

Policymakers: Running out of ammunition?

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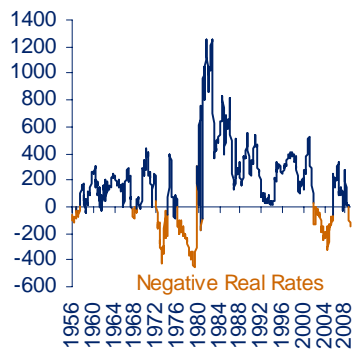
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Chart 1: Negative real rates often needed to spur activity

(Fed Funds less one-year ahead inflation, Bps)
 Source: Federal Reserve/BLS/Consensus



- **There are growing concerns that policymakers will soon run out of ammunition in their ability to stimulate the economy.** Official interest rates are already effectively at zero in the United States (0 to 0.25%), Japan (0.3%), Switzerland (0.5%) and expected to be close to zero in the UK and the Eurozone within the next six months.
- **Since nominal interest rates cannot be negative, policymakers will have to turn to unorthodox measures in order to get the economy moving again.** The good news is that there is still a range of options available, many of which are already being adopted. The bad news is that these policies have rarely been used and, as a result, their effectiveness in stimulating activity remains uncertain.
- **Japan's experience of the 1990s warns against a cautious, piecemeal approach.** Once short-term rates reach zero the focus is likely to move quickly towards reducing long-term rates and borrowing costs for households/firms (by supporting banking systems, purchasing corporate bonds, etc.). Fiscal policy is also being employed to spur demand directly. Measures are likely to be adopted in concert, increasing their potency.
- **Even if these unorthodox measures are effective at bringing economies out of recession, challenges will remain.** It will be difficult to "normalise" policy settings without either threatening the recovery, or generating a sharp rise in inflation further out.

Approaching a trap?

The approach of the zero bound is a particular concern given the inflation outlook. It is *real* interest rates that influence activity, i.e. the interest rate after taking account of inflation. For example, if the nominal interest rate on a one year loan is 10% but inflation is running at 5%, then the real rate of interest is only 5% (in terms of the extra goods and services you could buy with the interest). It is not unusual for real interest rates to be pushed *below* zero in order to get economic activity moving (chart 1). Given the magnitude of the current slowdown it is likely that real rates will again need to be negative to induce spending.

But inflation is already declining sharply, threatening to keep real interest rates high.

Through 2008, rising food and energy prices raised inflation to twice the targeted level in the UK, US and Eurozone. But commodity prices are now falling sharply. This is likely to pull inflation close to zero across the major developed economies. It's not just commodity prices that are a concern. More fundamentally, with demand evaporating, firms are under pressure to cut their prices across the board in order to support sales, suggesting that price declines are likely to become more widespread.

If price declines become more pervasive, they are more likely to affect inflation expectations and begin a vicious cycle that results in deflation becoming entrenched (see box). The danger is that this would keep real interest rates higher than is required to get the economy growing again. Indeed, if prices fell fast enough they could bring rising real interest rates even as the economy slows. For now at least, consumers' inflation expectations remain largely positive and well anchored in the major western economies. But the proportion of people expecting prices to fall, while still small, is increasing (chart 2). Bond

Chart 2: UK households' inflation expectations (%)

Source: Bank of England/NOP

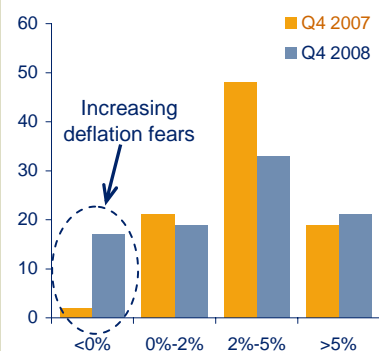
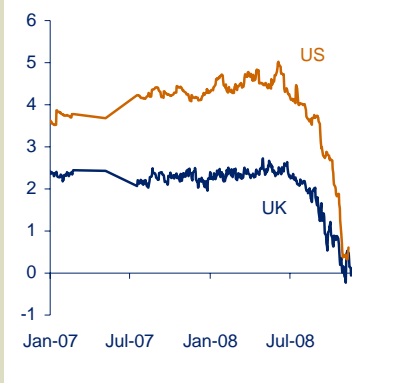


Chart 3: Bond investors' long-term inflation expectations

(Spread between inflation protected and nominal yield on 10 year government bonds)
Source: Thomson Datastream



markets also caution against complacency - they already suggest that a period of mild deflation is possible in the UK and US (chart 3).

