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Before the Senate Budget Committee

"Assessing the Federal Policy Response to the Economic Crisis"

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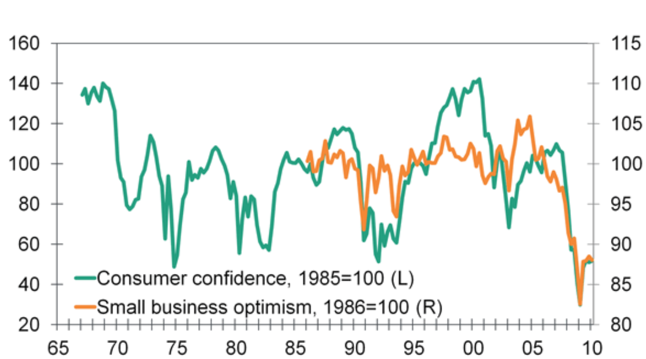
The U.S. economy has made enormous progress since the dark days of the Great Recession. Less than two years ago, the global financial system was on the brink of collapse and the U.S. was suffering its worst economic downturn since the 1930s. At its worst, real GDP was in free fall, declining at nearly a 7% annual rate, and job losses were near 750,000 per month. Today, the financial system is operating much more normally, real GDP has advanced by 3% during the past year, and job growth has resumed, albeit at an insufficient pace.

This dramatic turnaround was largely the result of an aggressive and unprecedented response by monetary and fiscal policymakers. The Federal Reserve Board effectively cut interest rates to zero and took a number of steps to help credit flow through the financial system. The Treasury Department required the nation's largest bank holding companies to conduct public stress tests. The FDIC increased deposit insurance limits and guaranteed bank debt. Congress and the Bush administration passed the Troubled Asset Relief Program, creating a fund that was ultimately used to support the banking system, the auto industry and the housing market. Under both the Bush and Obama administrations, Congress passed fiscal stimulus efforts ranging from expanded unemployment benefits to state and local government aid to tax cuts for businesses and households. While the effectiveness of any individual aspect can be debated, there is no question that the overall policy response has been very successful.

Despite the enormous economic progress, however, the recovery remains fragile. Retailing, housing, business investment and industrial activity have all been throttled back since the spring. Real GDP in the current quarter is growing at less than a 2% annualized rate, well below the economy's growth potential.[i] The job market's progress has also stalled. Discounting temporary federal hiring for the U.S. census, only about 75,000 jobs are being added on average per month. About double that pace of growth is necessary to stabilize the unemployment rate, given even modest assumptions about labor force growth. After rising to 9.6% in August, the unemployment rate is likely to drift further towards double digits in coming months. Consumer, business and investor confidence also remain extraordinarily fragile. According to nearly all surveys of sentiment, the panic that prevailed during the Great Recession has abated, but attitudes remain much darker than anything experienced even at the bottom of previous downturns (see Chart 1).

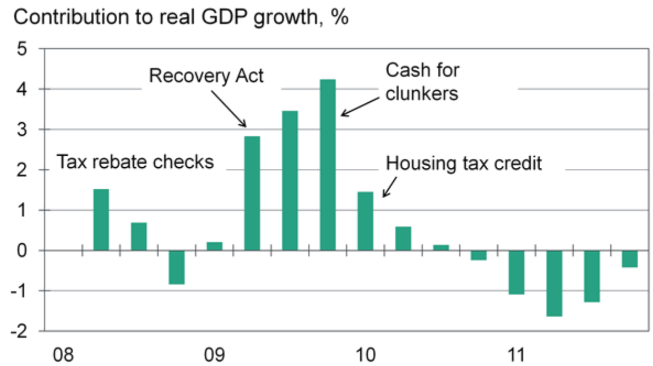
Chart 1: A Dark Mood



Sources: Conference Board, NFIB, Moody's Analytics

It is not surprising that the economy's growth has slowed in recent months, but the degree to which it has slowed was not anticipated. Not unexpectedly, the benefit of the fiscal stimulus has begun to fade. The stimulus provided its maximum boost to growth during the second half of 2009 and early 2010 (see Chart 2). Indeed, it is no coincidence the recession ended last summer, when the stimulus was providing its maximum economic benefit via the temporary tax cuts and increases in government spending. There was very little stimulus spending in the first quarter of 2009, when the Recovery Act was passed, but by the second quarter, nearly $100 billion was being provided to the economy. This change jump-started the recovery. Stimulus spending has now begun to decline, and the economic benefit is fading fast. Without further policy help, this will become a meaningful drag on the economy in 2011.

Chart 2: Economic Boost From Fiscal Stimulus Fades

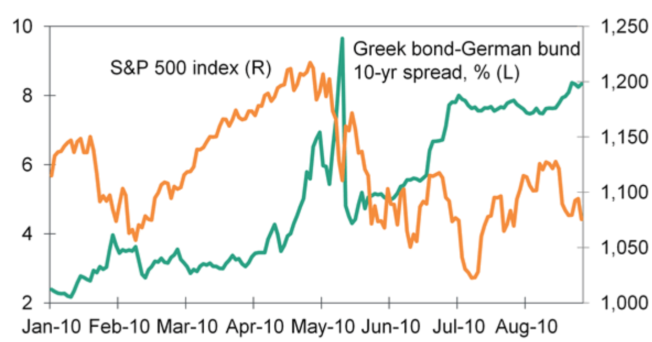


Source: Moody's Analytics

The boost to growth from the inventory swing in manufacturing is also winding down, as expected. Manufacturers had reduced production below demand during the recession, drawing down inventories rapidly. Over the past year of recovery, they have lifted production back to demand levels, and even a bit higher, to modestly rebuild their depleted stocks. This process is now about over, and the growth in industrial production is set to moderate.

Unexpected was the European sovereign debt crisis that erupted in the spring. The U.S. recovery seemed on track to evolve into a self-sustaining expansion, with businesses investing and hiring more aggressively. Some 400,000 private sector jobs were created in March and April. But the anxiety created by Europe's problems undermined stock prices and confidence (see Chart 3). The Standard & Poor's 500 stock index fell nearly 15% during May and June. Businesses seem to have put hiring plans on hold since then, while wealthier households, highly attuned to the value of their stock portfolios, have turned more cautious in their spending.

