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Economic Outlook and Issues

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U.S. Recovery, Prospects, and Legacies From the Crises

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Are We "Really" There?

After the worst U.S. and global economic downturn since the 1930s, truly a "Great Recession"—economic recovery is in-place.

What is the evidence for recovery? How did we get there? What about the profile of recovery, expansion, and the prospects? The aftermath and legacies of the economic and financial crises and the policies used to combat them? How serious are the legacies? What are the policy challenges going forward? Finally, a question that has to be asked—is the U.S. up to solving its problems or will the American system, perhaps for the first time, be unable to satisfactorily deal with the economic, societal, and political problems confronting the country?

The evidence for Recovery is: 1) high-frequency monthly and quarterly data, especially for the industrial and manufacturing economy, production, capital spending on technology, inventories and consumption; 2) shifts from negatives to positives in real economic growth and key components such as consumption; 3) super-low interest rates and their positive effects on financial conditions and financial intermediaries; 4) improving financial conditions, most particularly a stronger equity market and its support for consumption; 5) huge increases in federal government outlays; and now 6) what looks like the self-sustaining and self-reinforcing cyclical interactions that typically occur in an economic upturn.[1]

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[1]Globally, Decision Economics, Inc. (DE) estimates that 40 of 47 country economies analyzed and forecasted are in the Recovery phase of the business cycle, with most likely to remain so and then to enter Expansions, although with different time lines and robustness depending on the country. Downside risks to the Baseline prospect are approximately 20%, mainly global financial and sovereign debt risks.

Recovery is the first phase of a business cycle upturn. Technically, an Expansion does not begin until Real Gross Domestic Product (GDP) reaches its level prior to the Recession. For the United States and much of the world, recoveries should evolve into expansions by late 2010 or the first half of 2011 and continue thereafter, although with different time lines. Once locked into place, upcycles in the U.S. economy have lasted anywhere from three to ten years, resilient and hard to dislodge. Ebbs and flows in activity typically occur, at times creating doubts on the upturn. But, a *true* "double-dip" is rare.

The *aftermath* of the economic and financial crises, however, has left some *legacies* that suggest a difficult path ahead, with significantly lower real economic growth, on average, than often is the case, lingering sticky-high unemployment and underemployment, restructured and more regulated financial institutions, less strong and less aggressive financial intermediation, and *a U.S. sovereign debt problem of potentially epic proportions. The U.S. sovereign debt problem could severely limit economic growth, prevent the use of stimulative macroeconomic policies if needed, threaten the business expansion, perhaps bring on a recession, and present challenges that the U.S. political and economic system may be unable to handle.*

Clear is that the massive monetary and fiscal policy measures undertaken by the U.S. and countries such as Japan, Germany, Canada, the U.K., China, Australia, South Korea and others saved the day in the sense of halting what could have been an unknown and irreversible downward spiral of economic activity. As it was, deep and prolonged declines in economic growth occurred almost everywhere, essentially a "freefall," unprecedented compared with all other downcycles since the 1930s (see Table 1, especially 2008:3 to 2009:1). These data indicate that the episode can justifiably be called a "Great Recession."

What might have happened in the absence of the macroeconomic policies will never be known, but surely much worse results than the devastating economic downturn and financial collapse that occurred even with massively stimulative policies. Private sector adjustments and working out some of the excesses that helped produce the downturn also have been a key to recovery. And, particularly, "seeds of recovery," that is lower price inflation, lower interest rates, higher stock prices, and a generally weaker U.S. dollar have set into motion the self-sustaining, self-reinforcing cyclical forces that lock-in a recovery and expansion.[2]

Also clear is that the failure fallout of the economic and financial crises, side effects, aftermath and legacies, however described, have put in-place significant challenges to future U.S. economic growth and reinforced ongoing changes in the global economic and financial landscape that do not favor the United States in the longer-run.

Long-run prospects for countries and global regions that previously have been "Haves," such as the U.K., Japan, the U.S. and Eurozone, look diminished. Previous "Have-Not" countries such as China, India, Brazil, South Korea and Singapore, however, have been moving in the direction of "Haves."

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[2]Most high-frequency data indicate economic recovery except for labor market data, in the U.S. nonfarm payrolls and the unemployment rate. Dating the Recovery as having started some time last summer suggests that the upturn is already around eight months old but still "jobless," similar to the last two economic upturns post- 1990-91 and 2001.

Table 1
The "Great Recession" of 2007-09: A World View
Real GDP Growth
(Pct. Chg. at Annual Rates)

