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The Realities and Relevance of Japan's Great Recession: Neither *Ran* nor *Rashomon*

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Abstract

Japan's Great Recession was the result of a series of macroeconomic and financial policy mistakes. Thus, it was largely avoidable once the initial shock from the bubble bursting had passed. The aberration in Japan's recession was not the behaviour of growth, which is best seen as a series of recoveries aborted by policy errors. Rather, the surprise was the persistent steadiness of limited deflation, even after recovery took place. This is a more fundamental challenge to our basic macroeconomic understanding than is commonly recognized. The UK and US economies are at low risk of having recurrent recessions through macroeconomic policy mistakes—but deflation itself cannot be ruled out. The United Kingdom worryingly combines a couple of financial parallels to Japan with far less room for fiscal action to compensate for them than Japan had. Also, Japan did not face poor prospects for external demand and the need to reallocate productive resources across export sectors during its Great Recession. Many economies do now face this challenge simultaneously, which may limit the pace of, and their share in, the global recovery.

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Human beings share the same common problems. A film can only be understood if it depicts these properly. – Akira Kurosawa (1910–98)

What really happened when Japan's economic success story of the preceding decades turned into a decade of unprecedented stagnation from 1992 to 2002? What is the relevance of that experience for what the other advanced economies, particularly the United Kingdom, are facing today? In other words, what does it mean for an economy to "turn Japanese" and what determines whether it will?

In light of today's global financial crisis following sizable asset price bubbles, the accumulation of public debt, the cutting of most central banks' instrument interest rates to effectively zero levels, the widespread failure or impairment of systemically important financial institutions, and the worrisome trends towards deflation emerging in some major economies—all seen previously in Japan's Great Recession—seem to me like potentially important questions to address.[1] I am afraid that my answers to them will be only partly reassuring. My argument in brief is that:

- Japan's Great Recession was the result of a series of macroeconomic and financial policy mistakes. Thus, it was largely avoidable once the initial shock from the bubble bursting had passed. This is demonstrated by the underappreciated strength of Japan's recovery once policies were reversed in 2002–03 under the leadership of Prime Minister Junichiro Koizumi, Economics Minister Heizo Takenaka, and Bank of Japan Governor Toshihiko Fukui.
- Japan actually had a number of structural advantages that made its stagnation all the more avoidable, particularly with respect to fiscal policy. Structural deficiencies in Japan's financial system and in its corporate governance offset these when deflation persisted.
- The aberration in Japan's recession was not the behaviour of growth, which is best seen as a series of recoveries aborted by policy errors—a sawtooth, not a flatline. Rather, the surprise was the persistent steadiness of limited deflation, even after recovery took place. This strikes me as a more fundamental challenge to our basic macroeconomic understanding than is commonly recognized, and we need more research on it.
- The UK and US economies are at low risk of turning Japanese in the sense of having recurrent recessions through macroeconomic policy mistakes—but deflation itself cannot be ruled out. The United Kingdom worryingly combines a couple of financial parallels to Japan with far less room for fiscal action to compensate for them than Japan had. More active investors and greater openness in the United Kingdom than in Japan may be able to turn this around.
- One major problem that Japan did not face during its Great Recession was poor prospects for external demand and the need to reallocate productive resources across export sectors. The United Kingdom, the United States, and many euro area economies do now face this challenge simultaneously, which may limit the pace of, and their share in, the global recovery.

1. The inestimable Paul Krugman recently brought this prospect up in his column just last week: "Lost Decade Looming," *New York Times*, May 20, 2010, www.nytimes.com.

Ultimately, my main analytic point is for people to stop thinking of "turning Japanese" as a syndrome, some sort of strange condition into which an economy can fall.[2] Instead, we should think of Japan's Great Recession as largely demonstrating the validity of much textbook, even old fashioned Keynesian, macroeconomics—and thus amenable both to comprehension and, within limits, avoidance, or at least amelioration. As a result, while economies in Europe and the United States may not ever "turn Japanese," they all share some risks and problems in common with Japan circa 1995. The sense of exoticism of the Japanese economy, shared by many scholars let alone commentators inside and outside Japan, is even more misleading now than it was when Americans and Europeans looked wonderingly at Japan's miraculous economic performance of the 1950s–1980s.

In this, I am inspired by the legendary Japanese film director Akira Kurosawa, who was known for bringing universal human concerns and motifs back and forth from the West to Japan.[3] While historical context mattered greatly in his films, he was able to emphasize the underlying common themes and see analogies across cultures. Shakespeare and Hollywood westerns inspired his classic films *Throne of Blood*, *The Hidden Fortress*, *Ran,* and *the Seven Samurai*, which in turn led to *The Magnificent Seven*, *A Bug's Life*, and *Star Wars* in the United States. Kurosawa's assertion of Western models' relevance to Japanese experience was initially controversial at home, and the globalization of his work was seen as suspect but proved ultimately to be vindicated by its global reception. Japan's economic experience is similarly of universal relevance, offering parallels to today, but not some alternative state of the world.

NOT *RAN*: JAPAN'S ECONOMIC FATE WAS NOT SEALED BY THE BUBBLE

In Kurosawa's *Ran*, a retelling of *King Lear*, at the start of the film the old monarch makes a bad allocation of assets—control of his land and forces—to some of his less than trustworthy managers and fails to exercise proper oversight. The result is a painful and unavoidable downfall, through dispossession, war, destruction, and death. Sometimes one gets the feeling that is how many observers see Japan's Great Recession: A mistaken decision was made with regard to over-investment, or to monetary ease encouraging that investment, in the 1980s, and the rest was inevitable. Huge bubbles built up in equities and real estate, corporate and household balance sheets became leveraged, banks became fragile, and according to this story, once asset prices crashed, the stagnation of the Japanese economy was the unavoidable result.[4] Others claimed that Japan had a huge build-up of structural problems that could no longer be borne out, or even had a negative productivity shock, to the same effect: inexorable decline. (Proponents of demographic

2. I contributed to this proclivity in the past; see Posen (2003a, 2003b).

3. See Galbraith (2002), Prince (1999), and Richie (1998) for discussion of Kurosawa's cinema and life.

4. Sophisticated analyses sometimes used to buttress this argument include Bayoumi (2001) and Hoshi and Kashyap (1999). I decline to list the many pundits' books and articles advancing this mistaken view.

decline as an explanation of Japan's problems also fit in this structural slump camp.) Japan then supposedly went into a protracted period of slow and sometimes negative growth, and policy attempts to reverse this were futile at best. One hears similar characterization today from some quarters of the prospects for the United Kingdom and other economies that faced bubbles bursting in the last couple of years.

Like *Lear* and *Ran*, this is a compelling narrative for economic discussion, one that encourages the viewer to ponder the folly of those who believe too much in their power to see the future and are too confident in the good times of today. For all its dramatic and seemingly ethical power, however, it is not a narrative that fits the facts of Japan's experience. As I put it in Posen (2004a), it takes more than a bubble to become Japan. As shown in figure 1, Japanese real GDP growth was far from flat during the lost decade, let alone in the time since 2002. Yes, there were severe recessions in 1997–99 and 2001–02, following the recession upon the initial impact of Japanese bubbles bursting in 1992. But, in between, the Japanese economy recovered, growing steadily for two or three years at a time. And while these recoveries were not enormously rapid, neither were they paltry by the standards of an advanced economy at the global technological frontier nor out of line with the kinds of recovery we can see in most economies following a financial crisis, i.e., a return to trend growth rates without much catch-up (Posen 2004a, 2010b).

More importantly, these recoveries in Japan in the 1990s were not in any sense artificial, as in bought solely through government borrowing or export markets, though both factors of course contributed as they should to an economy in recession. As I first argued in Posen (1998), and with additional data to draw on and analyses with Kenneth Kuttner (Kuttner and Posen 2001), these recoveries could have been sustainable but were cut off by macroeconomic policy mistakes. Figure 2 breaks down the components of quarterly Japanese real GDP growth during the worst of the lost decade. One can see that understandably a decline in private investment following the bubble drove the initial 1992–94 recession and that during the recovery private consumption and investment growth played a greater role than either public spending or net exports (the latter actually negative for most of 1994–97).