Chart 3: European Debt Crisis Hammers Confidence



Sources: Bloomberg, S&P, Moody's Analytics

As a result, the recovery is struggling, and the odds of a double-dip recession during the coming year have risen to an uncomfortably high one in three. The reason the odds are not still higher is that large and midsize businesses are very profitable—economy-wide corporate profits are back to where they were prior to the recession—and have solid balance sheets and are thus unlikely to cut investment and payrolls. But the situation is fragile; nothing else must go wrong. Another round of financial turmoil in Europe, for example, or a modest policy error here at home could unhinge the collective psyche.

This testimony will argue that the policy response to the economic crisis successfully headed off an even worse calamity. It expands on several aspects of the quantitative analysis of the policy response in Blinder-Zandi and considers some criticisms of that study.[ii] Further evidence of the policy response's effectiveness is found by examining the timing of various policy steps and the subsequent performance of the financial system and economy. This analysis has important implications for current monetary and fiscal policy, namely that policymakers should remain aggressive in supporting the economy until it is experiencing consistent growth at a pace near its long-term potential level. This means that, at the very least, policymakers should *not* end their support too quickly, and should provide additional help if the recovery falters further in coming months. Of course, given the nation's increasingly daunting fiscal outlook, any additional aid should be provided judiciously and not significantly add to long-term budget deficits.

Assessing the policy response

The policy response to the economic crisis by the Federal Reserve, the Bush and Obama administrations and Congress was the most aggressive and multi-faceted ever recorded, and was ultimately very successful.[iii]

During the worst of the crisis, policymakers committed an estimated $12 trillion in government funds (see Table 1). This money funded a plethora of efforts ranging from the Fed's credit facilities to the Troubled Asset Relief Program (TARP) to the various fiscal stimulus measures. Even now, some $3.4 trillion is still available if needed.

Broadly speaking, the government set out to accomplish two goals: stabilize the reeling financial system and to mitigate the burgeoning recession, ultimately restarting economic growth. The first task was made necessary by the financial crisis, which struck in the summer of 2007 and spiraled into a panic in the fall of 2008. After the failure of Fannie Mae and Freddie Mac and the Lehman Brothers bankruptcy in early September, liquidity evaporated, credit spreads ballooned, stock prices fell sharply, and a string of major financial institutions failed. The second task was made necessary by the devastating effects of the financial crisis on the real economy, which began to contract at an alarming rate in the wake of the Lehman failure.

To gauge how well the policies achieved their goals, the Moody's Analytics model of the U.S. economy was simulated under several different policy assumptions. Details of these simulations and the results are provided in Blinder-Zandi. The bottom line is that policy efforts stabilized the financial system and averted an economic depression. The response was not able to forestall the Great Recession, which ended more than a year ago, but without extraordinary government action the economy would still be contracting, not hitting bottom until 2011.[iv] Real GDP would have fallen a stunning 12% peak to trough, compared with an actual decline of 4%, and 16.6 million jobs would have been lost, about twice as many as were in actuality. The unemployment rate would have surged to 16.5%, resulting in outright deflation in prices and wages. This dark scenario surely constitutes a 1930's-like depression.

The policy response was very expensive, but the cost of not responding would have been significantly greater. Total direct costs, including the TARP, the fiscal stimulus and other efforts such as addressing mortgage-related losses at Fannie Mae and Freddie Mac, are expected to reach almost $1.6 trillion (see Table 1). Adding approximately $750 billion in lost revenue and increased government spending from the weaker economy, the total budgetary cost of the crisis is projected to approach $2.4 trillion, about 16% of GDP.[v] But consider the alternative: if policymakers had not responded to the crisis and the economy had descended into a depression, the budgetary costs would have been at least *twice* as large according to the simulation results. Policymakers had no choice but to respond aggressively.

Table 1: Federal Government Response to the Financial Crisis

$ bil

	Originally Committed	Currently Provided	Ultimate Cost
Total	**11,990**	**3,430**	**1,577**
Federal Reserve			
Term auction credit	900	0	0
Other loans	Unlimited	53	3
Primary credit	Unlimited	0	0
Secondary credit	Unlimited	0	0
Seasonal credit	Unlimited	0	0
Primary Dealer Credit Facility (expired 2/1/2010)	Unlimited	0	0
Asset-Backed Commercial Paper Money Market Mutual Fund	Unlimited	0	0
AIG	26	20	2
AIG (for SPVs)	9	0	0
AIG (for ALICO, AIA)	26	0	1
Rescue of Bear Stearns (Maiden Lane)**	27	29	4
AIG-RMBS purchase program (Maiden Lane II)**	23	16	1
AIG-CDO purchase program (Maiden Lane III)**	30	23	4
Term Securities Lending Facility (expired 2/1/2010)	200	0	0
Commercial Paper Funding Facility** (expired 2/1/2010)	1,800	0	0
TALF	1,000	33	0
Money Market Investor Funding Facility (expired 10/30/2009)	540	0	0
Currency swap lines (expired 2/1/2010)	Unlimited	0	0
Purchase of GSE debt and MBS (3/31/2010)	1,425	1,259	0
Guarantee of Citigroup assets (terminated 12/23/2009)	286	0	0
Guarantee of Bank of America assets (terminated)	108	0	0
Purchase of long-term Treasuries	300	317	0
Treasury			
TARP *(see detail in Table 9)*	600	254	89
Fed supplementary financing account	560	200	0
Fannie Mae and Freddie Mac	Unlimited	145	278
FDIC			
Guarantee of U.S. banks' debt*	1,400	293	4
Guarantee of Citigroup debt	10		0
Guarantee of Bank of America debt	3		0
Transaction deposit accounts	500	0	0
Public-Private Investment Fund Guarantee	1,000	0	0
Bank Resolutions	Unlimited	23	71
Federal Housing Administration			
Refinancing of mortgages, Hope for Homeowners	100	0	0
Expanded mortgage lending	Unlimited	150	26
Congress			
Economic Stimulus Act of 2008	170	170	170
American Recovery and Reinvestment Act of 2009***	808	391	784
Cash for Clunkers	3	3	3
Additional Emergency UI benefits	90	39	90
Education Jobs and Medicaid Assistance Act	26	0	26
Other stimulus	21	12	21

Notes:

*Includes foreign-denominated debt

**Net portfolio holdings

*** Excludes AMT patch

Sources: Federal Reserve Board, Treasury, FDIC, Fannie Mae, Freddie Mac, Recovery.gov, Moody's Analytics

