Yield Curve Control: What It Is, Who Is Doing It, and What It Means

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Since we began studying yield curve control (YCC) policies years ago, they have gone from an abstract concept not seen since the WWII era to a policy that many of the world's largest central banks have adopted or are heavily considering. Under yield curve control policies, the central bank guarantees very low interest rates years into the future, setting the price of money well beyond the short rate.

Of course, central banks also influence the price of money further out the yield curve by undertaking QE purchases. But by credibly promising to purchase bonds if needed to control the bond yield, central banks guarantee the yields rather than being one influence on them, ensuring that very large government deficits can be financed without putting upward pressure on interest rates. If the commitment is credible, central banks can often get away with buying very few bonds, preserving their power to print—which is not infinite, even for central banks with reserve currency status. That said, significant money printing is often necessary as well in order to achieve central banks' goals, both to provide liquidity to the private sector to purchase government bonds, and to ensure that liquidity makes its way through the financial system and supports the prices of other risky assets. For investors, bonds that are pegged have radically different characteristics than what we've grown accustomed to in recent decades, with yields not responding to shifts in growth and inflation. Going forward, how long central banks maintain such policies will likely depend on how successfully they support a return to employment and inflation targets and how tolerant central banks will be if inflation rises well above target.

Looking across past and current cases, the table below summarizes some of the key attributes of yield curve control policies, with colors indicating the degree of stimulation provided:

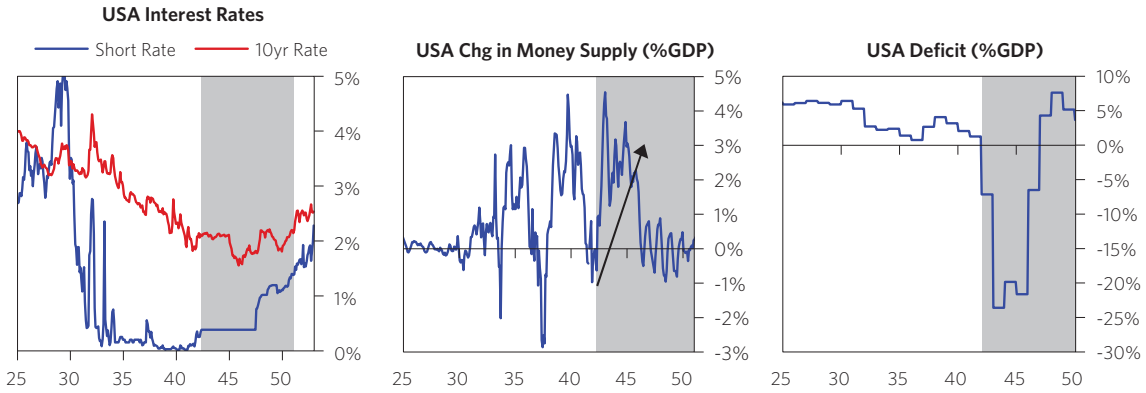
- **Yields targeted:** The Fed during WWII and the BoJ beginning in 2016 set the price of money out a decade or more. The RBA is operating a lighter version and is only targeting 3-year yields, and today's Fed is considering the same.
- **Yield curve steepness:** During WWII, the Fed targeted a relatively steep yield curve, ensuring steady returns for bond investors and incentivizing investors to finance a massive government deficit. In contrast, a very flat yield curve has been targeted in contemporary cases.
- **Money printing:** During WWII, the Fed aggressively expanded its balance sheet at the short end, providing liquidity to players such as banks to purchase government bonds. In contrast, Australia and until recently Japan have printed much less than their developed world peers under these policies. Today's Fed has committed to purchasing bonds at a minimum pace of about $120 billion per month (in line with its QE during the financial crisis), ensuring that printing will remain significant even under a new YCC policy.
- **Fiscal stimulus:** YCC policies are most effective if the government takes advantage of low rates to finance large budget deficits and pump the money directly into the economy. WWII saw massive fiscal deficits, and today's governments are projected to run the largest post-WWII deficits we've seen in response to the virus.