	Quarters						Years		
Country and Global Region	**2008:2**	**2008:3**	**2008:4**	**2009:1**	**2009:2**	**2009:3**	**2007**	**2008**	**2009**
United States *	**1.5**	**-2.7**	**-5.4**	**-6.4**	**-0.7**	**2.2**	**2.1**	**0.4**	**-2.4**
Canada *	**0.3**	**0.4**	**-3.7**	**-6.2**	**-3.1**	**0.4**	**2.5**	**0.4**	**-2.6**
United Kingdom *	**-0.3**	**-3.7**	**-7.0**	**-9.7**	**-2.7**	**-0.6**	**2.6**	**0.6**	**-4.9**
Europe	**-1.1**	**-1.0**	**-5.8**	**-14.5**	**-1.8**	**-1.1**	**2.7**	**0.6**	**-3.9**
France *	-1.8	-1.1	-6.4	-5.8	1.0	1.3	2.4	0.4	-2.2
Germany *	-2.2	-1.3	-9.4	-13.4	1.8	2.9	2.6	1.0	-4.9
Italy *	-2.2	-3.2	-8.0	-10.4	-1.9	2.3	1.5	-1.0	-5.1
Switzerland *	1.0	-2.0	-2.3	-3.6	-1.1	1.2	3.6	1.8	-1.5
Asia-Pacific	**-6.1**	**-3.2**	**-9.0**	**-9.4**	**2.7**	**1.2**	**2.7**	**-0.6**	**-4.1**
Japan *	-8.1	-4.0	-10.2	-11.9	2.7	1.3	2.3	-1.2	-5.2
Australia *	3.6	0.5	-3.5	2.2	2.6	0.8	4.8	2.2	1.3
New Zealand *	-2.4	-2.7	-3.4	-3.4	0.9	0.8	2.8	-0.1	-1.6
Newly Industrialized	**3.2**	**5.9**	**-13.7**	**-15.6**	**16.2**	**21.7**	**5.8**	**1.8**	**-0.9**
Korea *	1.7	1.0	-18.8	0.5	11.0	13.6	5.1	2.2	0.2
Taiwan	17.4	5.2	-8.4	-39.6	29.2	32.7	6.0	0.7	-1.9
Hong Kong	-10.0	27.6	1.6	-38.1	7.4	34.0	6.4	2.4	-2.7
Singapore	-4.4	6.5	-17.5	-20.1	24.6	24.6	7.8	1.1	-2.1
Latin America	**2.6**	**1.8**	**-7.3**	**-18.4**	**1.6**	**9.3**	**4.5**	**2.7**	**-4.5**
Argentina	7.3	5.3	-2.0	0.2	1.1	--	8.7	6.7	0.9
Brazil	3.9	4.5	-11.2	-3.5	4.4	5.1	6.1	5.1	-0.2
Mexico *	-1.4	0.2	-9.3	-23.4	-1.1	12.2	3.3	1.4	-6.6
Venezuela	43.1	10.2	35.7	-52.3	27.1	0.9	8.2	4.8	-3.3
Chile	7.6	-5.1	-7.9	-2.9	-1.2	4.6	4.7	2.9	-1.4
World	**0.7**	**0.5**	**-4.0**	**-9.7**	**0.6**	**4.1**	**4.1**	**1.8**	**-2.4**
OECD	**-0.4**	**-0.9**	**-7.3**	**-11.4**	**0.2**	**3.3**	**2.7**	**0.5**	**-3.6**
EU	**-0.8**	**-1.8**	**-7.3**	**-9.0**	**-0.9**	**1.2**	**2.8**	**0.6**	**-4.0**
Eurozone	**-1.4**	**-1.7**	**-7.3**	**-9.2**	**-0.7**	**1.5**	**2.7**	**0.5**	**-4.0**
Asia-NICs, Emerging	**2.5**	**6.2**	**10.7**	**0.0**	**4.6**	**10.9**	**10.0**	**6.7**	**5.1**
Europe									
Spain *	-0.1	-2.2	-4.3	-6.3	-4.1	-1.2	3.6	0.9	-3.6
Portugal *	0.5	-2.0	-6.7	-7.8	2.1	2.8	1.9	0.0	-2.7
Netherlands *	-0.1	-3.0	-4.1	-9.4	-4.0	1.8	3.6	2.0	-4.0
Belgium *	1.6	-0.9	-8.2	-7.0	-0.3	2.2	2.8	0.8	-3.0
Austria *	1.7	-2.6	-5.0	-9.7	-1.7	2.1	3.4	2.0	-3.5
Greece *	2.5	0.5	-2.7	-2.1	-0.4	-1.7	4.5	2.0	-2.0
Ireland *	-7.6	0.7	-19.9	-8.0	-2.5	1.4	6.0	-3.0	-7.1
Scandinavia	**1.3**	**-2.4**	**-10.2**	**-6.7**	**-2.4**	**1.8**	**2.8**	**0.4**	**-4.3**
Denmark *	2.8	-4.8	-8.6	-7.7	-6.7	1.5	2.1	-0.7	-4.8
Sweden *	-0.8	-2.2	-17.9	-3.2	1.2	0.7	2.7	-0.5	-4.7
Norway *	1.0	-2.8	0.1	-2.7	-3.7	3.5	2.7	1.7	-1.4
Finland *	3.7	0.8	-15.5	-18.2	-1.1	1.2	4.1	1.1	-7.8
Eastern Europe	**8.4**	**24.4**	**-19.4**	**-23.4**	**24.2**	**38.0**	**5.2**	**2.4**	**-2.7**
Poland *†	6.0	5.1	3.0	0.8	1.1	1.7	6.8	5.1	1.7
Hungary *	-0.8	-4.0	-7.3	-9.8	-7.6	-6.9	1.0	0.4	-6.2
Czech Republic *	2.8	0.7	-2.7	-16.4	0.6	3.3	6.1	2.3	-4.1
Turkey *	13.7	51.6	-43.2	-46.0	54.7	84.3	4.7	0.9	-4.7
Russia †	**7.5**	**6.0**	**1.2**	**-9.8**	**-10.9**	**-8.9**	**8.1**	**5.6**	**-7.9**
Emerging Asia	**2.3**	**6.3**	**17.0**	**4.0**	**1.7**	**8.2**	**11.1**	**8.0**	**6.7**
China †	10.2	9.0	7.0	6.1	7.9	8.9	13.0	9.1	8.4
India	-29.4	-4.4	67.2	10.8	-28.4	2.0	9.3	7.4	5.7
Indonesia	11.7	15.6	-13.8	6.9	9.9	16.4	6.3	6.1	4.5
Malaysia	9.5	11.9	-12.9	-27.6	20.7	25.0	6.3	4.6	-1.7
Philippines	26.9	-10.4	63.8	-45.1	31.3	-12.8	7.1	3.8	0.9
Thailand	-19.6	-0.4	3.2	-9.9	-11.6	8.6	4.9	2.6	-2.3
Middle East	**4.0**	**1.0**	**-0.8**	**-1.7**	**0.5**	**1.2**	**6.2**	**5.6**	**2.1**
Israel	3.6	0.8	-1.6	-3.2	1.0	2.2	5.2	4.2	0.2
Egypt	--	--	--	--	--	--	7.1	7.2	4.2
Jordan	51.9	14.0	--	--	--	--	8.9	7.9	4.4
South Africa	**5.0**	**0.2**	**-1.8**	**-6.4**	**-3.0**	**--**	**5.1**	**3.1**	**-1.8**

(1) Real GDP.

(2) Annual averages, except for Latin American countries and Russia, which are percent change, December-over-December.

* OECD countries.

§ Regional and world totals are weighted averages of countries shown.

† Quarterly changes calculated as percent change from year ago.

Despite the policies taken, *the legacies of the Crises appear to include prolonged unemployment and underemployment; a "topsy-turvy" world of opportunities and risks in historically surprising places; seismic shifts in the relative strength of countries in terms of economic growth, incomes, wealth and political power; and, for some, including the United States, sovereign debt problems of potentially huge significance.*

The first section asks and offers a brief explanation of why the financial and economic crises. The second examines how the U.S. has gotten to Recovery. Third is an assessment of where the U.S. economy is now, also the global economy, the prospects for the near- to intermediate-term, and the profile of Recovery and Expansion. Then, the aftermath and some legacies from the downturns and policies taken are indicated—the principal ones a "Jobs Deficit" and "Budget Deficits and Debt." Finally, there is a look at the policy challenges going forward. And, a question—is the U.S. up to it, or has the country reached a situation that leaves no easy, nor obvious, way out? Some concluding perspectives are then offered.

Why the Economic and Financial Crises?

The economic and financial crises had their origin in the United States as a consequence of an historically unparalleled bursting of asset price, credit and debt bubbles. The bursting of asset price bubbles in residential real estate and equities took down the values of balance sheets of highly leveraged financial institutions—banks and a growing number of nonbanks—resulting in a severe contraction of credit within the financial system, financial institution-to-financial institution, and outside the financial system, from financial institutions to households and businesses. This reduced activity in the financial sector and the availability of credit to the real economy.

The asset price bubbles that burst resulted in huge declines of household wealth, a collapse in the balance sheets of financial institutions and in financial intermediation, and shut off easy sources of funding for consumers that had been in place for years. Aggregate consumption fell to a far greater degree than any time since the 1930s. From peak-to-trough (National Bureau of Economic Research (NBER) and DE dating), residential real estate prices (Table 2, median home prices) fell 27.4%. Stock prices plummeted 52.6%. These were the largest, or near largest, declines in asset prices post-W.W.II.[3] The real estate component of real household net worth fell 63.4% and the stock market by 50.3%, dwarfing the declines seen in almost all other economic downturns. This caused the values of household assets, net worth, and the value of household sector asset collateral to plummet, increased credit risk, particularly on housing-related financial instruments e.g., subprime mortgages and housing-based derivatives, and brought further declines in the balance sheets of financial institutions. Consumer sentiment, measured by the University of Michigan Consumer Sentiment Index, slid 42.9%. The only comparable experience was in 1973 to 1975, when the decline was 44.2%.

