Government Debt Management at the Zero Lower Bound

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OUR PAPER

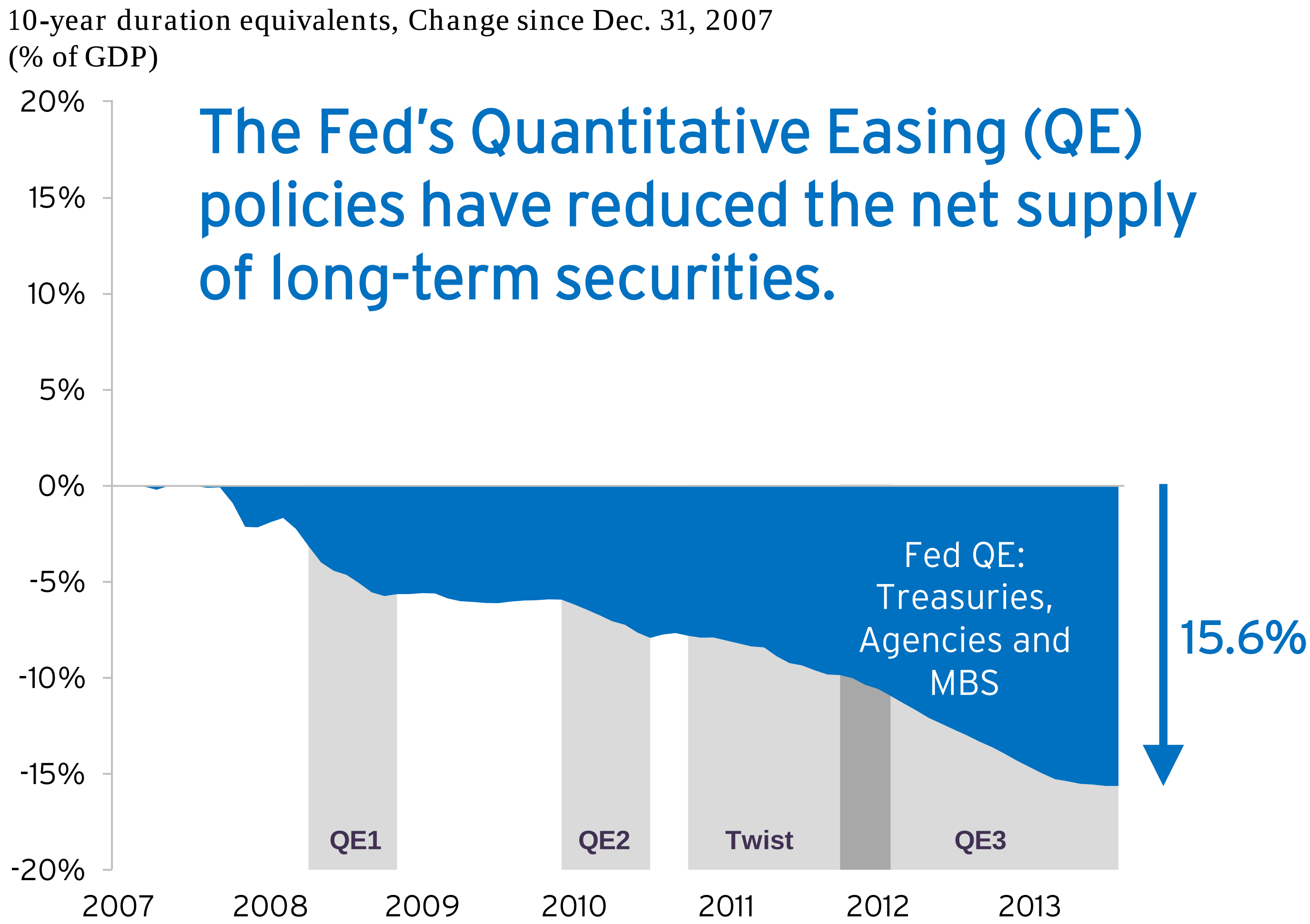
I. Quantify Fed vs. Treasury conflict in QE era

II. Fed vs. Treasury in historical perspective

III. A modern framework for debt management

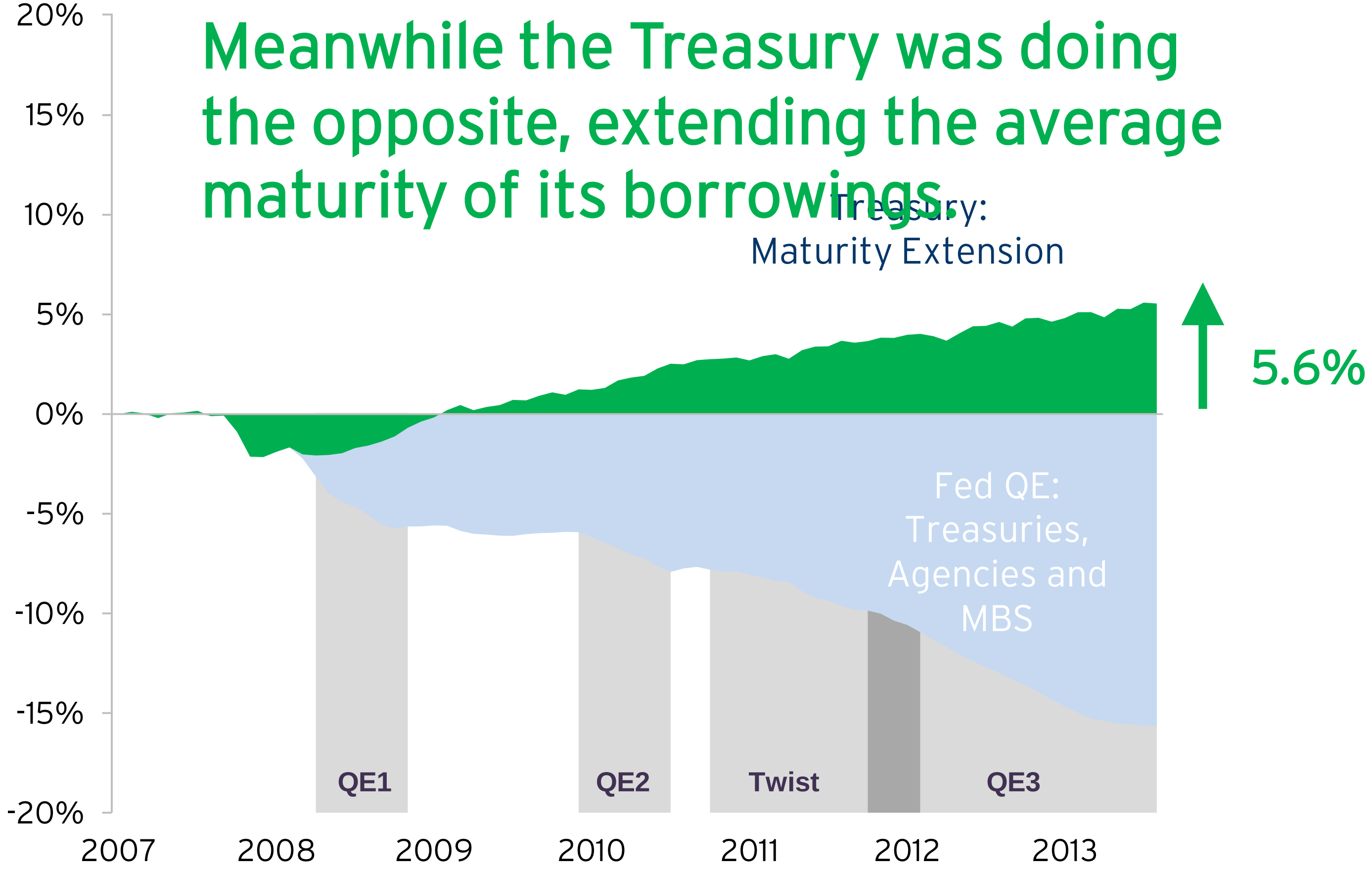
IV. Ways to resolve Fed vs. Treasury conflict

