

What's the difference between Japan and the US?

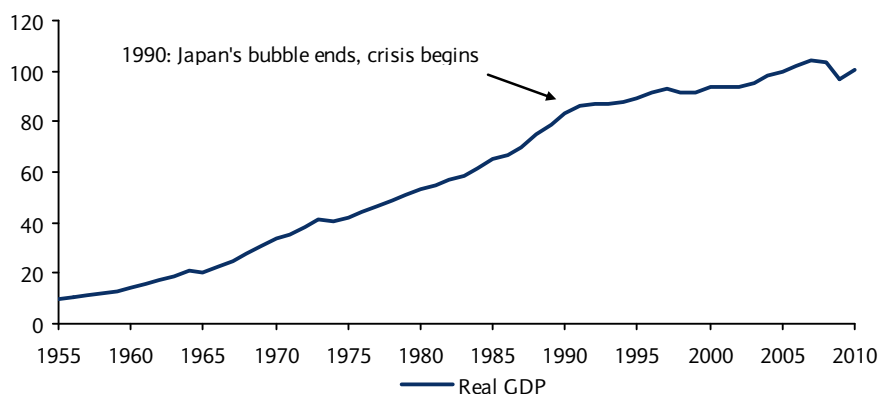
- After the financial crisis following the late-1980s real estate and equity market bubble, Japan entered a long period of stagnation; GDP growth fell from 4.6% in the 20 years before 1990 to a mere 0.9% in the 20 years subsequent. As the US struggles to emerge from a similarly disruptive financial crisis, the question arises as to whether it is in for a similar 'lost decade' (or two).
- If it is, we think it will be for reasons other than the challenges that have faced Japan in the past two decades. While the US financial boom and bust are similar, in broad outline, to Japan's experience, we attribute much of Japan's growth slowdown to an abrupt shift in demographic trends that hit the country in the early 1990s. US demographics are also becoming less growth supportive, but the US faces nothing like the demographic headwinds that hit Japan.
- The economic 'rebalancing' required for the US to adjust to post-bubble economic realities is small compared with Japan's and relatively far advanced.
- The US has also avoided some of the policy mistakes that may have slowed Japan's recovery from the financial crisis. Bank losses were recognized and banks recapitalized more proactively than in Japan. Other mistakes may be made, but at the moment, it seems to us that there is room for some optimism that US policy has been more conducive to adjustment and recovery than was Japan's.
- The closest analogy to the Japanese experience may be the large stock of mortgages that have been rendered unviable by the house price collapse but have yet to be restructured; like Japan's 'zombie firms', these 'zombie mortgages' are disrupting housing markets and inhibiting full economic normalization. Until this problem is resolved, which will likely take a few more years, the economic recovery may be lacklustre.

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Figure 1: Japan's post-crisis malaise – Can it happen to the US?



Source: Haver Analytics

Is a Japanese-style 'lost decade' in store for the US?

Does the US face a Japan-style decade of post-crisis malaise?

As it becomes increasingly clear that the downturn triggered by the credit bubble and its collapse is a very different sort of event than a normal post-war recession, comparisons with Japan's financial crisis and the 'lost decade' that ensued become more compelling. And potentially more disturbing: after a disappointing half-decade, does the US face another dismal decade (or more) like Japan's?

In Japan, three causes for growth deceleration

The sharp deceleration of growth that followed the collapse of Japan's 'bubble economy' in 1990 was not the result of that collapse alone. It had at least three causes: 1) a gradual and long-standing decline in productivity growth associated with a corresponding decline in gains from adopting foreign technology as Japanese technology converged on the global frontier; 2) an abrupt shift in demographic trends; and 3) the unwinding of the 'bubble economy' of the late 1980s, the associated financial crisis and its aftermath.

It would be a mistake to focus exclusively on the financial crisis

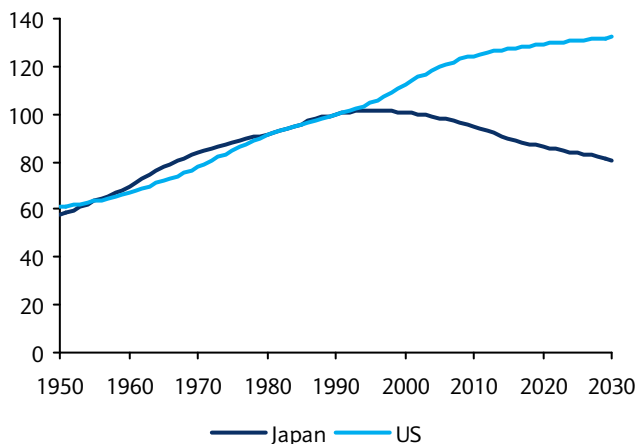
It is natural, preoccupied as most of us are with the more recent financial crisis and its aftermath, to focus on the Japanese crisis as the most significant driver of the country's relatively poor economic performance in the past 20 years, as well as the most relevant source of potential lessons for the US. We think this is a mistake and begin instead with demography, which has presented powerful economic headwinds in the past two decades – powerful enough that it is simply unreasonable to interpret Japan's recent economic history without making due allowance for the sharp reversal of population trends. The good news here is that the US is not Japan, in this respect; US population trends are becoming less growth friendly, but they pose nothing like the challenge that Japan has confronted in the past two decades.

The demographic difference

In the early 1990s, Japan's working age population peaked and began to decline.