Several criticisms have been offered of the Blinder-Zandi analysis. The most significant revolve around the structure of the Moody's Analytics model, with critics arguing it cannot accurately capture the economic impact of the policies being considered.[vi] It is important to point out that the Moody's model has been used for forecasting, scenario analysis and quantifying the impact of policies on the economy for nearly 20 years. A large number of nonfinancial corporations, financial institutions, regulators, and government bodies use the model regularly for these purposes. The Congressional Budget Office and the Council of Economic Advisers also derive their impact estimates for policies such as the fiscal stimulus using similar models and approaches. The Moody's model is in the mainstream of econometric models currently being used to address practical business and policy problems.[vii]

The Moody's model is also continually evolving to adapt to a shifting economic and policy environment. For example, the model was enhanced for the purposes of the Blinder-Zandi study to adequately capture the impact of a vast array of financial policies, most of which were unprecedented and unconventional. The basic approach was to treat these policies as ways to reduce credit spreads, particularly the three spreads that play key roles in the model: The spread between three-month Libor and three-month Treasury bill (the TED spread); the spread between fixed mortgage rates and 10-year Treasury bonds; and the spread between below-investment grade corporate bonds and Treasury bonds. All three of these spreads rose alarmingly during the crisis, but fell sharply again once the financial medicine was applied. The key question is how much of the decline in spreads to attribute to the policies.

The TED spread equation is illustrative of how Blinder-Zandi addressed this question. The spread is modeled using two-stage least squares techniques as a function of the delinquency rate on commercial bank loans and leases, the market value of equity lost in failing financial institutions during the financial crisis, the S&P 500 VIX index, and the amount of capital raised by the banking system via the Capital Purchase Program in TARP and the bank stress tests (see Table 2). The rationales are straightforward: As the delinquency rate increases, banks demand higher interest to lend to other banks. The equity lost in failing institutions captures the growing panic that investors felt as the crisis intensified. The VIX is included to capture the impact of broad financial market volatility on credit spreads, and initial UI claims are used as an instrument for the VIX to account for any issue with endogeneity. The capital raised by banks either from the federal government or in the equity market captures the benefit of the financial policy response in restoring stability to short-term funding markets. Based on this equation, the capital required by the policy response reduced the TED spread by some 200 basis points.[viii]

Table 2: TED Spread Model: Difference Between 3-month LIBOR and 3-month Treasury Bill

Method: Two-Stage Least Squares
Included observations: 51

Instrument specification: delinquency rate, commercial bank loans and leases, market value of equity lost in failing financial institutions, cumulative capital raised due to policy actions, initial claims of unemployment insurance, TED spread lagged 1 month

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Delinquency rate, commercial bank loans and leases	0.231	0.070	3.284	0.002
Market value of equity lost in failing financial institutions	0.000	0.000	-3.879	0.000
Cumulative capital raised due to policy actions	-0.004	0.001	-5.744	0.000
VIX index	0.038	0.014	2.726	0.009
Ted Spread(-1)	0.152	0.182	0.837	0.407
R-squared	0.86			
Adjusted R-squared	0.85			
S.E. of regression	0.33			
Durbin-Watson stat	1.77			
Instrument rank	5			
Mean dependent var	1.01			
S.D. dependent var	0.84			
Sum squared resid	4.90			
J-statistic	0.00			

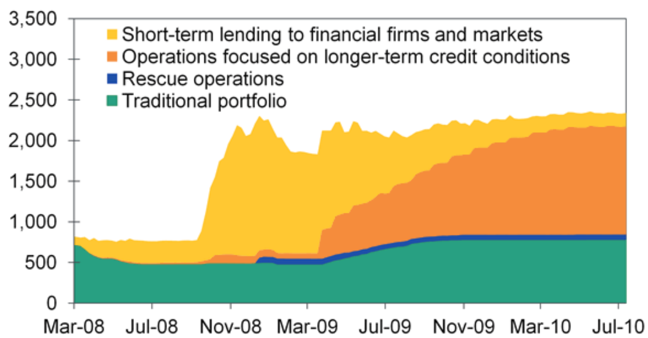
Another recent model innovation, which should be identified given some of the criticism, is that monetary policy is endogenously determined in the model and does allow for credit or quantitative easing. The federal funds rate equation is based on a FOMC reaction function in which the real funds rate target is a function of the economy's estimated real growth potential, the difference between the actual and target inflation rate (assumed to be 2% for core consumer price inflation), and the difference between the actual unemployment rate and the natural rate (currently estimated to be 5.5%).[ix] This specification is augmented to include the difference between the presumed 2% inflation target and inflation expectations, as measured by 5-year, 5-year-forward Treasury yields.

Because of the Federal Reserve's extensive use of quantitative easing to respond to the financial crisis, the value of assets on the Federal Reserve's balance sheet were added to the model. Fed assets are specified as a function of the federal funds rate target. When the funds rate implied by the equation falls below zero, the Fed's balance sheet expands. And the more negative the implied funds rate, the greater the assumed balance sheet expansion. Specifically, for every 100 basis points that the desired (but unachievable) funds rate becomes negative, the Fed is presumed to expand its balance sheet by $1.2 trillion. At present, the implied funds rate is negative 2.5%, which suggests that the Fed should be holding close to $4 trillion in assets—compared to the Fed's actual current holdings of $2.5 (see Chart 4). Fed assets and the funds rate are in turn key determinants of 10-year Treasury yields in the model.

Another common criticism is that models such as Moodys' do not account for the important role expectations play in determining the economic impact of fiscal policy. In fact, the outlook for the federal debt-to-GDP ratio is a key variable in the model impacting monetary policy and long-term interest rates via inflation expectations and real yields, and by extension current spending, saving and investment decisions. It is perhaps telling that current inflation expectations and real long-term Treasury yields remain low despite the current large budget deficits, ostensibly reflecting in part expectations that policymakers will meaningfully address the nation's fiscal problems.

