



## HIGHLIGHTS

- **The US recession and recovery cycle is closely following the average experience of countries that experienced a synchronized financial crisis in the past**
- **Although the sample size among like-experiences is small, the recent behaviour of the economy argues against a double-dip and/or deflation. It also suggests that US GDP could revisit its pre-recession peak level in Q1 2011**
- **Even so, history would only be consistent with US GDP growth at an average pace of 1.5% to 2% over the next 3-4 quarters – which we believe is the most likely scenario to play out**

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## U.S. RECOVERY IS TRACKING TRADITIONAL EXPERIENCE AFTER FINANCIAL CRISIS INDUCED RECESSIONS

Flipping through media headlines, it's hard to miss the fact that market skepticism has deepened in recent weeks over the sustainability of the US recovery. More and more, the notions of a "double-dip recession" and even "depression" are being tossed about by bearish market pundits. So it seems that now is a good time to review history and look at how this US recovery cycle compares to past cycles that were marked by a synchronized financial crisis.

An IMF report<sup>1</sup> produced in 2009 looked at the duration and magnitude of recession and recovery cycles among industrialized countries. In addition to traditional business cycles, the analysis also looked at those accompanied by a financial crisis and by a synchronized financial crisis (SFC). While the sample size is small, it is particularly notable that, up until now, the current US recession and recovery experience has been completely in sync with the mean experience of those in the past following a SFC, throwing some cold water on the view that "it's different this time" and that a renewed downturn is imminent or inevitable.

However, the reference back to historical experience has given us reason to pause and reflect on our near-term growth forecasts for the US. Indeed, history does suggest that economic growth in the next several quarters is likely to be modest. When we release our detailed quarterly forecast in mid-September, it will incorporate downward revisions, with the US economy expected to plod along at a 2% or slightly slower pace for several more quarters.

### How is the US cycle stacking up?

The historical comparison of the cycle is made across 4 parameters:

1. duration of recession
2. peak-to-trough decline in GDP
3. increase in real GDP within the first year of recovery
4. length of time for real GDP to return to pre-recession peak levels

The table on the next page summarizes the results. The IMF study found that when a recession is associated with a financial crisis that is also highly synchronized with other countries, the average recession is deeper and longer. A recession that is not induced by a financial crisis typically extends just over 3 quarters, while the synchronized financial crisis downturn generally lasts 7 quarters.<sup>2</sup> Likewise, the severity of the recession is greater with a 2.6% peak-to-trough contraction in the former case compared to a 4.8% contraction in the SFC episodes. The recent US recession cycle has mimicked the SFC historical pattern quite closely, with a peak-to-trough decline of 4.1%. While the NBER has yet to officially rule on the duration of the 2008-2009 recession, the peak-to-trough change in real GDP from 2008 to 2009 was exactly 6 quarters. Of course, this is a simplified approach because the NBER looks at a large cross section of data and not just aggregate GDP, such as industrial production, real manufacturing and trade sales, real personal

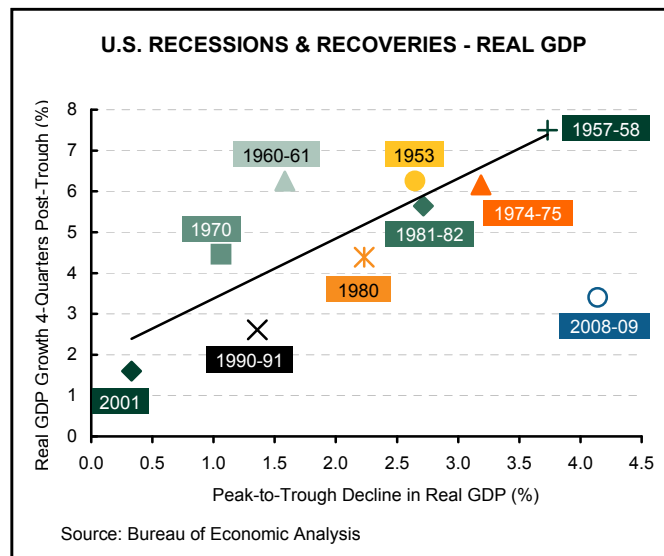
income less transfers and nonfarm payrolls. The latter two components continued to deteriorate two quarters beyond the trough in GDP. As a result, it's safe to say that the total duration of the recession is between 6 and 8 quarters. So, relative to the mean recession experience after a synchronized financial crisis, the US is batting 2-for-2.

Of course, the debate centers on the recovery. Once again the US is mimicking the historical experience, and in spectacular fashion. The IMF report noted that within the first year of recovery, real GDP expands by an average of 2.8% for countries caught in a synchronized financial crisis – which is about 1.5 percentage points slower than a non-SFC episode. The US economy has expanded by exactly 2.8% in the first year of the recovery.

