vs QE
  - QE open ended, state contingent vs QT limited based on market functioning
  - QE active easing, QT passive easing
  - QT is limited because reserves can be "too low"
  - QE forward guidance flatline rates at ELB vs QT lack of guidance opens unbounded upside
    - i.e. discussion of 75bp rate hikes, higher term premium, more price discovery
  - QE calibration "known" (many observations) while QT calibration unknown (only one observation (2017-19)).
    - Has large scale and persistent QE changed the intermediation capacity of the financial sector?
- Symmetry of end of QE/QT: signaling effect due to sequencing
- Is effect of run off same as asset sales?
  - Predictable run-off vs unpredictable asset sales. Did Fed squeeze out buyers during QE?
  - QT via MBS sales: moral hazard in politics of housing market

# Has the pass through of tightening to real rates changed recently? Background

- Real rates (r) = nominal rates (i) inflation (pi)
- Nominal rates anchored by estimates of *r*\* (if *pi* stable)
- Inflation anchored by estimates of *pi*\*



### Has the pass through of tightening to real rates changed recently? Discussion

- Lower r\* => less space for real rate volatility?
- QE purchased TIPS, dampened real rates (at least initially)
- FAIT meant nominal rates lower for longer and then faster increase, same pattern for real rates
- Change in inflation risk distribution (towards upside) boosts breakevens and dampens real rates for a given level of nominal rates, requiring higher nominal rates
  - Flows into TIPS ETFs seeking inflation protection have skyrocketed



What are the medium term risk to economic and financial stability if real rates rise substantially? Background

- Starting point: a very solid US economy
  - Robust household balance sheet, low corporate debt, strong capitalization of banks, healthy housing market
- Very likely r\* has increased
  - Higher investment, less and/or better quality debt, more risk taking, likely stronger productivity growth, compare to high savings & debt worries post 2008
- EM rates already high and fundamentals are solid
- Thus, there is ample room for US real rates to increase "for the right reason"

What are the medium term risk to economic and financial stability if real rates rise substantially? Discussion

 Private debt service ratio is at all time lows, can absorb an increase in real rates



What are the medium term risk to economic and financial stability if real rates rise substantially? Discussion

- The main risk to high real rates is elevated public debt ratios
  - Will higher real rates lead to r>g and change the benign debt dynamics?
  - Based on current 2022 projections (IMF Fiscal Monitor April 2022):
    - d(t) = 125%; pb(t) = -3.4%; potential growth (g\*) = 2%
  - The US debt stabilizing real interest rate (r) is about 0%
    - If primary balance (pb) reduced to 0%, then debt stabilizing real interest rate is 2%.
    - There is thus a trade off between fiscal outlook and room for real rates to increase
- Will the inflation scare limit the willingness to ease aggressively in the next recession, increasing the odds of future hysteresis?

What are the medium term risk to economic and financial stability if real rates rise substantially? Discussion

- Unwind of QE → greater scrutiny of risk and liquidity premia required, a "fairer" playing field for investors?
- Thesis drift : Market Liquidity Market Functioning Monetary Policy
- Orderly unwind, conclude policy mix was appropriate
- Disorderly/very hard landing, market likely distrusts efficacy of the tool next time around
- Variance of shocks (Russia/Ukraine, China COVID Zero) is high. Markets are reflecting uncertainty around outlook