Why worry about deflation?

Deflation can turn a bad situation into something far more serious. A sustained decrease in the general price level depresses activity in two ways. First, it encourages people to postpone big-ticket purchases. After all, why would anyone shop today if they think that prices will be lower tomorrow? While not buying makes sense from an individual's perspective, the aggregate effect is to choke demand, prompting firms to lay off staff. Overall, households lose more from higher unemployment than they gain from lower prices – this is what the renowned economist John Maynard Keynes called the 'paradox of thrift'.

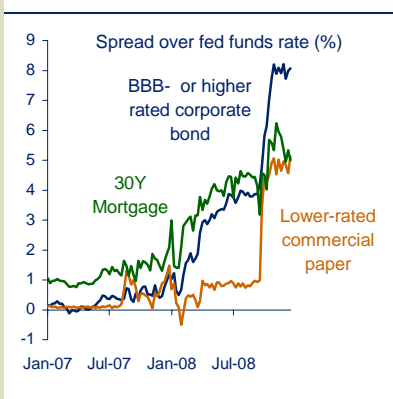
The second negative effect is that it increases the burden of outstanding debt. The amount of money that people owe, in real terms, increases over time when prices fall. Using a hypothetical example, if people borrow £100 for one year at zero interest, but prices drop by 50%, then the real cost of debt has doubled (as the £100 can now buy twice as many goods and services as a year earlier). Put differently, when prices and wages fall, it becomes tougher to service a given amount of nominal debt. With the real cost of debt increasing and repayments becoming more difficult, more loans go bad, dealing yet another blow to the financial system. For this reason deflation is particularly severe risk for countries with high household and corporate debt levels, such as the UK and US.

Policy rates are not the final frontier

Central banks use short term interest rates as their main policy instrument, but there are other tools available once rates reach zero. These are options not mutually exclusive. Indeed, pursuing a combination of measures is likely to have a more potent impact.

Chart 4: US interest rates (%)

Source: Thomson DataStream



1) Influencing inflation expectations

Real interest rates are determined by nominal interest rates minus expected inflation. Therefore raising peoples' expectations of future inflation would lower real interest rates and stimulate activity. If people expect inflation to be higher in future it makes sense to bring forward borrowing or investment stimulating demand. Influencing expectations is difficult, but not impossible. There is no explicit target in Japan or the US and only a target ceiling in the Eurozone. Announcing an intention to achieve an explicit inflation target might achieve this.

2) Targeting long-term interest rates

Policymakers typically target short-term interest rates, but there is nothing to prevent them acting to bring down longer-term interest rates by buying government bonds. The Federal Reserve pursued this policy successfully in the 1940s and early 1950s, keeping long-term rates capped at 2.5%. Targeting intermediate and long-term interest rates would help to lower borrowing costs and stimulate spending and investment.

3) Influencing market interest rates and credit availability

Short-term policy rates have already fallen dramatically (as have longer term bond yields), but many of the rates that household and corporate borrowers face have actually increased, particularly for higher risk borrowers (chart 4). Policymakers in the US, UK and Eurozone are already using alternative policy measures to reduce the spread between actual borrowing costs and policy rates. These policies fall into two categories:

- Banking system support.** The cost of bank funding has increased sharply (chart 5), which in turn increases the cost of bank funds for the wider economy. Central banks are attempting to reverse this trend by lending directly to banks, swapping illiquid securities for government bonds and guaranteeing issues of short/medium term bank debt. Policymakers are also attempting to influence the *quantity* of bank finance. The volume of bank loans is closely linked to the amount of capital banks hold. The ratio of bank lending to bank capital has become stretched. Authorities are supporting bank recapitalisation efforts ensuring that banks do not have to dramatically shrink their lending in order to get their capital ratios back to more comfortable levels.
- Buying assets.** Just as central banks can target the yield on government bonds, they could do this for other forms of lending, lowering borrowing costs for households and

Chart 5: Inter-bank lending rates remain elevated

(Spread between 3-month sterling LIBOR and Bank Rate)

