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Before the U.S. Senate Budget Committee

"The Economic Outlook and Stimulus Options"

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Mr. Chairman and members of the committee, my name is Mark Zandi; I am the Chief Economist and Cofounder of Moody's Economy.com.

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I strongly support efforts for a very large fiscal stimulus plan designed to help the economy by early 2009. A fiscal stimulus is needed, as the global financial system has effectively collapsed, undermining investor, household and business confidence, and pushing the economy into a lengthy and increasingly severe recession. Without a fiscal stimulus, the economy appears headed toward the worst downturn since the Great Depression.

The proximate cause of the global economic crisis is the collapse of the U.S. housing market and the resulting surge in mortgage loan defaults. Hundreds of billions of dollars in losses on these mortgages have undermined the financial institutions that originated and invested in them, including some of the largest and most venerable in the world. Many have failed, and most others are struggling to survive. Banks are fearful about extending credit to one another, let alone to businesses and households. With the credit spigot closing, the global economy is withering. Global stock investors have dumped their holdings as they come to terms with the implications for corporate earnings. A self-reinforcing adverse cycle has begun: The eroding financial system is upending the economy, putting further pressure on the financial system as the performance of everything from credit cards to commercial mortgage loans sours.

This cycle can be mitigated only by aggressive and consistent government action. In the United States, the public policy response to the financial crisis has been without precedent. The full faith and credit of the U.S. government now effectively backstop the financial system, significant parts of which have been nationalized. With the takeover of Fannie Mae and Freddie Mac, the government makes nearly all the nation's residential mortgage loans. And as the $700 billion troubled asset relief program (TARP) is deployed, the government is gaining sizable ownership stakes in the nation's largest financial institutions.

In an effort to restart money and credit markets, the Federal Reserve has vastly expanded its role. The central bank can now lend to whomever and buy whatever it deems necessary, essentially without limit. The Fed has also engineered an unprecedented coordinated interest rate cut with other central banks, more than doubled the size of its balance sheet to pump liquidity into the financial system, and is buying commercial paper and other money market instruments directly from issuers and money market funds.

Policymakers have also worked to directly shore up the housing and mortgage markets and broader economy. A number of efforts have been put in place to enable stressed homeowners to avoid foreclosure. These include programs called FHA Secure, Hope Now, and Hope for Homeowners. Fiscal stimulus, including this summer's refundable tax rebates and the investment tax incentives that remain in place through the end of the year, have provided some economic support.

Much more needs to be done to quell the financial panic and mitigate what threatens to become the worst economic setback since the Great Depression. The TARP funds need to be deployed aggressively and more broadly. The equity infusions should be extended beyond commercial banks to other institutions whose failure would threaten the financial system and broader economy. Using the funds to shore up the consumer lending market as proposed by the Treasury Department would be helpful, but failing to follow through on purchases of distressed assets via reverse auctions or other mechanisms as initially envisaged for the TARP is a mistake. In theory, the auctions are an elegant way to determine market values for these now-impossible-to-price assets. With price discovery will come clarity about which financial institutions are undercapitalized and by how much. Clarity, in turn, will attract the private capital ultimately needed to bolster the financial system. In practice, the auctions may not go as well, given the complexity of the assets to be purchased. If so, then the cost of trying will also be small.

A much larger and more comprehensive foreclosure mitigation plan is also needed. Millions of homeowners owe more than their home is worth, and unemployment is rising quickly. Foreclosures, already at record-high levels, are sure to mount. The Hope Now and Hope for Homeowners programs face severe impediments and even under the best of circumstances will likely be overwhelmed by the wave of foreclosures still coming. No plan will keep house prices from falling further, but quick action could avoid the darker scenarios in which crashing house prices force millions more people from their homes, completely undermining the financial system and economy.

Additional monetary and fiscal stimulus measures are also necessary. With inflation receding and deflation concerns likely to predominate soon, there are few impediments to further interest rate cuts by the Federal Reserve. The only issue is how close to zero the federal funds target rate can go before it begins to undermine money market funds, which need some return on their investments to cover their operating costs. More importantly, with the Fed's new ability to pay interest on bank reserves, there is no limit on how much liquidity the Fed can provide to the financial system.

Perhaps the most important policy step needed soon is another very large fiscal stimulus package. The package should both cut taxes and increase spending beginning early next year, when the economy is likely to be at its most vulnerable. The stimulus must be large, totaling at least $400 billion, equal to more than 2.5% of the nation's gross domestic product, as GDP is set to decline by at least that much without it. Extending unemployment insurance benefits, food stamps, and aid to state governments would be the most effective spurs to economic growth, but even increased infrastructure spending could be desirable considering that the economy's problems are likely to last long enough to give such spending enough time to be of help. The tax cuts should include the codification of the low marginal personal tax rates for lower- and middle-income households, assurances to higher-income households that their tax rates will not increase any time soon, temporary tax incentives to support business investment and home sales, and a temporary tax cut designed to help lower- and middle-income households and small businesses.

With government making so many monumental decisions in such a short time, there will surely be unintended consequences. Some may already be evident: Nationalizing Fannie Mae and Freddie Mac while not rescuing Lehman Brothers from bankruptcy may very well have set off the financial panic. And policymakers need to be wary of the costs of their actions, as global investors will eventually demand higher interest rates on the soaring volume of U.S. Treasury debt. Any measurable increase in long-term interest rates would be counterproductive; its effect on the housing market and the rest of the economy would offset the economic benefits from the fiscal stimulus.