Key sources of funds for consumer spending—capital gains realizations and gross mortgage refinancing cashouts (Figure 1)—responsible for much of the boom in consumption and in housing, fell sharply. Real household net worth declined 29.2% from 2007 to 2009, more than double the previous biggest drop of 13% (1973 to 1975). The

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[3]By the time the equity bear market ended on March 9, 2009, the peak-to-trough decline for the S&P500 was 56.3%, second only to the Great Depression.

DE Household Financial Conditions Index, a summary measure for the aggregate household balance sheet, reached an all-time high in the second quarter of 2009 (Figure 2), indicating severely deteriorated household financial conditions, the need to reduce spending, borrowing, credit and debt, and to reliquefy household financial positions. The end result, shown in Figure 3, was a seismic shift in the growth of aggregate real consumption, beginning in 2005:4, to far below the historic trend growth rate of 3-1/2% per annum. This included large declines of 3% to 4%, at an annual rate, in 2008:3 and 2008:4. Aggregate consumption spending, in real terms, fell in four of six quarters, an unprecedented result. This downshift in the growth of consumer spending provided the *coup de grace* for the U.S. economy.

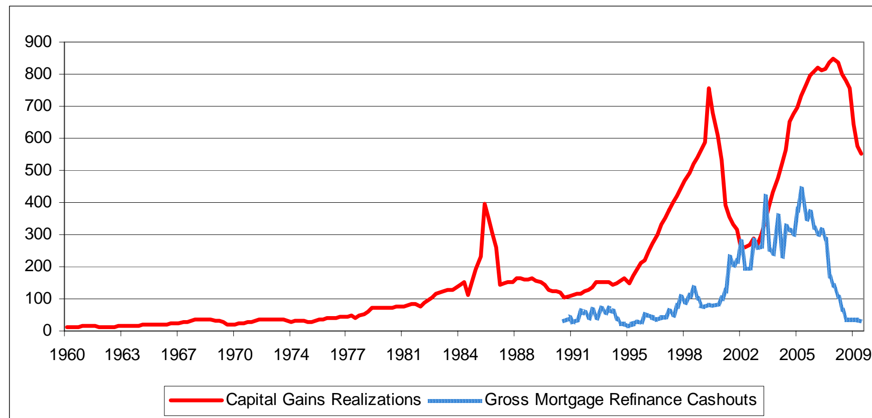
Table 2
Asset Prices, the Household Balance Sheet, and Consumer Sentiment in Postwar Recessions
Peak-to-Trough (Pct. Chg.)

				Household Sector					
Business Downturn (NBER Chronology)*	**S&P500 Price**	**Crude Oil Price**	**Median Home Price**	**Real Net Worth**	**Stock Mkt. Net Worth**	**Real Estate Net Worth**	**U. of M. Consumer Sentiment**	**3-Mos. Treasury Rate (%)**	**10-Yr. Treasury Yield (%)**
1948-1949	-15.4	--	--	--	--	--	--	NM	--
1953-1954	NM	--	--	NM	-18.9	-2.3	--	-70.8	-26.1
1957-1958	-16.5	--	--	-1.7	-12.6	-3.3	--	-76.8	-27.5
1960-1961	-10.9	--	--	-1.2	-11.9	-2.1	--	-50.1	-21.4
1969-1970	-32.9	NM	NM	-8.1	-41.1	-0.3	-22.6	-57.1	-27.9
1973-1975	-46.2	-18.1	NM	-13.0	-59.7	-13.6	-44.2	-51.5	NM
1980	-10.6	NM	NM	-0.8	-11.2	-3.0	-22.8	-53.5	-23.3
1981-1982	-21.3	-23.9	NM	-0.3	-32.6	-2.5	-19.7	-52.7	NM
1990-1991	-15.8	-49.9	-6.5	-4.0	-20.9	-9.9	-33.3	-67.5	-40.0
2001	-46.3	-44.3	NM	-13.2	-54.4	NM	-24.0	-85.1	-31.4
2007-2009	-52.6	-70.6	-27.4	-29.2	-50.3	-63.4	-42.9	-99.3	-52.6
Excluding 2007-2009:									
Average	-24.0	-34.1	-6.5	-5.3	-29.3	-4.6	-27.8	-62.8	-28.2
Median	-16.5	-34.1	-6.5	-2.8	-20.9	-2.7	-23.4	-57.1	-27.5
Including 2007-2009:									
Average	-26.8	-41.4	-17.0	-8.0	-31.4	-11.1	-29.9	-66.4	-31.3
Median	-18.9	-44.3	-17.0	-4.0	-26.8	-3.0	-24.0	-62.3	-27.7

NM=Not Meaningful (no significant change peak/trough).
"--"=No data available for time period.
Home Prices=Quantity weighted average of new and existing median home sale prices.
Sources: Standard and Poor's, OECD, University of Michigan, National Association of Realtors, Federal Reserve, Decision Economics, Inc. (DE).
*DE estimate—end of Recession, October 2009.

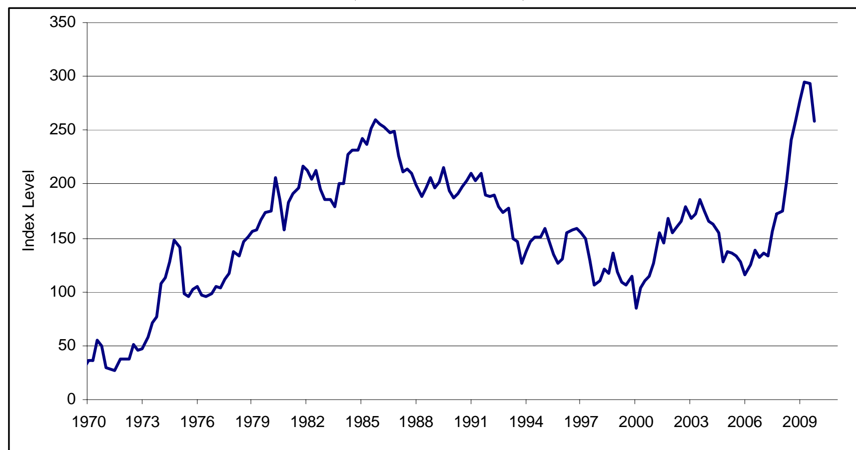
At over 71% of aggregate demand at the time, the slide in consumption reverberated through the economy, bringing down business sales and profits, production, inventories and jobs, in turn incomes and household spending, sales and business profits, then capital spending, employment, etc., and intensified the ongoing credit crunch and financial crisis. Standard multiplier-accelerator interactions occurred, leading to larger percentage declines in the growth of inventories, capital spending, and business profits.

Figure 1
Sources of Funds for Household Spending*
(Bils. $s)



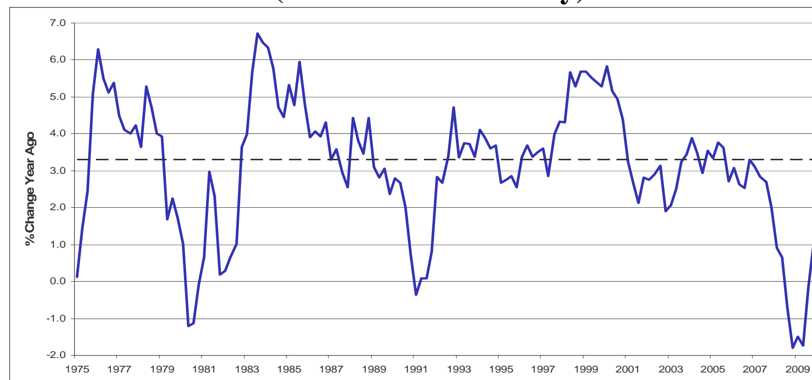
Sources: Department of the Treasury, A. Greenspan & J. Kennedy "Estimates of Home Mortgage Originations, Repayments, and Debt on One-to-Four-Family Residences" 2009, Decision Economics, Inc. (DE).
*Individual Capital Gains Realizations and Gross Mortgage Refinance Cashouts.