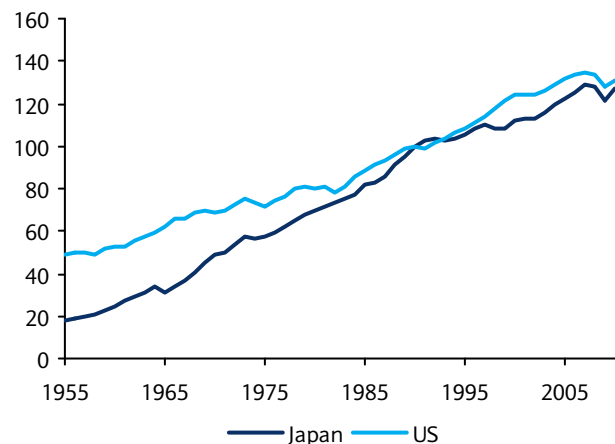
At the end of 1989, as the Japanese equity market peaked, the country was reaching a less visible but no less significant milestone. In 1990, the country's dependency ratio reached its post-war trough and began to rise. The working age population continued slowly to grow for a couple more years, but by the middle of the 1990s, it began a steady decline that is projected to continue for decades to come (Figure 2). By 2010, Japan's total population was marginally higher than it had been in 1990, but the working age population was more than 5% smaller.

Figure 2: The demographic difference (working-age population, 1990=100)



Source: Haver Analytics

Figure 3: Adjusted for population, Japan's growth doesn't look so bad (Real GDP/working age population, 1990=100)



Source: Haver Analytics, Barclays Capital

Japan's demographic transition has had enormous implications for the economy

The aging and shrinking of Japan's economically active population has enormous implications for saving, investment and sustainable rates of economic growth. We will highlight some of these in sections to come. For now, we would like to put Japan's low post-crisis economic growth into its demographic context. During the two decades after the crisis, Japanese growth averaged only 0.9%, less than a fifth the growth rate that the country had achieved in the preceding two decades.

Figure 4: Japan's lost decades: How bad is the growth record?

	Real GDP		Working age population		Real GDP/working age population	
	Japan	US	Japan	US	Japan	US
1955-1970	8.9%	3.6%	1.9%	1.4%	6.9%	2.2%
1970-1990	4.6%	3.2%	0.9%	1.3%	3.7%	1.9%
1990-2010	0.9%	2.5%	-0.3%	1.1%	1.2%	1.4%
2010-2020	na	na	-0.6%	1.0%	na	na

Source: Haver Analytics. Population projections are from UN World Population Prospects

Adjusted for growth of the potential workforce, Japan's growth record is not much worse than that of the US

However, this was due in large part to a 1.2 percentage point decline in growth of the working age population, which rose 0.9% per year in the 1970s and 1980s but fell 0.3% per year in the subsequent two decades. The growth rate of GDP per working age person fell as well, from 3.7% per year to 1.2% per year. But to some extent at least, this reflects a deceleration that was probably inevitable as Japan's productivity 'catch-up' with the global technological frontier became more complete. (As Figure 4 suggests, the deceleration in the growth rate of GDP per working age person was an ongoing process, predating the 1980s.) Strikingly, by this metric, the US outperformed Japan by only 0.2% per year; the United State's better growth record during the past 20 years turns out to be predominantly a matter of more favorable demographics, rather than more efficient deployment of its potential labor force.

The US does not face a demographic shock comparable with Japan's

Looking ahead, the US will retain its demographic advantage over Japan for the foreseeable future. The US population is aging, and the dependency ratio is rising, but not as fast as Japan's. The working age population is already growing more slowly than in previous decades, but until the 2020s, the slowdown is marginal. After 2020, projections suggest that growth of the working age population will decline more significantly, but even then, the workforce will continue to rise (Figure 2).

To underscore the point: if in 2010-20 the US is able to match the 1.2% annual growth in real GDP per potential worker that Japan achieved in 1990-2010, then US real GDP would grow by roughly 2.2% per year; a modest deceleration from the 2.5% growth during 1990-2010. Viewed in this light, a replication of the Japanese experience may not be as bad as is conventionally assumed.

Boom, bust and recovery – A road map

A closer look at the crisis and subsequent malaise

Japan's post-collapse malaise lasted at least a decade and encompassed several distinct phases. The US is now nearly five years into its post-bubble period, if we date the beginning of that period from the time when housing prices began their slide and housing investment began to collapse. This is no place for a detailed account of those episodes; instead, we focus on a few of the similarities and differences between the US and the Japanese booms and busts that seem germane to the question of whether the US is likely to follow Japan's example of an extended period of post-crisis stagnation. We begin with a few facts that we consider important.

*Recovery from financial crisis –
A rebalancing act*

We organize our more analytical comments with the following model of recovery from the financial cycle in mind. First, during a financial boom, spending patterns, business models and balance sheets generally become distorted or weakened. Once the boom comes to an end, corporate, household and governmental spending patterns need to adjust to post-bubble economic and financial realities. These readjustments pose potential problems for the economy if, for example, it proves difficult to compensate for the demand lost by household (or corporate or public sector) spending retrenchment. Recovery from a major financial event is, in part, a matter of 'rebalancing' the economy. We compare the rebalancing that Japan had to undergo with the one that seems to be demanded of the US. It seems to us that the US rebalancing is in most respects less daunting than the one that Japan had to engineer in the past two decades and is, in some important respects, well advanced.

*Repairing balance sheets and
business models*

Second and at a more micro level, the weaknesses in business models and balance sheets that develop during a financial boom may prove costly for an economy for years after the boom ends, quite beyond these broadly 'Keynesian' considerations. For example, if a financial collapse leaves banks with extremely weak balance sheets, they may perform poorly. In Japan, for example, it has been suggested that banks' unwillingness (abetted by political pressure) to pull the plug on inefficient and insolvent firms hampered the entry of more efficient firms to the market place, thus reducing productivity growth. Here, there are some potentially important points of contrast and comparison between Japan and the US.

*Monetary and fiscal policy
responses*

Finally, an economy's ability to recover from a financial collapse may depend on the monetary and fiscal policy response. By the same token, monetary and fiscal policy responses to a large crisis may have longer-term economic consequences of their own. Here, it seems to us, is where the largest uncertainties and risks lie. We offer some tentative comparisons between Japanese and US policies below.