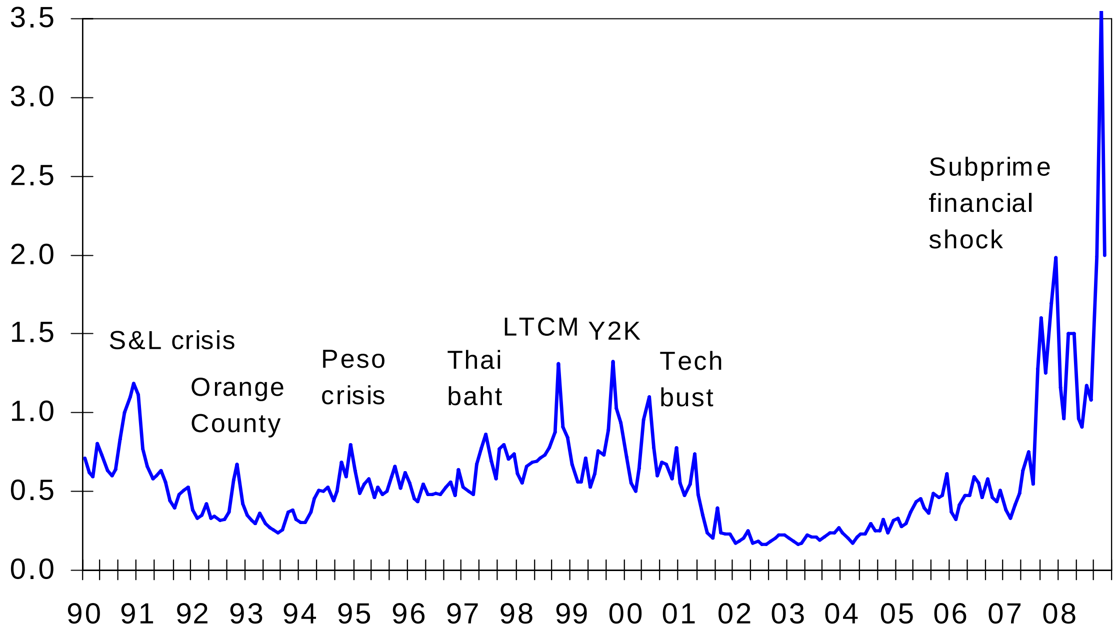
But policymakers' most serious missteps so far have come from acting too slowly, too timidly, and in a seemingly scattershot way. Early on in the crisis, there were reasonable worries about moral hazard and fairness: Bailing out those who took on, originated or invested in untenable mortgage loans would only encourage such bad behavior in the future. And a bailout would certainly be unfair to those homeowners still managing to make their mortgage payments. But as the crisis deepened and continued, those worries hindered policymakers far too long, allowing the panic to develop. With so many suffering so much financial loss, moral hazard is no longer an issue. Debate over whether it is fair to help stressed households stay in their homes appears quaint. Their problems are clearly everyone's problems. Only quick, overwhelming and consistent government action will instill the confidence necessary to restore financial stability and restart economic growth.

The economic backdrop

The need for more policy action is evident in the increasingly dark financial and economic backdrop. The financial panic that began in early September with the nationalization of Fannie and Freddie may have passed its apex, but the collective psyche remains frazzled. And even if the panic soon subsides, the economic damage has been done. The collapse in confidence, the massive loss of wealth, and the intensifying credit crunch ensure that the U.S. economy will struggle for some time to come.

Money markets are improving—thanks to massive intervention by global central banks—but remain far from normal. The difference between three-month Libor and three-month Treasury bill rates—a good proxy for the angst in the banking system—is still an extraordinarily wide 200 basis points (see Chart 1).[i] This is down from the record spreads of mid-October, which topped 450 basis points, but it is still stratospheric compared with past financial crises, not to mention the average 50-basis point spread that prevails in normal times. The Fed's program to purchase commercial paper directly from issuers has pushed those short-term rates down as well, but they, too, are still very high.

Chart 1: On the Precipice of Collapse
Difference between 3 month Libor and Treasury bill yields



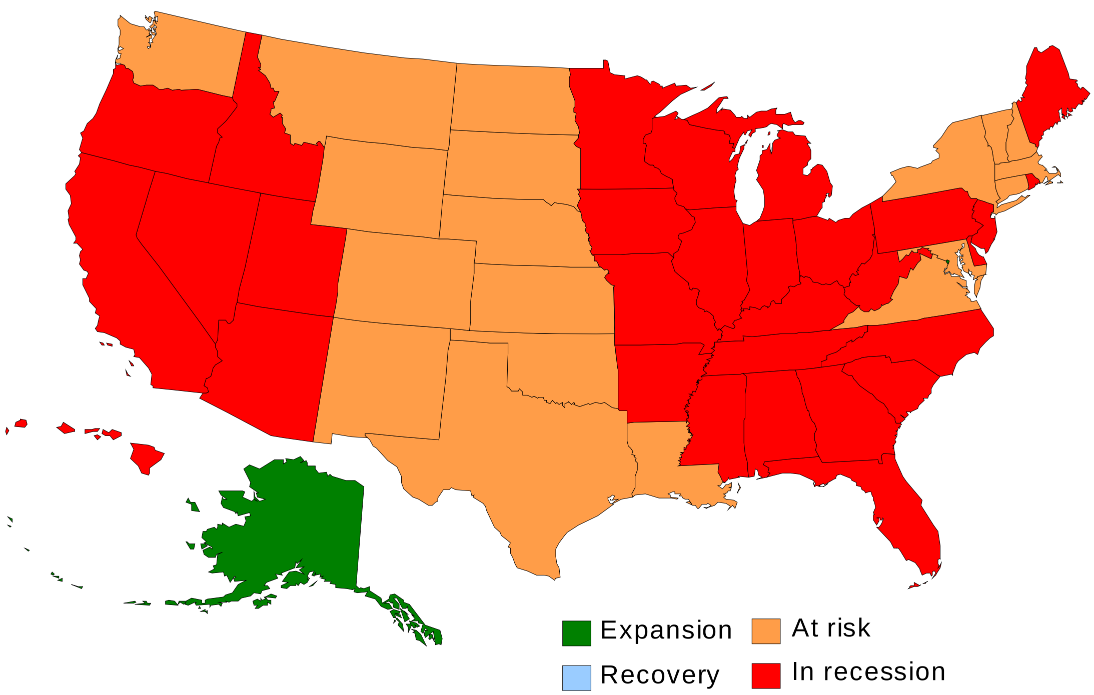
Credit markets remain badly shaken. Bond issuance has come to a standstill. No residential or commercial-backed securities have been issued in recent months, and there has been very little issuance of junk corporate bonds and emerging market debt. Asset-backed issuance of credit cards, vehicle and student loans, and municipal bond issuance also remain severely disrupted. Investment-grade bond issuance has held up somewhat better, but even this all but dried up in October. Credit spreads—the extra yield investors require to be compensated for the perceived added risk of investing in riskier bonds—also remain strikingly wide as investors shun anything but risk-free Treasury bonds. The difference between yields on junk corporate bonds and 10-year Treasuries has ballooned to some 1,700 basis points, and between emerging debt and Treasuries to well over 1,100 basis points. Historically, yield spreads for both have averaged closer to 500 basis points.

Commodity and foreign currency markets have been roiled. Oil prices have fallen more than 50% from their record peaks in early July, and prices for commodities from copper to corn have plunged. Global commodity demand is weakening rapidly as the global recession undercuts the financial demand that had sent prices surging this past summer. Economies reliant on commodity production have been hit hard, and their currencies have rapidly depreciated. The Canadian dollar, which had been close to parity with the U.S. dollar as recently as this summer, has dropped below 80 U.S. cents, and the Brazilian real has fallen more than 40% against the U.S. dollar since the panic began.[ii]

Volatility in global stock markets has been unprecedented and the price declines nerve-wracking. Since the downdraft began a few weeks ago, global stock prices are off a stunning 30% in local currency terms and more than 40% from their year-ago highs. No market has been spared. The declines have been so precipitous that U.S. and European bourses have tried imposing limits on short-selling, and Russia has suspended trading for days at a time. All of this has been to no avail. Mutual fund, 401(k) and hedge fund investors simply want out of stocks, regardless of the losses and any associated penalties.

