## The Real Reason Real Rates Are So Low

Good morning. Welcome to this Economic Perspectives seminar.

Thank you for sparing time at the start of your day to attend our event. The format is straightforward. In the next 20 minutes I will set out a challenging thesis about the forces that have delivered and sustained very low – even negative – real interest rates despite a half-decent global economic recovery, and the likely perils that await us as accommodative monetary policy is retracted, however gradually. Afterwards, there will be an opportunity to ask questions and I will do my best to answer them.

The focus of my remarks is the explanation and justification of persistently low real long-term interest rates in the major advanced economies of North America, Western Europe and Japan. We are bombarded with messages from well-meaning central banks that seek to shape our thinking and behaviour. There has never been a time of so many speeches on so many topics. The governor of the Bank of England even finds time to chip in on climate change.

In September, he delivered the IMF Michel Camdessus Central Banking Lecture on the subject of (De)globalisation and inflation. Some of you may have remember it. The lecture contains a stylised diagram, slide 6 in the pack before you, which neatly makes the point. This seemingly innocent diagram contains a very strong version of how the world works and invites you to believe it. It invites you to share the widely-held and much-repeated thesis of a global saving glut. My purpose today is to argue that is a self-serving falsehood that has infected the public debate since Ben Bernanke elaborated it back in 2005. Moreover, it is a falsehood that could cost you and your clients a great deal of money. Please allow me to explain.

One of the very good things about our central banks is the emergence of a more open culture of staff dissent from the mainstream view. A recent Bank of England Working Paper, by Paul Schmelzing, helpfully surveyed eight centuries of the 'risk-free rate'. His composite 'global' real interest rate calculation suggests that a downward trend has been observed throughout this long span of history. However, his story ends with real interest rates remaining positive, to the tune of 1 to 1.5 per cent.

A parallel narrative is the much more recent deceleration of global productivity growth, from 2 to 2.5 per cent in the 1990s and early 2000s to 1 to 1.5 per cent since the global financial crisis. To be clear, we regard the proposition that structural forces have lowered the pace of real productivity growth and of real long-term interest rates as credible, but not necessarily verified by rigorous empirical work. These structural forces would include the progressive drag from over-indebtedness, the relative price of capital, unfavourable demographics and widening disparities of income and wealth in both advanced and emerging nations.

Our bone of contention is with policymakers on both sides of the Atlantic who have hypothesised that the long-term real rate (sometimes labelled the natural rate, the risk-free rate or R-star) has fallen to zero or has even become negative. Such notions are readily identified with research carried out at the San Francisco Fed by John Williams and colleagues, and heartily endorsed by Fed Chair Janet Yellen. Larry Summers adds his heavyweight support to the idea that, try as they might, central banks have not yet succeeded in making monetary policy truly accommodative.

I suggest that this attempt to portray overly-accommodative policy settings as healthy expressions of central banking judgement is fundamentally ill-conceived. At its core, this view of the world supposes that the desired level of global savings exceeds the desired level of investment, in other words that

the world is characterised by a stubborn glut of global savings. Note the word 'desired', because here we are the murky realm of the unobserved.

For many of you, the notion of a global saving glut will seem a very familiar proposition, so familiar that perhaps you consider it beyond dispute. Many years ago, Professor Willem Buiter explained that there are, in fact three proofs: proof by induction, proof by deduction and proof by repeated assertion. The notion of a global savings glut belongs firmly in the third category. I am emboldened in my scepticism towards it by the words of Claudio Borio, head of the BIS monetary and economic department in a recent lecture:

"It is appealing to define an equilibrium or so-called natural rate that is entirely independent of monetary policy. This is the real rate that would prevail if the economy was at full employment – the rate that equilibrates desired saving and investment. It is also the interest rate towards which market rates tend to gravitate. Through this logic, one reaches the conclusion that market real interest rates tend to track this (unobservable) natural rate, cyclical variations aside. The view is so ingrained that, in discussions, the argument is often short-circuited: it is simply stated that saving-investment rates determine real interest rates."