Two booms, two busts

The Japanese and US financial booms and busts shared many characteristics of a typical, large financial cycle, but there were also significant qualitative differences between the events, and there is probably no definitive answer to the question of 'which was bigger', since it depends on what aspect of the experience one chooses to emphasize.

*The late 1980s run-up
in equity prices...*

The run-up in Japanese equities during the late 1980s was certainly breathtaking; the market capitalization of the Tokyo Stock exchange rose from about 30% of GDP in the first half of the 1980s to more than 140% of GDP at the end-1989 peak (Figure 5).

*...and property prices
was breathtaking*

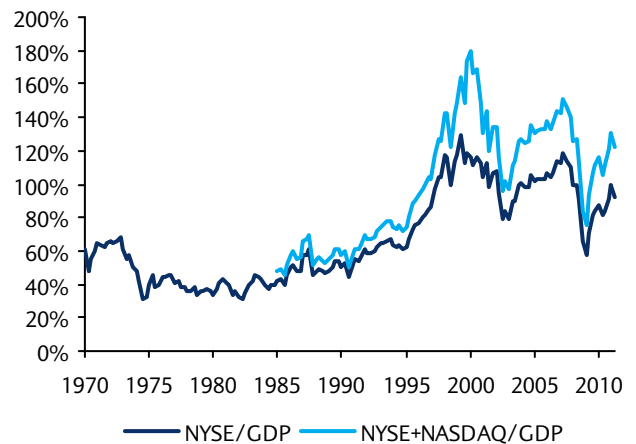
This massive equity market shock was largely unwound within a couple of years; by the mid-1990s, the market capitalization of the TSE had fallen to about 60% of GDP. At the same time, there was an almost equally massive run-up in property prices (Figure 7), which was closely associated with the equity and credit bubbles. In contrast to the equity market, Japanese land prices have continued their (inflation- and, later, deflation-adjusted) slide for 20 years after the peak of the bubble; they now stand at roughly 25% of their peak, well below pre-bubble levels.

Figure 5: Japan equity market boom and bust



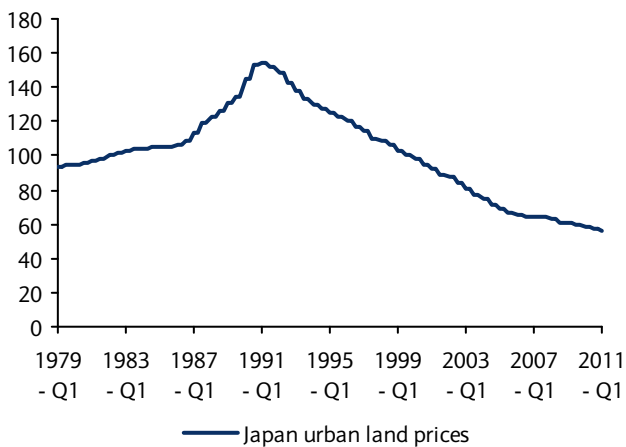
Source: Haver Analytics, Barclays Capital

Figure 6: US equity market



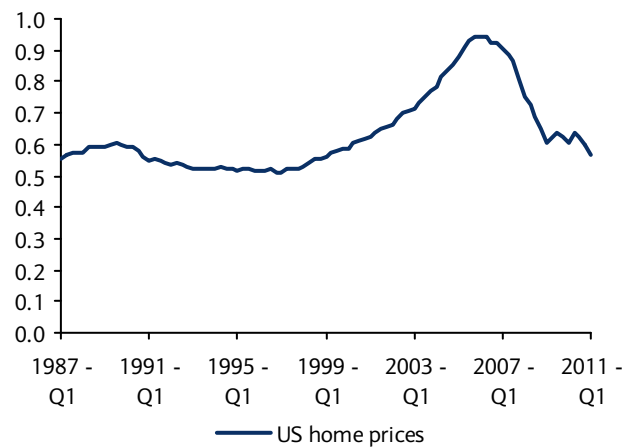
Source: Haver Analytics, Barclays Capital

Figure 7: Japanese land prices (CPI adjusted)



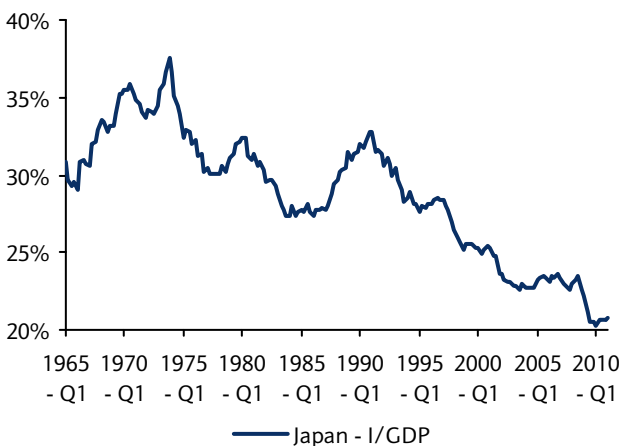
Source: Haver Analytics, Barclays Capital

Figure 8: US home prices (CPI adjusted)



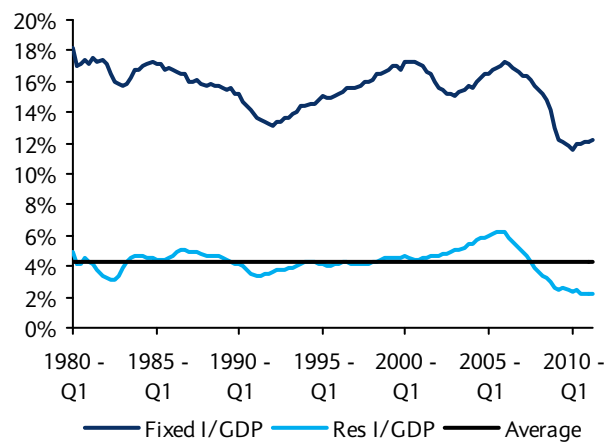
Source: Haver Analytics, Barclays Capital