	Yields Targeted	Yield Curve Steepness	Money Printing	Fiscal Deficit
Fed (WWII)	Entire Curve (3m-26yr)	High (1.3% on Avg)	Significant	Massive, 24% of GDP at peak
BoJ (Since 2016)	10yr	Low (0.1%)	Was low, now ramping up	Was modest, now to rise to 14% of GDP
RBA (Since March)	3yr	Low (0%)	Low but willing to ramp up	Massive, 14% of GDP projected
Fed (Under Consideration)	3yr	Low (0%)	Likely significant	Massive, 23% of GDP projected

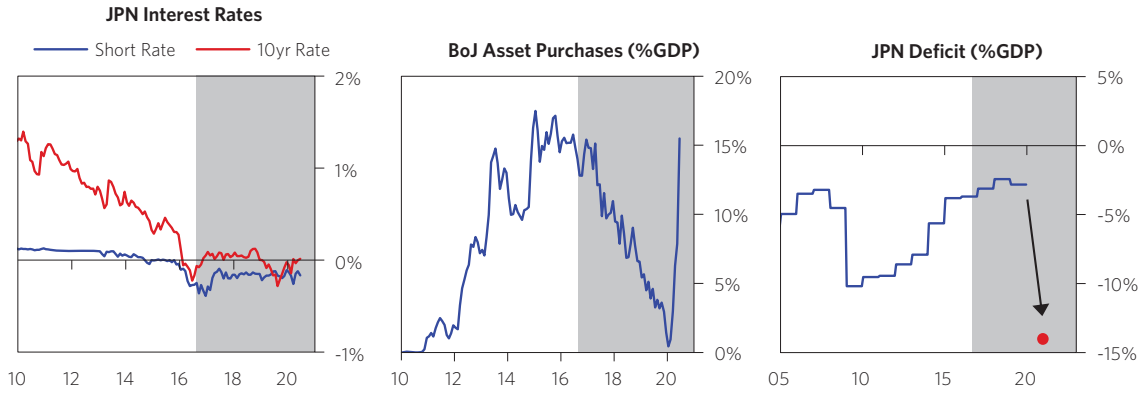
The Configuration of Conditions, Now and Then: Monetary Policy Up Against Its Limits and the Need to Enable Massive Fiscal Deficits Without Pushing Up Interest Rates

The charts below further illustrate conditions in each case and the parallels among them. In each case, rates had been pushed about as low as they could go—though the collapse in long rates as well as short rates is more extreme today than in the war years. During WWII, a steep yield curve was targeted and accompanied by significant liquidity production on the front end to provide the liquidity to investors to finance a massive fiscal deficit. Until recently, the BoJ's case was distinguished from that of the Fed in WWII by its much lower liquidity production and attempts to rein in the fiscal deficit. But Japan now plans to borrow more to stimulate given the virus hit to the economy, and the BoJ will ramp up its liquidity production to purchase the bonds. Australia is trying to finance a very large government deficit with extremely little liquidity production and only a 3-year yield target.