Source: Thomson Datastream

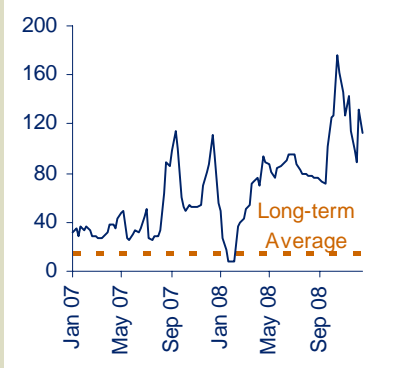


Chart 6: Monetary Base (y/y %)

Source: Thomson DataStream

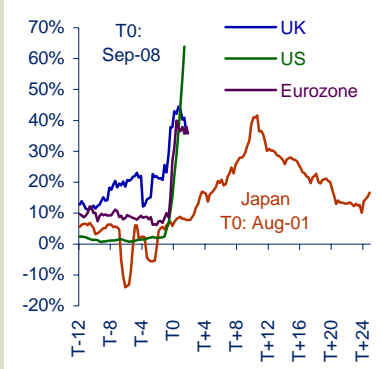


Chart 7: Federal Reserve assets (\$bn)

Source: Federal Reserve

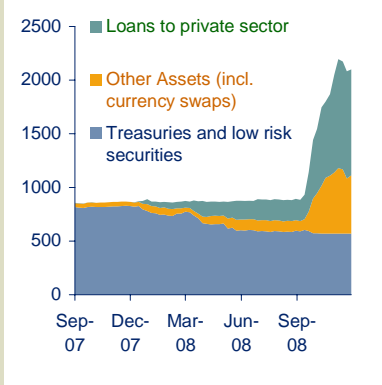
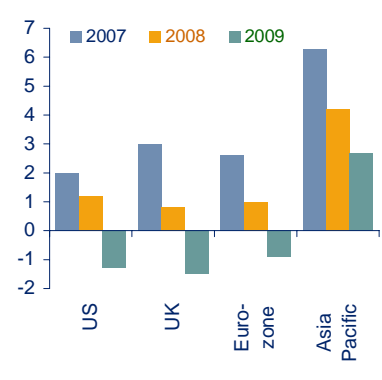


Chart 8: All regions of the globe expected to contract or at least slow sharply

Source: Consensus Forecast



“Prevention of deflation remains preferable to having to cure it.”

Ben Bernanke,
US Federal Reserve Chairman

firms more directly. The US Federal Reserve has already started to adopt this approach. The Fed currently holds \$266 billion of commercial paper issued by firms and set aside \$500bn to buy mortgage backed securities. It has allocated \$200 billion to buy credit card, student loan and SME loan backed securities. All of these measures should provide cheaper borrowing by increasing demand for these assets, lowering the yield and freeing banks balance sheets of illiquid assets, to allow for new lending.

4) Quantitative easing or “printing money”

Even when interest rates are at zero, increasing the monetary base (total currency in circulation plus liquid bank reserves) can still deliver a boost to the economy. Intuitively, if the supply of money increases sufficiently, its value (in terms of what it can buy) should fall, encouraging people to exchange it for goods and services, stimulating demand. Quantitative easing also has an indirect effect, demonstrating a firm commitment to keep interest rates at zero, helping to bring down longer term interest rates. The most prominent recent example was Japan during the early 2000s. Its success is often questioned, but central banks are currently adopting a more aggressive approach. Since October, central banks have begun quantitative easing as part of their efforts to fund their lending programmes. As a result, central bank balance sheets have expanded rapidly, as has the monetary base (charts 6+7).

5) Government spending

Fiscal policy is likely to take on a more prominent role when interest rates fall towards zero. The form of government spending is also important. Infrastructure spending can be effective if it can be ramped up quickly, as it boosts demand in the short-term as well as improving longer-term growth potential. Measures that encourage short-term spending (like tax breaks on investment) are likely to be more effective at spurring demand in the economy than income tax cuts, which are more likely to be saved. The potency of fiscal policy is increased significantly if deficits are financed by issuing currency rather than borrowing, as the increase in the money supply also boosts activity.

6) Exchange rate targeting

Central banks can engineer currency depreciations by selling their currency in exchange for foreign currency (they can do this without limit since they can “print” money). The aim would be to make their economies more competitive as exports become cheaper in world markets while imports become more expensive. However, in the current environment this is unlikely to have the desired impact. Demand is the key factor for international trade and the synchronised nature of the downturn means that a sharp depreciation would be unlikely to deliver a significant demand boost. Moreover, attempts at unilateral ‘beggar-thy-neighbour’ exchange rate policies are likely to be resisted as others conduct FX intervention of their own. Governments could resort to protectionist trade policies to support domestic industries. Retaliation would be likely. All parties would lose out by damaging competition and causing a misallocation of global resources that has long-term negative implications.

