

## **James McAndrews: Credit growth and economic activity after the Great Recession**

Remarks by Mr James McAndrews, Executive Vice President and Director of Research of the Federal Reserve Bank of New York, at the Economic Press Briefing on Student Loans, Federal Reserve Bank of New York, New York City, 16 February 2015.

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*Accompanying tables and figures can be found at the end of the speech.*

Good morning and let me welcome you to our press briefing focusing on developments in the student loan market. My remarks will concentrate on the role of credit markets more generally during this economic expansion. As a reminder, these remarks reflect my own views, and not those of the Federal Reserve Bank of New York or of the Federal Reserve System.

First, let me say a few words on the current economic outlook. Real GDP grew 2.4 percent over the course of 2014. As New York Fed President Dudley noted earlier this month, despite what appears to be a soft first quarter, we expect that real GDP growth will continue over the next couple of years at a similar rate, supported by solid underlying fundamentals and accommodative financial conditions. Unemployment should continue to decline and approach 5 percent by late this year. Because of the recent sharp fall in oil prices and the appreciation of the dollar, inflation will be very low over the coming months. However, as these temporary factors dissipate, economic slack declines further and inflation expectations remain stable, inflation should slowly move up toward the Federal Open Market Committee's longer-run objective of 2 percent.

Using data from the National Income and Product Accounts, this expansion so far has exhibited unusual features compared to previous long expansions. Most notably, the pace of growth during the early years of this expansion was well below that of the early years in previous long cycles (Table 1). Among the factors for the slower growth were unusually low contributions from residential investment and from nondurables and services consumption. In contrast, the contribution from durables consumption, particularly for motor vehicles, was similar to that observed in previous expansions. Even though real GDP growth has picked up some in the past two years, these patterns are still evident (Table 2).

The slow growth during the current expansion, what we might call the long shallow recovery, is likely a result of a confluence of many factors including constrained monetary and fiscal policies, demographic factors and economic and financial developments abroad.

Today, I'd like to consider developments in credit markets in the context of this shallow recovery. Credit availability is a crucial ingredient in any advanced economy's recipe for economic growth because credit can support investment in productive enterprises and can smooth household spending from fluctuations in income. Credit is the means through which financial assets accumulated by savers can earn returns by being put to productive uses.

Based on data from the Financial Accounts of the United States (Flow of Funds), real credit (that is, credit after taking into account the effects of inflation) to both corporations and households in prior recoveries generally started to grow fairly quickly after the end of the recession. By contrast, in the most recent recovery the real credit outstanding of businesses (corporations and non-corporations) declined for about two years after the end of the recession. And only recently – more than five years after the end of the recession – has it attained pre-recession levels (Figure 1). More dramatically, real credit to households continued to decline for about four years and, while it has finally begun to expand, is still well below its pre-recession levels (Figure 2).

These different patterns of credit growth partly reflect the weak state of the banking sector following the financial crisis. The U.S. banking sector experienced record losses in the Great

Recession that impaired a significant portion of banks' capital and triggered many failures. These losses would have been even higher had it not been for the liquidity and solvency support from the official sector – including the U.S. Treasury, the FDIC and the Federal Reserve. Sorting banks by the losses incurred during a recession relative to equity capital at the beginning of the recession, it is clear that the U.S. banking industry across this spectrum was much more adversely affected in the latest recession than in the two prior recessions (Figure 3). The legacy of those losses has likely limited the banking sector's ability to extend new loans during this expansion, as banks acted in a highly precautionary way to accrue capital that had been depleted as well as to add to their previous capital levels.

The need for banks to repair their balance sheets following the financial crisis contributed to the far slower growth of outstanding bank loans during this expansion when compared to previous long expansions. Real outstanding loans to businesses, which are dominated by bank loans, declined more in this recovery than in previous recoveries (Figure 4). On the household side, real outstanding residential mortgages, which are largely originated by banks, have declined through most of this expansion while they grew steadily in previous expansions (Figure 5). Consumer credit has risen at a modest rate in this recovery – comparable to that of the last cycle (Figure 6). This category includes auto loans, credit cards and other consumer debts that are mainly originated by banks. But it also includes student loans where the federal government is the dominant lender. Student loans have risen robustly during this expansion, and have driven much of the rise of overall consumer credit. We will have much more to say about them later in today's briefing.