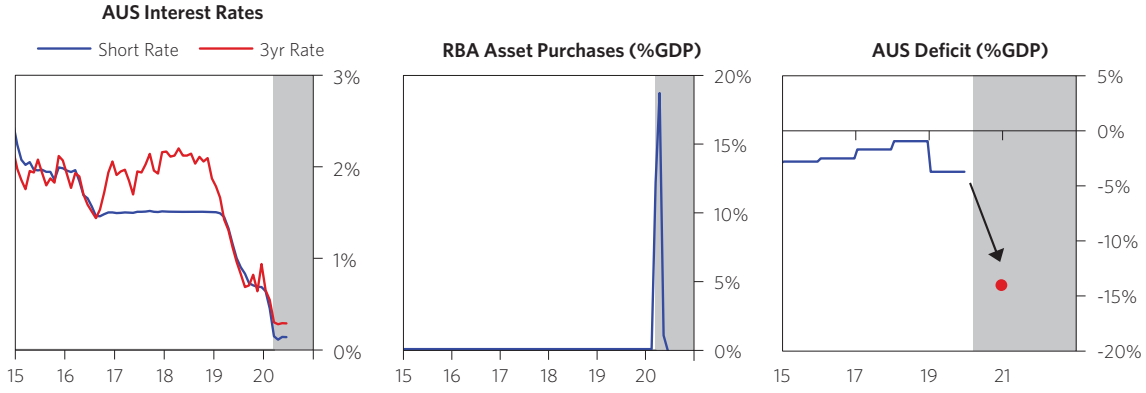
US: 1930s–1940s



Japan: 2016–Today



Australia: March 2020–Today

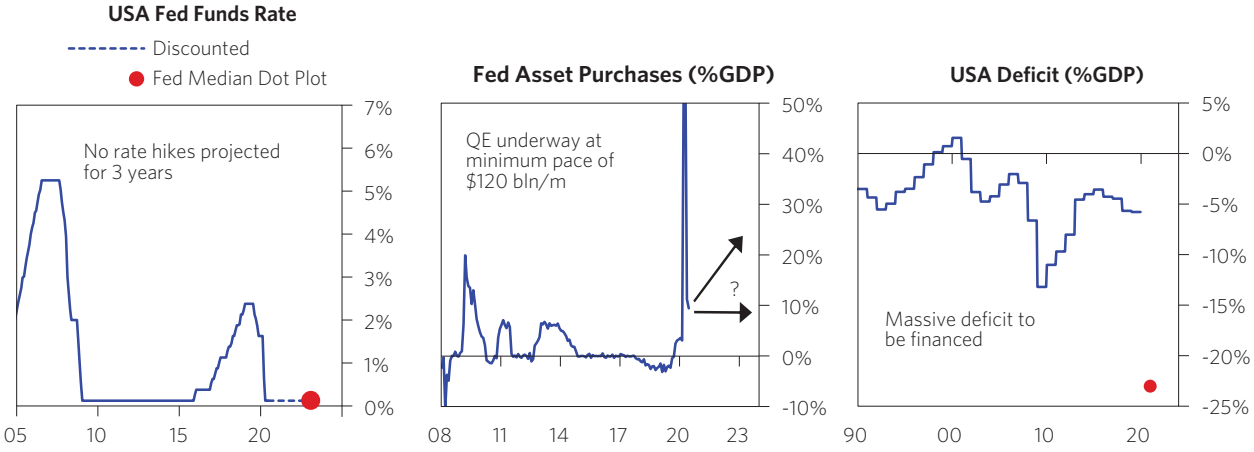


The Fed Is Considering Yield Targets to Limit Unwanted Upward Pressure on Rates

Today, the Fed faces a set of circumstances that is similar to those faced by other central banks that have adopted yield targets: an economy requiring accommodative financial conditions, limited monetary fuel with short rates at zero and asset purchases already underway, and massive fiscal deficits requiring adequate liquidity to prevent an undesirable tightening. The Fed has been studying other central banks' experiences with yield targets, and while the Fed is still evaluating the desirability of the policy, many market participants expect the Fed to announce a front-end yield target (~3 years) later in the year.

The Fed's guidance and the market pricing both already imply an extended period of zero interest rates; short rates are priced to remain at zero for at least three years, and the Fed maintains they're not even "thinking about thinking about raising rates" until they either clearly achieve their goals or run into inflation constraints. A front-end yield target would formalize this commitment, containing any rise in rates driven by rising Treasury issuance, improving growth conditions, or rising inflation. In a recent Senate hearing, Chair Powell described the goals of the policy and when it might be employed (though he emphasized that no decision had been reached yet):