It was then withdrawal of public investment and zeroing out of public consumption, along with banking problems, that provided the negative shock in 1997 leading to the renewed recession of 1998–99.[5] Insufficiently loosened monetary policy contributed, a point to which I will return later. As shown in figure 3, continuing the GDP breakdown through the 2000s, the Japanese economy recovered strongly in 2000–2001, a period of withdrawal of public investment (again) and limited public consumption (driven by automatic stabilizers); the public sector side of GDP is shown in more detail in figures 4 and 5. At this point, it was mounting financial fragility in the core of Japan's banking system, exacerbated by fears of

5. In Kuttner and Posen (2001, 2002), we more carefully estimate the size and relative importance of the fiscal shock using a VAR framework, building on Blanchard and Perotti's (2002) techniques, though the extent of the fiscal shock as opposed to perceptions of fiscal laxity was first documented in Posen (1998).

monetary tightening, that provided the negative shock leading to a sharp collapse in private investment, driving the economy back into recession.[6] Again, the picture is that of a market economy showing some natural tendencies to recovery being stymied by policy mistakes.

The subsequent recovery of Japan from late 2002 up until the global financial crisis of summer 2008 is equally telling. As I argued in Posen (2001a), there was good reason to think that Japan's underlying potential growth rate was not only undiminished by the recession (though less than it appeared to be in the late 1980s) but actually had increased due to structural reforms undertaken over the course of the 1990s. These included energy market deregulation, better utilization of women in the workforce, new entrants in retail due to the rise of Chinese and East Asian production and telecoms deregulation (under US pressure), as well as financial market liberalization.[7] What was necessary was the clean-up and recapitalization of the banking system, the further loosening of monetary policy (to the extent possible given that interest rates were at zero), and the avoidance of any further premature fiscal tightening, as I set out in Posen (1998, 1999a, 2001b). This was obviously not a simple list, economically or politically. Yet, it was also not a list of the impossible, it emphasized demand side factors, and it was a list that seemed all the more plausible when Japanese policymakers recognized that Japan was not doomed to a permanently low trend growth rate—a belief that had bedeviled both fiscal and monetary policy decisions in Japan for much of the 1990s.

Japan's new economic leadership in the early 2000s, Prime Minister Junichiro Koizumi, Cabinet Office and later Financial Services Minister Heizo Takenaka, and Bank of Japan Governor Toshihiko Fukui, turned matters around. They reversed monetary policies that contributed to deflation, turned the fiscal impulse to average net zero (see figure 5), and forced bad loan write-offs and recapitalization by the Japanese banks (figure 6).[8] What few seem to appreciate, either inside or outside of Japan, is just how strong the resulting Japanese recovery from 2002 to 2008 was. It was the longest unbroken recovery of Japan's postwar history, and, while not as strong as pre-bubble Japanese performance, was in fact stronger than the growth in comparable economies even when fueled by their own bubbles.

As shown in figure 7, Japanese annual total factor productivity (TFP) growth was the highest or second highest among the G-5 (France, Germany, Japan, the United Kingdom, and the United States) in most precrisis years of the last decade—the recovery was no simple sopping up of idle resources. Looking at the averages for the period between the start of Japanese recovery (2002Q2) and the start of the global crisis (2008Q3), given in figure 8, Japan had the highest average annual GDP growth per worker and by far

6. See Kuttner and Posen (2004), Posen (2001), and Hoshi and Kashyap (2004) for analyses of these factors.

7. Yes, juxtaposed with fragile banks, which was part of the problem; see Hoshi and Kashyap (1999), Shimizu (2000), and Ueda (2000). But this gives some hope to euro area members that structural reform can yield rapid dividends.

8. Posen (2004b) sets out "What Went Right in Japan." See also Posen (2009a) for discussion of this policy success.

the highest annual TFP growth. In Posen (2002a), I had made the case that the high rate of technological innovation in Japan was largely unchanged over the course of the 1990s and that shortfalls in private investment due to the preceding recessions were demand (or financially) rather than productivity driven—this case is borne out by the subsequent productivity performance of Japan that I just documented.[9]

It is worth belabouring this point, not just to give myself credit for getting a call or two correct but also to emphasize that Japan was not in structural decline during the 1990s, that the series of recessions were demand (and macroeconomic policy) driven and were not real business cycles, that therefore this was avoidable and policy could help matters. This illustrates what has become known at the Bank as "Adam's left-arm principle"—workers and investors of Japan did not wake up one day in 1992 and find that their left arms had fallen off, and, for that matter, workers and investors of the United Kingdom also still have their left arms. In other words, policymakers and economists must not reason backwards from a period of growth shortfall that aggregate supply or growth potential have significantly fallen and lower their sights for policy response as a result.

The real costs of recession and even financial crisis tend to accumulate over time as job loss turns to long-term unemployment and as financial disruption turns to underinvestment and capital misallocation. This is why a number of central bankers, myself included, have argued for very strong immediate monetary response to negative shocks, so as to forestall this process as far as possible. It is impossible to completely offset such negative structural effects, and unfortunately, I believe that there is reason to think they will be larger and more immediate in the United Kingdom today than they were in Japan in the 1990s, as I will discuss shortly. Yet, large persistent output gaps do arise, as Japan demonstrates, and should be treated as reparable.[10] They should also presumably push down on inflation (as discussed in the explanation of the MPC's most recent forecast in the May 2010 inflation report), though perhaps not as straightforwardly as we used to think they would, as I note below.

NOT *RASHOMON*: JAPAN'S POLICY MEASURES HAD MOSTLY TEXTBOOK EFFECTS

Rashomon, Kurosawa's ground-breaking film giving four participants' differing perspectives on the same act of violence, has become a code word for the undependability of human memory, or at least the differences in personal experiences of the same event. Anthropologists, sociologists, and legal scholars all invoke the Rashomon effect when speaking of contested views of causality, for example, of guilt and

9. This raises the issue of how the banking-sector disruption and fabled misallocation of capital in the Japanese economy did not result in worse structural harms to productivity. I am working on research in this area, supported by the Ford Foundation, and hope to have some reasonable hypotheses and data for them over this summer.

10. See Bernanke (2000) arguing against "self-induced paralysis" in monetary policy and also Posen (1999b, 2000). The idea that Japan's difficulties were serious and demand-related was first advanced independently by Krugman (1998) and Posen (1998). Krugman achieved a unique level of theoretical insight into the problem, however.

intention in criminal cases. Here, however, economists should be trying to get away from this cinematic—and very human—sense of indeterminacy and lack of clarity. While economics is surely not a science, empirical evaluation of macroeconomic policies and their impact can and must proceed on the basis of common standards of evidence and argument leading to some accumulation of generally agreed results.

As Kuttner and I (Kuttner and Posen 2001) argued, what Japan's Great Recession demonstrates is the accuracy of many of our predictions about policy from the mainstream macroeconomics literature, even of the intermediate textbook level. This is of course a piece of my broader case that Japan's experience is amenable to the same means of understanding as macroeconomic events in other advanced economies are, but the point goes further. We have ways of specifying what was extreme or structurally different about Japan's situation—size of the shock, closedness of the economy, the zero interest rate bound—and make our policy judgments conditional on those assessments. And in the main, those conditional judgments were borne out by the facts.

If ever there seemed to be a Rashomon effect in economic policy discussion, it would be with regard to fiscal stimulus and its impact. Whether in Japan in the 1990s or in the United States in 2008–10, heated discussions take place as though the short-run effects of fiscal policy were in dispute. They should not be. Fiscal policy works when it is tried. When one takes into account such factors as openness and size of the economy undertaking fiscal policy, and the government's starting debt position, and so on, one can reasonably expect some diminishment of fiscal policy's impact for smaller, more open, more indebted economies. There is no good evidence, however, of strong Ricardian offsets to fiscal policy or of immediate crowding out by interest rates (unless the economy is already overheating or at unsustainable debt levels).[11] This is conclusively demonstrated by Japan.[12] As we argued in Kuttner and Posen (2002):

> "[O]ur results provide little support for the Ricardian equivalence hypothesis under perhaps the most propitious conditions ever seen for it to hold: a rapid and large increase in the public debt contemporaneous with a widely publicized projection of the demographic dangers to social security benefits, in an economy already prone to high rates of saving.... Our examination of the effects of fiscal policy in Japan in the 1990s has taken us on what seems to be a tour of macroeconomics' past: when economies were closed, savers were myopic, and consequently fiscal stabilization is effective." (p. 554)

Charles Horioka and his colleagues predicted and then documented a long-term demographically driven decline in Japan's household saving rate, also totally inconsistent with Ricardian predictions.[13] In

11. Auerbach and Gale (2009) make this argument strongly, assessing the latest developments. See also Ball and Mankiw (2005), Kuttner and Posen (2001), Mankiw and Elmendorf (1998), and Posen (1998).