The U.S. financial system relies more heavily on capital markets than other advanced economies. Bonds and other negotiable debt instruments are an important source of funding to credit-worthy corporations. Indeed, the growth rate of real nonfinancial corporate bonds outstanding during this expansion has been roughly similar to that of previous expansions (Figure 7). A similar pattern is evident in the commercial paper market (Figure 8). Notwithstanding the robust performance of debt markets during this expansion, the sharper decline in outstanding bank loans to businesses that I mentioned earlier was likely a contributing factor to the slower economic recovery we have observed this time around.

These developments appear to have had adverse consequences on the cost and availability of credit for bank-dependent borrowers. Also, in the early years of this recovery, bank-dependent firms appear to have deleveraged more and invested less than firms with access to capital markets. So, the impairment of banks' ability to extend credit still has the potential to hinder investment and adversely affect the overall economy.

We see similar correlations when it comes to lending to households. The expansion in auto lending that commenced in 2010 coincided with a recovery in auto sales, which have now essentially regained the ground they lost during the recession. Until recent quarters, overall consumption growth has been slow, consistent with a pattern of slow growth in credit card balances. The most obvious case is mortgages where – after a massive tightening from 2007 to early 2010 – underwriting standards remain very tight. This tightness, especially for non-prime borrowers, has likely been a factor behind a persistently sluggish housing market that has held back this recovery relative to earlier ones.

Overall, these patterns of credit growth support the idea that the weakness of banks at the end of the Great Recession has been a contributing factor to the slow recovery of the U.S. economy since the recession. These patterns are consistent with evidence provided in the work of Carmen Reinhardt and Kenneth Rogoff, and in that of Christina and David Romer,

indicating that the severity of recessions and strength of the subsequent recovery are associated with the amount of financial distress experienced in a financial crisis.<sup>1</sup>

There is also a strong likelihood that decreased credit demand – for example, from households whose homes fell in value below what they still owed on the mortgage – also has played a part in the slow growth of credit in this expansion, as has been expressed in the work of Atif Mian and Amir Sufi.<sup>2</sup> Nevertheless, the patterns that I have reviewed here point to an adverse impact from a relatively weak banking sector on credit supply. However, it also suggests that the recent improvement in banks' financial condition should provide support to credit growth going forward, which in turn would provide support to the economic growth we project over the medium term.

As I noted earlier, one area where credit has flowed freely is student lending. Of course, an important factor distinguishing student loans from other forms of household debt is the fact that banks are far less important players and the federal government is instead the dominant lender. But this is just one factor that makes student loans unique, and I will now ask my colleagues to provide some more details on this important and fascinating market.

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<sup>1</sup> Christina D. Romer and David H. Romer, "New Evidence on the Impact of Financial Crises in Advanced Countries," NBER Working Paper No. 21021, March 2015; and Carmen M. Reinhart and Kenneth S. Rogoff, *This Time Is Different: Eight Centuries of Financial Folly*, Princeton, NJ: Princeton University Press, 2009.

<sup>2</sup> Atif Mian and Amir Sufi, *House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again*, University of Chicago Press, 2014; and a number of scholarly articles.

**Table 1:** Pattern of Real GDP Growth in Long Expansions  
First 16 Quarters of Expansion

	1960s	1980s	1990s	2000s	Current
Average Real GDP Growth Rate (%)	5.7	5.2	3.3	3.1	2.1
Average Contributions to (%) Change in Real GDP					
PCE	2.9	3.2	2.0	2.2	1.3
Durable Goods	0.7	1.0	0.4	0.6	0.5
Nondurable Goods	0.8	0.6	0.4	0.5	0.2
Services	1.4	1.6	1.2	1.2	0.6
Residential Investment	0.3	0.7	0.2	0.4	0.1
Fixed Nonresidential Investment	0.9	0.7	0.6	0.2	0.4
Government Expenditures	0.8	1.0	0.0	0.4	-0.2
Motor Vehicle Output	---	0.4	0.2	0.1	0.3