Clearly, to break out of this tautological trap, we must appeal to the data. In the pack, from slides 7 to 11, we present data from respected international government organisations on the gross national saving rates of various countries. With very few exceptions, saving rates are falling. Moreover, it is household saving rates that are typically responsible for the overall result. Not all saving has the same propensity to generate demand for financial assets, such as bonds and equities. Most saving is undertaken by the non-financial corporate sector, and is used internally by the companies themselves. It is household savings, channelled through financial intermediaries, that have the greatest propensity to express as demand for securities. The empirical basis for the excess savings hypothesis is lacking.

Borio and colleagues analysed data for 19 countries back to the 1870s to examine the relationship between real interest rates and the 'usual suspects': economic growth, productivity, demographics, income distribution, the relative price of capital and the marginal product of capital. While the correlations are tolerably good in most cases for the past 20-30 years, they break down in all the earlier time periods. Instead, differing monetary policy regimes were extremely important ingredients in the explanation of real interest rates.

He concludes that the decline in real interest rates in recent times could be attributed to a combination of three factors, **all related to monetary policy**:

1 Gradual normalisation of interest rates after the Volcker shock that ended the Great Inflation

2 The asymmetric policy response to successive financial and business cycles in a context of prevailing disinflationary tailwinds linked to globalisation

3 Post-GFC, strenuous central bank efforts to push a stubbornly low inflation rate towards target. Repeated interest rate cuts failed to generate much inflation so that real interest rates fell further even as inflation remained persistently below target.

The alternative explanation – to a global savings glut – of very low real interest rates is a 'global banking glut', as put forward by Hyun Song Shin and Piti Disyatat in 2011. They assert that the excess elasticity of the international monetary and financial system was the main contributing factor to the global financial crisis, not 'excess saving'. The monetary and financial regimes in place failed to restrain the build-up of unsustainable credit and asset price booms. Their analysis throws a spotlight on the explosive growth of cross-border lending in Europe – gross financing flows – that effectively funded

US sub-prime credit. Chinese savings did not fund US sub-prime! US net cross-border claims have recovered to rival the peaks seen in 2007-08.

If we fast-forward to today, we find that this financial accelerator has been at work again, but its transmission has been largely through non-bank financial institutions. Prolonged policy ease has brought about an explosion of so-called shadow banking. The Financial Stability Board's assessment of narrow shadow banking at end-2015 identified US\$34trn of assets across 27 banking jurisdictions. About two-thirds were collective investment vehicles with features that make them susceptible to 'runs'.

Since the GFC, financial intermediation has migrated from banks to other financial institutions. OFI leverage, scaled by nominal GDP, comfortably exceeds the prior peak. This narrative has played out particularly vigorously in emerging markets. Other financials – for example, trust companies, hedge and investment funds and real estate investment trusts – are running riot in a cheap credit environment. OFIs have muscled in on the global financial system with significant leverage and little financial capital.

Among them, asset managers – especially fixed income managers – have become significant borrowers from the banking system since 2008. It is difficult to escape the conclusion that post-GFC monetary policy has emboldened financial risk-taking and has unwittingly fostered more dangerous asset management strategies. Financial markets have adapted to the new styles and expressions of monetary policy. Forward guidance emboldens leveraged asset management by lessening the risk of rate reversals. Suppressed bond and equity volatility has nurtured the style of asset management known as risk parity. Large-scale asset purchases have created artificial shortages and triggered convexity trades, for example, by German insurance companies.