Figure 2
DE Household Financial Conditions Index*
(1970-2009:4)



Source: Decision Economics, Inc. (DE).
*Constructed using a weighted average of eight household sector variables that describe consumer financial conditions.
Note: A higher level indicates worse financial conditions.

Figure 3
Actual vs. Historic Trend Growth in Real Consumption
(1947 to 2009: History)



Sources: Bureau of Economic Analysis; Decision Economics, Inc. (DE).

Very importantly, the slide of consumption spread into the global economy on the large export exposures of open economies such as China, Japan and South Korea, less exposed to the United States on trade, except for China, than ever before, but still highly exposed. Asian export and import flows fell sharply; similarly so for Germany and Europe, Canada and Mexico, levering down real economic growth in the global economy and through weaker U.S. exports back again to further weaken the U.S. economy and its financial system.

The collapse of asset prices and the financial crisis intensified the economic downturn, U.S. and worldwide, and the economic downturn worsened the financial crisis. For a time, the U.S. and global economies essentially collapsed (Table 1, 2008:3 to 2009:1), with widespread, stunning and sweeping declines in real economic activity. Failure fallout occurred on a grand scale. As a result of continuing contractions in the balance sheets of financial institutions and a shutdown of credit within the financial system, financial intermediation was severely limited and many capital markets stopped functioning. The U.S. central bank had no choice but to step in to support banks, ultimately nonbank financial institutions, with essentially zero short-term interest rates and massive infusions of liquidity, as well as direct purchases of securities in certain capital markets, mortgages in particular, to restore some functionality.

How the crises happened certainly had more dimensions than indicated here. But, the mechanisms described and connections between the "financial factor" in the U.S. business cycle and the economy, collapse in asset values and in the balance sheets of financial institutions, and the credit crunch and reduced financial intermediation converged to produce an unprecedented contraction in consumption, the largest source of aggregate demand in the United States and for the exports of many countries. This probably was the "kernel" of the economic crisis of 2007-09.

How Did We Get Out of It?

Getting out of the Crises involved exceptionally easy monetary policy and massive fiscal stimulus in the U.S., developed, and many developing economies.

In a number of situations, monetary policy ease involved "Quantitative Easing," actions ranging from greatly increasing the funds available to banks, for example through the Federal Reserve discount "window" and opening the window for Primary Dealers through establishing special liquidity facilities. The Federal Reserve also acted as "lender of last resort" to the private sector, not just to banks, by establishing special lending facilities. Purchasing longer-dated U.S. Treasury and mortgage-backed securities in the open market to liquefy the banking system and keep long-term interest rates low was another measure taken. Federal Reserve swaps to provide funds for the European banking system was another. Both the Federal Reserve and the Treasury provided liquidity to the financial system, support for financial markets, debt and deposit guarantees for investors, borrowers, and lenders to relieve fears and panic, and to prevent an even worse financial crisis. The scale of support was huge and had no historical precedent.

The macroeconomic policies used—a combination of extreme monetary ease, support of the housing market through guaranteeing mortgage-backed debt, purchases of mortgage-backed securities in the open market, and massive fiscal stimulus—with lags,

cushioned the decline of economic growth and helped reverse the downward spiral of private sector economic activity. Emergency measures by the Federal Reserve and U.S. Treasury guaranteed debt, expanded consumer deposit insurance, and bailed out "too big to fail" financial institutions. U.S. banks were recapitalized with taxpayer money and nonbanks requested bank status, which was quickly approved, in order to take advantage of the support being provided by the Federal Reserve. The policy support and an eventual end to the declines in asset prices combined to set the stage for economic recovery, but not until after the longest and deepest recession in modern history.

Macroeconomic policies "saved" the U.S. and global economies from plummeting even further. But, by the time the aggressively easier monetary policies were applied, *it was too late* to stop the downturns and pronounced declines in economic activity.

As Table 3 shows, in mid-September 2007 the Federal Reserve began to reduce interest rates, long after the cyclical downturns in financial and economic activities were in-train. Indeed, even when the "Great Recession" began in December 2007, the federal funds rate was still 4-1/2%, not far from its high of 5-1/4%. By mid-December 2008, short-term interest rates had been taken to near zero, but that was fully one year after the Recession started.

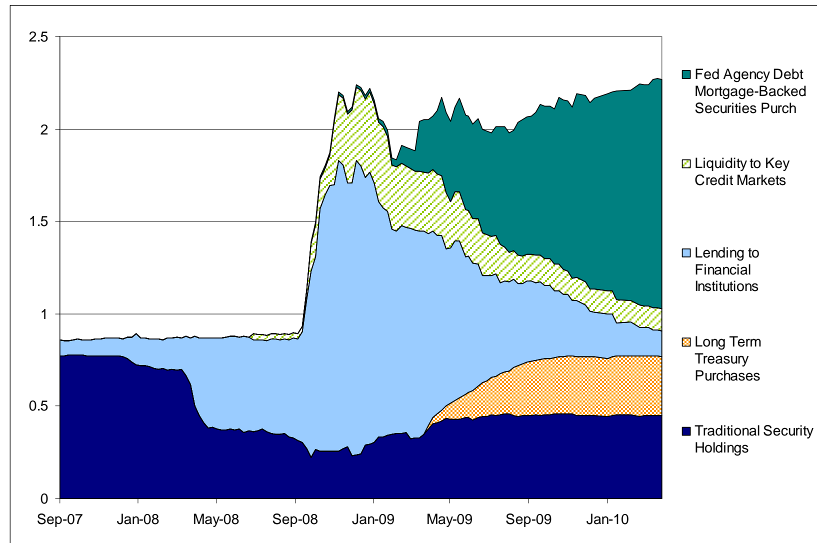
Table 3
Fed Policy and the Federal Funds Rate in the "Great Recession:" 2007-Present

Date	Initial Level (Percent)	Change (Basis Points)	New Level (Percent)
2007			
Sep 18	5.25	-50	4.75
Oct 31	4.75	-25	4.50
Dec 11	4.50	-25	4.25
2008			
Jan 22	4.25	-75	3.50
Jan 30	3.50	-50	3.00
Mar 18	3.00	-75	2.25
Apr 30	2.25	-25	2.00
Oct 8	2.00	-50	1.50
Oct 29	1.50	-50	1.00
Dec 16	1.00	-75 to -100	0.00-0.25

Source: Federal Reserve.