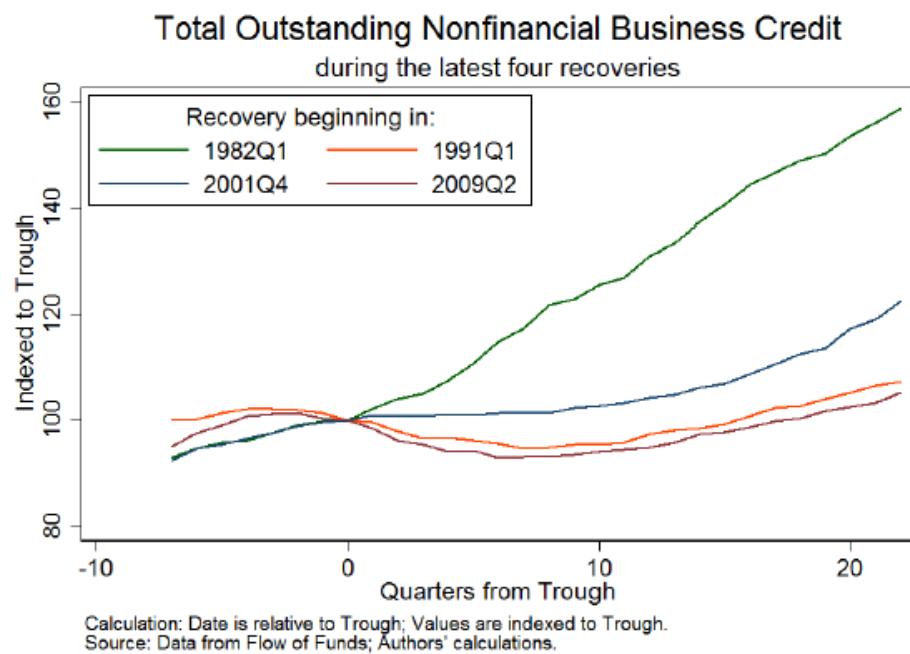
Sources: Bureau of Economic Analysis; FRBNY staff calculations

**Table 2:** Pattern of Real GDP Growth in Long Expansions  
Entirety of Expansion

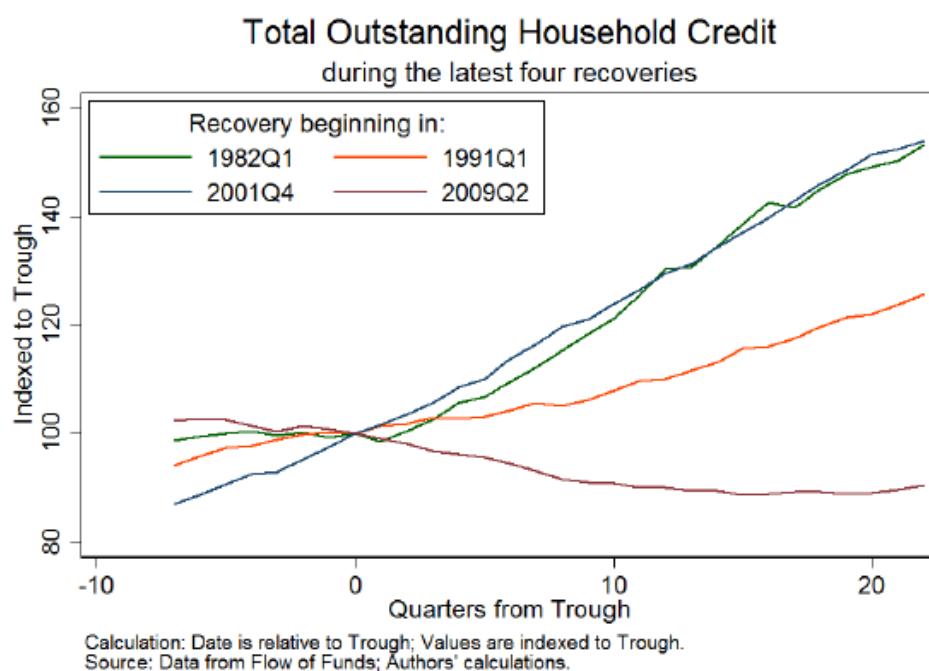
	1960s	1980s	1990s	2000s	Current
Average Real GDP Growth Rate (%)	4.9	4.3	3.6	2.8	2.3
Average Contributions to (%) Change in Real GDP					
PCE	2.8	2.6	2.5	2.0	1.5
Durable Goods	0.6	0.6	0.6	0.5	0.5
Nondurable Goods	0.8	0.5	0.4	0.4	0.3
Services	1.4	1.5	1.4	1.1	0.7
Residential Investment	0.1	0.3	0.2	-0.1	0.1
Fixed Nonresidential Investment	0.8	0.5	0.9	0.4	0.5
Government Expenditures	1.0	0.8	0.2	0.4	-0.2
Motor Vehicle Output	---	0.2	0.2	0.1	0.3