PULLING IN OPPOSITE DIRECTIONS



PULLING IN OPPOSITE DIRECTIONS

10-year duration equivalents, Change since Dec. 31, 2007
(% of GDP)



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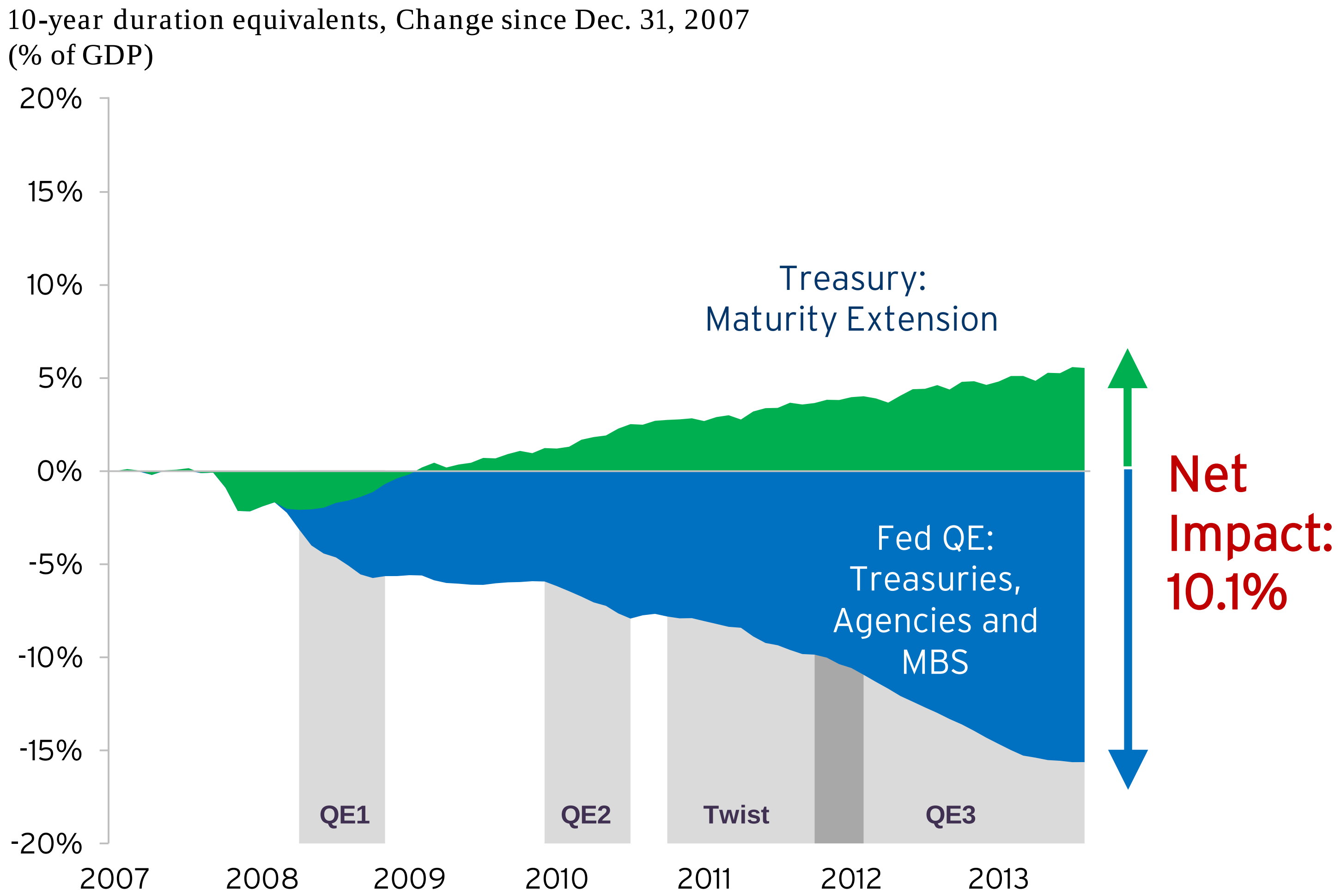