Figure 9: Japan: Late-1980s investment boom superimposed on trend decline



Source: Haver Analytics, Barclays Capital

Figure 10: US investment boom limited to residential investment



Source: Haver Analytics

The boom in US asset prices was broadly similar, with the significant difference that the equity bubble and housing boom were separated by roughly half a decade in the US, while they were simultaneous in Japan

In Japan, the bubble affected firms and led to an investment spending boom

In the US, the financial boom led to a boom in housing investment and a continuation of the unsustainably high consumption that had developed during the long bull market of the 1990s

US asset prices have followed a broadly similar outline so far in the boom and bust, with the considerable difference that the US equity boom of the late 1990s and the residential property boom were separated by half a decade, with the former beginning to unwind in late 2000 and the latter in late 2006. The US economy thus had considerable time to adjust to the equity market downdraft before it was forced to confront the residential housing crisis. On that score, a case might be made that the Japanese bubble was a bigger event, relative to the size of the Japanese economy, than the US residential housing bubble that triggered the 2008 financial crisis. On the other hand, unlike the Japanese bubble of the late 1980s, the 2002-06 credit boom was a global event, which amplified its effects and continues to complicate efforts to emerge from the associated crisis. Given this and other qualitative differences in the episodes, it probably doesn't pay to put too fine a point on comparisons of size; for our purposes, it is enough to note that they were both very large financial events, roughly comparable in intensity and, in particular, large enough to destabilize domestic banking systems in both countries.

The most important qualitative difference is that the Japanese bubble was largely a business event, while the US housing bubble predominantly affected households. Arguably the best way to see this is to compare fixed investment spending in the Japanese and US booms (Figures 9 and 10). In Japan, fixed investment boomed in the late 1980s, which was superimposed on a long-term downward trend, bringing investment from nearly 35% of GDP at the peak of the boom to about 20% of GDP at present. That downward trend pre-dates the 'bubble economy' years, and much of the large decline in investment spending during the past 20 years is more plausibly related to the country's demographic challenges and productivity trends than to the bust that followed the financial bubble, but the investment spending downdraft in the first half of the 1990s was amplified by the unwinding of the spending excesses created by the preceding boom; this probably accounted for something like 5 percentage points of the 15 percentage point decline in investment between 1990 and 2010.

In the United States, on the other hand, the spending boom associated with the credit bubble and housing boom was largely confined to residential investment, which surged from a normal level of about 4.25% of GDP to a peak of just over 6.25% in late 2005. This boom in spending gave way to bust, and residential construction spending now accounts for roughly 2.5% of GDP. We will have more to say on this below. Nonresidential investment was little changed by the boom, and a brief collapse during the peak of the economic and financial crisis has been reversed only in part.

The consumption side of the US credit boom is more nuanced than some popular accounts of the crisis may suggest. To the extent that there was a consumption boom in the United States, it pre-dates the housing bubble (Figure 11) and is more plausibly associated with the secular bull market in financial assets that began in the 1990s. The more recent credit and housing boom, as well as the loose financial conditions with which it was associated, seems not to have triggered a consumption boom so much as postpone the adjustment in consumption that would otherwise have been associated with the post-2000 equity market sell-off. (In addition to the housing-finance boom, loose financial conditions in 2002-06 also promoted a strong recovery of equity markets, which likely played a large role in supporting household consumption. We follow convention and focus on the housing and credit booms here, because they were more closely associated with the financial crisis and have had a more lasting effect on the economy than the 2002-06 equity market rally.) This supports a view that the equity market and housing cycles were one long financial event that played out in stages, with the credit and housing bubbles of 2002-06 linked to the earlier event by the monetary policies put in place to insulate the economy from the equity market downdraft that began in late 2000.

However you look at it, low household savings ultimately proved unsustainable, and the US economy has been forced to adjust to an increase in household savings that is (so far) modest by historical standards and compared with the much larger investment decline in Japan, but that, combined with the roughly 4% of GDP plunge in residential investment, has dealt the US economy a blow from which it is still struggling to recover.

Post-crisis recovery – A rebalancing act

*Economic recovery:
A rebalancing act*

Overcoming the economic fallout from a financial crisis can be viewed, in part, as an exercise in rebalancing. In Japan, the challenge was to adjust to a massive decline in investment, associated with an unwinding of the investment boom of the late 1980s, combined with a secular decline in investment associated, we suspect, with fundamentals unrelated to the crisis, including, in particular, the country's challenging demographic transition. In the United States, the challenge is to adjust to large declines in private consumption, as saving ratios normalize, and in residential investment from the unsustainably high levels created by the credit and house price boom of 2002-06.

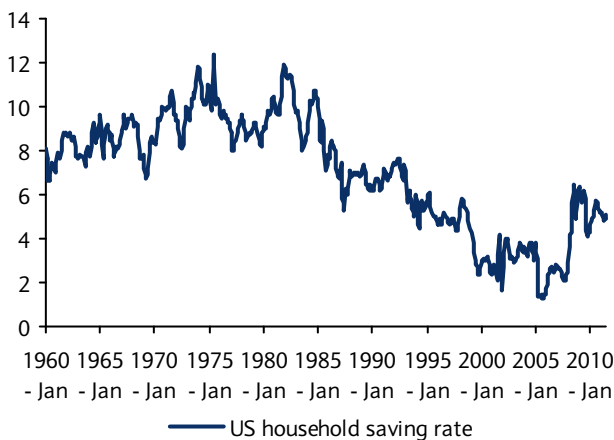
The rebalancing required of the US looks less daunting than the one that confronted Japan

Viewed in this light, we are struck by how manageable the adjustment required of the US seems to be, at least compared with the one that Japan has had to manage in the past two decades, and how advanced is the private sector side of the 'rebalancing'. Household savings have risen to more than 5% of disposable income from a mid-2000 trough of only 2%. This is not particularly high by historical standards, and in the absence of a further shock to household wealth, our economists believe that the adjustment of the savings rate is largely complete. Private consumption is unlikely to be a driver of economic activity in the months and years to come, as it was during the long household spending boom of the late 1980s through 2006. But households are positioned once again to play their normal reinforcing role, with increasing household income translating once again into higher consumption demand. In this, the Japanese and the US experiences are quite different. In Japan, it was primarily a large decline in household saving that 'rebalanced' the decline in private investment demand.