Sources: Bureau of Economic Analysis; FRBNY staff calculations

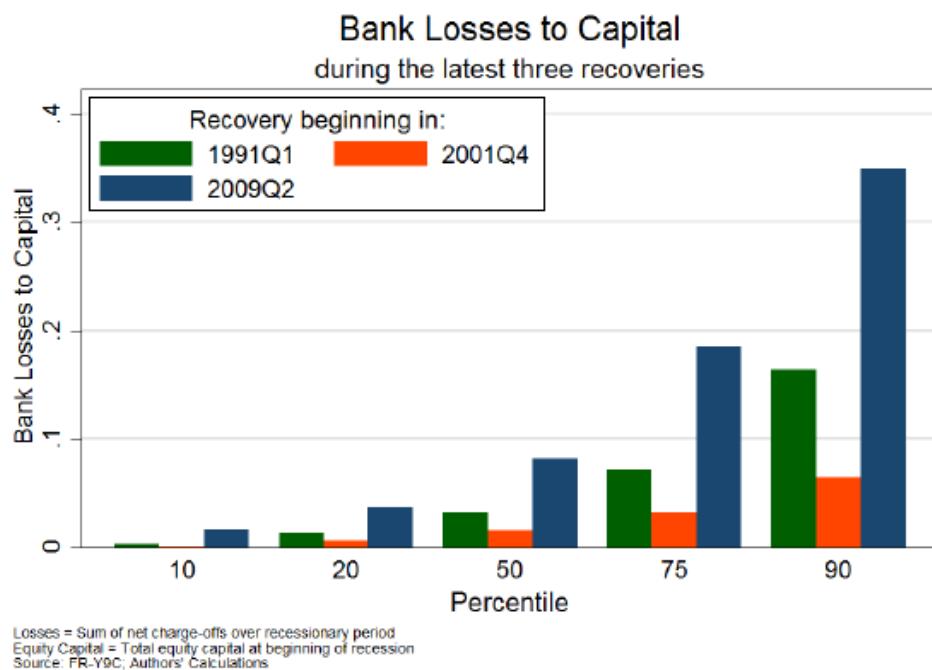
**Figure 1**



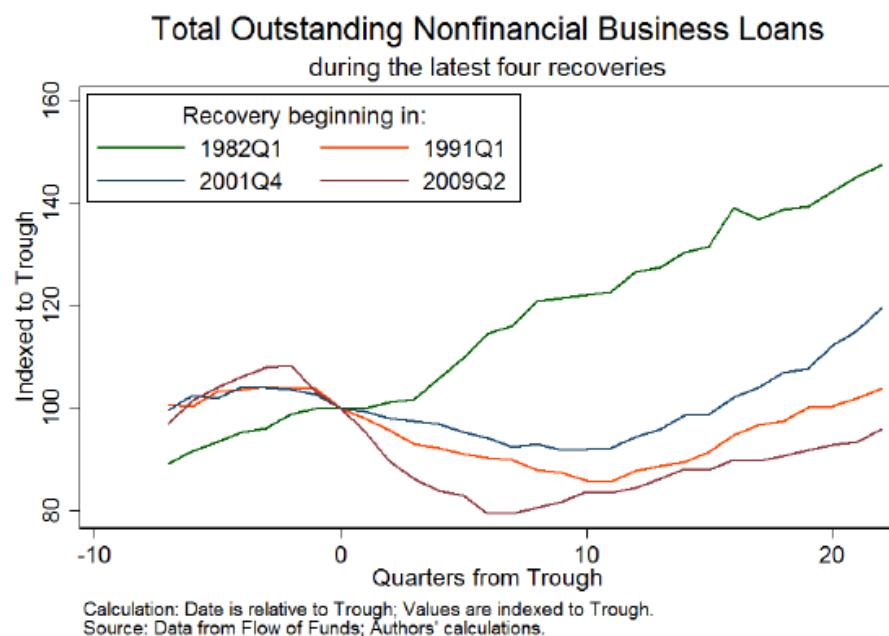
**Figure 2**



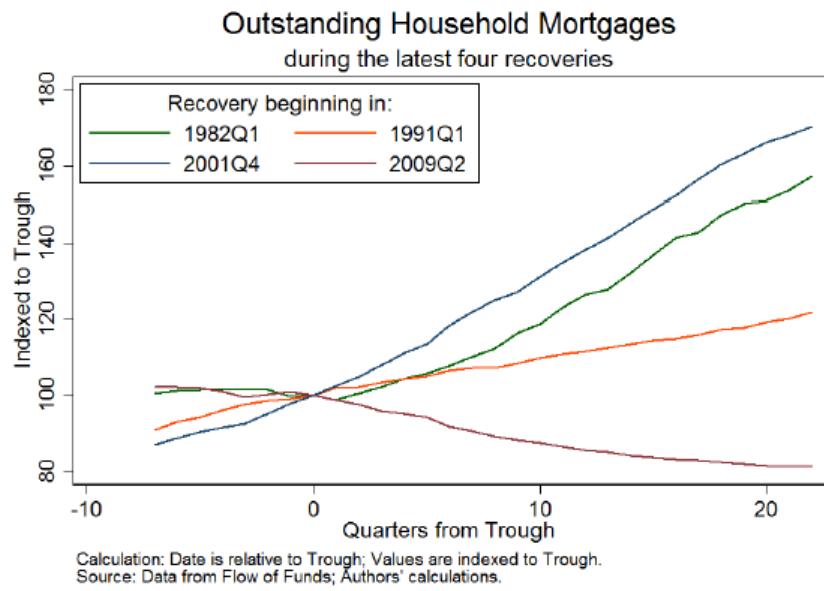