In addition to reducing interest rates, the Federal Reserve and a number of other central banks expanded loans and investments. In the U.S., this was done by purchasing securities other than short-term Treasuries from banks in exchange for bank reserves and by direct lending to liquidity-constrained banks and nonbanks, Primary Dealers in particular. Purchases of mortgage-backed securities in the open market guaranteed by federally-sponsored agencies and direct lending to the private sector through specially created facilities were used to maintain flows of money and credit into the economy, especially mortgage finance and housing. Similar actions were taken by other central banks. Figure 4 shows the position and composition of the Federal Reserve balance sheet at the end of March 2010. The preponderance of "non-traditional" holdings of assets on the balance sheet represents the extent of the Quantitative Easing.

Figure 4
Federal Reserve Balance Sheet
(Assets, March 31, 2010, Trils. $s)



Source: Federal Reserve

Typically, lags in the effects on the economy from lower interest rates and increased availability of funds have taken anywhere from six months to twenty-four months. Given the collapse in financial intermediation and failure fallout in the banking system, for large banks and small, and for nonbanks, even *longer* lags this time is a reasonable expectation, with easier monetary policy perhaps not impacting fully until well into 2010 and possibly as late as 2011.

Fiscal policy legislation to stimulate the economy was passed in early 2008 after initiation and deliberations by the Congress. Table 4 shows that this first stimulus program was modest and contained only temporary measures. Decision Economics, Inc. (DE) research has found very little effect on the economy from this program, which included temporary tax rebates for individuals and bonus depreciation for equipment spending by business.[4]

Then, shortly after the 2008 Presidential Election, the Congress and Obama Administration proposed and legislated the American Recovery and Reinvestment Act of 2009, which was signed into law February 17, 2009. Table 5 provides the program elements—the types of stimulus, amounts, and timeline for them.

The two-year program of nearly $790 billion was the largest ever in the U.S.. About two-thirds was in federal government outlays and one-third in tax reductions, the latter mostly temporary tax credits. Transfer payments to individuals and states and localities

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[4]A quantitative assessment of the policies used during the Great Recession is provided by Allen Sinai and Paul Edelstein, "Macroeconomic Policies and the 'Great Recession' of 2007-09: Retrospect and Prospect," presented at the Andrew F. Brimmer Policy Forum, ASSA Meetings, January 5, 2010, Atlanta, GA, Table 15 and Figure 12.
The method of analysis was counterfactual simulation with a large-scale macroeconometric model of the United States, asking what would have happened if there had been no stimulative monetary and fiscal policies, either singly or jointly. Since the historical data reflect the policies actually taken, removing them from history and simulating their removal in a large-scale macroeconometric model can provide estimates of the effects. In this work, the American Recovery and Reinvestment Act of 2009 was estimated to have raised real economic growth 0.8 percentage points in 2009 and 1.3 percentage points in 2010.

Table 4
Economic Recovery Act of 2008
(Bils. $s, Annual Rates, Quarters and Fiscal Years)

	2008				2009				Annual			Total
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**2008**	**2009**	**2010**	**2008-18**
Individual Recovery Rebate	0.0	317.4	56.9	12.0	18.0	24.0	18.0	18.0	96.6	19.5	0.0	116.1
Bonus Depreciation	50.0	50.0	50.0	50.0	50.0	-7.5	-7.5	-7.5	28.4	6.9	-7.5	7.5
All Other	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-1.0	0.9
Total	51.0	368.4	107.9	63.0	69.0	17.5	11.5	11.5	126.0	27.4	-8.5	124.5

Sources: CBO, OMB, JCT, Congressional Committees, Decision Economics, Inc. (DE).

Table 5
American Recovery and Reinvestment Act of 2009
(Bils. $s, Annual Rates, Quarters and Fiscal Years)

	2009				2010				Annual			Total
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**2009**	**2010**	**2011**	**2009-19**
Total	64	253	368	490	589	645	315	173	171	510	118	790
Tax Reductions	64	110	165	180	199	235	95	65	85	177	16	219
Individual*	4	50	105	120	145	220	80	50	40	141	13	193
Payroll tax cut/credit	4	50	50	50	40	40	40	40	26	42	10	78
2009 AMT fix			15	25	75	150	25	0	4	69	0	73
All other			40	45	30	30	15	10	10	30	3	43
Corporate	60	60	60	60	54	15	15	15	45	36	4	26
Bonus depreciation/expensing	35	35	35	35	35	-4	-4	-4	26	16	-4	6
5-yr. carryback of NOLs	5	5	5	5	-1	-1	-1	-1	4	1	-1	1
All other	20	20	20	20	20	20	20	20	15	20	9	19
Outlay Increases		143	203	310	390	410	220	108	87	333	102	571
Discretionary/Purchases		10	25	50	75	90	60	30	9	69	8	85
Mandatory/Transfers*		133	178	260	315	320	160	78	78	264	95	486
Tax credits counted as outlays*					65	135	30	0	0	58	50	108
Payroll tax credit*					20	50	5	0	0	19	18	36
All other credits*					45	85	25	0	0	39	33	71
Aid to families*		83	78	135	100	60	30	3	40	81	1	123
Grants		50	100	125	150	125	100	75	38	125	44	256
Addendum:												
*Counted in disposable income	4	133	183	255	310	415	140	53	80	280	63	423
As counted by BEA (Excl. NW taxes)	4	133	128	185	140	100	70	43	66	124	11	201
All other taxes		60	60	60	54	15	15	15	45	36	4	26
All other outlays		60	125	175	225	215	160	105	46	194	51	341
Counted directly in GDP		10	25	50	75	90	60	30	9	69	8	85

Sources: CBO, OMB, JCT, Congressional Committees, Decision Economics, Inc. (DE).

provided the bulk of the outlays and federal government purchases only a relatively small amount, $85 billion. Transfer payments to states and localities take time to implement and those to individuals act like tax reductions, sometimes with a considerable delay before being spent. In modeling work at Decision Economics, Inc. (DE), the federal government purchases multiplier is well over unity early but fades later. Government transfer multipliers are smaller. Considerable debate exists over the size of federal government spending multipliers. What these multipliers are greatly affects views on the efficacy of federal government purchases and outlays as opposed to tax reductions.[5]

Like monetary policy, fiscal policy acts with lags. Unfortunately, by the time the Economic Recovery Act of 2008 and American Recovery and Reinvestment Act of 2009 were enacted, the economy was already well into the Great Recession.

With the bulk of these two measures federal government outlays, lags in getting the outlays into the economy and then in their effects on the economy suggest that the major impact probably was *not* in 2009 but will be in 2010. However, *since both measures were "temporary" and the much larger American Recovery and Reinvestment Act of 2009 was set for two years, the fiscal stimulus and its effects likely will fade in 2011 and 2012, leaving a challenge as to what further actions will be necessary to sustain the expansion and to reduce joblessness.*

Where Are We Now? Recovery and Expansion, and the Profile

The current assessment is that 40 of 47 countries covered and analyzed by Decision Economics, Inc. (DE) have entered a Recovery and later will move into Expansion. The Recovery stage of the business cycle is tentative and fragile for some countries, mostly in Europe, but solid for many others.

For the U.S., the business upturn looks to be entrenched, sustained, and sustainable. A wide range of high-frequency economic and financial data suggest this. The dynamics of the business cycle interactions that produce a self-sustaining and self-reinforcing upturn look to be in-process. And, both monetary and fiscal policies remain quite stimulative. Table 6 presents some highlights of the U.S. economic and financial markets outlook (as of April 2010).

But the upturn is likely to be subdued, on average, and its longevity is in question. Slower growth in aggregate consumption in response to reduced growth of income and wealth and less willingness to spend after years of strong spending and heavy use of credit and debt will prevent a more typical upturn from occurring.