Chart 4: The Fed Expands Its Balance Sheet

Composition of Federal Reserve's balance sheet, $ bil



Sources: Federal Reserve Board, Moody's Analytics

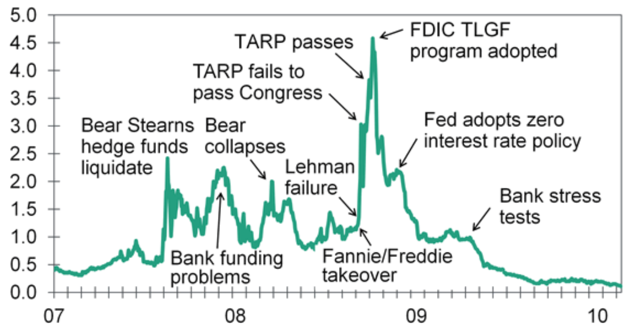
More empirical evidence

The success of the policy response to the economic crisis is also suggested by the timing of various aspects of the response and the subsequent performance of the financial system and economy.[x]

The restoration of stability in the financial system in late 2008 and early 2009 coincides closely with several important policy steps. Most important was the passage of the Emergency Economic Stabilization Act—the $700 billion TARP legislation—on October 3, 2008. The financial system had been thrown into panic by the government takeover of Fannie Mae and Freddie Mac and failure of Lehman Brothers in early September.[xi] The TED spread ballooned from its already elevated level near 100 basis points to 300 basis points when Congress made its first attempt to pass TARP on September 29 (see Chart 5). That first attempt at passage failed, and financial markets were thrown into further turmoil, with the spread widening to a record 400 basis points. After Congress reversed itself and passed TARP a few days later, the financial panic quickly passed its apex.

Chart 5: Policy Actions Quell the Financial Panic

Difference between 3-mo Libor and Treasury bill yields



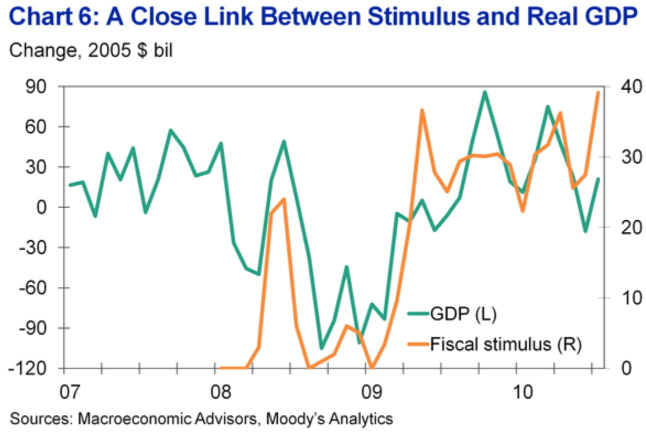
Sources: Federal Reserve Board, Moody's Analytics

The FDIC's Temporary Liquidity Guarantee Program (TLFG), begun on October 13, 2008, was also vital in ending the run on the financial system. The TED spread hit an all-time high of 458 basis points the day the program began. The TLGF, which federally guaranteed any debt issued by qualifying financial institutions, immediately assuaged investor concern and allowed the nation's critical banks to regain access to the capital markets and raise funds at a reasonable cost. Liquidity in the financial system immediately revived and the panic subsided.

The numerous unprecedented and creative actions taken by the Federal Reserve were also instrumental in restoring stability to the financial system. None were more important than the Fed's adoption of a zero interest rate policy on December 16, 2008. The TED spread which was hovering at 200 basis points prior to the move, quickly fell closer to 100 basis points. The aggressive implementation of credit easing in March 2009, which expanded the Federal Reserve's balance sheet through purchases of Treasury securities, Fannie Mae and Freddie Mac and other GSE debt, and mortgage securities backed by Fannie and Freddie, caused credit spreads, particularly mortgage spreads, to compress even further.

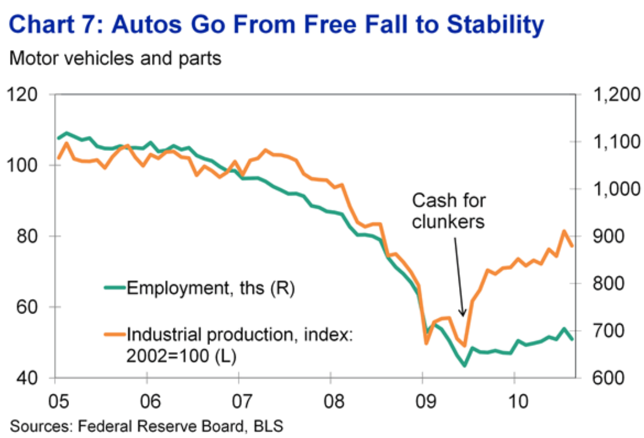
The financial panic reached its denouement with the bank stress tests in spring 2009. The Federal Reserve and Treasury required the nation's 19 largest bank holding companies to assess their capital adequacy under depression-like economic assumptions. The results of the tests, dubbed the Supervisory Capital Assessment Program (SCAP), were released publicly on May 7, 2009. A number of the banks were then required to take more capital from the TARP, while others raised additional equity in the public market. The tests were credible and the extra capital restored confidence, particularly within the banking system. Banks were no longer nervous about lending to each other and the TED spread narrowed further. By summer 2009, the TED spread had come full circle, settling near the 20 basis points that had prevailed prior to early 2007.

The end of the Great Recession last summer also coincided with the maximum boost to economic growth from the federal fiscal stimulus. The stimulus was designed to short-circuit the recession and jump-start recovery, and judging by the historical record, it did precisely that. Temporary tax cuts and spending increases included as part of the Recovery Act, which passed in February 2009, began to enter the economy in earnest by April and May 2009. Real GDP, which was in free fall in the first quarter of 2009, shrank only modestly in the second quarter and resumed growing in the third (see Chart 6).[xii] The recession was over.



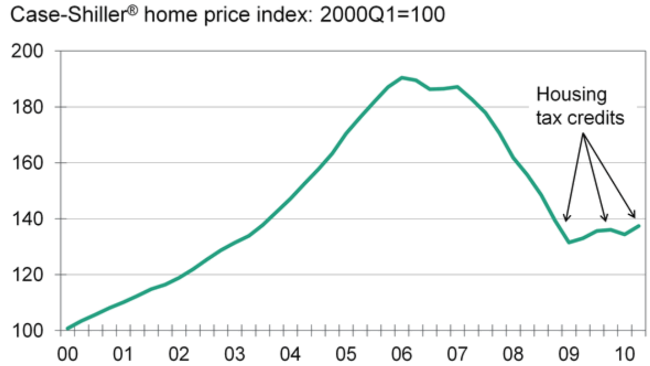
The impact of a federal stimulus was also evident during the summer of 2008, when the Bush administration proposed and Congress enacted tax rebates to lower and middle income households and temporary tax cuts for businesses. Households received the bulk of the rebate money in May and June. GDP, which had contracted in the first quarter of 2008, rose in the second quarter.[xiii] Indeed, the economy might have been able to avoid recession altogether if not for the financial panic that began that September as the boost from the rebate checks was fading.