Residential investment has overshot and should support a pick-up in demand as it recovers

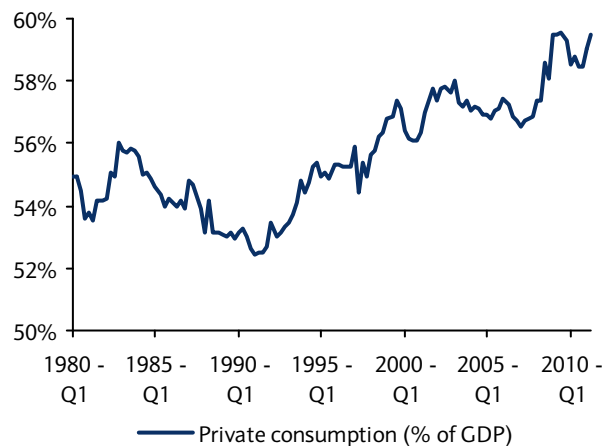
A second spending imbalance that was propagated by the US credit boom is residential investment, which, as noted above, surged a full 2 percentage points of GDP above its normal level during the bubble (Figure 10, above). This is a minor event compared with the booms in countries such as Ireland or Spain, but it was the largest US residential

Figure 11: US household saving



Source: Haver Analytics. Note: 3m moving average of monthly data.

Figure 12: Japanese private consumption ... to the rescue?



Source: Haver Analytics, Barclays Capital

Recovery to more normal levels of housing investment could add 2% of GDP to domestic demand, but may be some time in coming

construction boom since the early 1950s. As this has been unwound, the economy has had to confront more than a 'rebalancing', because the period of over-building created excess capacity in many markets that required a period of below-trend housing investment.

If that were the end of the story, there would be grounds for optimism that a recovery of housing investment would soon provide meaningful support for economic activity and employment. By the end of the second quarter of 2011, the cumulative under-investment associated with the residential construction recession already matched the cumulative over-investment associated with the 2002-06 housing bubble. This suggests to us that housing investment is depressed not because there is a nationwide glut of unneeded houses, but because of market disruptions associated with legacies of the mortgage boom and bust. This disruption is unlikely to be reversed soon, but by the time it is, the cumulative under-investment in housing is likely to support a potentially strong rebound in housing investment, perhaps even exceeding for some time the 2% of GDP gap between current levels of residential construction and plausible estimates of the equilibrium level.

Business investment – US imbalance much smaller than in the Japanese boom

In the United States, unlike in the Japanese precedent, the credit boom was not associated with a large boom in business spending. But business investment plunged during the 2008 financial meltdown and has since staged only a partial recovery that leaves it relatively low by historical standards. The weak and partial recovery of business investment is a problem for the moment but, like the exaggerated plunge in residential investment, distinguishes the US outlook from the Japanese precedent in a positive way.

Whether it was understood or not at the time, in 1990, Japan faced a two-decade slump in business investment associated with over-investment during the boom, as well as secular factors – in particular, the unfavorable swing in population dynamics. In the US, there is no investment overhang to correct, and US demographics do not point toward the grinding erosion of investment spending experienced by Japan, and if cyclical and policy uncertainties begin to look less daunting to business leaders, there appears to be room for further recovery of investment spending in the US.

The situations are qualitatively different, of course. The Japanese 'rebalancing' took place over decades, and the decline in household saving and rise in consumption that compensated for the lost investment demand were feasible because Japanese households entered the period in a strong position because of their initially high saving rate. In the US, on the other hand, investment is likely to be a contributor to demand in the years to come, while households' capacity to increase their own demand is limited.

US 'rebalancing' seems far from insurmountable over the medium term

In short, the economic adjustments required of the US 'rebalancing' seem far from insurmountable and, in particular, are small compared with those that faced Japan over the past 20 years. While there is room for doubt about the cyclical strength of the US economy in the coming 12-24 months, the required adjustments do not point toward a longstanding period of economic weakness, unless they are compounded by policy mistakes or further economic shocks.

An important qualification is that the growth of net exports that was part of the Japanese 'rebalancing' may be more difficult for the US to engineer, because a large set of advanced economies are trying to recover from similar crises, and policymakers in many surplus economies are motivated to maintain their external surpluses for precautionary and other reasons. However, after the substantial improvement in the US external accounts associated with the 2008-09 recession, no large additional improvement in the external accounts is required for the US 'rebalancing'.

Rebuilding balance sheets and business models

Financial booms typically weaken the balance sheets of companies and/or households and may destabilize banks that are exposed to weakened borrowers. This was certainly true of Japan in the early 1990s and the US in 2008.

Management of the banking crisis...

Japanese authorities have been criticized for their management of the banking crisis created by the bursting of the real estate and equity market bubbles. The complaint is that the authorities initially underestimated the magnitude of the banking problems created by the bad loans of insolvent, over-indebted firms and, even after the gravity of the problem became clear, encouraged a 'muddling through' approach organized around regulatory forbearance and postponing recognition of credit losses and the required bank recapitalization. In particular, policies encouraged bank lending to 'zombie' corporations that were, in reality, bankrupt, but staggered on, undead, fortified by injections of bank credit at below-market rates of interest. This was a waste of national resources and probably magnified the bad loan problem once it was recognized, as it eventually had to be. Worse, the existence of these undead companies is believed to have discouraged the entry of new companies that, while potentially more efficient and creative, could not compete with officially underwritten competitors, however inefficient.¹ (See Caballero, Hoshi and Kashyap, 'Zombie Lending and Depressed Restructuring in Japan', *American Economic Review*, December 2008.)