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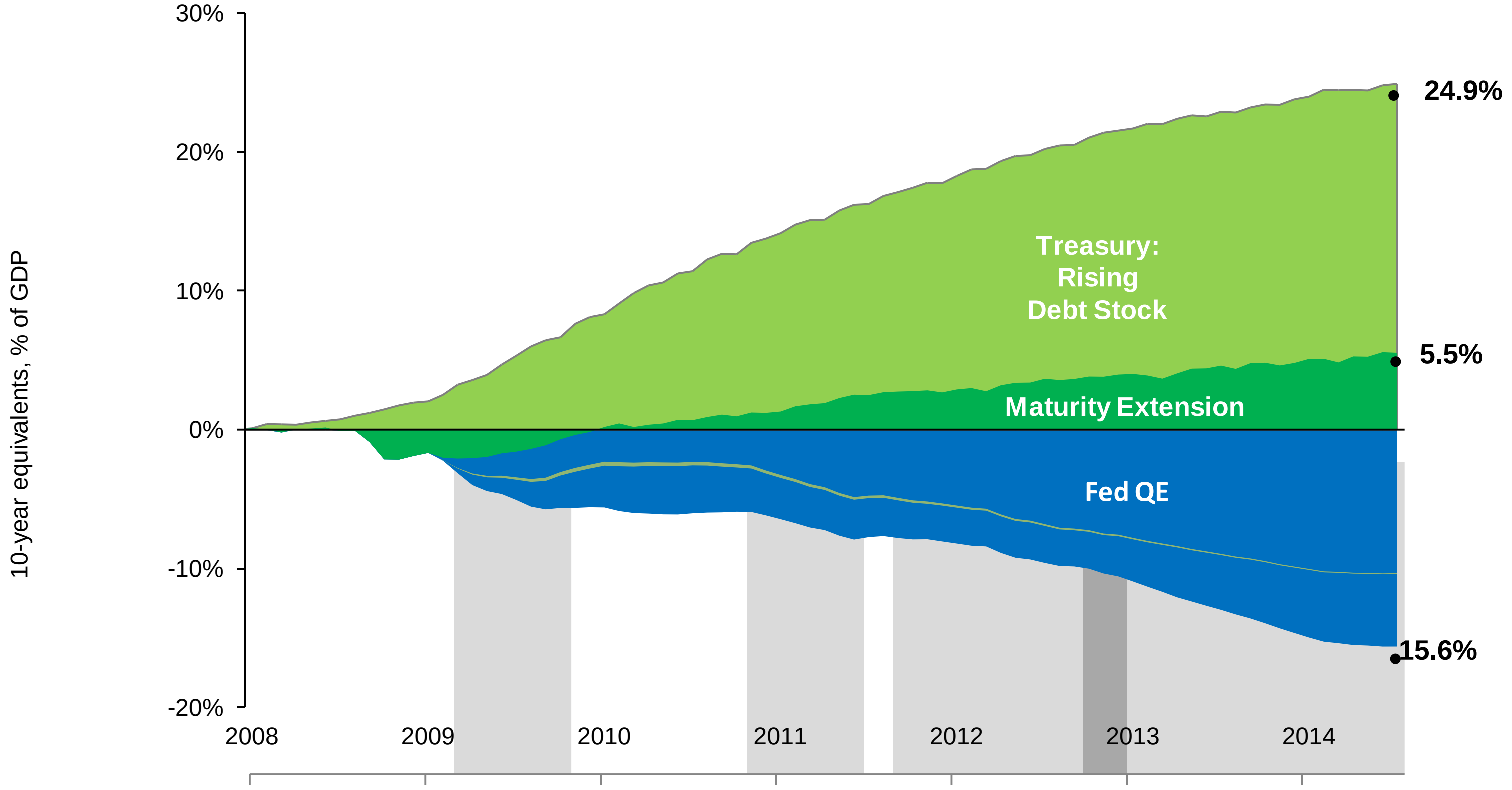


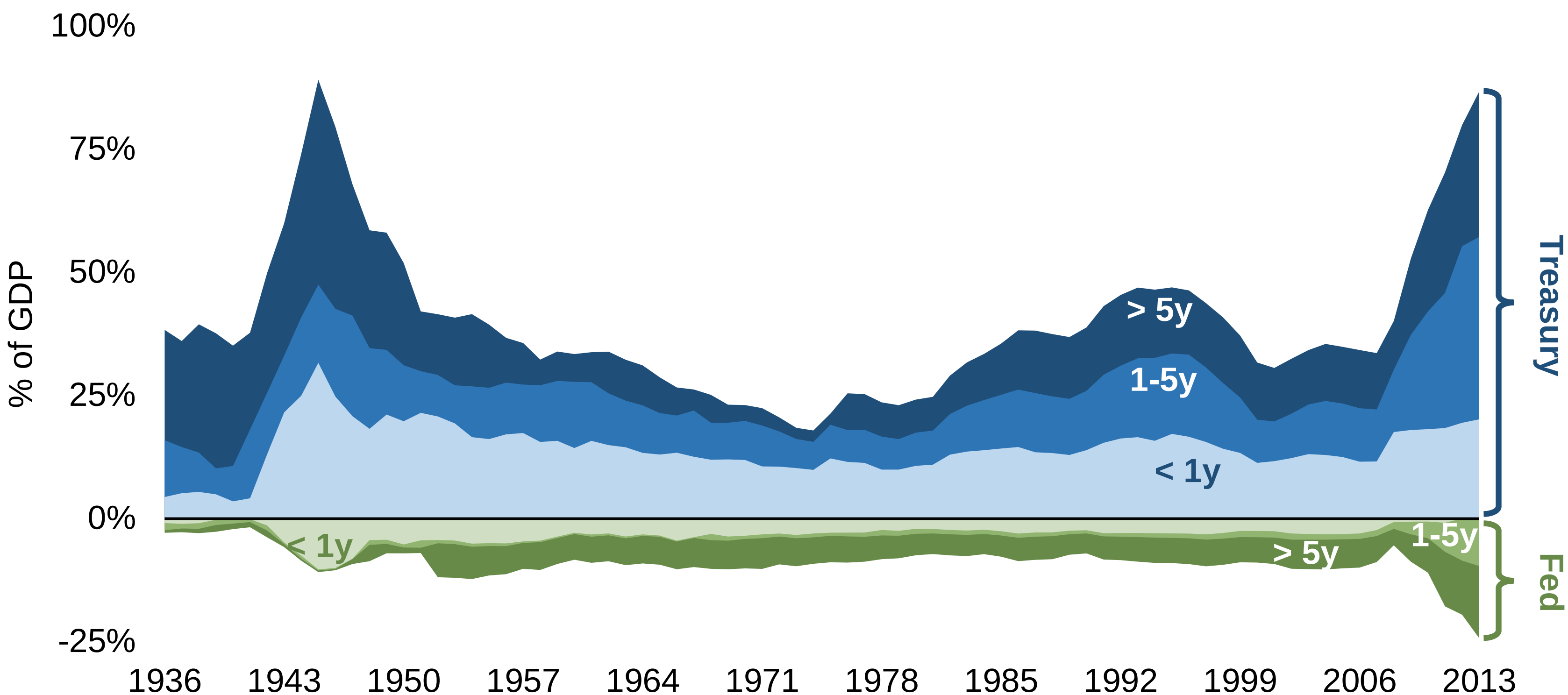
Market Impact

Relying on prior studies, we estimate that the Fed's QE policies have lowered the yield on 10-year Treasuries by a cumulative 1.37 percentage points.