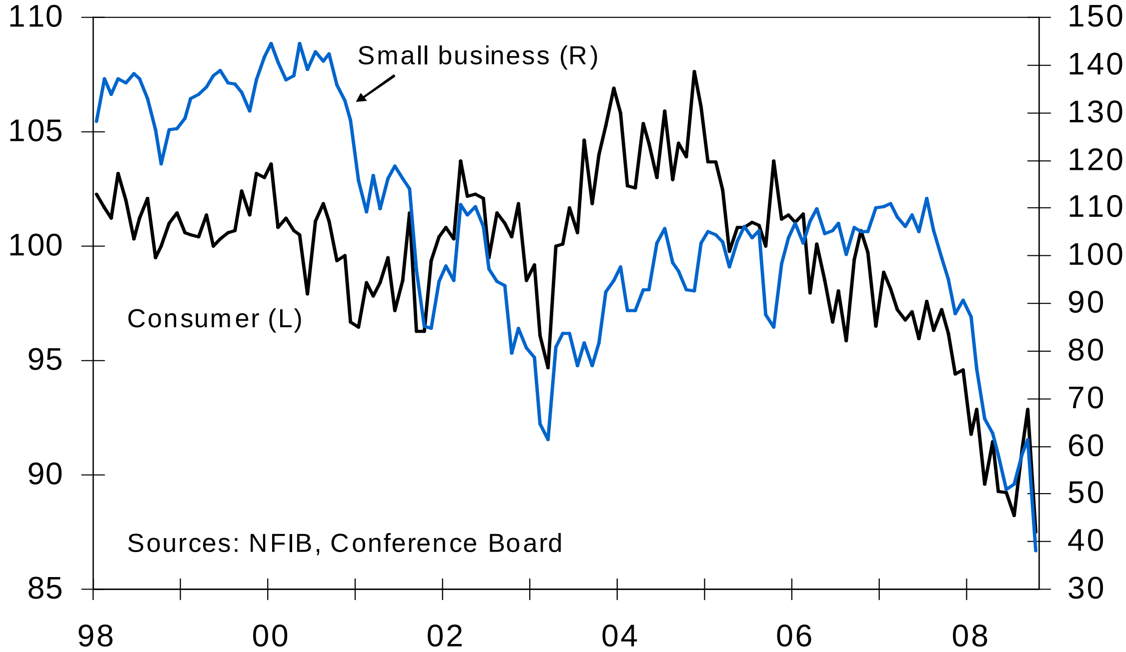
Even if the global financial system stabilizes soon, substantial damage has already been done. The U.S. economy was struggling before the financial panic hit; it has likely been in recession for at least a year. Real GDP fell in the last quarter of 2007 and again in the third quarter of 2008.[iii] Some 1.2 million jobs have already been lost so far on net, and the unemployment rate has risen by over 2 percentage points to 6.5%. The downturn is broad-based across industries and regions, with 30 states now in recession (see Chart 2).[iv] Data since the panic hit have been uniformly bad, suggesting that the downturn is intensifying. Retail sales, vehicle sales and industrial production have plunged, and the increase in unemployment insurance claims in November is consistent with monthly job losses approaching 300,000.

Chart 2: Recession From Coast-to-Coast



The panic's most immediate fallout is the blow to confidence. Consumer confidence crashed in October to its lowest reading since the Conference Board began its survey more than 40 years ago. This is all the more surprising given the plunge in gasoline prices during the month; cheaper motor fuel in times past has always lifted households' spirits. Small business confidence as measured by the National Federation of Independent Businesses has also plunged (see Chart 3).

Chart 3: A Body Blow to Confidence
Consumer and business confidence

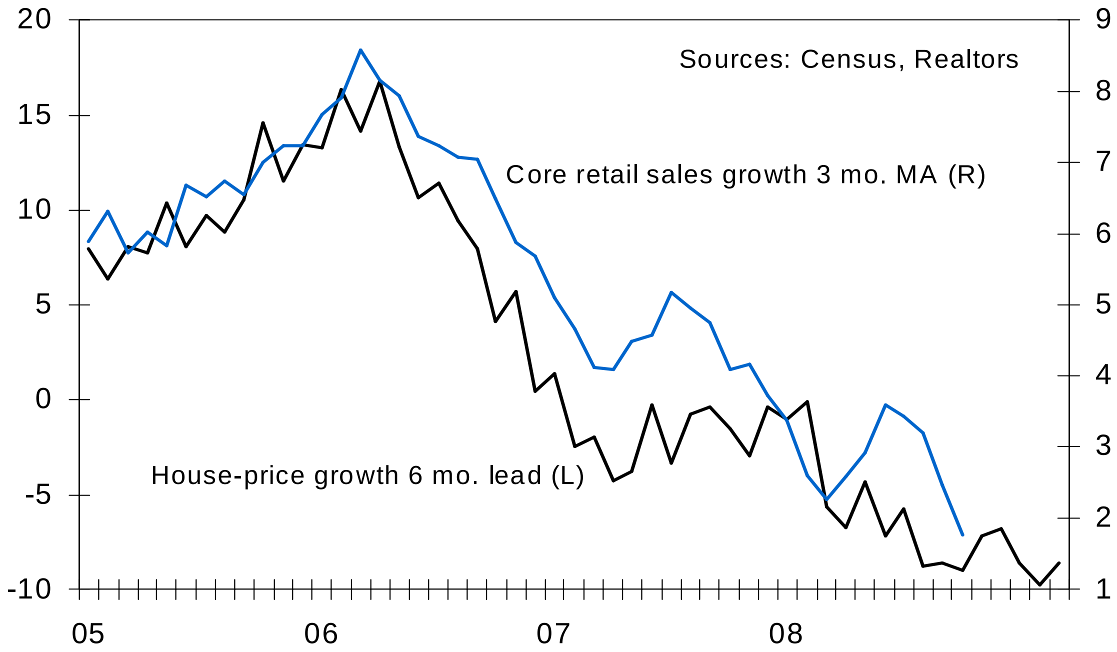


Current events have so soured sentiment that they are sure to have long-lasting effects on household spending and saving, as well as on business decisions regarding payrolls and investment.

The pessimism will magnify the effect of evaporating household wealth. Net worth has fallen close to $12 trillion since peaking a year ago; of that, $4 trillion results from the 20% decline in house prices, while the rest is due to the 40% decline in stock prices. Every dollar loss in household net worth reduces consumer spending by 5 cents over the next two years.[v] If sustained, the wealth lost over the past year could thus cut $300 billion from consumer spending in 2009 and a like amount in 2010.