Compared with the first and second years of most previous upturns, the 2009-11 prospect looks subdued. Real economic growth is forecasted in a range of 2-1/2% to 3-1/2%. Growth will exceed that of the first two years after the 2001 and 1990-91 recessions (2.2% and 2.1%, respectively) but is expected to be far below the average increases for the first and second years of Recoveries between 1947 and 1990, which typically were well in excess of 6% per annum.

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[5]For a quantitative assessment of the effects from various fiscal policies such as federal government spending, transfers or taxes, see Allen Sinai, "Macroeconomic Policy Challenges and Choices in a Time of Crises, Part II: Fiscal Policy and Policies for Recovery," *Challenge,* July-August, 2009, pp. 53-93.

Table 6
U.S. Economic Outlook—April 2010
(Baseline Probability—0.70)

	Quarters					Years		
	2009:4A	**2010:1**	**2010:2**	**2010:3**	**2010:4**	**2009**	**2010F**	**2011F**
Real Economy								
Real GDP (Pct. Chg.)	5.6	3.3	2.5	3.2	3.0	-2.4	3.1	2.9
Inflation								
CPI-U (Pct. Chg.)	2.6	1.5	2.0	2.2	2.3	-0.3	2.0	2.5
Unemployment Rate								
(Pct.)	10.0	9.7	9.6	9.5	9.4	9.3	9.6	8.9
Profits								
S&P500 EPS ($s)	18.20	19.15	20.45	20.77	21.20	65.50	81.57	95.19
(Pct. Chg. Y-o-Y)	46.5	47.2	21.8	18.7	16.6	-4.6	24.5	16.1
Federal Budget Deficit								
(Unified, Fiscal Years)	-388.5	-328.9	-346.0	-342.5	-380.1	-1414.3	-1317.4	-1384.4
(% of GDP)	--	--	--	--	--	-9.9	-8.9	-9.0
(Gross Debt/GDP)	85.1	86.2	87.5	88.7	90.1	83.4	90.0	95.9
Interest Rates (%)								
Federal Funds	0.13	0.14	0.22	0.25	0.43	0.17	0.26	1.01
10-Year U.S. Treas.	3.45	3.70	3.87	4.05	4.29	3.24	3.98	4.75
Currencies								
Yen/$	89.8	90.7	95.4	98.1	101.3	93.6	96.4	106.1
$/Euro	1.447	1.384	1.325	1.298	1.327	1.394	1.349	1.334
$/Pd. Strlg.	1.634	1.561	1.551	1.562	1.583	1.566	1.564	1.594
C$/$	1.06	1.04	1.00	0.99	0.98	1.14	1.00	0.95

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Department of the Treasury, Bloomberg (profits, interest rates and currencies).
A-Actual.
F-Decision Economics, Inc. forecasts.

Sticky-high unemployment and underemployment will prevent the "V"-like spending on consumption and housing that usually occurs. Business will hire only cautiously and spend more on technology than people to keep costs down. Monetary policy will have to withdraw some of the ease and emergency support put into place during the Crises. Fiscal policy will be constrained by a U.S. sovereign debt problem—record-high federal budget deficits and gross public debt relative to GDP that have set up conditions for a sovereign debt crisis. And, while getting easier, credit will not be what it has been in other upturns; in part, because of reluctance by financial institutions to lend, cautious borrowers, and the effects of financial reform and regulation on U.S. and global financial institutions' ability and willingness to lend.

Most important is that the economic and financial condition of the United States coming out of the Crises suggests fragility rather than solidity.

This economic upcycle likely will not be strong enough to reduce unemployment very much, with the unemployment rate continuing to be "sticky-high"—moving lower from a peak of 9.9% but remaining well over 8% into 2011. Real economic growth only about half as strong as in most U.S. upturns, a reluctance by businesses to hire and rehire because of high labor costs, and the ready availability of less costly technology to substitute for labor are some reasons. This phenomenon likely will be present in other slow-growing global regions and countries, particularly the Eurozone, U.K. and Japan. Asian unemployment should move down nicely given the strong economic expansions expected in countries like China, India, Korea, Taiwan, Hong Kong, Indonesia, Malaysia,

Singapore, Australia and New Zealand. Portions of Emerging Europe and parts of Latin America also are likely to grow quite strongly.

The *profile of the Recovery appears very different* from most previous ones.

Typically after a recession, particularly one that was deep, consumer spending leads the way with a surge in outlays on durable goods, such as autos and houses. In part, this comes from pent-up demands, unleashed because of macroeconomic policy stimulus but also after the reliquefication of previously overextended household balance sheets. The surge in consumption induces a major swing in inventories from depletion to replacement, production of inventories for sale, and later increased capital spending. Often, stimulative monetary policy creates conditions where financial institutions aggressively lend. Aggressive intermediation of funds through the banking system and financial institutions of all kinds takes place, particularly in support of consumption, inventory building, and capital spending. The role of the federal government has varied, sometimes being quite significant, particularly around wartime such as the period after the Korean and Vietnam Wars and buildup in defense spending during the 1980s. In the 1990s, just the opposite was the case—the end of the Cold War permitted a sizeable shrinkage in federal government defense spending and a reduction in the share of the federal government in the private sector economy. Also, between the early 1980s and recently, the political backdrop surrounding the role of the federal government in the private economy favored "free market capitalism" and as little government involvement as possible.

In the current situation, neither consumption nor residential construction has performed as in the past, improving but nowhere near the pronounced upward thrust that has typified so many economic upturns.

One reason is that the fundamentals surrounding consumer spending have been, and remain, more negative than positive, although improving on a quarter-by-quarter basis. These include: 1) jobs and income; 2) household real net worth; 3) consumer psychology; 4) the ability to fund purchases through capital gains realizations and gross cashout mortgage refinancing; and 5) the financial position of households. These fundamentals suggest a more subdued pace of aggregate consumption than previously that will limit the pace of growth of the economy. Essentially, after years of very strong growth in consumer spending, outsized credit and debt creation, the expansion and overextension of household balance sheets through leverage, particularly from using residential real estate as asset collateral, household financial positions have a long way to go before there is enough stability to permit rapid growth in consumption.

To pick up the slack, discretionary fiscal policy has been used, both for emergency purposes and to increase aggregate demand. The share of real GDP in the federal government sector is on the rise as is its presence in the private sector through stimulus, emergency support, changes in the rules and regulations within which financial institutions operate, and some "bailouts" of major U.S. companies and financial institutions.