12. Not all disagreement on this assessment is ideologically driven. Complexities of the Japanese fiscal system (Broda and Weinstein 2005, Ishii and Wada 1998) and failure to properly account for the tax revenue impact of declining GDP growth (Kuttner and Posen 2002, Posen 1998) contributed to some of the confusion.

13. See Horioka (2006) and the references therein.

a seminal paper, Broda and Weinstein (2005) assessed the net rather than gross debt position of Japanese government, finding it to be only half that often cited gross level, and pointed out how demographics did not mean automatic fiscal unsustainability. Faruqee and Muhleisen (2003) showed how even potentially beneficial long-term social security reforms would still involve short-term output losses and that "sharp tightening measures should be held back until private demand has reached sustainable levels" (p. 21).

Note, however, that this assessment is not a blank check for unlimited fiscal stimulus every time, everywhere. Japan in the 1990s was where fiscal activism should have worked the best, being closed, with passive highly home-biased savers, and a large economy with essentially no foreign indebtedness. Having a low government share in GDP and a low tax base also means the distortions incurred by sustained fiscal expansions are of relatively low cost. Looking at today's world, only the United States shares these attributes with Japan and can thus afford to engage in ongoing fiscal stimulus in a protracted recession—and the lesser passivity of US savers and increasing American foreign indebtedness suggest some limit will be reached. For smaller, more open economies, with larger state sectors, like the United Kingdom, the news is not as good.

There will be leakage of fiscal stimulus abroad so it will be less effective than in Japan; the willingness of the markets to roll over public debt will be more limited, especially if the size of the public sector and the tax share are reaching diminishing returns.[14] Cross-national empirical research, such as that summarized in Cadoan (2009), supports this view.[15] Thus, while fiscal stimulus was the right response by a wide range of economies, including the United Kingdom, to the immediate crisis in 2008–09, consistent with one lesson from Japan, we cannot sustain it like Japan should have.

Monetary policy is another place where research has tried to get past the Rashomon effect when looking at Japan in the 1990s. We have had considerably more success in getting agreement here, not only inside and outside Japan, but across a wide ideological spectrum. By common assent, Bank of Japan policy was too late and too timid in loosening monetary conditions and too reluctant to take up unconventional measures when the zero lower bound on nominal interest rates was reached.[16] A wide variety of policy response functions have been estimated under various assumptions, and essentially all suggest that the Bank of Japan could and should have been more aggressive in the early 1990s when rates were above zero and the crisis initially hit. A good example is given in figure 9, from Harrigan and

14. Public-sector investment is not worse than private-sector investment per se, and having a larger state than the United States or Japan offers the macroeconomic benefit of greater automatic stabilization, so it is not a one-way case.

15. See also Posen (2005) on the variation in fiscal response and impact with size and openness during Europe's recession of the early 2000s.

16. Notable works in this spirit include Ahearne et al. (2002), Bernanke (2000), Bernanke, Reinhart, and Sack (2004), Cargill, Hutchison, and Ito (2001), Harrigan and Kuttner (2005), Krugman (1998), Ito and Mishkin (2005), Jinushi, Kuroki, and Miyao (2000), Kuttner (2004), Kuttner and Posen (2001), Posen (1999b), and Svensson (2003).

Kuttner (2005). As Kuttner and Posen (2004) point out, these reaction functions are not very robust and become more difficult to estimate meaningfully when deflation occurs—but that only further emphasizes the missed opportunity. Some observers would suggest that the monetary game was in some sense lost when unconventional measures were not undertaken before longer-term nominal interest rates went to zero.[17] My personal belief is that the critical though closely related concern is whether the financial system is in shape to transmit monetary policy, not the interest rate per se, and that when rates go to zero, unconventional policy can still work, albeit with difficulty and uncertainty about its effects (Posen 2009b).

Where Rashomon has its revenge is in trying to make sense of what happened subsequently on the monetary side. As shown in figure 10, every measure of inflation in Japan turned negative around 1995 and stayed negative (with only a brief respite in 1998) until at least 2004. It was in the second half of this period, from 2001 to 2006, that the Bank of Japan undertook its version of "quantitative easing" (QE) to seemingly little nominal effect. Yes, there was an output gap in the early 2000s still to be absorbed, but it is difficult to reconcile any reasonable estimate of the size of that gap—even based on my own previously considered to be too optimistic assessment of Japanese potential growth prospects—with the persistence of deflation seen. Alternatively, if the output gap was actually that large, why did deflation not accelerate over the course of the 1990s instead of remaining stable? There certainly was no shortage of narrow money creation or of government bond purchases by the Bank of Japan when they got started, and no concomitant increase in broad money growth (see figure 11).

The general assessment by econometric investigators to date is that QE did have some impact on inflation expectations and expectations about monetary policy as a commitment mechanism but had little direct effect on asset or other prices.[18] Thus, a key part of the Bank of Japan's efforts to combat deflation was the public commitment given in 2002 to maintain low rates until inflation was reliably forecast to remain positive (Posen 2004b). Figure 12, extending a chart from Kuttner and Posen (2004), suggests that "deflation scares" where the Bank of Japan was seen to be threatening rate hikes did have an impact on long-term interest rates and presumably expectations beyond that of the world (US) interest rate and that these have been absent since the Bank of Japan's commitment to pursue positive inflation. But we all must admit that it is rather difficult to tell in any convincing rather than suggestive manner.

This leads of course directly to concerns about the Bank of England's own QE policy of late and its impact. As also shown in figure 11, the Bank of England has created narrow money at an even faster

17. Krugman (1998) sets out the theory of the liquidity trap, while Tucker (2009) cites this concern in guiding his policy activist decisions of 2009 at the Bank of England.

18. Ugai (2006) gives a useful summary of some of the assessments. See also Baba et al. (2005), Baba et al. (2006), Kimura and Small (2006), Oda and Ueda (2005), Okina and Shiratsuka (2004), and Ueda (2002). Tomas Hellebrandt, Neil Meads, and I have work in progress attempting to make another assessment.

rate, sooner, than the Bank of Japan did and seemingly has had just as little impact on broad money growth. In part, this is overstated, because the private counterparties from whom the Bank of England buys its gilts in the secondary market (i.e., pension funds and insurance companies) are different from the counterparties of the Bank of Japan on its purchases (banks), so controlling for that in the flow of funds reveals a slightly higher broad money growth rate. Much more importantly, however, the proof is in the outcome: Inflation has remained positive in the United Kingdom, despite at least as large a negative shock as Japan experienced in 1992 and that seems in part to be driven by QE's effect on asset prices.[19] My MPC colleague, Spencer Dale (2010), recently summarized the results of some of the Bank of England staff's own research:

> "[A]bsent the monetary injection, broad money would almost certainly have been far weaker... summing movements in gilt-OIS spreads following our [asset purchase] announcements suggests that the portfolio balance effect may have reduced gilt yields by around 100 basis points.... Since we started QE, equity prices have increased by more than 50%, and corporate bond yields have fallen by over 400 basis points."

In Japan during the Bank of Japan's QE period there was no such fall in corporate bond yields and even some rise (albeit from very low levels probably reflecting the recovery), and there certainly was no 50 percent rise in equity prices. It remains to be seen whether the equity rise in the United Kingdom and elsewhere is sustainable (I have no opinion, just hopes). Moreover, even if the Bank of England successfully avoids both deflation and inflation in contrast to Japan's deflation, but Japan has yet another recovery and the United Kingdom's recovery is weak or cutoff, that is not a happy outcome for the United Kingdom vis-a-vis Japan.

To me, the upshot of all of this Rashomon effect about QE there and here is twofold. One, of course, is a call for more and cleverer research than I and others have mustered to date—research that should focus less on the immediate announcement or asset price impact of QE (though that was the right place to start) and more on the transmission mechanism. It is at least plausible that part of the better real economic results Japan had over the course of the 2000s than the United Kingdom has since early 2009 is due to the more advanced state of the banking system restructuring undertaken by Takenaka in 2003 versus what has been done to date in the United Kingdom and in other major markets. That should, however, have shown up somewhere in broad money growth at some time, one would think. We also need more research on the costs of deflation, and why they seem to have been much lower in Japan than we reasonably would have expected ex ante. There is no question that deflation has been a drag on

19. No, I am not happy that UK CPI inflation is currently overshooting the Bank's government-given inflation target. As I have said in the press of late, if this proves to be other than temporary factors at work, the MPC should take action. But I'd certainly rather have us temporarily overshooting by around 1 percent than facing oncoming deflation.

growth, and, even at Japan's low interest rates, make government debt service more difficult. But it has not been a disaster.[20]

The other lesson for me, as a central banker, is to have much more humility about what we are capable of doing with monetary policy, especially with unconventional measures.[21] Monetary policy has been unable in Japan to remove deflation quickly in any easy way. Even the above zero inflation we have maintained in the United Kingdom has hardly been commensurate with what many of the monetarist persuasion would have predicted, given the scale of the Bank of England's asset purchases (Posen 2009b). We also do not understand deflation very well— whatever type of standard macro model one uses for analysis, you will find it difficult to generate the persistent for a decade, sticky, but steady at –1 percent, deflation Japan experienced, rather than something that accelerated either up or down, and did more harm.[22] As a result, we should stay away from very mechanistic monetarism that, "Oh, boy, they've printed a lot of money so at some point that has to turn into inflation." Or, "If we do this specific amount of quantitative easing, it will lead to this result." Looking at Japan, it is clear that their quantitative easing measures had the right sign, in the sense of removing fears of tightening, but did not have a predictable or even large short-term result, let alone cause high inflation.