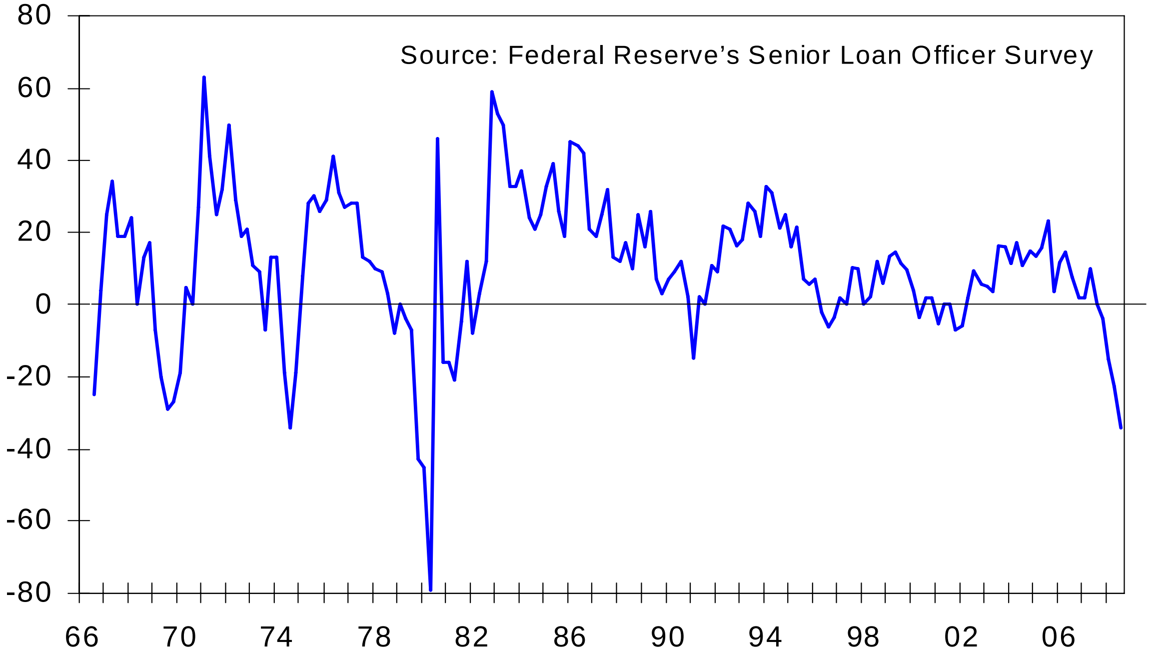
More than in past recessions, the financial pain of this recession is being felt by all Americans, from lower-income households losing jobs to affluent households with diminished nest eggs. This is evident in the sharply weaker sales at high-end retailers such as Nordstrom, Neiman Marcus and Bergdorf Goodman. Usually the wealth effect is so small that it can be determined only econometrically; now it is potent enough to be apparent visually. Since the housing bubble began to deflate, the link between retail sales and house prices has been striking (see Chart 4). Falling house prices appear to curb retail sales with a lag of about six months, as homeowners do not immediately adjust their spending to a change in housing wealth. The current declines in house prices suggest that this Christmas will be as tough for retailers as any since 1992. Moreover, if house prices decline substantially further as expected, then retailers' troubles will last through Christmas 2009.

Chart 4: Smaller Nest Eggs, Less Spending



The financial panic is also reducing the availability and raising the cost of credit. Credit growth was weakening rapidly even before recent events. The Federal Reserve's Flow of Funds shows debt owed by households and nonfinancial corporations actually fell in the second quarter of 2008 after inflation, for the first time since the savings and loan crisis of the early 1990s. To date, the weakening in credit growth is largely due to disruptions in the bond and money markets. Lending by banks, S&Ls and credit unions has remained sturdy. But this is probably only because nervous borrowers have pulled down available credit lines, and with banks now battening down their underwriting standards and cutting lines, this source of credit is drying up. According to the Fed's senior loan officer survey, lenders have tightened credit over the past year as aggressively as they ever have. The net percent of loan officers who say they are willing to make a consumer loan is the lowest ever, with the exception of 1980 when the Carter administration briefly imposed credit controls (see Chart 5).[vi]

Chart 5: Banks Fight to Survive, Not to Make a Loan
Net % of lenders willing to make a consumer loan



The pernicious impact of a credit crunch on the economy is difficult to quantify, but the economy's performances during the early 1980s and early 1990s suggest it can be substantial. The 1980s downturn was the most severe in the post-World War II period, and while the 1990s downturn was not as bad, the economy struggled long after the recession formally ended. Using these two periods as a guide suggests that for every 1 percentage point decline in real credit growth, real GDP growth weakens in the subsequent year by approximately 35 basis points. Thus, if real credit shrinks 5% by the end of this year, which seems plausible, then this credit effect will cut some $275 billion from GDP in 2009.

One significant positive for the U.S. economy has come out of the financial panic: lower energy and commodity prices. With oil now trading below $70 per barrel, a gallon of regular unleaded gasoline should soon cost no more than $2. Gasoline prices peaked during the summer above $4 per gallon and have averaged closer to $3 over the past year. Every penny-per-gallon decline in the cost of gasoline saves U.S. consumers just over $1 billion a year. Assuming gas remains at $2 per gallon through the coming year, Americans will save more than $100 billion in 2009 compared with fuel costs in 2008. There will also be measurable savings on home heating and food bills as agricultural and transportation costs fall. Total savings next year compared with this year will thus approach $175 billion.

Calculating the costs to the economy from the wealth and credit effects, less the benefits from lower commodity prices, puts the net direct cost of the financial panic at $400 billion in 2009, or more than 2.5% of GDP. (A $300 billion wealth effect plus $275 billion credit crunch effect minus $175 billion in savings due to lower commodity prices.) This is, of course, a simplistic analysis; it does not account for all the indirect costs of the panic on the economy and the multipliers, but it gives a sense of the magnitude of the fallout.