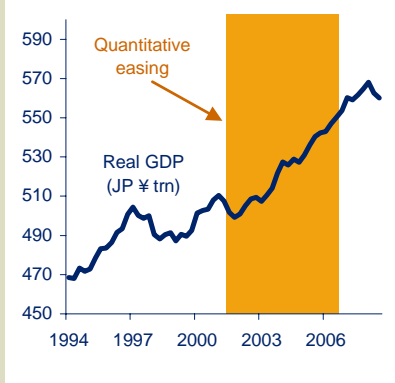
Lessons from Japan

There are parallels between the current global crisis and Japan’s situation in the early 1990s. In particular, the bursting of asset price bubbles in the housing and equity markets significantly weakened the financial position of households and firms and ushered in a period of weak economic activity. This is a concern, since Japan experienced a generation of lost growth – in Q3 2008 the Japanese economy was only 0.8% larger in nominal terms than it was a decade earlier. The synchronised nature of this downturn makes the outlook even more dangerous – all developed economies are expected to contract in 2009 while virtually all emerging markets are likely see growth slow sharply (chart 8). There are a number of lessons we can draw from Japan’s experience:

Deflation must be avoided at all costs. Deflation came as a surprise to virtually all observers, both domestically and internationally, compounding the problems facing the economy. Real interest rates remained too high and the rising real cost of debt magnified already intense pressure on balance sheets. Also delayed consumption created a downward spiral in demand. The Japanese experience highlights the importance of acting early to revive economic activity to head off the threat of deflation before it emerges.

Chart 9: Quantitative easing helped spur Japanese growth

Source: Thomson Datastream



Banking sector support is crucial to restoring the flow of credit. Banks were not forced to write down their bad debts and re-capitalise until 1998. The banking sector had been weakened significantly and some banks had failed. This blunted the effectiveness of monetary policy and limited credit supply during Japan’s short lived recovery in 1997. It also delayed the needed restructuring of the corporate sector.

Fiscal policy must be well targeted. Fiscal policy was largely ineffective at stimulating demand. Temporary income tax cuts tended to be saved and government spending was poorly targeted. Japan also raised its expenditure tax in 1997, after its economy had just recovered from stagnation. This fiscal tightening combined with the Asian financial crisis and sharp Yen appreciation quelled the economic recovery.

Quantitative easing should be adopted sooner rather than later - Japan only began quantitative easing in 2001, more than a decade after its asset price crash. Nevertheless, this policy, together with a commitment to maintain zero interest rates, succeeded in spurring growth. It was suspended when positive inflation was restored in 2006 – this was premature, as growth soon faltered (chart 9).

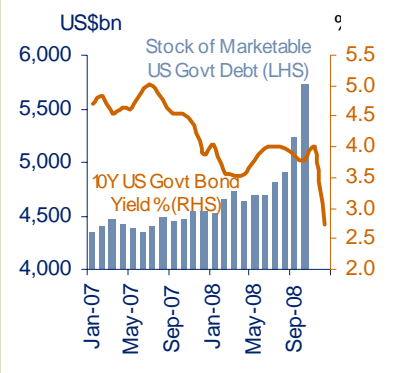
The key lesson is that policymakers should act quickly and aggressively to tackle downside risks to growth, and prevent deflation before it happens. It is also important to ensure that the recovery is well established and self sustaining before attempting to remove the stimulus, even though exiting these unorthodox policies is unlikely to be straightforward.

Exit strategy?

Even if the policies outlined above are successful in pulling the global economy out of recession, challenges will remain. It will be difficult to “normalise” policy settings without either threatening the economic recovery or generating a sharp rise in inflation. As noted above, in Japan an income tax hike in 1997 and a premature end to the zero interest rate policy and quantitative easing (in 2006) hobbled the recovery.