Thus, Treasury's *maturity extension* may have offset as much as one-third of QE's market impact.

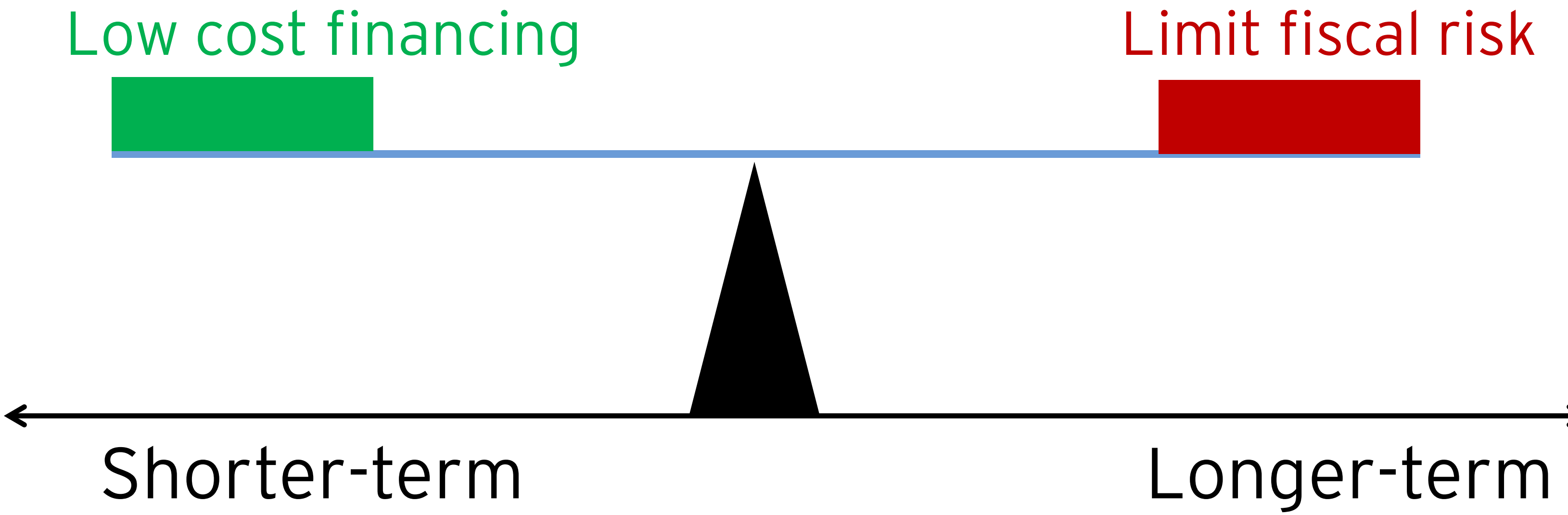
FED VS. TREASURY HISTORICALLY

Before 2008, the Fed's balance sheet was far smaller. As a result, the Fed had little impact on the maturity structure of the



Traditional Debt Management

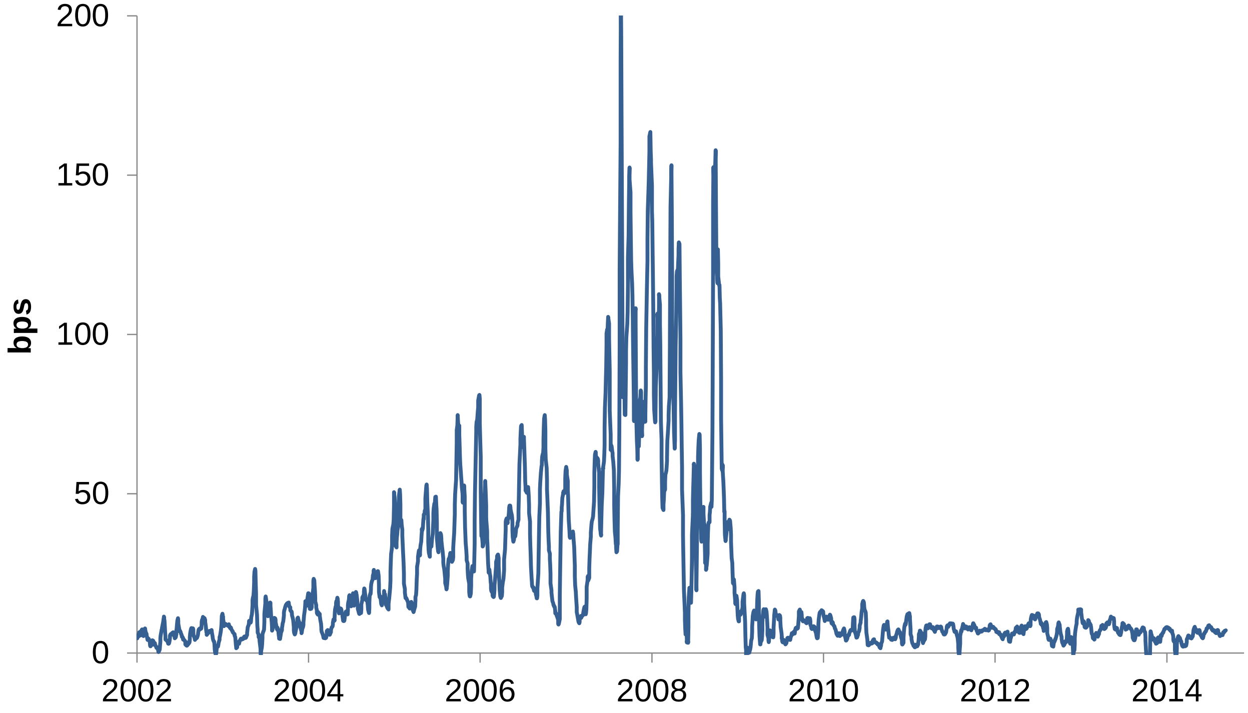
Treasury's traditional approach to determining the appropriate maturity of the debt traded off a desire to achieve low cost financing against the desire to limit fiscal risk.