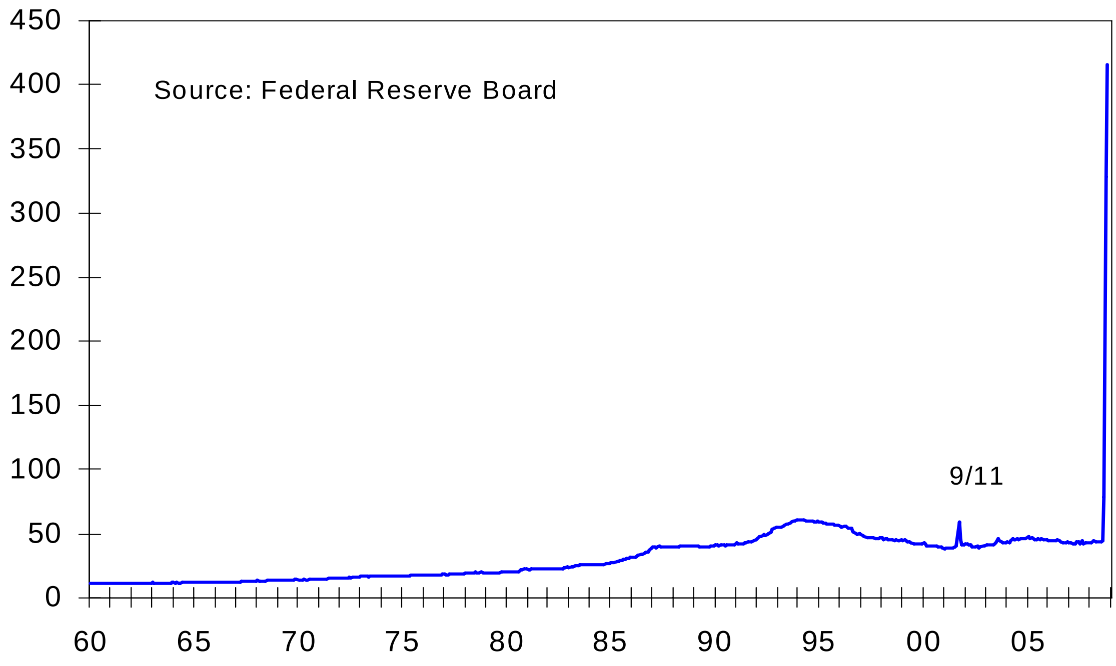
Muted monetary stimulus

Reinforcing the need for fiscal stimulus is monetary policy's increasing inability to revive the economy. Monetary stimulus supports the economy by lowering the cost of credit and promoting the availability of credit. Even though the Federal Reserve has aggressively lowered the federal funds rate and is providing massive liquidity to the financial system, these efforts have yet to get credit flowing again or measurably lower its cost. The Federal Reserve's unprecedented efforts will ultimately succeed, but given the severe disrepair of the financial system, this will be very slow to occur.

The Federal Reserve is running out of room to lower the federal funds rate. Policymakers are likely to lower the funds rate target one more time to 0.5% at the December Federal Open Market Committee meeting, but any further rate reductions may not be feasible. One problem that would be created by lowering rates further would be to jeopardize already-stressed money market mutual funds. The average money fund has operating costs of close to 50 basis points and would thus become quickly unprofitable if the return on their short-term investments, which are closely tied to the funds rate, were to fall below that.[vii]

The Fed will continue to flood the financial system with liquidity despite reaching the zero bound on the federal funds rate. The TARP legislation granted the Fed authority to pay interest on bank reserves. The Fed has set this deposit rate to just below the funds rate target. This seemingly innocuous technical change allows the Fed to inject unlimited reserves into the system and maintain the funds rate at the deposit rate. Financial institutions will choose to deposit their excess reserves with the Fed to collect the deposit rate rather than lend them out at a lower rate. Although the Fed is having some difficulty making this work properly, it has pumped a massive amount of reserves into the financial system in recent weeks (see Chart 6).

Chart 6: The Fed Floods the Financial System
Bank reserves, $ bil



To flood the financial system with even more liquidity, the Fed is ramping up lending to a wide range of financial institutions through credit facilities it has established over the past year. These facilities allow financial institutions to borrow from the Fed, using securities they own as collateral. The Fed has repeatedly lowered the bar on the collateral it will accept, taking on progressively less liquid securities to encourage more borrowing. To bring overseas financial institutions into the mix, the Fed has greatly expanded its swap lines with global central banks. Foreign central banks can exchange U.S. dollars for their own currencies rather than buying up dollars in foreign exchange markets. Such swap lines have been set up with central banks of developed as well as emerging economies. The Fed is also providing liquidity by exercising its new ability to purchase commercial paper directly from issuers. The implications of this program go far beyond the commercial paper market; the Fed now has a mechanism to purchase just about anything it deems necessary.[viii]

Money markets are responding to the Fed's unprecedented actions. Libor has fallen, suggesting that the interbank lending market is coming back to life. Commercial paper rates have also fallen, and the volume of new issuance has sharply increased. Despite the better money market conditions, they remain far from normal. Moreover, even after financial institutions begin lending more freely to one another, they will be slow to extend credit more freely to households and businesses, given their mounting worries over the creditworthiness of all borrowers in a severe recession.

How large a fiscal stimulus?

The goal of fiscal stimulus measures is to maximize the near-term boost to economic growth without weakening the economy's longer-term prospects. This requires that the stimulus be implemented quickly and that its benefits go first and predominately to those hurt most by the economy's problems. The amount spent on the stimulus should be large enough to provide a measurable boost, but not so large that it harms the nation's long-term fiscal condition. The likely severity and length of the current recession means the stimulus plan should be very large: Given that the direct economic costs of the financial panic are estimated at $400 billion, this would be a good benchmark. Such a stimulus plan would be four times the size of the tax rebate checks mailed this past summer and would equal more than 2.5% of GDP.

To provide the largest bang for the buck, a well-designed stimulus plan should include a temporary increase in government spending. Spending increases benefit the economy as soon as the money is disbursed, and the economic benefit is less likely to be diluted by increased imports. The most efficacious spending includes extending unemployment insurance benefits, expanding the food stamp program, and increasing aid to hard-pressed state and local governments. Increasing infrastructure spending would also greatly boost the economy, particularly in the current downturn, as the economy's problems are expected to last for an extended period.

Tax cuts should also be part of a well-designed stimulus plan. This would include codifying the current personal marginal tax rates for lower- and middle-income households, assuring higher-income households that their tax rates will not increase any time soon, providing temporary tax incentives to support business investment and stimulate home sales, and providing a temporary tax cut, such as a payroll tax holiday, that would benefit lower- and middle-income households and small businesses.

UI and food stamps

Extra benefits for workers who exhaust their regular 26 weeks of unemployment insurance benefits and expanded food stamp payments have been part of the federal response to most recessions, and for good reason: They are the most efficient ways to prime the economy's pump. Simulations of the Moody's Economy.com macroeconomic model show that every dollar spent on UI benefits generates an estimated $1.63 in near-term GDP. [ix] Boosting food stamp payments by $1 increases GDP by $1.73 (see Table 1). People who receive these benefits are hard-pressed and will spend any financial aid they receive very quickly. Another advantage is that these programs are already operating and can quickly deliver a benefit increase to recipients. The virtue of extending UI benefits goes beyond simply providing financial aid for the jobless to more broadly shoring up household confidence. Nothing is more psychologically debilitating, even to those still employed, than watching unemployed friends and relatives lose their sources of support.[x] Increasing food stamp benefits has the added virtue of helping people ineligible for UI such as part-time workers.