The tendency for more federal government involvement is more political than economic, growing out of the economic and financial crises that had as their origin excesses in the behavior of financial institutions, consumers and businesses; relaxed

Table 7
Global Economic Outlook—April 2010
(Baseline Probability—0.70)

Country and Global Region	2007	2008	2009	2010F	2011F
			Years		
United States*	**2.1**	**0.4**	**-2.4**	**3.1**	**2.9**
Canada*	**2.5**	**0.4**	**-2.6**	**2.9**	**3.7**
United Kingdom*	**2.6**	**0.5**	**-4.9**	**0.7**	**1.6**
Europe	**2.7**	**0.5**	**-3.9**	**0.7**	**1.3**
France *	2.4	0.4	-2.2	1.7	1.5
Germany *	2.6	1.0	-4.9	1.1	1.5
Italy *	1.4	-1.3	-5.1	0.7	1.3
Switzerland *	3.6	1.8	-1.5	1.7	1.6
Asia-Pacific	**2.7**	**-0.6**	**-4.1**	**2.3**	**3.0**
Japan *	2.3	-1.2	-5.2	2.1	2.9
Australia *	4.7	2.4	1.3	3.2	3.8
New Zealand *	2.8	-0.1	-1.6	2.8	3.0
Newly Industrialized	**5.8**	**1.7**	**-0.9**	**7.0**	**6.3**
Korea *	5.1	2.2	0.2	6.5	5.8
Taiwan	6.0	0.7	-1.9	7.5	6.7
Hong Kong	6.4	2.1	-2.7	6.9	6.5
Singapore	7.8	1.2	-2.1	8.9	7.9
Latin America	**4.5**	**2.8**	**-4.5**	**5.2**	**4.5**
Argentina	8.7	6.8	0.9	5.5	5.3
Brazil	6.1	5.1	-0.2	6.1	6.3
Mexico *	3.3	1.5	-6.6	4.9	3.7
Venezuela	8.4	4.8	-3.3	4.3	5.2
Chile	4.7	2.9	-1.4	4.9	5.2
World	**4.1**	**1.8**	**-2.4**	**3.5**	**3.6**
OECD	**2.7**	**0.5**	**-3.6**	**2.4**	**2.6**
EU	**2.8**	**0.6**	**-4.0**	**0.9**	**1.5**
Eurozone	**2.7**	**0.5**	**-4.0**	**0.6**	**1.4**
Asia-NICs, Emerging	**10.2**	**6.6**	**5.1**	**9.0**	**8.3**

Country and Global Region	2007	2008	2009	2010F	2011F
			Years		
Europe					
Spain *	3.6	0.9	-3.6	-1.1	0.9
Portugal *	1.9	0.1	-2.7	-1.0	0.8
Netherlands *	3.6	2.0	-4.0	1.5	1.6
Belgium *	2.8	0.8	-3.0	1.3	1.4
Austria *	3.4	1.9	-3.5	1.2	1.5
Greece *	4.5	2.0	-2.0	-4.1	-1.7
Ireland *	6.0	-3.0	-7.1	-0.8	1.5
Scandinavia	**2.9**	**0.4**	**-4.3**	**1.1**	**2.3**
Denmark *	2.1	-0.7	-4.8	1.2	1.5
Sweden *	2.7	-0.5	-4.7	0.5	1.6
Norway *	2.7	1.7	-1.4	1.5	2.4
Finland *	4.8	1.2	-7.8	1.2	4.1
Eastern Europe	**5.2**	**2.4**	**-2.7**	**5.2**	**4.9**
Poland *	6.8	5.1	1.7	4.6	4.9
Hungary *	1.0	0.4	-6.2	1.3	3.4
Czech Republic *	6.1	2.3	-4.1	3.5	3.8
Turkey *	4.7	0.9	-4.7	7.0	5.5
Russia	**8.1**	**5.8**	**-7.9**	**5.9**	**5.3**
Emerging Asia	**11.3**	**7.9**	**6.7**	**9.5**	**8.8**
China	13.1	9.2	8.4	10.8	9.6
India	9.9	6.3	5.7	8.1	8.5
Indonesia	6.3	6.0	4.5	6.0	6.2
Malaysia	6.3	4.6	-1.7	5.8	5.6
Philippines	7.1	3.8	0.9	5.5	5.7
Thailand	4.9	2.5	-2.3	6.5	6.3
Middle East	**6.1**	**5.5**	**2.1**	**4.4**	**4.9**
Israel	5.2	4.2	0.2	4.0	4.7
Egypt	7.1	7.1	4.2	4.9	5.1
Jordan	6.6	6.0	4.4	5.2	5.5
South Africa	**5.5**	**3.7**	**-1.8**	**4.2**	**4.7**

* OECD countries.
§ Regional and world totals are weighted averages of countries shown.
F-Decision Economics, Inc. forecasts.

Washington regulation; unethical and possibly illegal practices in Wall Street; and monetary and fiscal policies that fell behind the power curve of the economic downturn.

By late 2010, the U.S. and numerous other countries should be in the Expansion stage of the business cycle, with real GDP having reached and surpassed the levels prior to recession. Once entrenched, an economic upcycle tends to be self-reinforcing, usually with continuing policy support, until inflation becomes a problem. With inflation in the G-7 and many countries benign for now, a major tightening of monetary policy is not expected. This should leave room for the cyclical upturns to be sustained.

However, later in 2011 and 2012, given current U.S. macroeconomic policies, the prospect is that the U.S. expansion will run out of upward thrust. The initial conditions for the U.S. upon entry into the Recovery; negative fundamentals, although improved, surrounding the consumer; excessive international indebtedness; huge federal budget deficits and growing federal government debt; macroeconomic policy stimulus that was mainly temporary; and still high unemployment and underemployment leave an aftermath of challenging problems and a possibility that the expansion may be failing.

Globally, the long-run prospect is more positive, where many countries, particularly in Asia, entered the upturn in better financial condition than the U.S., and with fewer excesses. Long-run sovereign debt problems of consequence in countries like Greece, Spain, Portugal, Ireland, perhaps Italy, the U.K., Japan and several others, especially where growth prospects are subdued and the politics of the country may be difficult, leave these countries vulnerable to relatively short cyclical upturns. *The U.S. certainly is one of them. Further policy actions will be necessary to extend the expansion to the longer-run.*

Legacies of the Crises—Challenges to the Longer-Run Prospect—Jobs and Budget Deficits

The short- to intermediate-term prospect for the U.S. economy is one of recovery and expansion. *But, the longevity of the U.S. economic upturn is a major question for the longer-run.*

The economic and financial crises and policies used to combat them have left legacies that call into question whether the U.S. will be able to achieve, and sustain, full employment with low inflation.

Among these are—

- sticky-high unemployment and the greatest number of unemployed and underemployed in U.S. economic history, except for the 1930s—a problem of "joblessness" that perhaps can be called the "Jobs Deficit;"
- huge federal budget deficits and growing federal government debt for a number of G-7 countries including the U.S., Japan, U.K. and Italy, whose growth prospects, budget deficits and debt, international competitiveness, ability to make and execute appropriate macroeconomic policies, and fragile initial conditions leave future outcomes unclear. This might be indicated as a problem of "Budget Deficits;"
- reform and regulation of the U.S. financial system and financial intermediation in the aftermath of the financial crisis and the ability, or lack thereof, to finance and energize economic expansion in the future;

- the relative standing of the U.S. in a world where the economic and financial geography is rapidly changing in favor of previous "Have-Not" countries as against the previous "Haves." The rapid ascendency of China, India, and Asia ex-Japan, along with some other Developed Countries such as Canada and Australia, provides an example.

The macroeconomic policies used in the U.S. certainly averted a much worse downturn from occurring than would have happened otherwise. But, *so far, these policies are not solving the problems of joblessness, soaring federal budget deficits and federal debt, and U.S. sovereign debt risks—principal legacies of the Crises.* Indeed, they may not have been the most effective policy choices. As between joblessness and outsized deficits and debt, most traditional solutions to one or the other are in conflict, presenting a policy challenge of considerable difficulty.