TRADITIONAL DEBT MANAGEMENT

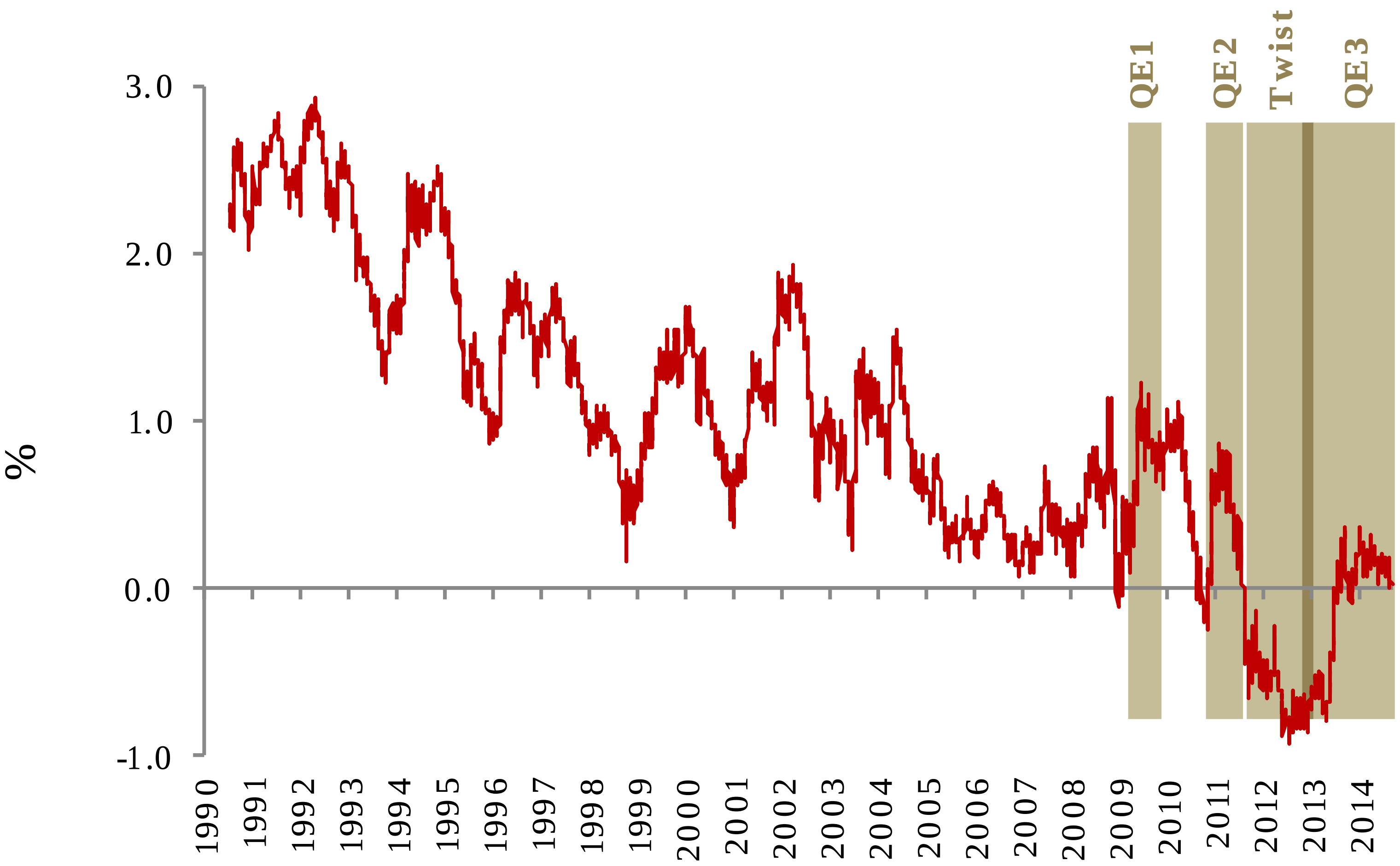
Issuing short-term is "cheaper" because it allows Treasury to capture the "liquidity premium" on T-bills and to conserve on the "term premium" investors demand to hold long bonds.