This brings us to pivotal role of the central banks in facilitating this reorientation of the financial system. Central banks have, through their actions, reinforced the inherent pro-cyclicality of the financial system. The textbook diagram of the way that monetary policy works – through a variety of transmissions – from the top of the page to the bottom is outdated and inaccurate. Since the GFC, central banks have become endogenous to the system. In their quest for transparency, they have shown too many cards and have been second-guessed and out-manoeuvred by the financial industry. As a result, their policy actions are embedded in the market infrastructure and will have unpredictable outcomes.

Central banks have journeyed from control over the interest rate structure, in the 1970s, to mere influence by the mid-1990s. Capital markets revolution of 1980s and 1990s weakened the authority of central banks. Central bank control of the government yield curve evaporated as bond markets gained strength and depth. The GFC gave central banks the opportunity to reassert their influence through the adoption of unconventional monetary policies and forward guidance. Over the past 10 years, US monetary has been in a state of near-continuous innovation and experimentation. There has been an escalation in policy initiatives and an over-eagerness to communicate. Through a long and tortuous process, central banks have regained a significant measure of control over the government yield curve and corporate credit spreads. Worse, they have succeeded in suppressing market measures of implied volatility in contradiction of broader indications that economic policy uncertainty is elevated. However, this seizure of control is likely to prove a Pyrrhic victory.

In co-opting market leverage to reinforce financial repression, the major central banks have every reason to fear that this leverage will unwind quickly as they seek to change course, however tentatively. A surprisingly robust global economic performance in 2017, which may well extend into

the early months of 2018, has stripped away the last excuses for delay. Collectively, the world's major central banks are beginning to raise short-term interest rates, reduce or reverse large scale asset purchases (to the extent that there will be no net increment to central bank QE after 2018 and a probable drawdown from spring 2019), and discontinue special liquidity provision to the commercial banks.

Our conclusion is that there is no safe exit from unconventional monetary policy. Control over longterm real rates will be surrendered as policy is unwound (tapering, tightening, etc.) Co-option of financial leverage to exert downward pressure on long rates in an easing phase implies powerful upward pressure when the tide turns. Lack of capital in risk markets spurs the unwinding of leverage. Margin requirements set to rise. Rebound in market volatility compresses risk positions even further, bringing the likelihood of disorderly financial asset markets. Excess financial elasticity works in both directions: crushed credit spreads and term premia pave the way for potentially violent rebounds.

Central bank reticence to raise interest rates is entirely justified, given the minefield that they have laid for themselves. The capacity for bond markets to amplify intended modest tightening measures was amply demonstrated in 2013, when Fed Chair Bernanke first intimated that the Fed would taper its asset purchases.

If this thesis is broadly correct, then we should expect a spike in real interest rates in 2018 that brings the Indian summer of global growth to an end. Rising real rates will activate the next debt delinquency cycle and bring the corporate bond bonanza to a dramatic close. Our presumption is that government policy responses to these events will be much more focused on fiscal actions than monetary ease, which will sustain an inflationary bias to the global economy even as growth slows.

Last October, we held a seminar entitled "Debt and Delusion: Lessons Unlearned". Some of you were present, so a special thank you for repeat attendance. The four key messages of my 1999 book can be summarised as follows:

- 1 The overaccumulation of debt and the deepening addiction to debt
- 2 The proliferation of new credit and financial instruments
- 3 The increasing complexity and sophistication of financial institutions
- 4 The complicity of the most influential central banks in these developments

My argument today is that these same forces are re-expressing themselves in new ways to the detriment of global financial stability. We may have better early warning systems than in 2007, more banking capital and system liquidity, but no less vulnerability to financial crisis and economic dislocation.

The financial establishment is on a mission to reassure government bond investors that the market will remain well balanced after global QE passes into history. That inflationary pressures will abate. That fiscal deficits will fall obediently towards their prescribed targets and that primary issuance will remain low. All these conjectures are liable to be scrutinised and overturned in the coming year as the regime of real rate suppression and financial volatility suppression draws to a close. At Economic Perspectives, we will be keeping a very close watch on every aspect of this debate.

Thank you for your patience and attention.