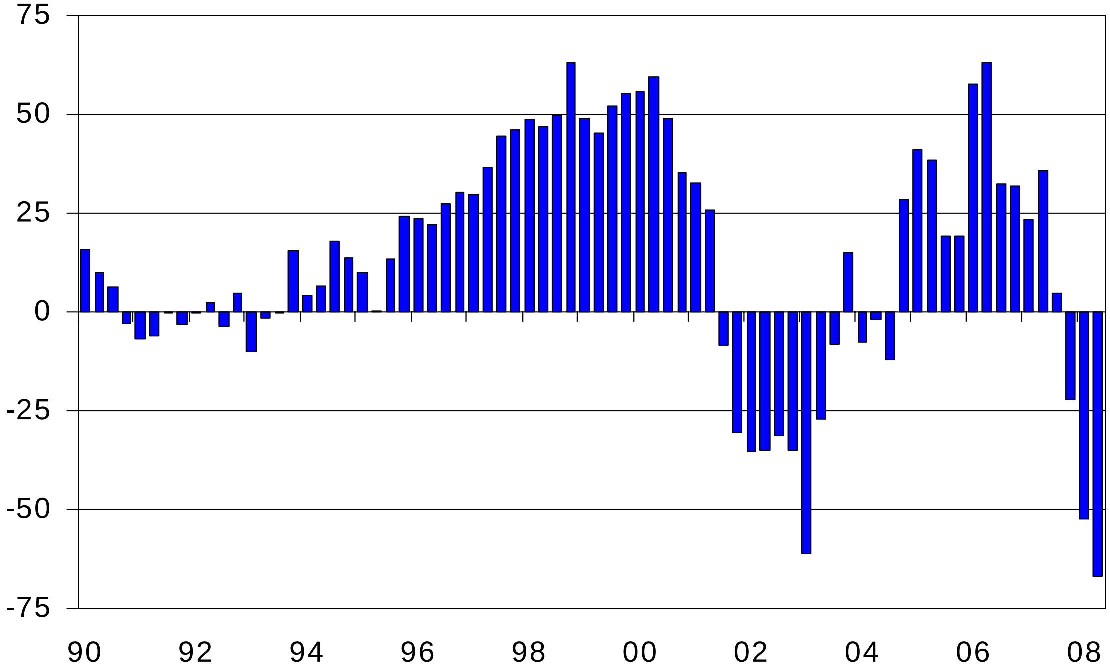
Table 1: Fiscal Stimulus Bang for the Buck	
Source: Moody's Economy.com	
	Bang for the Buck
Tax Cuts	
Non-refundable Lump-Sum Tax Rebate	1.01
Refundable Lump-Sum Tax Rebate	1.22
Temporary Tax Cuts	
Payroll Tax Holiday	1.28
Across the Board Tax Cut	1.03
Accelerated Depreciation	0.25
Permanent Tax Cuts	
Extend Alternative Minimum Tax Patch	0.49
Make Bush Income Tax Cuts Permanent	0.31
Make Dividend and Capital Gains Tax Cuts Permanent	0.38
Cut in Corporate Tax Rate	0.30
Spending Increases	
Extending Unemployment Insurance Benefits	1.63
Temporary Increase in Food Stamps	1.73
General Aid to State Governments	1.38
Increased Infrastructure Spending	1.59
Note: The bang for the buck is estimated by the one year $ change in GDP for a given $ reduction in federal tax revenue or increase in spending	

Aiding state and local governments

Another economically potent stimulus is to provide additional aid to financially pressed state governments. This could take the form of general aid or a temporary increase in the Medicaid matching rate to ease the costs of healthcare coverage.

Forty-one states and a rapidly increasing number of localities are already grappling with significant fiscal problems. Tax revenue growth has slowed sharply along with falling home sales, property values, retail sales, and corporate profits. Personal income tax receipts have also begun to suffer as the job market slumps. Big states including California and Florida are under severe financial pressure, and smaller states including Arizona, Minnesota and Maryland are struggling significantly. The gap between state and local government revenues and expenditures ballooned to over $60 billion—a record—in the second quarter of 2008, according to the Bureau of Economic Analysis (see Chart 7).

Chart 7: State & Local Budget Shortfall Deepens
State and local govt. expenditures less tax revenues, $ bil



Because most state governments are required by their constitutions to quickly eliminate their deficits, most have drawn down their reserve funds and have already begun to cut programs ranging from healthcare to education. Cuts in state and local government outlays are sure to be a substantial drag on the economy in 2009 and 2010. Additional federal aid to state governments will fund existing payrolls and programs, providing a relatively quick economic boost. States that receive checks from the federal government will quickly pass the money on to workers, vendors and program beneficiaries.

Arguments that state governments should be forced to cut spending because they have grown bloated and irresponsible are strained, at best. State government spending and employment are no larger today as a share of total economic activity and employment than they were three decades ago. The contention that helping states today will encourage more profligacy in the future also appears overdone. Apportioning federal aid to states based on their size, rather than on the size of their budget shortfalls, would substantially mitigate this concern.

Infrastructure spending

Increased infrastructure spending is also a particularly effective way to stimulate the economy. The boost to GDP from a dollar spent on building new bridges and schools is large—an estimated $1.59—and there is little doubt that major infrastructure investment is needed. The case against including such spending as a part of a stimulus plan, however, is that it generally takes a substantial amount of time for funds to flow to builders and contractors and into the broader economy.[xi] Infrastructure projects can take years from planning to completion. Even if the funds are used to finance only projects that are well along in their planning, it is very difficult to know just when projects will get under way and the when the money will be spent. Although this caveat is important in many cases, the economy's problems could extend well into 2010, which weakens the case against infrastructure spending in the current downturn.

Personal tax rates

Under current law, personal marginal tax rates and capital gains and dividend income tax rates are set to increase beginning in 2011 when the 2001 and 2003 tax cuts start to expire. At expiration, 1) the top marginal tax rate for individuals will increase from 35% to 39.6%; 2) the maximum long term capital gains tax rate will increase from 15% to 20%; and 3) the top tax rate on divided income will increase from 15% to 39.6%. A modest stimulus would be provided by codifying the currently lower tax rates for individuals who make less than $250,000 annually as promised by President-elect Obama. While taxpayers earning more than $250,000 annually likely expect their tax rates to rise, it would be beneficial if they are assured that this will not occur until later in the next decade and that future tax increases will be phased in over several years.

Investment and housing tax incentives

Temporary tax incentives to support business investment and stimulate home sales would also provide an important economic boost. Accelerated depreciation by large businesses and expensing of investment by small businesses were included in the fiscal stimulus provided early this year. These tax benefits are set to expire at the end of this year, giving businesses an incentive to invest now at the cost of weaker investment at early next year. The timing would be particularly bad given that the economy will likely be at its weakest in early 2009. Extending these tax incentives for another year until the end of 2009 would thus forestall this badly timed weakening in business investment.