A PARTIAL REMAKE? WHERE THE UNITED KINGDOM HAS SOME JAPANESE RISKS

As I said earlier, Kurosawa not only brought Western models and inspiration into his films in Japan, but he in turn inspired remakes and homages, or even particular scenes, in Western films. So if the macroeconomic policy response undertaken so far by the United Kingdom and other major economies makes it unlikely our economy will "turn Japanese" precisely—especially now that I have explained to you what turning Japanese actually meant in the 1990s and 2000s—what particular aspects of Japan's Great Recession might be relevant and of concern? What kind of remake might we see of the story for an unwilling UK audience? Unfortunately, the ironic twist for this upcoming film is that in some ways the remake might be scarier than the original. That risk arises not only because the original Great Recession was not quite so scary as previously thought on close viewing but because Japan actually had various resources with which to manage its situation while the United Kingdom and other economies are not similarly endowed, even if some Japanese policymakers failed to take advantage of them.

The first set of advantages Japan had over the United Kingdom today in responding to a recessionary

20. A partial explanation for that may be the real and nominal wage flexibility in Japan. See Kimura and Ueda (2001).

21. I have made this point in appearances before both the United Kingdom House of Commons Treasury Select Committee and the US Congress Joint Economic Committee. Setting the bar of expectations low for my own role might be a factor.

22. See the Phillips Curve based analysis in De Veriman (2007) for some evidence on this point.

shock comes from its relative closedness and passivity of its domestic savers and investors. Fiscal stimulus will be more limited in its effect and less sustainable on a large scale in the United Kingdom than it was in Japan. The threat of savings leaving the United Kingdom for other currency-denominated assets is low, but not zero, and has responded to fiscal concerns in the past. In contrast, clearly Japanese savers have been unwilling to move a large share of their savings abroad, no matter what has occurred with public debt to date.[23] The multiplier on Japanese fiscal stimulus was higher than it has been in the United Kingdom. The upshot is that declaring a limit on fiscal stimulus in the United Kingdom well before Japan should have is sound policy, yet no one should doubt this will be painful in terms of aggregate GDP growth (beyond its direct human effects), either. The loss may be less than some fear, since a low multiplier works for cuts as well as spending, but given where interest rates are now, there will be no bonus from fiscal discipline. This is about preempting an interest rate rise.

A second difference from Japan that works against the United Kingdom in our current situation is the amount of reallocation of labor and capital across sectors that we need to undertake. Japan did and does have a number of inefficient industries, and during the boom of the 1980s and even after had unsustainably huge numbers of people employed in construction (Kuttner and Posen 2001).

The most inefficient industries, however, were in Japan's nontraded sector: health care, retail, food production and distribution, as well as construction; by contrast, the export industries were and remain highly competitive (Posen 2001a, 2002), and Japan was running a trade surplus except for a few years. The United Kingdom at present has to reallocate labor and capital into export-oriented industries from where there has been domestic growth (health care and other services; construction), or where the former export demand has suffered a structural decline (financial services). The challenge should not be overstated, for the United Kingdom has one of the most flexible economies in the world, past adjustment of the trade-weighted pound should ease the process, and many recent survey-based and orders indicators suggest that UK manufacturing is responding well to the shift in demand. That said, this challenge should not be dismissed and may have something to do with the disappointing performance of UK net exports over the last several months of global and UK recovery.

A third place where Japan had an advantage in its recovery, which the United Kingdom but also several other economies do not share, is in the availability of growing export markets. The role of exports in Japan's economy overall and in its recovery of 2002–08 is usually exaggerated. As shown in figure 3, net exports played a meaningful but not majority role. If anything, though, the United Kingdom—and for that matter almost all other advanced economies except the United States—is more dependent on

23. Nishimura (2007) gives a fascinating analysis of capital flows and household saving behavior in Japan, noting among other things that very large outflows in absolute terms from Japan are only a small portion of investors' portfolios and that household investors (the Mrs. Watanabes) have offset professionals' moves to stabilize.

trade as a share of the economy than Japan. During Japan's Great Recession, its primary trading partners like the United States were enjoying strong growth, and its immediate neighbours were only briefly (though sharply) in recession in 1997–98. In the 2000s, developing Asia and particularly China took in an increasing share of Japanese exports, as shown in figure 13. The United Kingdom faces a double-limitation on export-led growth in comparison. First, with most of the Western economies in recession, there is more competition for export markets, and presumably at some point the United States, too, will have to close its trade deficit. As widely noted, not everyone can be a net exporter at the same time. Second and more pressingly, the United Kingdom's major export market remains the euro area, as shown in figure 14. Let us just say that the prospects for strong growth in most of the euro area are rather dim for the next several years, as are the prospects for a sustained relative price adjustment by the United Kingdom against the euro area. Again, this is not insurmountable, and trade patterns can change, especially if the China bloc allows their currencies to adjust in line with their productivity and domestic demand growth. But it does not help.

There are also two parallels for the United Kingdom with less salutary aspects of Japan's situation. One I brought up in a speech last October (Posen 2009b). As summarized in figure 15, the United Kingdom has limited alternative sources of corporate finance to its few big banks, some of whom are obviously still impaired, and all of whom have to increase their capital bases and/or shrink their balance sheets. The United Kingdom is thus similar to Japan, and unlike most other advanced economies, in terms of its vulnerability to financial fragility. So far, there is some reason to think that a lot of the very sharp decline in investment the United Kingdom experienced over the past 18 to 24 months can be accounted for by a decline in investment demand, driven by uncertainty and temporarily (we hope) lower growth prospects, and not be solely ascribed to a credit crunch. As I said in October, the test will come when the recovery, thankfully now underway, leads to increased investment demand by new firms and small and medium-sized enterprises—will the concentrated and part-nationalized United Kingdom banking system be ready to meet the demand for capital? In Japan, this kind of credit crunch did play a key role in the third recession of the 1990s, until the bank reform of 2002.

Another parallel has emerged from some recent research in progress I have undertaken with Neil Meads at the Bank. One distinctive aspect of Japan's recovery was the accumulation of large surpluses in the Japanese nonfinancial corporate sector, as depicted in figure 16.[24] These reached a high of nearly 10 percent of GDP in the mid-2000s, and after declining during the global financial crisis have begun climbing again. This pattern was unusual and sometimes ascribed to Japan's corporate governance. Yet,

24. An interesting side note is that figure 16 largely gives the lie to claims that Japan suffered a "balance sheet recession," another of the *Ran*-type one-shock-and-done candidate explanations for the Great Recession. As is clear from this figure, both corporates and households were net asset holders from 1995 onwards.

of late, we have seen a similar pattern emerge in the United Kingdom. As shown in figure 17, since the global shock of 2008, UK public nonfinancial corporations have had their own surplus rise towards 8 percent of GDP. The good news is that this rules out a balance sheet recession here as well (ditto for most households, though not quite so strongly). The bad news is if this indicates some form of self-insurance by companies against lack of future access to credit, in line with the structural financial parallels to Japan I set out, this will constrain investment until access is credibly restored—which might take restructuring the UK financial system (not a bad idea).