Fiscal stimulus measures also averted a crash in the auto industry. The cash for clunkers program, which encouraged households to trade in their gas-guzzling vehicles for more efficient new ones, marked a dramatic turnaround for the beleaguered motor vehicle market. After falling by almost 50% during the Great Recession, vehicle production hit bottom in August 2009, the month cash for clunkers was in full swing (see Chart 7).[xiv] Employment in the auto industry quickly stabilized and has since been expanding, providing a key source of private sector job growth. Vehicle sales would have ultimately stabilized without cash for clunkers, but likely not before production and jobs had fallen further.



The dizzying collapse of the housing industry was also mitigated in significant part by tax credits implemented as part of the fiscal stimulus,[xv] which induced homebuyers to purchase sooner rather than later. It worked: Home sales surged prior to the expiration of the credits, particularly in November 2009 and April 2010. The credits have been criticized for merely pulling sales forward; indeed sales weakened measurably after each round of credits expired. But the credits' principal objective was to break the deflationary psychology afflicting the housing market. As potential buyers remained on the sidelines for fear that prices would fall further, such fear became self-realizing. While further modest house price declines are likely in coming months, this pernicious deflationary spiral appears to have been broken (see Chart 8).

Chart 8: Tax Credits Break the Deflationary Psychology



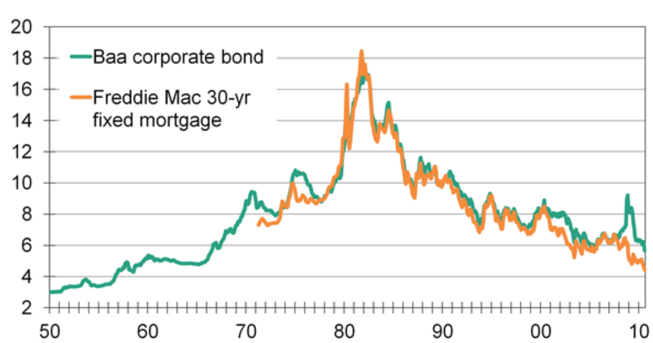
Sources: Fiserv, Moody's Analytics

Current policy

The debate over the response to the economic crisis is important for many reasons, but mainly for how it guides policy going forward. This is especially vital because the recovery has yet to evolve into a self-sustaining economic expansion. Arguing that the policy response did not work or was counterproductive could imply that policymakers should step aside and let events run their course. This would be a significant error. At the very least, policymakers should not end support for the economy until a self-sustaining expansion has taken hold, and should step up support if the recovery continues to flag.

From the Federal Reserve, more quantitative easing may be needed soon. This is increasingly evident in the high and rising unemployment rate, undesirably low inflation and weakening inflation expectations. Quantitative easing would mean further Fed purchases of Treasury securities to lower fixed mortgage rates and borrowing costs, support stock prices and ultimately persuade lenders to ease underwriting standards. The possibility of additional quantitative easing was discussed at the FOMC's August meeting; since then, stock prices have firmed and borrowing costs have declined. The Freddie Mac conforming loan rate has fallen to a record low 4.3%, and the yield on Baa corporate bonds, the lowest investment-grade securities, has cracked a 50-year low of nearly 5.5% (see Chart 9).

Chart 9: Long-Term Rates Approach 50-Year Lows



Sources: Moody's Investors Service, Freddie Mac

There are significant questions regarding the effectiveness of quantitative easing as an economic stimulus. It is unclear how much lower the Fed can push long-term rates, or whether it can induce creditors to ease standards to restart the housing market and business expansion. The slide in home sales following the last homebuyers' tax credit has been extraordinarily severe, particularly given low mortgage rates. Prospective buyers may be waiting to see if Congress produces yet another tax incentive like the three earlier temporary credits. More ominously, the weak job market and hobbled consumer sentiment could simply be too much for even lower mortgage rates to overcome soon.

Lower borrowing costs have supported business investment in equipment and software but have not yet persuaded firms to step up hiring. Businesses remain extraordinarily cautious, probably because of still-raw memories of the recession and policy uncertainty. Managers have watched Congress debate healthcare, financial regulation, energy policy, immigration and most recently, what to do about the expiring tax cuts. Though healthcare and financial regulatory reform are now law, the new rules remain unclear. Businesses will not take the plunge and expand payrolls until they have a clearer understanding of what the changes mean for them.

Expiring tax cuts

Fiscal policymakers should thus quickly reach a decision regarding the expiring tax cuts. Most were passed under the Bush administration and will lapse at the end of 2010 if Congress does not act. The most important provisions concern individual income tax rates, but capital gains and dividend taxes are also affected, along with personal exemptions, the marriage penalty, the alternative minimum tax, the Making Work Pay program, the earned income tax credit, the child tax credit, and estate and gift taxes. In all, these tax cuts are worth about $300 billion per year, or about 2% of GDP, according to the Congressional Budget Office (see Table 3). Uncertainty about what tax rates will be just a few months from now is adding to the collective nervousness.

Table 3: Cost of Extending Various Expiring Tax Provisions
$ bil, fiscal years

	2011	2012	2011-2020
Bush Era Tax Cuts:			
Income tax provisions of Bush tax cuts	-79	-150	-1615
Estate and gift taxes	-16	-44	-571
Reduced tax rates on capital gains and dividends	-15	-17	-348
Total Bush Era Tax Cuts	-110	-210	-2534
Other Major Tax Provisions:			
Making Work Pay tax credit	-30	-59	-571
Increased AMT exemption amount	-69	-31	-530
Total Tax Cuts	**-209**	**-299**	**-3635**

Source: Congressional Budget Office

There is wide agreement that allowing all the tax cuts to expire January 1 makes little sense given the economy's fragility. Based on a simulation of the Moody's Analytics macroeconomic model, an across-the-board tax increase would precipitate a double-dip recession during the first half of 2011; the hit to after-tax income would undermine fragile consumer confidence and spending (see Table 4).[xvi] Employment would decline throughout much of 2011, bottoming out some 8.6 million jobs below its late 2007 peak. Unemployment would remain near double digits into late 2012. Under this scenario, the economy does not return to full employment until 2015, eight years after the Great Recession began.