... advantage US

The US seems to have avoided most of these errors. Authorities may have absorbed lessons from the Japanese experience, and in any event, the intensity of the global banking crisis that broke out in 2008 left little room for a muddling-through approach. Many institutions were rescued by the extraordinary interventions of financial authorities, but were forced to recognize losses and raise capital. The banking system may, over time, need to raise capital to meet new and more stringent regulatory standards, but the system is not now operating with an acute capital shortage that distorts incentives, as the Japanese system was doing in much of the 1990s.

No 'zombie firms' in the US...

Interventions by the US to support nonfinancial corporations, notably in the auto industry, were spasmodic rather than systemic, reasonably transparent, and have largely been unwound. A cynic could argue that it was easier for Washington to refrain from such support than for Tokyo, because US corporations generally entered the crisis with strong balance sheets and could survive without direct official help. Whatever the reason, the US business sector is operating without the kinds of officially created impediments and distortions such as 'zombie firms' that inhabited Japan in the 1990s.

...but 'zombie mortgages' are disrupting housing markets

The closest analogue to Japan's 'zombie firms' is the overhang of broken mortgage contracts that have been rendered unviable by the collapse of home prices but have yet to be restructured. This is mainly the result of delays associated with time-consuming legal processes, not regulatory forbearance. These processes will eventually run their course, but in the meantime, the 'zombie mortgages' have weakened an important monetary transmission mechanism and are costly for the economy (more on this below).

Household balance sheets...

It has become a commonplace to assert that the US, like Japan in the 1990s, is confronting a 'balance sheet recession' and that such recessions are more intractable than normal cyclical

¹ The incentive for Japanese banks to keep 'zombie' firms alive may have been exaggerated by their role as shareholders in the bubble years and, thus, owners of a call option on the value of the enterprise. As such, a 'muddling through' approach was very much in their interest, because the longer the firms could be kept alive, the higher the value of the call option. Of course, every banking system in distress has incentives to 'gamble for resurrection', which is why an official counterweight is required. In Japan, the complaint is that the authorities were reluctant to impose restructuring on banks and bankrupt firms and even encouraged banks to lend to insolvent companies in an attempt to preserve employment.

events. We agree with this, but when thinking about the outlook, we think it is important to be explicit about what, precisely, is the balance sheet problem that needs to be addressed. In Japan in the 1990s, it was mainly overleveraged nonfinancial firms, as well as a banking system whose balance sheets had been undermined by exposure to these firms, and by direct exposure to plunging land and equity markets. In the US today, corporate balance sheets are in solid shape, but household balance sheets are weak.

...what is the problem?

The question is what sort of balance sheet repair is required before the economy can return to normal. If household debt needs to be brought down to pre-boom levels, then Figure 13 suggests that we are in for a long wait. We have a different perspective on the question. US household debt is actually not out of line with international experience. For example, Japanese households maintained substantially higher debt (measured as a share of disposable income) throughout the post-collapse period, and this did not prevent them from reducing their saving rate significantly, thereby helping 'rebalance' the cyclical and secular decline in investment. Of course, they were able to do this because their historically high savings had left them with lots of net worth. But this example highlights the pitfalls of focusing excessively on debt alone.

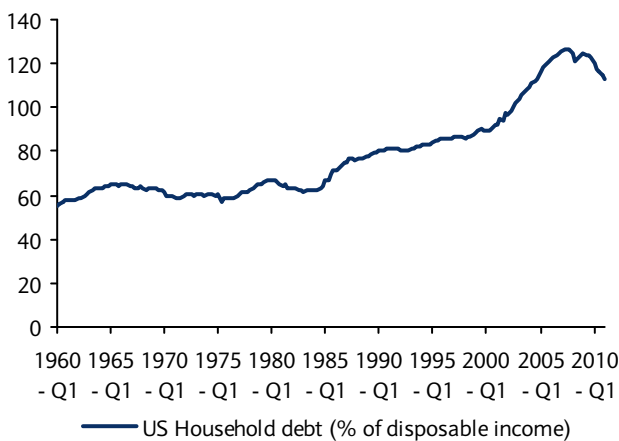
US debt burdens are not out of line with international experience, nor with the value of the assets that they help finance

In the US today, household net worth is about five times disposable income, far below the levels reached during the equity and housing market booms that peaked in 2000 and 2006 (Figure 15). But setting those extraordinary periods aside, household net worth is at the high end of the historically normal range. So if household debt is not particularly high by international standards and not particularly high compared with household assets, what might the 'balance sheet' problem be?

The bigger problem is the devaluation of the housing collateral that backs so much household mortgage debt

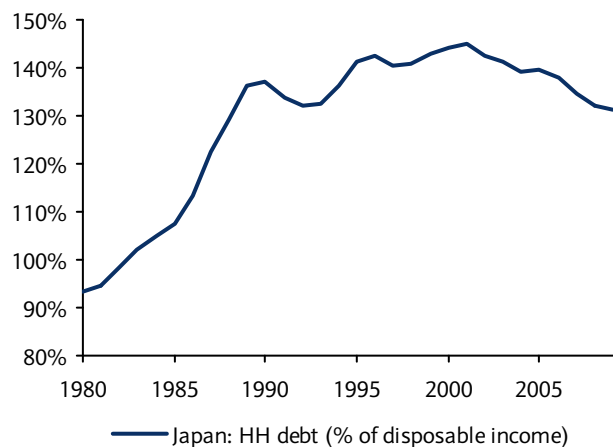
Our view is that the most important problem is not the sheer size of household liabilities; especially in light of the very low interest rates that now prevail, this is not obviously unsustainable. The bigger problem is that the housing collateral that stands behind so much household debt has been devalued by the large drop in housing prices; many of these mortgage debt contracts have thus been rendered unviable, but have yet to be restructured. By creating a large pipeline of foreclosures and distressed sales, this has disrupted secondary housing markets. This disruption has, in turn, impeded the recovery of residential construction that would otherwise likely be under way. The impaired mortgages have been difficult to refinance because so many homeowners lack the equity required to qualify for a

Figure 13: US households are bringing down debt levels...