Chart 10: US long-term rates falling even as public debt surges

Source: US Department of the Treasury

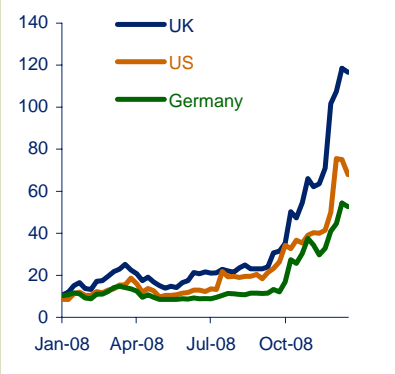


Smoothly draining the large increase in the money supply will be tricky. While demand is weak there is little to fear. But once the economy recovers, there is a danger of a surge in inflation (too much money chasing too few goods). Removing excess liquidity will require the central bank to sell newly created government debt in exchange for cash. Investors may be unwilling to voluntarily hold the additional stock of government bonds, which would push down their price and push up long-term interest rates, perhaps sharply.

Large budget deficits could ultimately have a similar effect, pushing up long-term rates. This is far from automatic in the short-term – indeed, long-term rates fell to generational lows in the US and UK in recent months despite the deterioration in the outlook for public finances (chart 10). The sharp rise in the cost of insuring against default on government debt (chart 11) shows growing investor concern. Ultimately higher taxes or lower public spending will be needed to put public finances on a sustainable footing.

Chart 11: Cost of insuring against default on gov't bonds (bps)

Source: Thomson Datastream



Central bank purchases of private sector securities, if sustained for a long period, would distort the allocation of resources, since yields no longer reflect investors’ evaluation of risk and required returns. Moreover, the eventual sale by central banks of private assets, like mortgage backed securities or corporate bonds, may be difficult to achieve without disruption to asset markets.

Conclusion

Many economies are either at, or rapidly approaching, the threshold at which conventional monetary policy becomes ineffective. Some are already adopting unorthodox policies (see table on the next page). These tools have rarely been used in the past and, as a result, their effectiveness in stimulating activity remains uncertain. The global downturn is likely to be severe by historic standards, given the shock to the global financial system. Nevertheless, the aggressiveness with which these measures are being adopted (led by the United States) provides confidence that the global economy will avoid Japan’s experience of over a decade of lost growth. Even if these measures are effective in bringing the global economy out of recession, normalising policy setting will bring a fresh set of challenges.

Policy	Aim/Benefits	Risks	Current policy stance			
			US	UK	EZ	Japan
Zero interest rates	Reduces short term borrowing costs	Household/firms' borrowing costs may not decline in line with official rates Deflation limits impact - real (inflation adjusted) interest rates rise as prices fall	0 to 0.25%	2% (Q209 F: 1%)	2.25% (Q309 F: 1.5%)	0.3%
Raise inflation expectations	Reduces real interest rates Quick and easy to implement	Difficult to influence expectations May damage long-term credibility (may be seen as shifting goalposts)	No <i>explicit</i> inflation target	2% target	2% target ceiling - no lower limit	None
Target long term rates	Lowers longer term borrowing costs	Fall in govt bond yields may not result in lower borrowing costs for households/firms Potential crash in bond prices when policy is stopped or reduced	Proposed	No	No	No
Banking system support (funding and re-capitalisation)	Maintains credit supply, lowers cost of bank credit to wider economy Strengthens banking sector, restores confidence in financial markets	Banks may hoard cash rather than lend. Taxpayer bears credit risk Increases contingent liabilities of state	Yes	Yes	Yes	Yes
Central bank Purchase of Private Sector Assets	Reduces spread between official & household/corporate lending rates. Frees up bank balance sheets for new lending Creates a price floor in asset markets, supporting balance sheets	Taxpayers assume credit risk on risky assets Clear exit strategy needed to prevent distortions or future price falls	Direct: Purchase of mortgages, commercial paper, etc	Indirect: Swapping Govt bonds for mortgages	Indirect: Extended collateral accepted for central bank loans	Indirect: Extended collateral accepted for central bank loans
Quantitative easing	Increases money supply, lifting spending Shows commitment to zero interest rates for extended period	Difficulty in sterilising afterwards Risk of high inflation longer term	Yes	Yes	Yes	No
Government Spending	Direct boost to domestic economic activity through government spending or tax cuts	Potential for upward pressure on longer-term interest rates	Yes	Yes	Yes-	Yes
Deliberate Currency Depreciation	Depreciate currency to increase competitiveness of exports and create import price inflation	Large turnover in FX markets (\$3 trillion a day) makes effective intervention difficult Straightforward for other central banks to resist through intervention of their own	No	No	No	No
Protectionism	Shields domestic industries, using government support/import barriers May prevent unemployment and economic activity in some industries the short term	Damages competition, leads to misallocation of resources Retaliation likely, negating even short-term benefits	Support for auto-producers?	No	No	No