Liquidity premium on short-term T-bills, Basis points



TRADITIONAL DEBT MANAGEMENT

Term Premium on 10-Year Zero-Coupon Treasuries



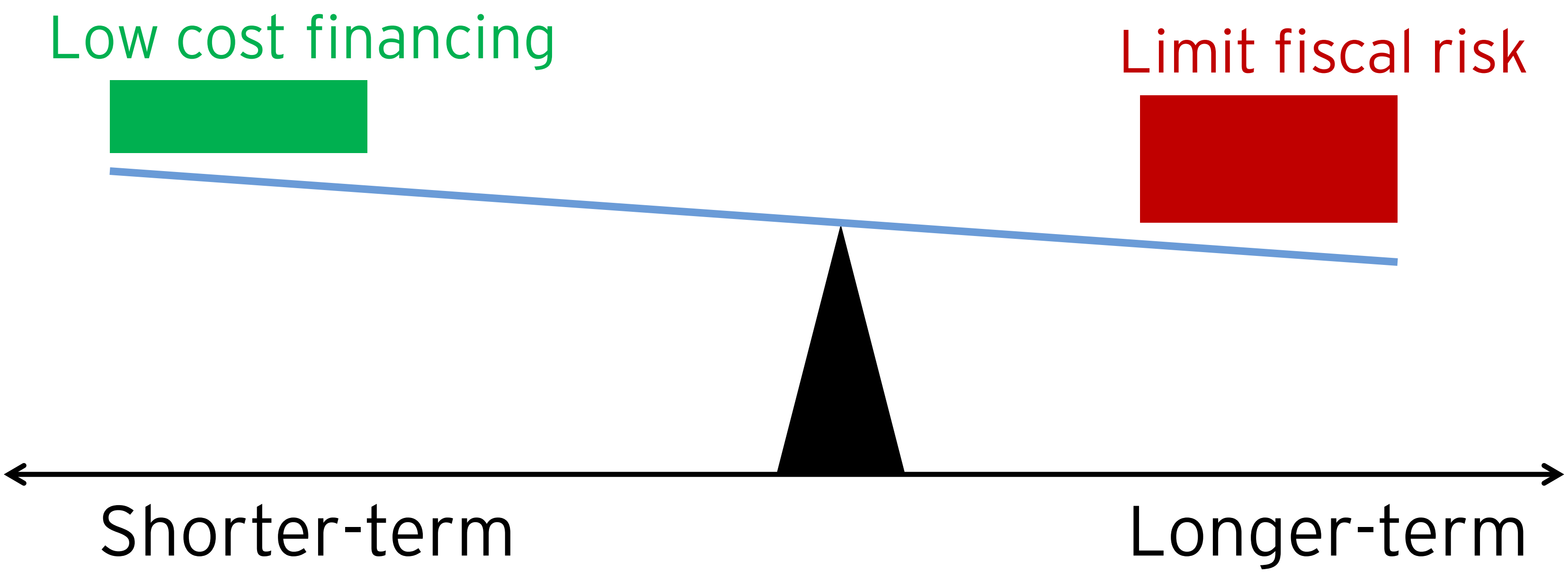
Traditional Debt Management

What is fiscal risk?

- Refinancing risk
  - If the government issues short-term, it is exposed to increases in interest rates
  - If the government issues long-term, it ‘locks in’ the cost of capital
- Rollover risk
  - Failed auction
  - Self-fulfilling bank run

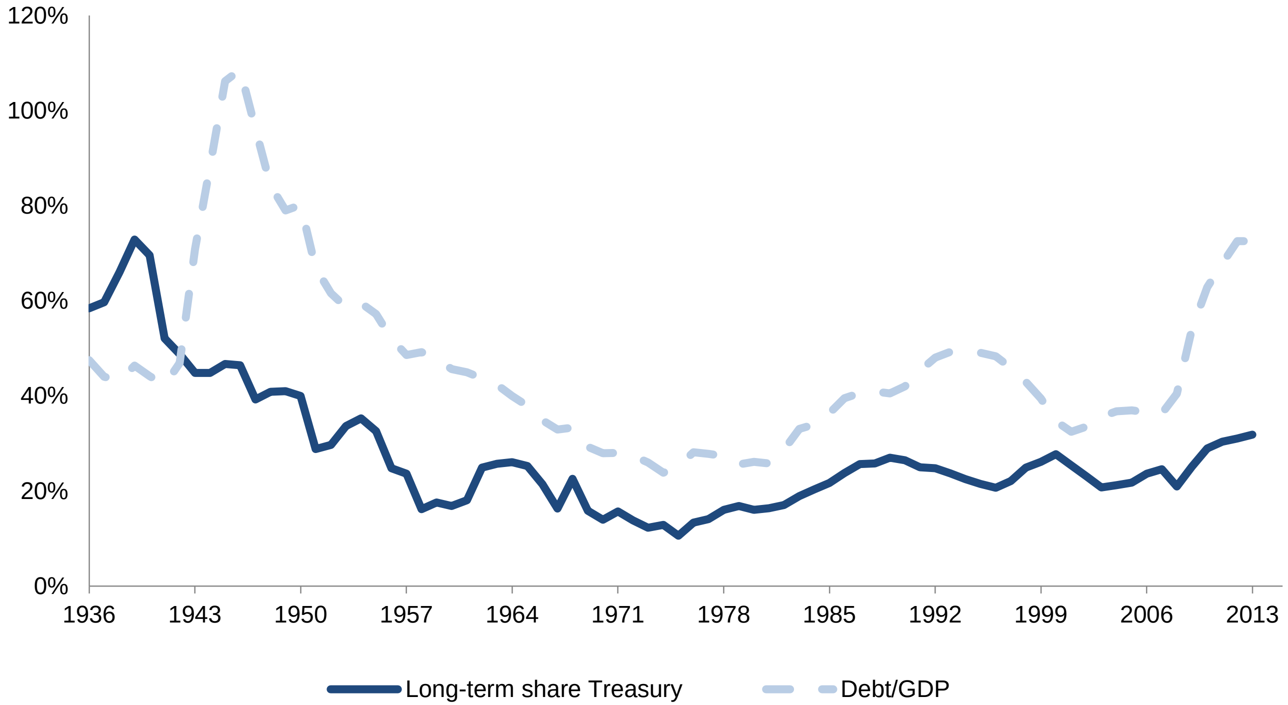
TRADITIONAL DEBT MANAGEMENT

The desire to limit fiscal risk looms larger when the overall debt burden rises.