**Figure 3**



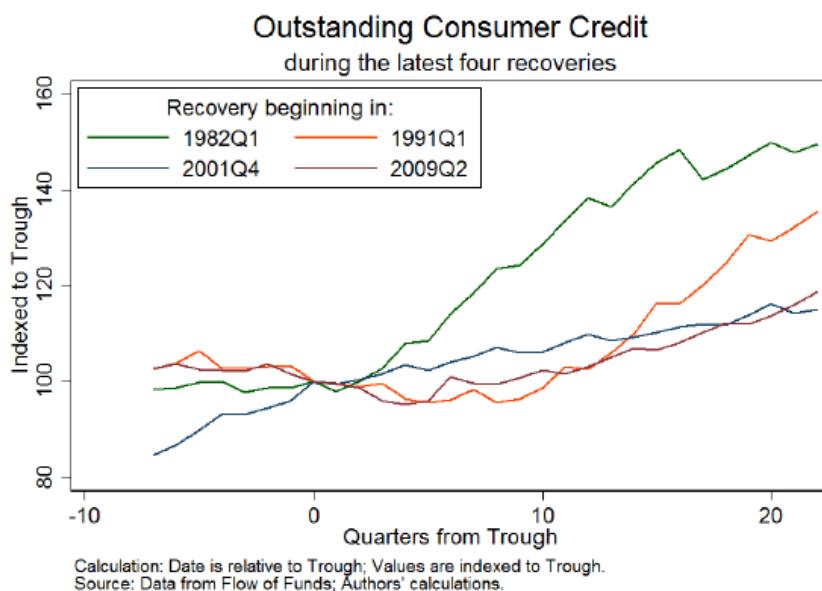
**Figure 4**



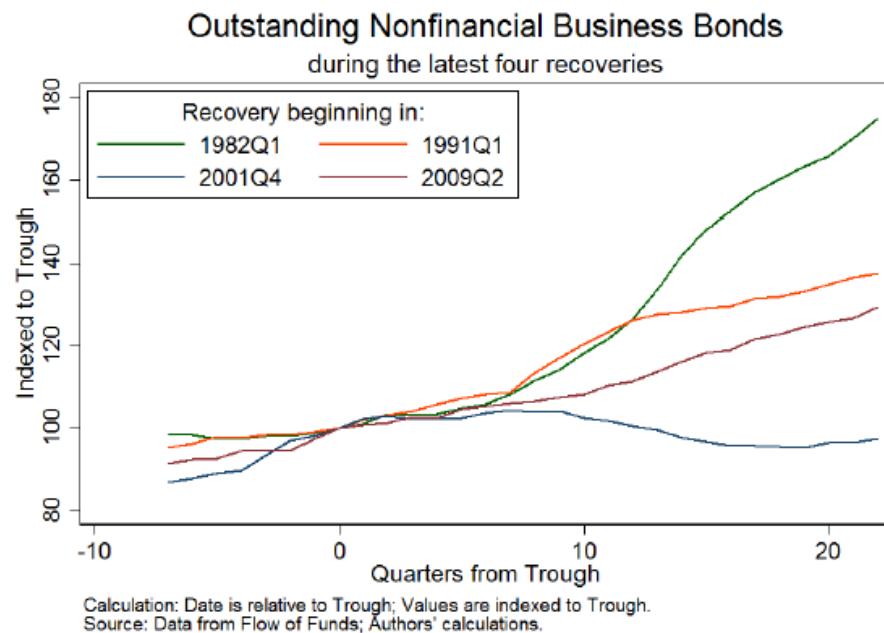
**Figure 5**



**Figure 6**



**Figure 7**



**Figure 8**