The worst news would be if this sitting on funds was not temporary but lasting. In that case, it would represent a lack of faith in future UK economic prospects, meaning that despite all my arguments UK investors do feel that their workers all woke up minus some body parts or that their previously purchased capital stock was somehow now redundant. That would be a structural slump, with all the prospects for higher inflation (due to smaller output gap) and slower growth (due to lower productivity trend) that portends. I do not believe this to be the case. But even if it were, here is where the United Kingdom's openness comes to our rescue in the end, and Japan's closed corporate governance came back to bite it. As shown in figure 18, the United Kingdom has been consistently more willing to invest abroad than Japan. Even in the worst times in the Great Recession, Japanese corporations sat on their cash, neither engaging in large-scale foreign direct investment (FDI), where productivity and growth prospects were higher, nor returning their cash to investors (who would not move it abroad in any event).[25]

In the United Kingdom, even leaving aside the spike around 2000 related to some takeover activity, corporations and their investors have been willing to move direct investment abroad in search of higher returns. It is possible that some of what appears to accumulation of cash surpluses by UK corporations over the last two years are actually acquisitions of investments abroad, which would show up on the balance sheet as assets without showing up in GDP flows as corporate investment. It certainly has not been due to merger and acquisition activity of late. If that proves to be the case, returns on savings and corporate profits will be higher than they were for trapped capital in Japan, which in turn will more sustainably feed consumption and productivity growth. So the UK remake of the Japanese recession film need not be entirely a morose tear-jerker.

PERHAPS *SEVEN SAMURAI*: A CONCLUDING NOTE FOR POLICYMAKERS

Arguably Kurosawa's greatest film, and my personal favourite, is *The Seven Samurai (Shichinin no Samurai)*.[26] The plot, having been emulated or remade by numerous subsequent filmmakers, should be

25. Alexander (2007) has an excellent discussion of returns to capital and comparative returns on FDI for Japan. See also Fukao (1995) regarding globalization and corporate governance in general terms.

26. See http://en.wikipedia.org/wiki/Seven_Samurai for more information.

familiar to many who have not even seen the film. A village of farmers is threatened by a severe negative shock, that bandits will return after the harvest to steal their crops. They are incapable of defending on their own the hard won fruits of their labor from this onslaught. The farmers hire seven masterless samurai to organize their defense, if not able to defend them directly. The farmers, however, have limited resources to provide for their defense or pay the samurai, and what they have is being hoarded in precautionary saving against the coming shock. The samurai restore confidence to the village, and with an activist strategy fight off the bandits, albeit at a high cost; four samurai lose their lives. With the bandits defeated, the regular cycle of farmers planting for the next year's harvest begins again, surprisingly happily. The three surviving samurai win the battle for the farmers but lose their comrades with no place in normal society to show for it. "Again we are defeated," their leader, Kambei, muses. "The farmers have won. Not us."

I hope you see where I am going with this, and it is not to overdramatize the pressures of being a central banker (actually a very nice if demanding job). Macroeconomic policymakers really should have little to do when the business cycle is following its normal path. Fine tuning is unnecessary, although obviously some ongoing unobtrusive monitoring of the situation is useful. When a clear, large negative shock threatens to pull the cycle down into severe contraction, central bankers and (to the extent feasible) fiscal authorities have to intervene and do so proactively. No one should be overconfident that the shock can be costlessly offset or restored fully to *status quo ante bellum*. Part of responding to a large negative shock successfully in fact requires the policymakers to successfully instill confidence in and mobilize the general public. But when it is all over, and even when the policy response has fended off the worst, the best a macroeconomic policymaker can hope for is for the citizens to return to the normal cycle of life—and desire the monetary *samurai* to go away again, unless and until another shock comes. May it only be so that the United Kingdom recovers to its normal cycle of growth sufficiently, so that I and my colleagues can sink from the frontline into our well-deserved technocratic obscurity.

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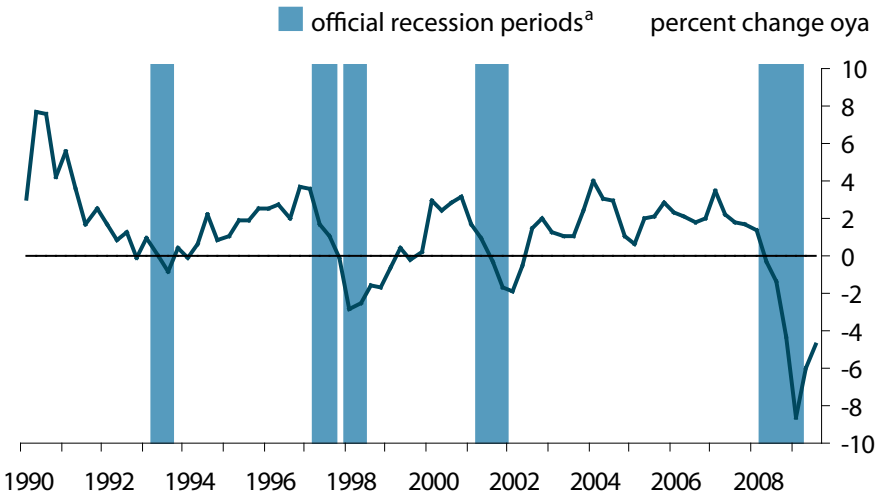
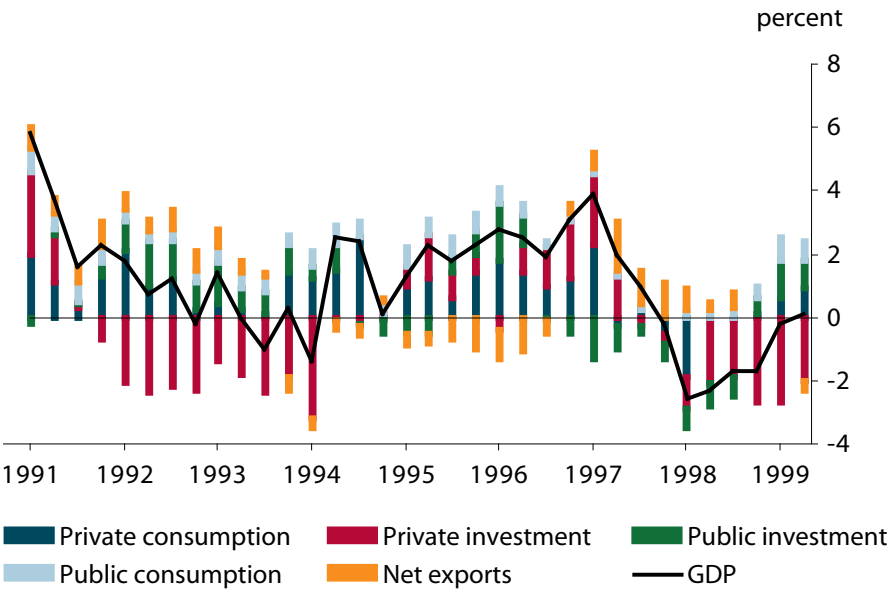
Figure 1 Annual Japanese GDP growth



a. Defined as two consecutive quarters of declining output.

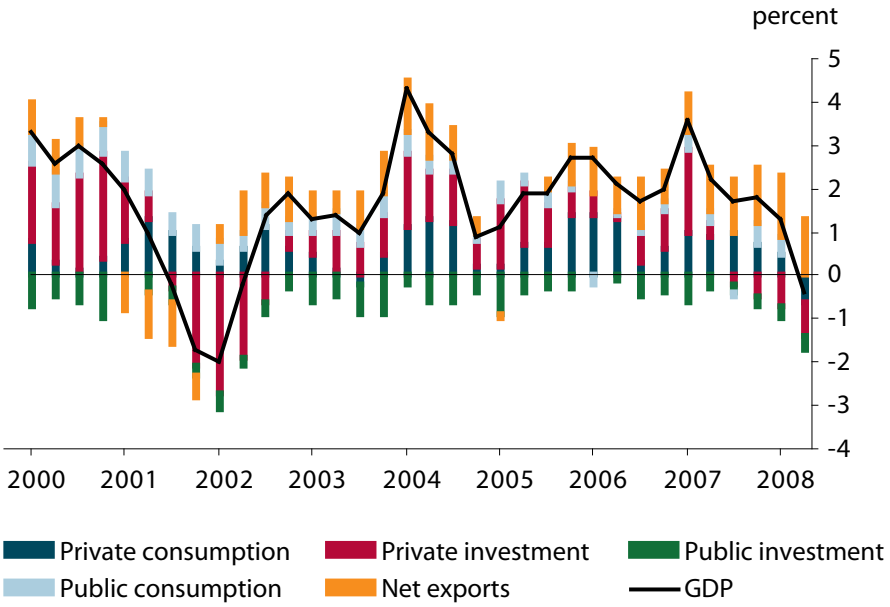
Source: Thompson DataStream.