Another important boost to the hard-pressed housing market would come from giving people an incentive to purchase a home in 2009. This would help work off the large amount of excess housing inventory and help stop the decline in housing values. For first-time buyers of owner-occupied homes, a particularly attractive incentive would be a homebuyer tax credit equal to 10% of the purchased home's value, capped at 3.5% of FHA loan limits, which vary according to location. This money would be made available to the first-time buyer at closing to help with the necessary downpayment. The homebuyer would have to at least meet all other FHA underwriting criteria. Repeat buyers of owner-occupied homes who purchase a home in 2009 would be able to double their mortgage interest tax deduction in the first year after the purchase, take an additional 75% of the deduction in the following year, 50% in the third year, 25% in the fourth year, and nothing after that. For the average homebuyer in 2009, this bonus mortgage interest deduction would be worth approximately $7,500 on a net present value basis.

Payroll tax holiday

One reasonably efficacious way to provide quick relief to working cash-strapped households and businesses would be to implement a payroll tax holiday. A holiday applied to the employees' share of the tax would have the advantage of directing more of the reduction to households more likely to spend it, even reaching taxpayers who could not qualify for a rebate on the basis of income tax returns. For most households, the monies would be deposited directly into their checking accounts, thus increasing the amount that would be spent quickly. A holiday for the employers' share of the tax would be especially helpful for smaller businesses and could have the benefit of stemming some layoffs as labor costs would be temporarily reduced. Any administration complications from turning withholding schedules on and off should be modest.

Economic impact of stimulus measures

Unless policymakers quickly implement a very large and effective fiscal stimulus plan, the economy appears headed for the worst downturn since the Great Depression. The Moody's Economy.com macroeconomic model's simulation results support this assessment. Simulating the model assuming that there is no added fiscal stimulus except for that provided by the automatic stabilizers already in place, real GDP would decline for seven straight quarters, falling by a stunning 2.6% in 2009. This would be more severe than the 1.9% decline of 1982, the worst year for the economy since the Depression. Nearly 5 million jobs would be lost from the peak in employment at the start of 2008 to the bottom in employment by mid-2010, pushing the unemployment rate to over 10% by late 2010.

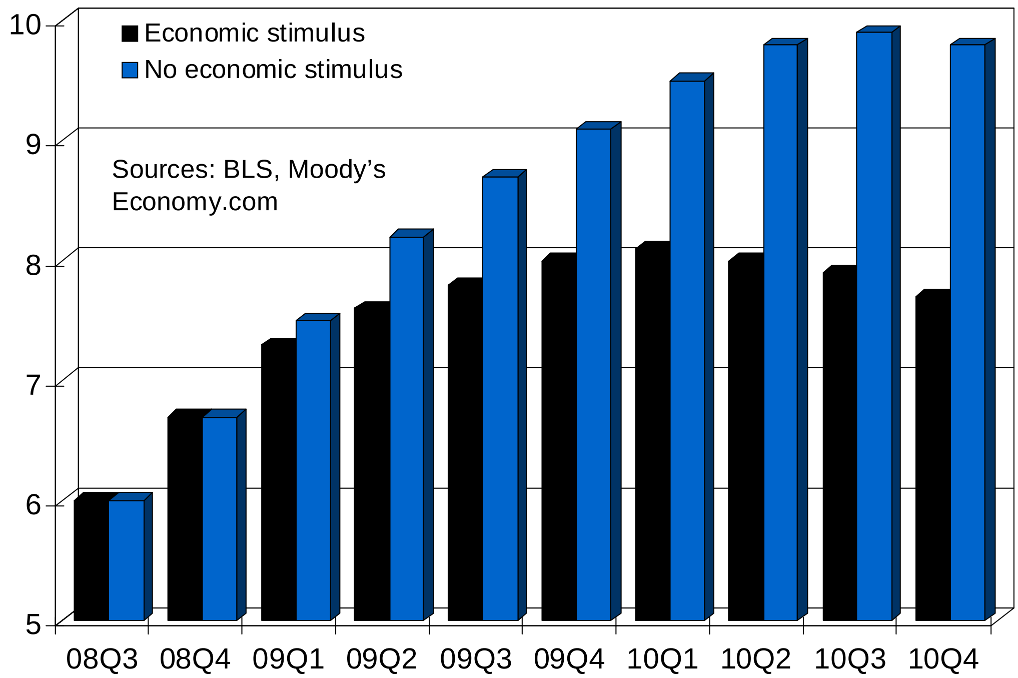
The implementation of a fiscal stimulus plan beginning in early 2009 would make a substantial difference to the economic outlook. This can be seen by simulating the macro model assuming that a $400 billion stimulus program is implemented in 2009 and 2010 (see Table 2). The plan includes $230 billion in increased government spending, composed of $30 billion in additional spending on UI benefits and foods stamps, $100 billion in increased aid to state governments, and $100 billion in greater infrastructure spending. The plan also includes $170 billion in tax cuts, composed of $30 billion to extend various investment tax credits for businesses that are set to expire at the end of this year which were part of this year's fiscal stimulus, $40 billion in tax incentives to stimulate housing demand, and $100 billion to cover the costs of a payroll tax holiday in May and June 2009 to lower income households and small businesses. The stimulus also includes changes to the tax law to make permanent current marginal tax rates for taxpayers that make less than $250,000 a year, and to allow for a phase in between 2012 and 2015 of higher marginal rates for taxpayers who make more. [xii]

Table 2: $400 billion Fiscal Stimulus Plan		
Source: Moody's Economy.com		
		Billions $
Total		$400
Spending		$230
	Extending Unemployment Insurance	$15
	Expanding Food Stamps	$15
	Aid to State and Local Government	$100
	Infrastructure Spending	$100
Taxes		$170
	Investment Tax Credits	$30
	Housing Tax Incentives	$40
	Payroll Tax Holiday	$100

The $400 billion stimulus plan would add more than 2 percentage points to annualized real GDP growth in 2009. Real GDP still would decline during the year, but by a much smaller 0.3% (see Table 3). The stimulus limits the peak-to-trough decline in jobs to some 2.5 million, and the unemployment rate peaks at just over 8% in early 2010. With the stimulus, the unemployment rate would fall back to its full employment rate of nearly 5% by the end of 2012. Without the stimulus, the unemployment rate ends 2012 at a still very high 7.5%.