Looking at the adjacent graph of US recession-recovery cycles, the subdued growth rate in the recovery may seem at odds when compared to other domestic business cycles. Clearly this US recovery is running at about half the pace of the 1957-58 cycle that experience a similarly-sized contraction. However, the picture is incomplete, as none of the US recessions (except the recent one) in the graph capture a cycle that was a synchronized financial crisis.

Recoveries that follow a financial crisis are identified as being slower than average, taking nearly 6 quarters for the level of real GDP to return to the prior peak. But, when a synchronized cycle occurs, the recovery is further lagged and, on average, takes nearly 7 quarters, because the recovery must not only combat dual headwinds from weakened demand and hobbled credit markets, but exports also play a more limited role in driving the expansion.

In terms of the time it will take for the US economy to revisit the pre-recession GDP peak, this remains a central question. At best, the US is in the 5th quarter of the recovery cycle, and GDP is 1.3% below the peak level. However, to match the mean historical experience it would only require



the US economy to plod along at 2% annualized growth over the next 3 quarters or 1.5% over the next 4 quarters to hit the historical marker. Obviously, there is no guarantee that the US will continue to match the historical experience, but the policy response to date does give us hope. US policy-makers do seem to have learned from the past. As a diligent student of the Depression, Fed Chairman Bernanke immediately took the right steps to remove bad assets from balance sheets, inject liquidity and drive down interest rates – all of which have proven historically effective in recovering from financial crisis induced recessions. But, their full effect takes time.

We recognize that at a 2% or lower annualized quarterly pace, the US has little wiggle room and any unexpected drawdown of inventories or a sharp deterioration in the trade balance could easily produce a quarterly contraction in the near term. The real issue, however, isn't whether there is a small statistical dip, but whether there is a material and sustained decline. The data indicate that the US is definitely not following the more extreme experience that played out in Finland in the early 1990s. Rather, the US is walking in the middle of the road of the 6 country sample provided by the IMF, so why would we now apply the outlier experience of a double-dip or depression as the most likely outcome in the coming quarters?

Admittedly, the risk of a double-dip recession is not small; we place the odds at 1-in-3. If this outcome was to occur, it would be the product of psychology, specifically fear. Households and businesses would need to experience a crisis of confidence that induces them to cut back materially on spending and investment. This is a well documented phenomenon, which would run the risk of inducing deflation.

BUSINESS CYCLES IN INDUSTRIALIZED COUNTRIES				
	Non-Financial Crisis	Financial Crisis	Synchronized Financial Crisis	U.S.
Recession Duration (quarters)	3.4	5.7	7.3	7.0
Peak-to-Trough (%)	-2.6	-3.4	-4.8	-4.1
Recovery Duration (quarters)	3.0	5.6	6.8	5*
Growth in First Year of Recovery (%)	4.3	2.2	2.8	2.8

\*At best, U.S. has completed the 5th quarter of expansion, though it is possibly less depending on eventual NBER recession dating  
Source: IMF, TD Economics



However, so long as fear does not take over, a renewed downturn should not materialize and deflation would be avoided. Interestingly, none of the IMF countries in the historical sample appear to have experienced a deflation cycle, though the measurement and methodology for inflation differs between countries. This might seem odd to readers, as the Japan experience leaps to mind. However, Japan's lost decade and deflation was not the product of a synchronized financial crisis, but rather a domestic financial crisis. So, the risk of deflation cannot be ruled out, but it is not the most likely outcome.

The bottom line is that the increasing media and public chatter about double-dip runs the risk of becoming a self-fulfilling prophecy if it becomes too intense, making sentiment indicators an important clue to the recovery pattern that will ultimately materialize. So long as fear does not dominate, the most likely scenario is for the US economy to continue to follow history, with very modest

growth accompanied by very low inflation for an extended period of time. It is a sad testament of the times that such a conservative assessment might be viewed by some as being unduly optimistic.

The simple reality is that major imbalances had developed before the downturn and some of the policy responses have created their own set of complications. These imbalances must be unwound. Unfortunately, it takes time. The best analogy is that the US economy is like a patient that has undergone a major operation and is now healing. Policy-makers, households, businesses and investors are feeling the traditional urge of the patient to get out of bed and get their life back to normal as soon as possible. It simply isn't possible, as an extended period of convalescing is required. Indeed, rushing could actually make things worse. This will naturally lead to frustration and worries about whether progress is truly being made. It will provide fuel to the bears who will augur for dire times to come. However, history is not on their side.

## Endnotes

- 1 World Economic Outlook (WEO), Crisis and Recovery, IMF, April 2009
- 2 The IMF notes that since 1960, there were only 6 recessions out of a 122 sample that fit this criteria: Finland (1990), France (1992), Germany (1980), Greece (1992), Italy (1992) and Sweden (1990). Admittedly, there is much variance within this small sample, and some of the experiences have been characterized as depressions – i.e. Finland. However, the US experience appears more aligned with those economies that are larger and more diversified in the sample – Germany, Italy and France. And, within the sample for those where we could cross reference the data, the recessions were not double-dips, i.e. once the recovery was underway, it continued uninterrupted.

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