Figure 2 Contributions to Japanese GDP growth, 1991Q1 to 1999Q2



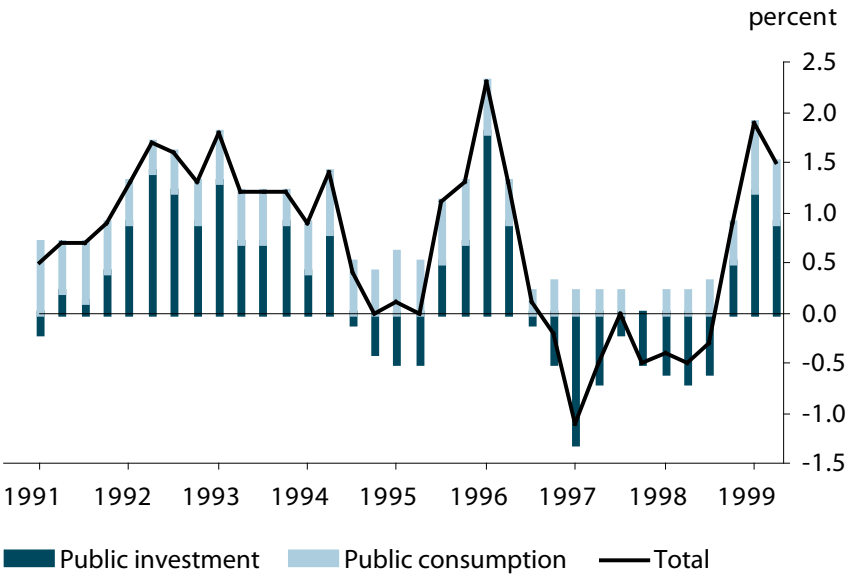
Source: Cabinet Office, Japan.

Figure 3 Contributions to Japanese GDP growth, 2000Q1 to 2008Q2



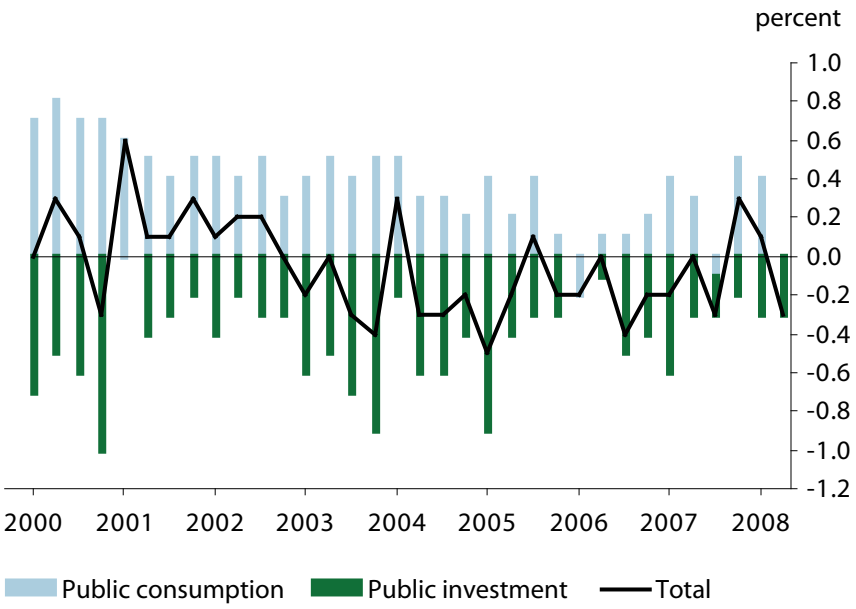
Source: Cabinet Office, Japan.

Figure 4 Japanese public-sector stimulus, 1991Q1 to 1999Q2



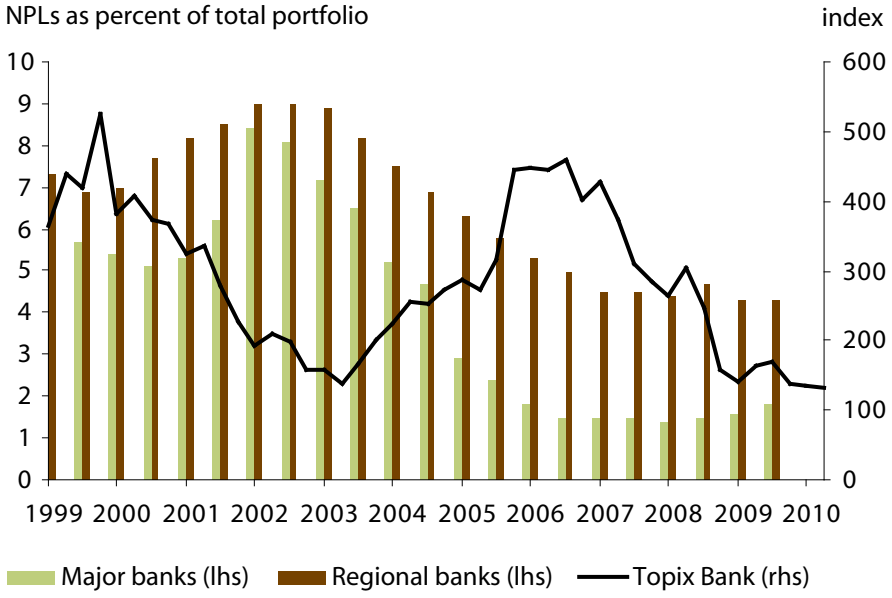
Source: Cabinet Office, Japan.

Figure 5 Japanese public-sector stimulus, 2000Q1 to 2008Q2



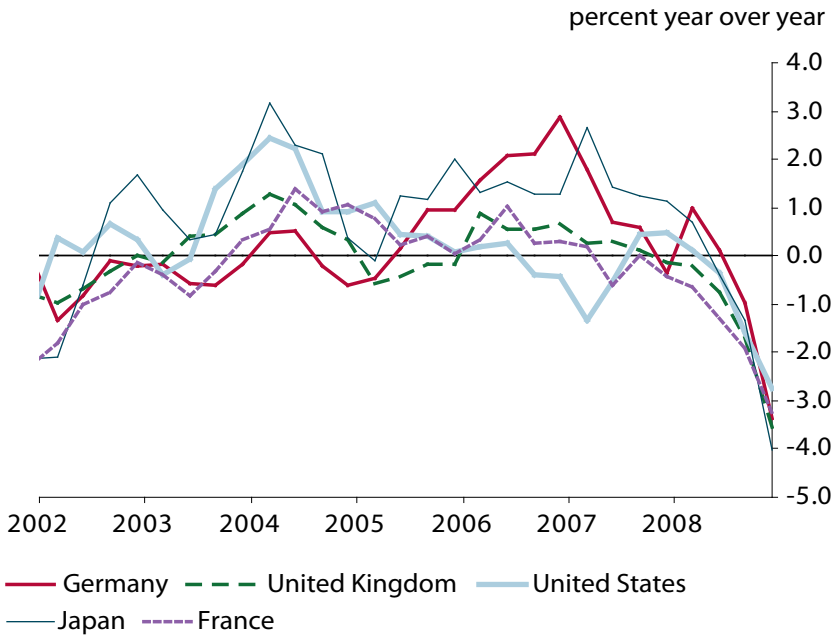
Source: Cabinet Office, Japan.

Figure 6 Japanese banks' nonperforming loans (NPLs) problem



Source: Financial Services Agency, Japan; Thompson DataStream.

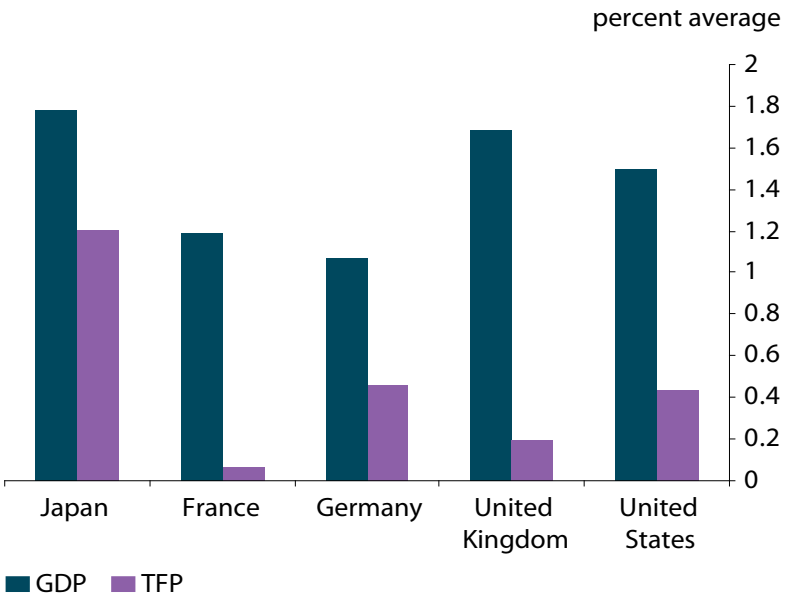
Figure 7 International total factor productivity (TFP) growth



Note: Simple TFP measure based on residual of GDP growth after accounting for growth in employment and capital and movements in labor share.