There are longer-term economic benefits to allowing the tax cuts to expire. Budget deficits would be measurably smaller in the latter half of the decade, resulting in lower long-term interest rates and a generally stable federal debt-to-GDP ratio. The benefits also accumulate over time and become even more pronounced in the subsequent decade. This clearly highlights the necessity of addressing the nation's longer-term fiscal problems once the economy is back on sounder ground.

Table 4: Economic Impact of Various Tax Cut Scenarios

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real GDP, annualized % change											
Tax cuts expire	2.68	0.90	3.78	5.94	4.29	2.68	2.33	2.39	2.32	2.25	2.23
Republican proposal	2.69	2.95	5.23	4.52	2.77	2.07	2.12	2.17	2.11	2.04	2.04
Administration proposal	2.68	2.58	4.79	4.77	2.94	2.31	2.23	2.25	2.17	2.12	2.12
Compromise proposal	2.69	2.95	5.00	4.31	2.89	2.30	2.22	2.24	2.17	2.12	2.12
Real GDP, 2005$ bil											
Tax cuts expire	13,226	13,345	13,850	14,673	15,302	15,712	16,079	16,464	16,846	17,224	17,609
Republican proposal	13,226	13,617	14,328	14,976	15,391	15,710	16,042	16,391	16,736	17,077	17,425
Administration proposal	13,226	13,567	14,217	14,895	15,334	15,687	16,037	16,399	16,757	17,114	17,479
Compromise proposal	13,226	13,616	14,298	14,914	15,345	15,698	16,047	16,406	16,762	17,118	17,481
Employment, mil											
Tax cuts expire	130.21	129.70	130.67	136.29	141.56	144.15	145.47	146.56	147.57	148.54	149.50
Republican proposal	130.22	131.52	135.03	139.94	143.29	144.98	145.98	146.84	147.65	148.40	149.18
Administration proposal	130.21	131.20	134.11	138.96	142.46	144.37	145.57	146.53	147.45	148.36	149.30
Compromise proposal	130.22	131.52	134.83	139.27	142.57	144.46	145.64	146.59	147.49	148.38	149.31
Unemployment rate, %											
Tax cuts expire	9.72	10.65	10.22	7.86	6.08	5.70	5.73	5.69	5.63	5.60	5.57
Republican proposal	9.71	9.86	8.25	6.16	5.24	5.29	5.44	5.55	5.61	5.69	5.75
Administration proposal	9.71	10.00	8.65	6.59	5.60	5.55	5.61	5.65	5.66	5.65	5.64
Compromise proposal	9.71	9.87	8.33	6.46	5.56	5.52	5.59	5.64	5.65	5.65	5.64
Federal budget deficit, fiscal year, $ bil											
Tax cuts expire	(1,277)	(732)	(1,055)	(770)	(489)	(485)	(503)	(506)	(513)	(544)	(581)
Republican proposal	(1,277)	(943)	(743)	(581)	(667)	(716)	(773)	(846)	(892)	(950)	(1,014)
Administration proposal	(1,277)	(904)	(795)	(664)	(685)	(709)	(716)	(749)	(789)	(845)	(905)
Compromise proposal	(1,277)	(943)	(782)	(630)	(677)	(703)	(715)	(749)	(792)	(850)	(914)
Federal debt-to GDP ratio, %											
Tax cuts expire	60.6	69.0	74.6	77.1	77.9	78.7	79.2	79.4	79.2	78.9	78.5
Republican proposal	60.6	68.5	72.4	74.1	76.1	78.2	80.1	81.7	83.2	84.6	85.9
Administration proposal	60.6	68.6	72.9	74.9	77.0	79.0	80.6	81.8	82.8	83.7	84.5
Compromise proposal	60.6	68.5	72.7	74.8	76.9	78.8	80.4	81.6	82.7	83.6	84.5

Sources: BEA, BLS, Treasury, Moody's Analytics

While there is consensus against an across-the-board tax increase soon, this is where the consensus ends. The president supports permanently extending the current tax rates for all except the highest income households, while congressional Republicans want the entire basket of cuts made permanent. More specifically, the president wants those with a joint adjusted gross income above $250,000 annually to pay at rates that were in effect during the 1990s. For those in the top income bracket, the marginal personal income rate would rise from its current 35% to 39.6%. The capital gains tax rate for this group would rise from 15% to 20%.

A prudent middle course between the president's plan and the Republican counterproposal would be to forestall any tax hikes in 2011 but slowly phase in higher rates on upper income households beginning in 2012. By then the economy will presumably be on firmer ground, with stock and house prices consistently rising. Allowing the tax cuts for high-income households to expire over, say, a three-year period would not harm the economy. Fears of diminished living standards among high-income households will have faded, and the increases would be small enough to not materially alter their decisions about spending, working or investing. Remember that these households paid the same higher tax rates during the 1990s, a time when the U.S. economy performed admirably. Affluent households will benefit as much as anyone from a reduced federal deficit, which will keep interest rates lower, spurring more investment, jobs and wealth creation. Simulating the Moody's Analytics model under this proposal results in a more durable near-term recovery than under using the president's plan, and a much smaller federal debt load in the long run than under the Republican plan (see Table 4).

None of this means the tax code should be off limits when deciding how to fix the long-term fiscal problems. Everything must be on the table for the fiscal commission now working toward a solution. Experience with fiscal austerity at home and overseas strongly suggests it is best for the economy in the long run to restrain government spending rather than raise taxes, but that tradeoff must also be part of the national debate.

Other fiscal policy

If the recovery fails to gain traction soon and unemployment rises back into the double digits, policymakers should consider an expanded job tax credit.[xvii] A tax break for businesses that add to payrolls is in place now, but it is small and restrictive and due to expire at year's end; consequently it has had little impact.[xviii] Washington could offer a $7,500 tax credit for each additional net hire made in the 12 months beginning this October. Allot $50 billion for the credit and make it first come, first serve, so that businesses have an incentive to hire quickly. Under reasonable assumptions, a $50 billion program would be sufficient to generate almost a million additional jobs on net.