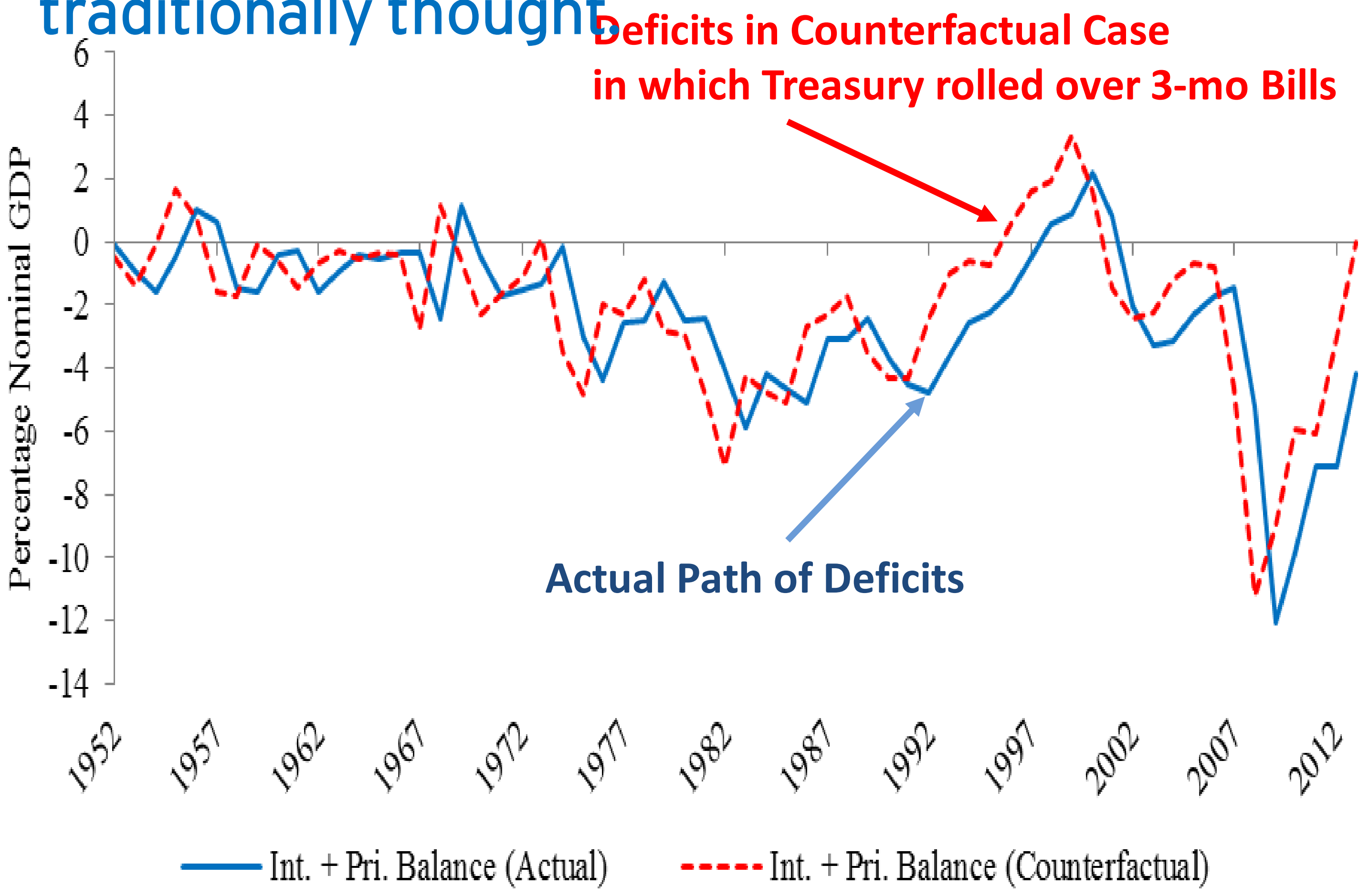
Traditional Debt Management

Thus, Treasury has historically tended to extend the average maturity of the debt when debt-to-GDP rises. Much like the Treasury is doing today.

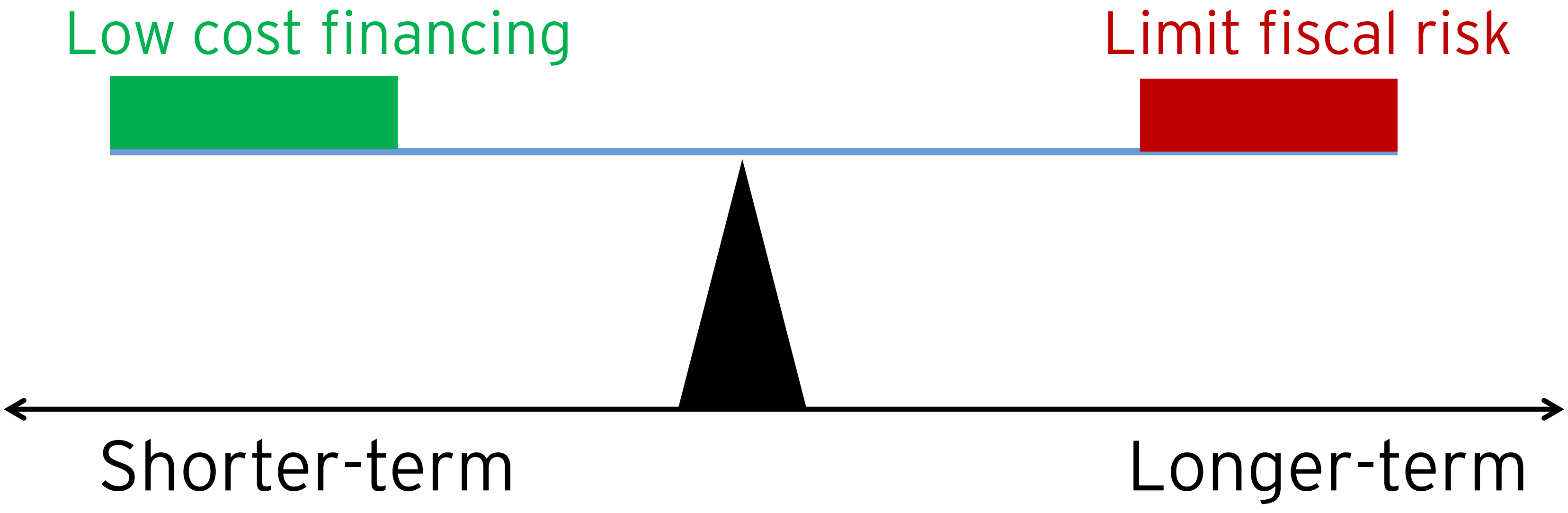


QUANTIFYING FISCAL RISK: A COUNTERFACTUAL

We argue that the "fiscal risk" generated by issuing short-term debt is less important than traditionally thought.