Sources: Thompson DataStream and Bank calculations.

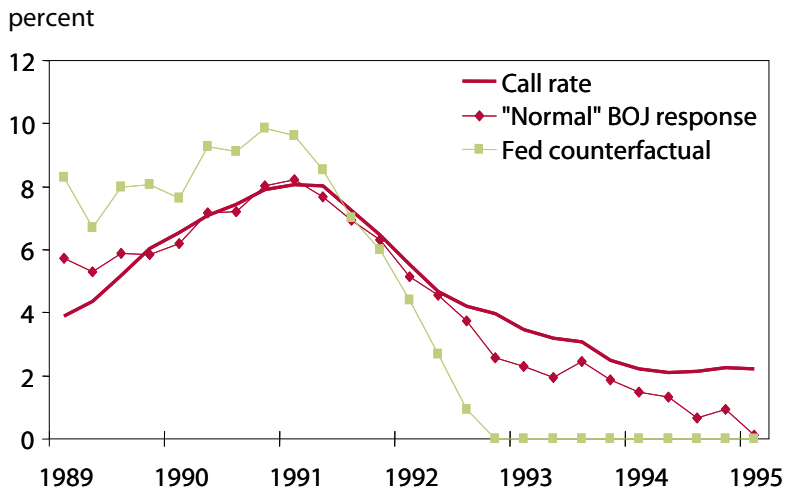
Figure 8 Average TFP growth and GDP per worker, 2002Q2 to 2008Q2



Note: Simple TFP measure based on residual of GDP growth after accounting for growth in employment and capital and movements in labor share.

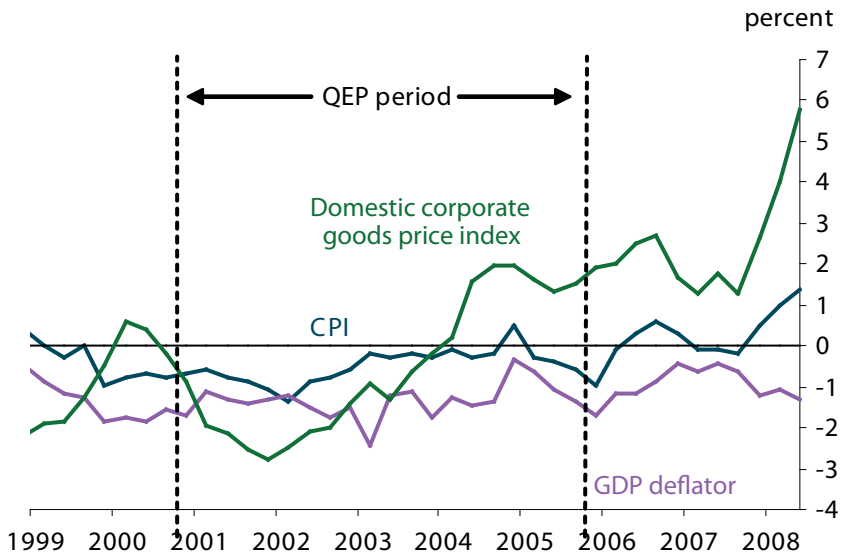
Source: Thompson DataStream and Bank calculations.

Figure 9 The Bank of Japan's response to Japan's recession



Source: Harrigan and Kutter (2005).

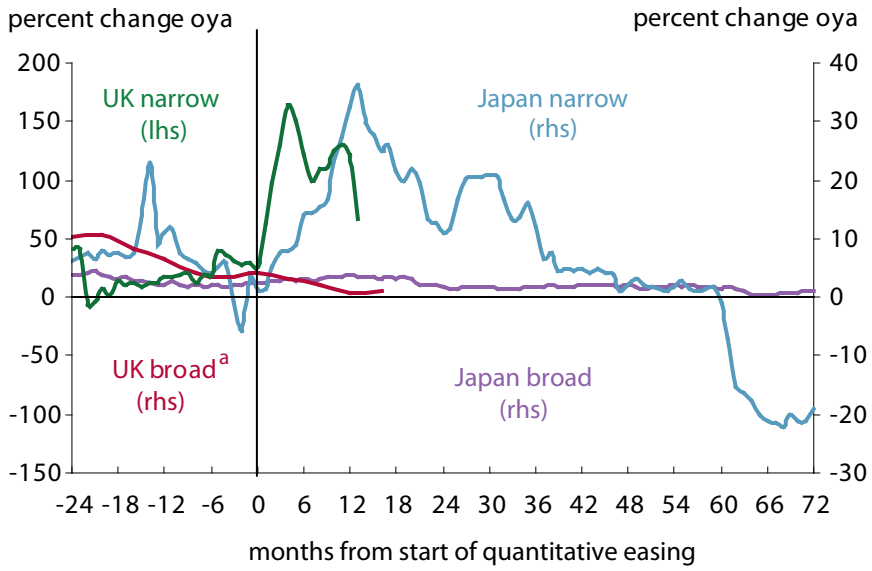
Figure 10 Japan's inflation experience, 1999Q1 to 2008Q2



QEP = quantitative easing policy; CPI = consumer price index

Source: Bank of Japan.

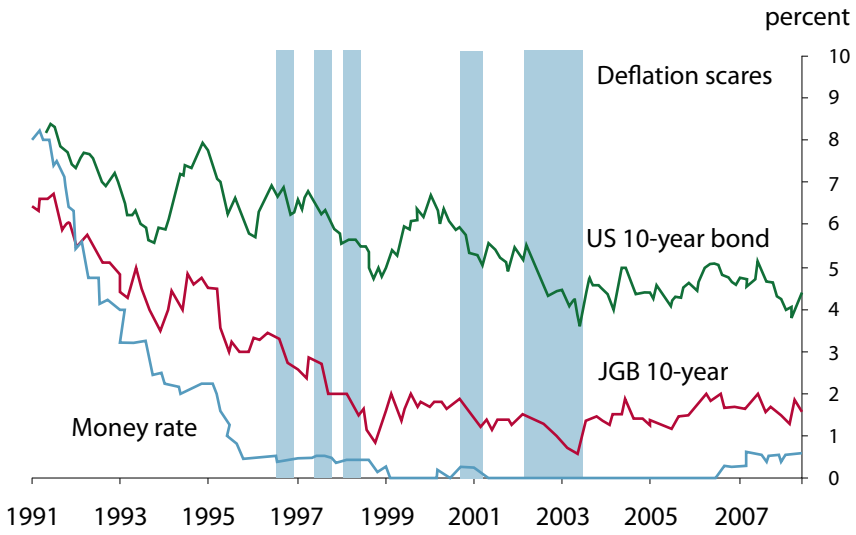
Figure 11 Quantitative easing and money growth



a. Excluding intermediate "other financial corporations" (OFCs).

Source: Bank of Japan and Bank of England.

Figure 12 An independent central bank and expectations

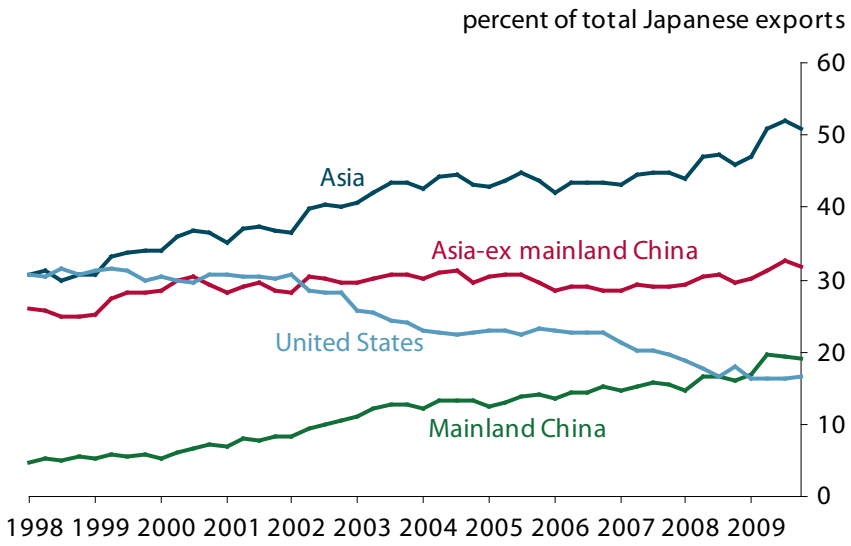


JGB = Japanese government bond

Note: Adapted from Kuttner and Posen (2003).