So that it doesn't add significantly to the nation's debt load, businesses that take advantage of the credit should be required to increase future tax liabilities by the same $7,500 per net hire over, say, a five-year period beginning in 2012. Firms would in effect receive an interest-free loan from the Treasury to hire now. To ensure that big companies don't monopolize the tax break, limit the credit to firms that employ fewer than 500 employees. This would go a long way toward addressing the problems small businesses currently have obtaining loans to expand payrolls. It would also encourage mid-sized companies that do have cash to deploy it quickly by hiring. Some of these job tax credits will go to businesses that would have hired anyway, but that only means we are rewarding stronger firms, making it more likely they will hire additional workers in the future.

To address what will likely be persistently high unemployment, a policy focus should be put on significantly upgrading and expanding the nation's infrastructure. Big infrastructure projects take years to complete, but we face years of high unemployment. These projects require lots of workers over long periods, and could employ many of the construction workers who lost jobs in the housing bust. Jobs would be created in many communities across the country, all the more important now given that millions of homeowners are underwater and can't easily move to find work. They are literally stuck; infrastructure development will take the jobs to them. It is also important to remind ourselves that we have underinvested in infrastructure for decades, as is evident from our crumbling bridges and inefficient air and seaports; new investments are thus likely to bring a high economic return.

Instead of government operating the projects, let private investors do them with government backing. Pension funds, insurance companies, sovereign wealth funds and private equity firms are eager to invest in such projects—not just because they can bring high returns, but even more importantly because they can provide steady, long-running revenue streams that match well with long-term fund obligations. But these investors need government help to navigate the myriad roadblocks to development—zoning, rights-of-way, environmental requirements—and to provide a financial backstop in case things go wrong. Getting private investors involved also helps address reasonable concerns about politically driven decisions leading to bad investment outcomes.

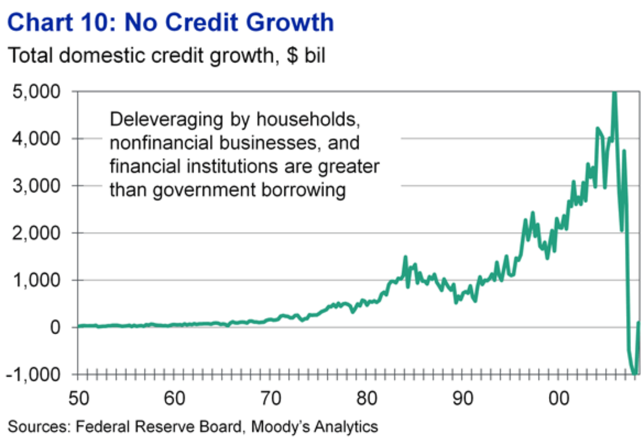
To this end, the federal government can help by providing guarantees to back private financing of infrastructure projects. Washington wouldn't issue bonds or make loans to fund projects, but would partially insure investors in case a project fell significantly short of revenue projections. The guarantees would lower borrowing costs and make many more projects financially viable. Such insurance could be paid for by tolls or user fees assessed on the use of the infrastructure.

Both of these ideas—the expanded job tax credit and catastrophic infrastructure investment insurance—are feasible. Neither is outside the policy box. The President proposed a similar tax credit for hiring earlier this year, but it was pushed aside in favor of the current, much smaller credit. Build America Bonds, which open financing of infrastructure projects to more types of investors, have been a big success since they were implemented as part of last year’s fiscal stimulus program. And while these ideas could fall completely flat, if they do they won’t cost taxpayers a thing.

Deficit concerns

Fiscal policymakers are rightfully worried about an additional stimulus, given the nation’s large budget deficits and daunting fiscal outlook. The federal budget deficit ballooned to $1.4 trillion in fiscal 2009, equal to a record 10% of GDP, and this year’s deficit will be similar. Even President Obama’s budget, presented earlier this year, does not result in a fiscally sustainable deficit at any point during its 10-year outlook.[xix]

The very poor fiscal situation reflects the ultimate expected price tag of the financial crisis and recession. And even after the costs associated with the financial crisis are mostly paid, without significant changes to tax and government spending policy the budget outlook is bleak. This is largely due to the rising expected cost of entitlement programs, despite the passage of healthcare reform. The nation's federal debt-to-GDP ratio is projected to increase to almost 85% a decade from now, double the approximately 40% that prevailed prior to the current financial crisis, and the highest ratio since World War II (see Chart 10).



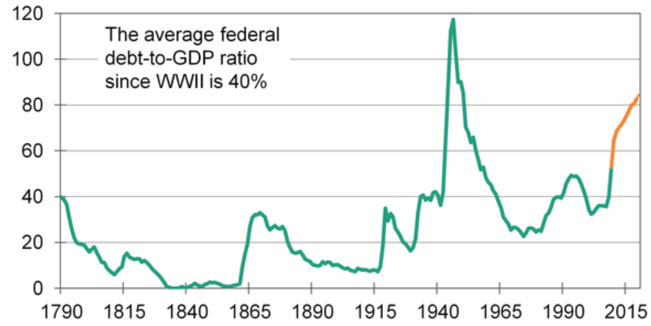
The need to make fundamental changes to government spending and tax policy is thus much more intense in the wake of the financial crisis and recession. Unless policymakers credibly address these issues soon, a future fiscal crisis will likely result in higher interest rates, lower stock prices, a weaker U.S. dollar, and ultimately lower living standards.

As such, it would be desirable for fiscal policymakers to pay for any additional policy support with spending offsets and tax increases. Doing so this year or next would dilute or neutralize any economic benefit from the stimulus, but it should be placed high on the legislative agenda as soon as the economy is in full swing, most likely beginning in 2012. Making such a commitment now would send a strong signal to global investors that policymakers are serious about addressing the nation’s fiscal problems. This would make it easier for policymakers to run a larger deficit in the coming year to fund the stimulus without causing long-term interest rates to rise and crowding out private investment.

That said, fully paying for any additional stimulus should not be a necessary condition for providing it. Policymakers have some latitude to run a larger near-term deficit, given the ongoing global flight to quality into U.S. government debt and, more importantly, given deleveraging by the private sector. Households, businesses and financial institutions are reducing their debt outstanding so rapidly that total credit demand remains moribund despite enormous borrowing by federal, state and municipal governments (see Chart 11). With private credit demand still falling, there is little prospect that providing more modest deficit-financed stimulus through mid next year will result in higher interest rates.