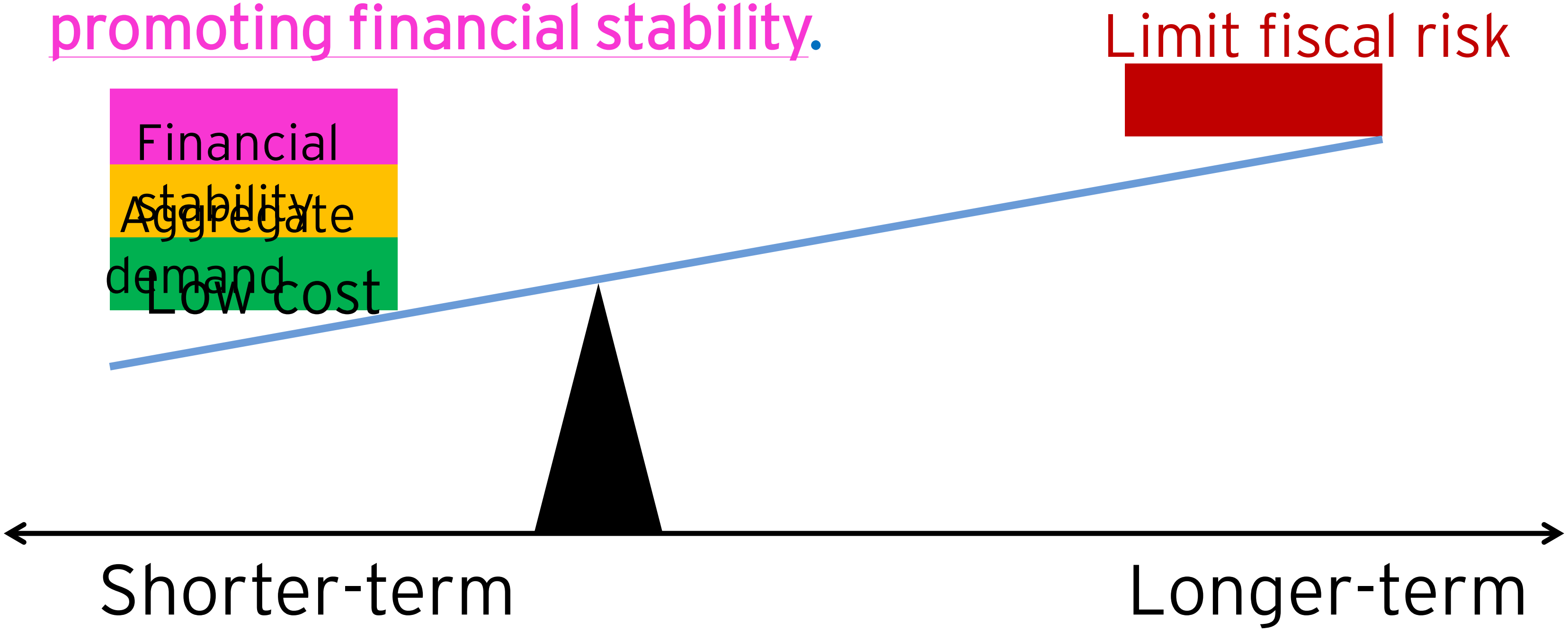


TRADITIONAL DEBT MANAGEMENT



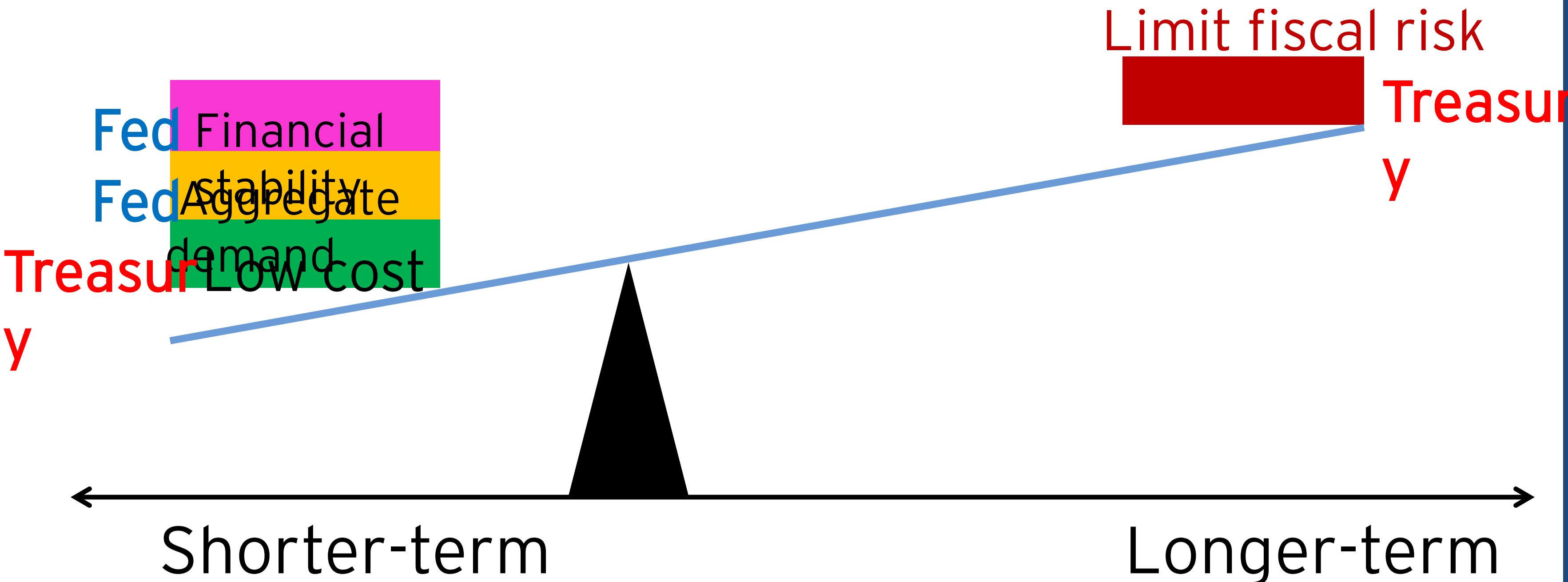
Modern Debt Management

Modern debt management recognizes that the maturity of government debt may also be a valuable tool for managing aggregate demand and promoting financial stability.



DEBT MANAGEMENT CONFLICTS

Objectives of modern debt management have been assigned to Treasury and Fed, which exercise different policy weights



DEBT MANAGEMENT CONFLICTS

- Expansionary monetary policy at ZLB
  - Extend average duration to mitigate fiscal risk (Treasury)
  - Shorten average duration to bolster aggregate demand (Fed)
  - Fed and Treasury in direct conflict over objectives

- Contractionary monetary policy
  - Rise in premium on money-like assets
  - Increases incentive to issue short
    - In this case, Treasury-led debt management is expansionary

SOLVING THE CONFLICTS

- Outside of the zero-lower-bound, Fed sterilization of Treasury debt management is imperfect workaround
  - Fed gets last word using short rate
  - But sterilization no longer possible at the ZLB

- Better solution: Treasury and Fed release annual joint statement on combined public debt management strategy
  - Forces each agency to internalize other's objectives
  - Fed charged with routine tactical adjustments because of its expertise in open-market operations