Table 3: The Economic Benefit of Fiscal Stimulus						
Sources: BEA, BLS, Moody's Economy.com						
	Real GDP, Billions 2000$			**Real GDP, % Change**		
	No Stimulus	Stimulus	Difference	No Stimulus	Stimulus	Difference
2007	11,523.9	11,523.9	-	2.03	2.03	-
2008	11,686.1	11,687.5	1.5	1.41	1.42	0.0
2009	11,384.6	11,648.5	264.0	-2.58	-0.33	2.2
2010	11,446.0	11,970.5	524.5	0.54	2.76	2.2
2011	11,826.0	12,533.9	707.9	3.32	4.61	1.3
2012	12,468.2	12,962.7	494.5	5.43	3.62	(1.8)
	Unemployment Rate			**Payroll Employment, Millions**		
	No Stimulus	Stimulus	Difference	No Stimulus	Stimulus	Difference
2007	4.64	4.64	-	137.6	137.6	-
2008	5.63	5.62	(0.0)	137.5	137.6	0.0
2009	8.36	7.59	(0.8)	133.2	134.9	1.8
2010	9.92	7.91	(2.0)	132.9	136.6	3.7
2011	9.63	6.87	(2.8)	135.4	140.1	4.7
2012	8.04	5.52	(2.5)	140.0	143.4	3.4

Chart 8: 10% Unemployment Without Stimulus
Unemployment rate



Despite the added federal government borrowing necessary to finance the fiscal stimulus plan, it would not lead to excessively higher long-term interest rates. Given all of the current demands on the Treasury, total bond issuance with the stimulus would approach a record $2 trillion in fiscal 2009 and about the same in fiscal 2010, but private bond issuance would remain extraordinarily depressed during this period. The moribund issuance of corporate debt, emerging market debt, and private-label mortgage and asset-backed debt will eventually revive, but total credit market needs including the record Treasury issuance will remain modest enough that the 10-year Treasury yield would remain below 5% through 2010. It is now firmly below 4%. Other long-term rates, including corporate bond and mortgage rates, would rise by even less as credit spreads narrowed, reflecting the stronger economy and reduced credit concerns.

Conclusions

A long history of public policy mistakes has contributed to this crisis. Although there will surely be more missteps, only through further aggressive and consistent government action will the U.S. avoid the most severe economic downturn since the Great Depression.

In some respects, this crisis has its genesis in the long-held economic policy objective of promoting homeownership. Since the 1930s, policy has been geared toward increasing homeownership by heavily subsidizing home purchases. Although homeownership is a worthy goal, fostering stable and successful communities, it was carried too far, producing a bubble when millions of people became homeowners who probably should not have. These people are now losing their homes in foreclosure, undermining the viability of the financial system and precipitating the current recession.

Perhaps even more important has been the lack of effective regulatory oversight. The deregulation that began during the Reagan administration fostered financial innovation and increased the flow of credit to businesses and households. But deregulatory fervor went too far during the housing boom. Mortgage lenders established corporate structures to avoid oversight, while at the Federal Reserve, the nation's most important financial regulator, there was a general distrust of regulation.

Despite all this, the panic that has roiled financial markets might have been avoided if policymakers had responded more aggressively to the crisis early on. Officials misjudged the severity of the situation and allowed themselves to be hung up by concerns about moral hazard and fairness. Considering the widespread loss of wealth, it is now clear they waited much too long to act, and their response to the financial failures in early September was inconsistent and ad hoc. Nationalizing Fannie Mae and Freddie Mac but letting Lehman Brothers fail confused and spooked global investors. The shocking initial failure of Congress to pass the TARP legislation caused credit markets to freeze and sent stock and commodity prices crashing.

Now, a new policy consensus has been forged out of financial collapse. It is widely held that policymakers must take aggressive and consistent action to quell the panic and mitigate the resulting economic fallout. An unfettered Federal Reserve will pump an unprecedented amount of liquidity into the financial system to unlock money and credit markets. The TARP fund will be deployed more broadly, and another much larger and comprehensive mortgage loan modification program is needed to blunt further increases in foreclosures. Finally, another very sizable economic stimulus plan will be needed early next year. The most economically efficient plan would include aid to state governments and infrastructure spending, in addition to another round of tax cuts. The economy's problems are likely to continue long enough to make such spending particularly helpful a year from now.

Each of these measures carries substantial costs. The federal budget deficit, which topped $450 billion in the just-ended 2008 fiscal year, could easily exceed $1 trillion in fiscal 2009 and go even higher in 2010. Borrowing by the Treasury could top $2 trillion this year. There will also be substantial long-term costs to extricate the government from the financial system. Unintended consequences of all the actions taken in such a short period will be considerable. These are problems for another day, however. The financial system is in disarray, and the economy's struggles are intensifying. Policymakers are working hard to quell the panic and shore up the economy; but given the magnitude of the crisis and the continuing risks, policymakers must be aggressive. Whether from a natural disaster, a terrorist attack, or a financial calamity, crises end only with overwhelming government action.

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[i] The London interbank offered rate is the interest rate at which major banks lend to each other.

[ii] Currency swings have been wild enough to prompt discussion of coordinated government intervention. This seems unlikely, in part because the currency moves until recently have been largely welcome. A stronger U.S. dollar means global investors still view the U.S. as a safe haven, which is important as the Treasury ramps up borrowing. Nations whose currencies are falling against the dollar are hopeful that this will reduce pressures on their key export industries.

[iii] When all the GDP revisions are in, it is expected to show that real GDP also fell in the first quarter of 2008. Second quarter growth was supported by the tax rebate checks as part of the first fiscal stimulus package.

[iv] State recessions are determined using a methodology similar to that used by the business cycle dating committee of the National Bureau of Economic Research for national recessions.

[v] For a more thorough discussion of the wealth effect, see "MEW Matters," Zandi and Pozsar, *Regional Financial Review*, April 2006. In this article, the housing wealth effect is estimated to be closer to 7 cents while the stock wealth effect is nearer to 4 cents.

[vi] This was part of a failed effort to rein in the double-digit inflation of the period.

[vii] The expense ratio for money funds varies from 10 to 100 basis points, with averages of 30 basis points for institutional funds and 55 basis points for retail funds. A funds rate target of below 50 basis points could also exacerbate the failure problem in the Treasury market.

[viii] A hypothetical but plausible example would be for the Fed to purchase municipal bonds if state and local fiscal conditions continue to erode, threatening a string of municipal bond defaults. Such defaults would almost certainly reignite the financial panic since most investors perceive municipal bonds to be super-safe.

[ix] The model is a large-scale econometric model of the U.S. economy. A detailed description of the model is available upon request.

[x] The slump in consumer confidence after the recession in 1990-1991 may have been due in part to the first Bush administration's initial opposition to extending UI benefits for hundreds of thousands of workers. The administration ultimately acceded and benefits were extended, but only after confidence had waned and the fledgling recovery sputtered.

[xi] It should be noted that the economic bang-for-the-buck estimates measure the change in GDP one year after spending actually occurs; it says nothing about how long it may take to cut a check to a builder for a new school.

[xii] The cost of these tax law changes are not included as part of the cost of the stimulus plan.