Thus, the initial conditions of the United States in its Recovery and coming Expansion indicate fragility for the longer-run and raise a question as to whether the economic upturn can be sustained beyond 2011. By that time, the effects of the fiscal stimulus from the 2009 American Recovery and Reinvestment Act of 2009 will be fading. Taxes will be higher. The unemployment rate will still be high with a legacy of greater unemployment and underemployment than any other time in modern U.S. history. Under current policies, federal government budget deficits and debt, relative to GDP, will be at or near record-highs, unless major changes take place in fiscal policy.

Labor market slack, a high unemployment rate, and slow growth in nonfarm payroll jobs are likely to present economic, societal, and political problems of huge proportions. The labor prospects for the United States under the most likely macroeconomic scenario are shown in Tables 8 and 9—on a 3-to-5 year moderate economic expansion prospect—projections for jobs, the unemployment rate, and employment to 2015.

Table 8
Legacies of the "Great Recession" and Macroeconomic Policy Responses:
U.S. Labor Market (2009-2015)

	2009A	2010F	2011F	2012F	2013F	2014F	2015F
Nonfarm Payroll Employment (Pct. Chg.)	-4.3	1.0	0.8	1.6	1.1	1.4	1.0
Unemployment Rate (%)	9.3	9.6	9.2	8.5	8.0	7.5	6.8

Sources: Bureau of Labor Statistics, Decision Economics, Inc. (DE).
A—Actual.
F–Decision Economics, Inc. (DE) forecasts; includes one-time Census worker effects.

Table 9
Legacies of the "Great Recession" and Macroeconomic Policy Responses:
U.S. Labor Market (2009-2015)

	2009A	2010F	2011F	2012F	2013F	2014F	2015F
Nonfarm Payroll Employment (Mils. Jobs)	130.9	132.2	133.2	135.3	136.8	138.7	140.1
Civilian Employment (Mils. Persons)	139.9	141.4	142.6	145.0	146.9	149.1	150.8

Sources: Bureau of Labor Statistics, Decision Economics, Inc. (DE).
A—Actual.
F—Decision Economics, Inc. (DE) forecasts; includes one-time Census worker effects.

A legacy of sticky-high unemployment is expected, with the unemployment rate only stubbornly moving lower. The "underemployment rate," i.e., the number of unemployed, discouraged workers no longer looking for work, and individuals working part-time who wish to work more, could well range between the current near 17% to no lower than 13% or 14%.

The number of jobs created, on the nonfarm payroll basis, is estimated at 9.2 million from 2009 to 2015, not much more than the jobs lost during the 2007-09 Great Recession. On the Household Survey basis, 10.9 million more persons, net, are expected to be working than in 2009. The unemployment rate is forecast at an average still high 6.8% in 2015.

Over the next three years, only about 4.4 million new jobs are expected and just 5.1 million more people working. The unemployment rate would still be over 8%.

Why so weak a prospect?

Subdued growth of aggregate demand, the inability to use stimulative macroeconomic policies to reduce joblessness because of high federal government budget deficits and debt, caution by companies in hiring and rehiring in order to reduce costs and to maximize shareholder value, and an increasing tendency to shift jobs out of the United States as companies diversify globally lie behind these projections.

The primary legacy of the "Great Recession" and macroeconomic policy responses taken thus could well be a "Jobs Deficit" of unparalleled proportions.

Along with the "Jobs Deficit" there likely is another legacy, "Budget Deficits," which under current policies and expectations on future growth, the policies put into place so far and in prospect going forward, will leave the United States with unsustainably high budget deficits and gross public debt relative to GDP.

The two deficits go hand-in-hand, the "jobs deficit" and "budget deficits," as legacies from the aftermath of the economic and financial crises. Massively stimulative fiscal policies on top of continuing structural budget deficits, slow growth in jobs, the constraint of a federal budget deficit that will not permit aggressively stimulative policies to be implemented if needed, and rising sovereign debt risks and their potential consequence are causes.

Table 10
Legacies of the "Great Recession" and Macroeconomic Policy Responses:
Federal Budget Deficits and Debt (2009-2015)
(Bils. $s, Fiscal Years)

	2009A	**2010F**	**2011F**	**2012F**	**2013F**	**2014F**	**2015F**
Unified Budget Deficit	-1414	-1317	-1384	-1339	-1316	-1346	-1433
Percent of GDP	-9.9	-8.9	-9.0	-8.4	-7.9	-7.8	-7.9
Gross Federal Debt	11874	13270	14723	16137	17533	18954	20449
Percent of GDP	83.4	90.0	95.9	101.3	105.8	109.4	112.7

Sources: Congressional Budget Office, Office of Management and Budget, Decision Economics, Inc. (DE).
A—Actual.
F—Decision Economics, Inc. (DE) projections.

Concluding Perspectives—Recovery But "Jobs Deficit" and "Budget Deficits" Risks a Daunting Challenge to Policy

Finally, after the longest and deepest downturn in modern U.S. economic history, an economic recovery is in-place.

After unprecedented financial and economic crises, indeed a "Great Recession," the combination of a massive easing in monetary policy, huge fiscal stimulus, improved financial markets conditions, adjustments in the private sector especially by business, shifts in direction for real GDP and its components, the dynamics of underlying business cycle processes, positive self-reinforcing and self-sustaining cyclical interactions, and a strong economic upturn in Asia and the Developing World have led to an entrenched, sustained, and sustainable economic upturn in the United States.

But the economic upturn will be limited in scope and strength, held back by the legacies of the Crises which include sticky-high unemployment and joblessness, outsized and unsustainable huge federal budget deficits and debt relative to GDP, compromised financial institutions and constrained financial intermediation, a poor set of initial economic and financial conditions for the U.S. entering the recovery, and sovereign debt risks of potential epic proportions.

The short-run prospect for the United States is encouraging, especially after the nearly two-year downturn which swept the country, and others, and the collapse in financial asset prices and in economic activity that occurred.

But, in exiting from the downturn, the resulting by-products of a "Jobs Deficit" and federal "Budget Deficits"—a new "Twin Deficits" problem—pose challenges to Washington policy never before faced.

Normally, in order to increase real economic growth and reduce the unemployment rate, fiscal stimulus can be used, that is reductions in taxes and increases of federal government spending. But this time around, given huge federal budget deficits and growing government debt, further fiscal policy stimulus will be difficult to implement because the deficits and debt would rise even further. The U.S. could pursue this path, but there are limits, at times painfully set by financial market reactions and interactions with the financial system and real economy, as to how far down this path a country can go and for how long.

If reducing deficits and debt are the objective, then reductions in spending and increases in taxes would be the medicine. But such policies *reduce* economic growth and *increase* joblessness, making the "Jobs Deficit" even worse, feeding back to worsen cyclical "Budget Deficits," and perhaps negatively to financial markets, balance sheets, and to the financial system.

How to grow the economy faster to move the unemployment rate toward a full employment goal of 4% or 5% and reduce the federal budget deficit at the same time is the policy challenge.

Given the societal and political powder keg of a prolonged jobs deficit and prolonged federal budget deficits and growing public debt, it is an open question whether the United States will be up to the task, especially given a difficult political climate in Washington and reluctance by the public to bear the burden of voluntary fiscal restraint.

Whether the U.S. can satisfactorily deal with the economic, societal, and political problems confronting the country this time around is a question for the future, the answer to which cannot be known at this point.