Chart 11: Policymakers Must Change This Outlook

Federal debt-to-GDP ratio



Sources: Treasury, Moody's Analytics

Conclusions

The economy has come a long way since the end of the Great Recession. The financial system is stable, real GDP and employment are expanding, stock prices are up and house prices have largely stabilized. That the recovery is more than a year old testifies to the success of the monetary and fiscal policy response. If policymakers had not acted as aggressively, the economy would likely still be mired in depression and the costs to taxpayers would have been much greater.

Despite this, it is understandable that the economy's continued fragility has fueled criticism of the government's response. No one can know for sure what the world have looked like today if policymakers had not acted as they did; the estimates presented here are just that, estimates. It is also not difficult to find fault with isolated aspects of the policy response. Were the bank and auto industry bailouts really necessary? Do extra UI benefits encourage the unemployed not to seek work? Shouldn't bloated state and local governments be forced to cut wasteful budgets? Was the housing tax credit a giveaway to buyers who would have bought homes anyway? Are the foreclosure mitigation efforts the best that could have been done? The questions go on and on.

Moreover, there is no free lunch. The government response was costly, and effectively pulled the nation's fiscal problems forward by a full decade. Policymakers have little choice but to deal with the nation's byzantine tax structure and ballooning entitlement programs soon. Many policymakers are understandably reticent to provide even more stimulus, lest they make these budgetary problems even more severe.

Indeed, even if policymakers do nothing else, the recovery will still likely continue. The next six to 12 months will be uncomfortable as the economy struggles to gain traction, but a full-fledged expansion should take hold by this time next year. Policymakers would be taking a significant gamble, however. Given the halting recovery and the clear threats remaining, it is not difficult to construct scenarios in which the economy backtracks into recession. Once back in recession, moreover, it is unclear how the economy would get out. The slump could last a long time and cost millions more their livelihoods. The nation's fiscal problems would then be completely intractable. Prudent economic risk management—backed by the lessons of recent history—argues forcefully for policymakers to err on the side of providing too much near-term economic support rather than too little.

[i] The economy's current potential real GDP growth is estimated to be 2.75%.

[ii] "How the Great Recession Was Brought to an End," Alan Blinder and Mark Zandi, July 27, 2010. http://www.economy.com/mark-zandi/documents/End-of-Great-Recession.pdf

[iii] The monetary and fiscal policy response to the economic crisis outside of the U.S. was equally massive, but was not explicitly considered in this analysis. The success by global policymakers in heading off a significant increase in protectionism despite the sharp increase in global unemployment is also noteworthy.

[iv] The Great Recession ended in June 2009 according to the National Bureau of Economic Research, the official arbiter of the U.S. business cycle.

[v] For historical comparison, the savings and loan crisis of the early 1990s cost some $350 billion in today's dollars: $275 billion in direct costs plus $75 billion due to the associated recession. This was equal to almost 6% of GDP at that time.

[vi] Representative of these critiques is "New Keynesian vs. Old Keynesian Government Spending Multipliers," Cogan, Kwik, Taylor, and Wieland, January 2010.

[vii] Macroeconomic Advisers and IHS Global Insight, the two other major commercial economic forecasting and consulting firms, use very similar models for their work.

[viii] The TED spread generally is near 20 basis points when the financial system is functioning properly. This spread topped out above 400 basis points in early October 2008, during the worst of the financial panic. The impact on spreads of the policy response was also confirmed from a separate analysis based on the construction of a small vector autoregressive model, the results for which are available upon request.

[ix] Prior to the Great Recession, the natural rate of unemployment was estimated at closer to 5%. Pushing the natural rate higher is a growing number of long-term unemployed who are losing marketable skills, and a decline in mobility from the large number of underwater homeowners for whom it is financially difficult to move for work.

[x] Of course, many factors beyond the policy actions taken affected performance in the financial system and economy during this period. The close link between performance and the timing of various policy steps is thus only suggestive and not proof of the benefit of those steps.

[xi] Fannie Mae and Freddie Mac were put into receivership on September 6, 2008 and Lehman filed for bankruptcy on September 15, 2008.

[xii] A 3-month moving average of real GDP is used in Chart 6. The moving average makes the visual relationship with fiscal stimulus stronger. This suggests that some households and businesses may have been changing their spending and investment decisions in anticipation of fiscal stimulus.

[xiii] There is also evidence that high-income households that did not receive tax rebates were reining in spending during this period as rapidly falling stock and house prices eroded household net worth. This pullback by high-income households likely offset the benefit of tax rebates on consumer spending and broader economic activity.

[xiv] The domestic vehicle industry also received significant financial help from TARP funds, which ensured the orderly bankruptcy of GM and Chrysler. Without this support, these firms would have very likely ceased as going concerns. The liquidation of GM and Chrysler would have in turn caused the bankruptcy of many vehicle part suppliers and in turn, of Ford as well.

[xv] Also important to stemming the housing market crash has been monetary policy and the record low fixed mortgage rates that resulted, the expansion of FHA lending, higher conforming loan limits and the Obama administration's mortgage loan modification efforts which have been financed with TARP funds.

[xvi] For a more detailed discussion of the impact of different proposals regarding the expiring tax cuts, see "The Economic Impact of Tax Cut Proposals: A Prudent Middle Course," Mark Zandi, September 15, 2010. http://www.economy.com/mark-zandi/documents/Tax_Cuts_091510.pdf

[xvii] Legislation currently before Congress to give the Small Business Administration more lending authority, boost community banks' capital to promote small business lending, and increase tax benefits for business investment would be helpful, but will not significantly lift the economy quickly even if passed soon as expected. The Obama administration has also recently put forth a somewhat more ambitious fiscal stimulus agenda, including investment tax breaks for businesses and an infrastructure spending initiative, which would also be helpful, but the economic benefits of this would not be evident until late 2011.

[xviii] The current job tax credit allows businesses to forgo paying their share of payroll taxes on any new net hire of a worker that has been unemployed for more than 60 days. For a detailed analysis of the economic impact of this credit and other similar credits see "An Assessment of the Job Tax Credit," Mark Zandi, February 8, 2010. http://www.economy.com/mark-zandi/documents/Job-Tax-Credit-020810.pdf

[xix] A fiscally sustainable deficit-to-GDP ratio—consistent with a stable level of debt relative to GDP—is no more than 3%.