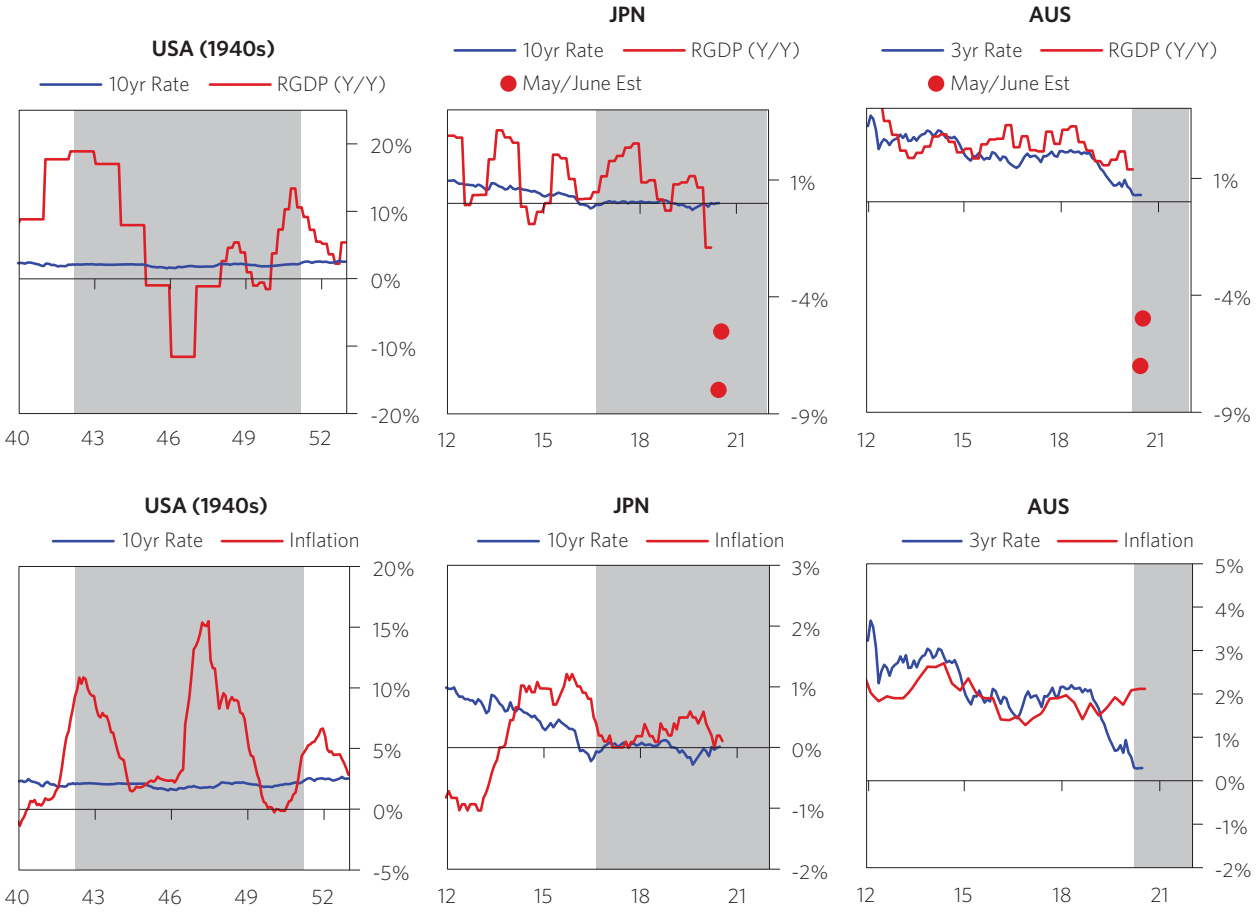
> *"The sense of it is that if the market, if rates were to move up a lot for whatever reason, and we wanted to keep them low to keep monetary policy accommodative, you might think about using it, not on the whole curve, but on some part of the curve."*



Next, we explore how different a yield curve control paradigm can be for investors—especially in contrast to what investors have lived through in recent decades.

Yield Curve Control Policies Have Anchored Rates Through Big Swings in Growth and Inflation

For investors, a policy of pegged yields can be radically different from what we've grown accustomed to over the last few decades. As shown below, under these policies, central banks tend not to respond to short-term swings in the cycle. As a result, even as there are large swings in growth and inflation, policy does not change, and bond yields remain steady. This has important implications for investors who utilize nominal bonds for diversification in their portfolios. The charts below show targeted yields against core inflation and real GDP growth, with our estimates of activity at the peak of the drawdown (lower dot) and today (upper dot).