Source: Haver Analytics, Barclays Capital

Figure 14: ... like Japanese households did after 2000



Source: Haver Analytics, Barclays Capital. Note: Household debt is based on OECD data and includes loans and accounts receivable.

new mortgage, so a powerful channel through which lower interest rates are normally transmitted to households has been blocked. Disrupted housing markets also seem likely to have reduced labor mobility, impeding the geographical reallocations of labor that may be called for as the economy adjusts to the new economic context.

This perspective on the US household balance sheet problem is not necessarily reassuring. The resolution of 'zombie mortgages' is likely to be gradual and time consuming, just as a reduction in household debt levels would be. This does suggest, however, that investors look to the resolution of problem mortgages, rather than some target level of overall household debt, as the barometer of the household balance sheet problem.

Money, inflation and budgets

The monetary and fiscal policy response to the Japanese financial crisis has received a lot of attention, and we conclude our comparison of the Japanese and US experiences with thoughts on these areas,

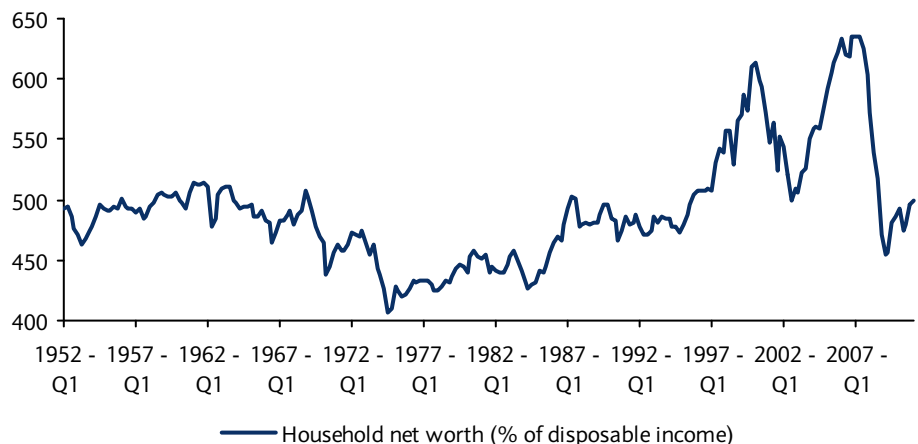
A much more forceful and inflationary response from the US Fed; the risk of deflation appears small

Federal Reserve Chairman Bernanke was a student of the Japanese monetary response to the weak economy of the 1990s and an outspoken critic of authorities' unwillingness to act proactively and aggressively enough to prevent the long recession from creating deflation that has subsequently proven difficult to reverse. Unsurprisingly, the Fed has acted forcefully to avoid deflation and use conventional and unconventional tools at its disposal to promote recovery. It has so far been successful at staving off deflation – so successful, in fact, that underlying inflationary pressures have actually risen significantly in 2011, despite ongoing weakness in labor markets, and medium-term inflationary expectations (reflected, for example, in inflation breakevens) have remained at the high end of the normal range.

The Fed's more inflationary monetary policy has raised inflation expectations and lowered real interest rates

The Fed's ability to generate inflation and convince markets that it will continue to deliver inflation for the foreseeable future have permitted a drastic reduction in real interest rates (Figure 17) to levels much lower than in Japan, where market expectations that inflation will remain negligible for the foreseeable future have kept long-term real interest rates well above the rates that prevail in the US.

Figure 15: US household net worth is at a historically normal level



Source: Haver Analytics

Ultra-loose monetary policy creates risks of its own

This ability to fend off Japan-style deflation has to be viewed as an improvement in prospects for US recovery. But the jury is still out on the effectiveness of the US monetary response and will be for some time to come. It is not clear how effective the reduction of real interest rates will be with the monetary policy transmission mechanism weakened as it has been. There is a small risk that weak labor markets will once again decrease the underlying inflationary pressures and return the threat of deflation. It is also possible that the Fed's inflationary monetary policy will deliver too much of a good thing; deflation is bad, but inflation has been known to cause economic problems as well. Moreover, extended periods of very low real interest rates have proved financially destabilizing in the past. In fact, one reading of the 2002-06 boom that led up to the 2008 crisis is that it was abetted by loose financial conditions that were created by the Fed to counteract the recessionary consequences of the equity market collapse. Time will tell if the Fed's radically different approach to monetary policy will prove more expansionary than the Japanese experience without creating costly side effects.

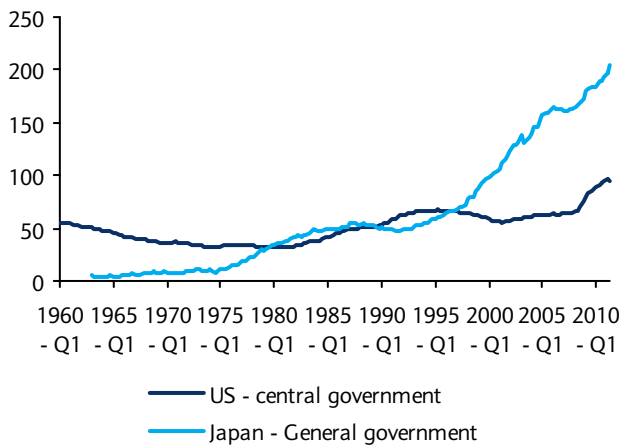
In fiscal policy, the US and Japan are more similar than alike, and the long-term fiscal consolidation is not far advanced in either country

In fiscal policy, Japan and the US look much more similar than distinct. In both countries, the economic downturn created by the financial crisis was countered with large fiscal expansions. In both countries, the expansions focused on public spending, and in both countries, results have disappointed at least some advocates and observers, with disputes about policy effectiveness remaining alive. In both countries, it is widely recognized that the attempts to stimulate the economy through expansionary fiscal policies have (combined with longer-term stresses associated with aging populations) generated unsustainable debt dynamics and that fiscal consolidation will, at some point, become a necessity. In neither country have market stresses yet forced authorities into such a consolidation, nor is there a clear political consensus on a path toward consolidation.