Source: Thompson DataStream and Bank calculations.

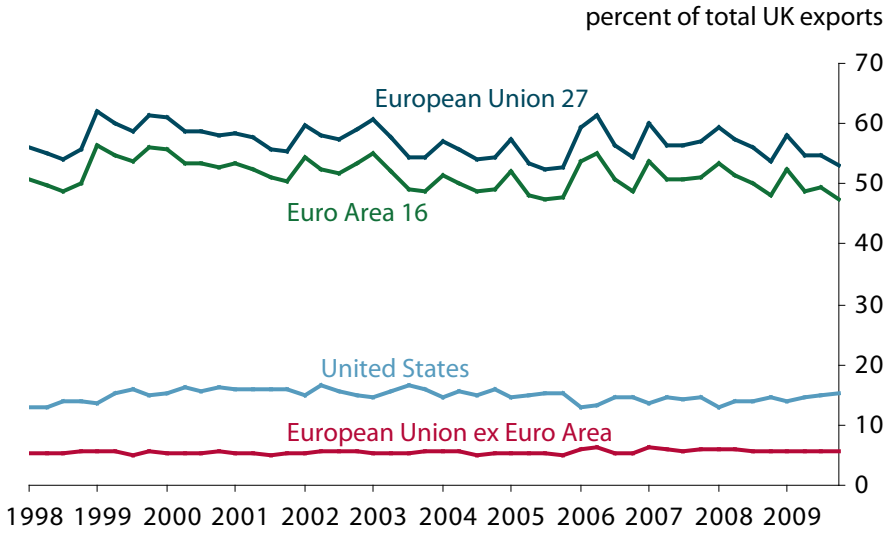
Figure 13 Japanese export markets



Note: Asia includes Oceania, Hong Kong, and Macau.

Source: IMF, Direction of Trade Statistics.

Figure 14 UK export markets



Source: IMF, Direction of Trade Statistics.

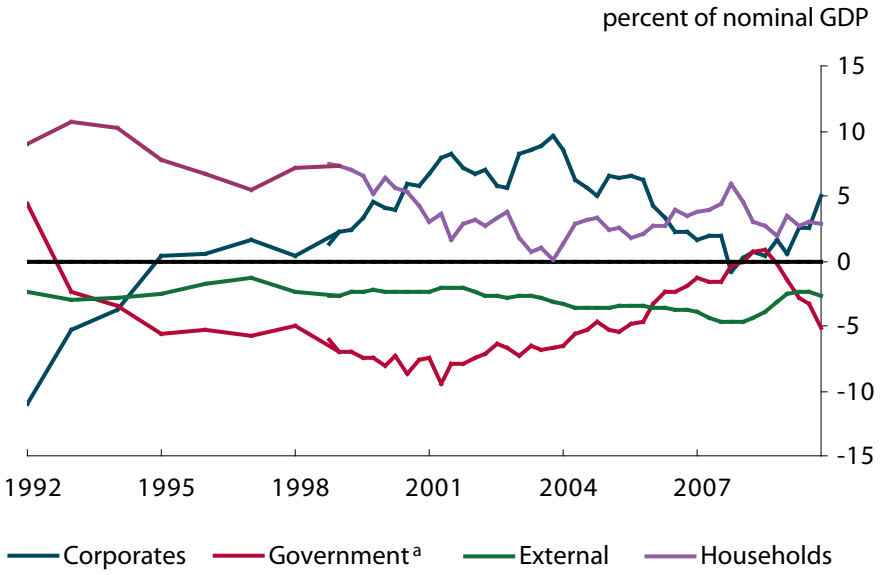
Figure 15 Structure of G-7 financial markets

	Canada	France	Germany	Italy	Japan	UK	US	Average
Stock market capitalization[a]	1.74	1.12	0.65	0.51	1.02	1.37	1.48	1.13
Private sector bond market capitalization[b]	0.31	0.57	0.36	0.60	0.38	0.16	1.30	0.53
Short term private sector securities[c]	0.11	0.22	0.21	0.01	0.07	0.16	0.26	0.15
Banking sector capitalization[d]	1.41	1.21	1.20	1.27	1.51	1.90	0.69	1.31
Banking sector concentration[e]	0.57	0.55	0.74	0.40	0.54	0.72	0.35	0.55
Banks per million persons	2.95	7.90	22.60	12.49	6.66	8.50	31.70	13.26

a. As ratio of GDP. Data as of end 2008. Source: World Bank Financial Structure Dataset.
b. As ratio of GDP. Data as of end 2008. Source: World Bank Financial Structure Dataset.
c. As ratio of GDP. Data as of end 2008. Source: Bank Calculations and BIS.
d. Deposit money bank assets as ratio of GDP. Data as of end 2008. Source World Bank Financial Dataset.
e. Assets of three largest banks as share of assets of all commercial banks. Data as end of 2008. Source: World Bank Financial Structure Dataset.

Source: Bankscope, IMF, and Bank calculations.

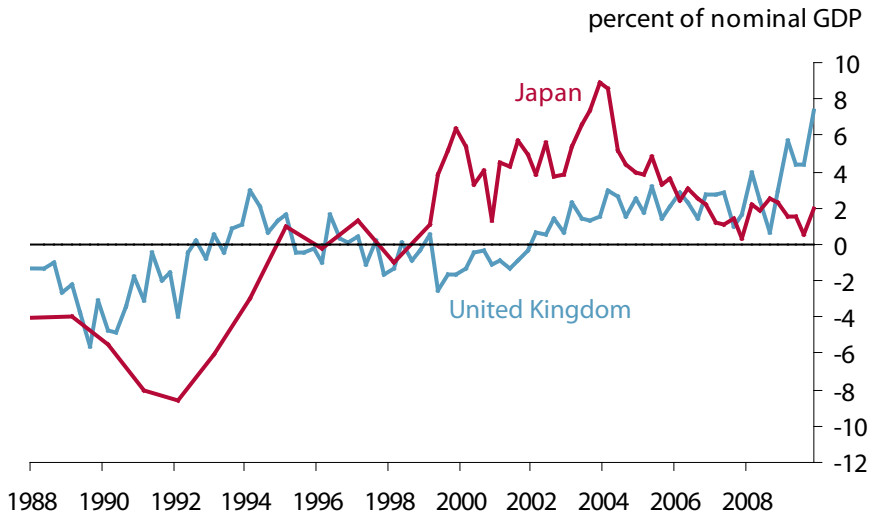
Figure 16 Japanese financial surpluses



a. Including public nonfinancial corporations.
Note: Based on annual financial year data through 1998.

Source: Bank of Japan.

Figure 17 UK and Japanese PNFC financial surpluses

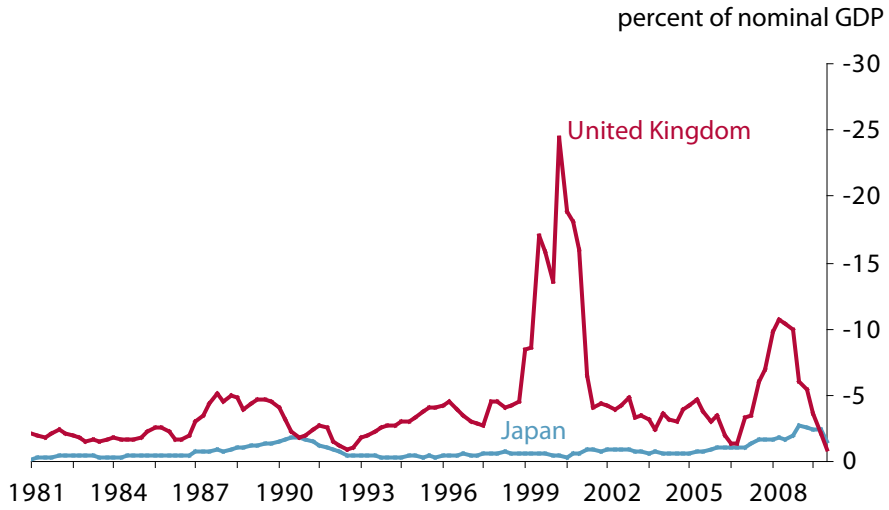


PNFC = public nonfinancial corporations

Note: Japanese data based on annual financial data through 1998.

Source: Bank of Japan and Bank of England.

Figure 18 UK and Japanese FDI outflows



Source: OECD, Balance of Payments Statistics.