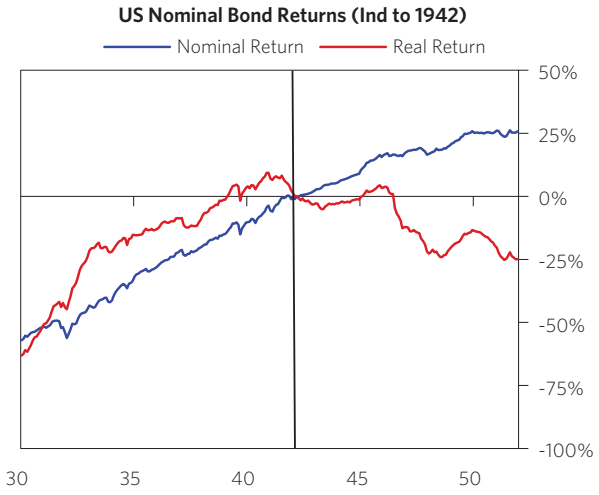


Setting a Steep Bond Yield Makes Bonds Under YCC Especially Attractive for Investors

For investors, the returns of holding bonds under yield curve control regimes will depend significantly on the details of the policy—particularly the yield curve steepness policy makers target. For example, in the 1940s, low and stable bond yields with an upward-sloping yield curve created consistent carry for investors despite huge issuance, allowing them to lock in virtually guaranteed returns. That said, investors eventually saw their returns eroded in real terms, as all the easing to backstop big fiscal deficits eventually drove up inflation during and after the war. (Still, these bonds were much better to hold than cash at rates close to zero as inflation mounted.)

Average Annualized Total Returns from...

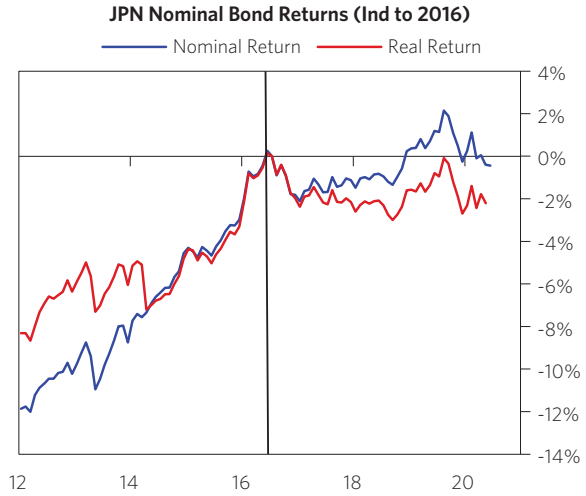
	1935 Until US Enters the War		Beginning of WWII Through 1948	
	Nominal	Real	Nominal	Real
Cash	0.1%	-1.9%	0.5%	-5.9%
Nominal Bonds	4.9%	2.8%	2.8%	-3.6%
Carry	3.5%	—	2.2%	—
Yield Changes	1.4%	—	0.7%	—



Today, yield curves across the developed world are much shallower (as shown earlier), providing less opportunity to lock in the carry. The complexion of inflationary pressures is somewhat different as well, given the persistence of secular disinflationary pressures and the early deflationary effects of the pandemic, though the biggest driver of whether we will see an end to the current secular disinflationary period lies in the future of monetary and fiscal policy. Looking at Japan's experience since 2016, the yield curve has been much flatter, with short rates at -10bps and 10-year bond yields at "around zero." Without much carry or room for price appreciation (and cash rates that have been negative), subsequent returns have been weak, with Japanese 10-year bonds averaging roughly flat annualized returns since the adoption of the target. But in the context of little fiscal issuance and other disinflationary pressures, inflation has remained modest, eroding returns only slightly.

JPN Average Annualized Returns Since 2016

	Nominal	Real
Cash	-0.2%	-0.6%
Nominal Bonds	-0.1%	-0.5%
Carry	0.3%	—
Yield Changes	-0.4%	—



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