Limited lessons for the US, therefore, from the Japanese experience

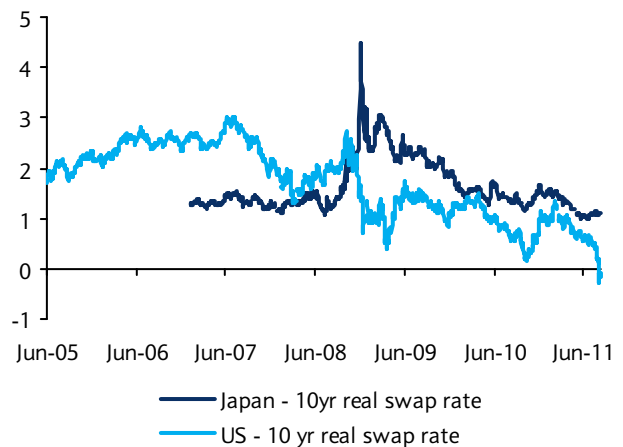
Looking forward, questions about the timing and content of a program to restore fiscal sustainability, as well as the economic implications of the eventual consolidation, loom large for both Japan and the United States. They deserve further discussion; in fact, few policy questions seem more worthy of discussion. However, the Japanese experience of the past 20 years offers little guidance for how such consolidation may play out, since the consolidation has not yet been put in place there, any more than in the US.²

Figure 16: Public debt – The new policy challenge



Source: Haver Analytics

Figure 17: Real interest rates



Source: Barclays Capital

² In 1997, Japan raised the consumption tax as a first step toward fiscal consolidation. The hike was pre-announced, and consumers brought spending forward to avoid the tax, resulting in a spending drought once the tax was implemented. Faced with economic weakness, the authorities reversed the tax hike. This episode offers little guidance for how a sustained and credible fiscal consolidation might play out in either country, but it does highlight the risk of a front-loaded fiscal contraction that fails to credibly address longer-term budgetary realities.

Conclusion

Will the US replicate Japan's experience? We think not

We find little in the Japanese experience to support the idea that the US is destined to experience an extended period of economic stagnation. The sharp, secular decline in Japan's growth rate had much to do with a demographic shock that the US does not face. In fact, if in the next ten years the US manages to match the growth in real GDP per potential worker that Japan achieved in 1990-2010, US GDP growth would be about 2.2% annually, no stellar performance, but not far from the 2.5% growth that the US achieved in 1990-2010.

The economic 'rebalancing' required for US recovery appears manageable and is relatively far along

The economic imbalances that developed during the boom and now need to be 'rebalanced' appear manageable and certainly smaller than the rebalancing that needed to be engineered by Japan over the past 20 years. Moreover, the US private sector 'rebalancing' is far advanced; residential investment has even overshoot the long-term adjustment that was required; an eventual normalization of housing construction should lend substantial support for employment and activity in the US.

The US avoided the policy mistakes that are often attributed to Japanese authorities...

The US has so far avoided the policy mistakes that are generally felt to have delayed and weakened recovery in Japan. In particular:

- Losses have been recognized and the banking system recapitalized more proactively than in Japan, and artificial support for unviable nonfinancial firms has been avoided. Support programs that were established during the crisis have mostly been wound down.
- Monetary policy has responded much more actively and aggressively, and it now appears that the threat of a Japan-style deflation is low.

...although it may be making others

This does not mean that a 'lost decade' (or more) is not possible in the US, just that if it happens, it would likely be for reasons other than those that caused the Japanese slowdown. More generally, the fact that the US has avoided the errors that Japanese authorities are felt to have made does not mean that it is not making different sorts of errors. In particular, it seems certain that the Bernanke Fed's monetary policy will be discussed in the textbooks for a long time to come; it remains to be seen whether it will be depicted as a daring policy that saved the US economy from deflation or an example of monetary overkill that set the economy up for inflation or another form of financial instability.

If it is not secular stagnation, why is the US recovery so weak?

That said, there is no escaping the conclusion that the US recovery has so far been much weaker than a typical post-war recovery. We accept the conventional view that the weak recovery has much to do with balance sheet pathologies that need to be corrected before the economy can stage a complete recovery from the recession. However, we place less emphasis on the overall level of household debt and the associated implication that it is household spending that will normalize once balance sheets are repaired. Instead, we focus on the fact that so much housing collateral has been destroyed in the collapse of housing prices and that many of the mortgage contracts that have thereby been rendered unviable have yet to be restructured. In this view, balance-sheet repair is mainly associated with restructuring or cancelling the unviable mortgage contracts, and it is mainly residential construction, rather than household consumption, that will be supported by the repair.

Either diagnosis is at least somewhat depressing, in that either form of balance sheet correction is likely to take another 2-3 years to complete. Until it is, the recovery is likely to be lacklustre and at perceived risk from policy or other economic disturbances. High perceived risks of an economic downturn may slow the recovery of business investment, and an extended period of economic weakness amplifies the risk of policy mistakes. Although we think it unlikely that the US will face a multi-decade slump, it may be hard to tell the difference for a while to come.

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