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IS AMERICA HEADED TOWARD A FUTURE DEBT CRISIS?

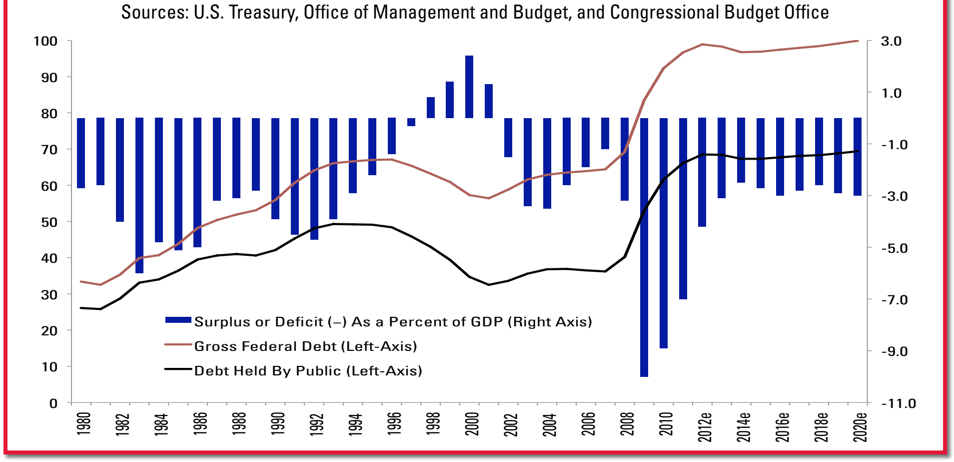
by Vivekanand Jayakumar, Ph.D.

The recent past has evidenced extraordinary developments in the U.S. fiscal policy realm, including budget deficits well in excess of a trillion dollars. The financial crisis and the Great Recession of 2007-2009 created enormous challenges for American policymakers. The Federal Reserve System engaged in an unprecedented expansion of its balance sheet and undertook massive quantitative (credit) easing programs. Fiscal authorities initiated new spending and bailout programs in response to the economic shocks, which when combined with the effects of automatic stabilizers (falling tax revenues and increased government spending on programs such as unemployment benefits and food stamps) resulted in the largest budget deficits in modern American history. The massive deficits experienced during the past two fiscal years, along with the projections of continuing budgetary shortfalls for the next 10 years, have clearly unnerved many in the U.S. and abroad.

Prior to the Great Recession of 2007-2009, U.S. fiscal authorities allowed budget gaps to persist. In fact, the U.S. has experienced a federal budget deficit (the amount by which the federal government's total outlays exceed its total revenues in a fiscal year) in each of the last 30-plus years, except for the four years between 1997 and 2001. The largest nominal budget deficit on record, at $1.42 trillion, occurred in FY2009 (FY refers to fiscal year). For FY2010, the federal budget deficit was $1.29 trillion.

The persistence of annual deficits has contributed to the growth in the magnitude of the federal debt. The debt held by the public (primarily securities issued by the U.S. Treasury and held by domestic and foreign investors — individuals, corporations, central banks or foreign governments) and the gross federal debt (debt held by the public plus debt held by government accounts, such as the borrowings by the U.S. Treasury from the Social Security trust fund surpluses) have risen in recent years. The gross federal debt was $11.88 trillion according to the CBO (Congressional Budget Office) at the end of the FY2009. At the end of FY2010, the gross federal debt exceeded $13.5 trillion.

Figure A: U.S. Federal Deficit & Federal Debt as a Percent of GDP (Projections are from the Congressional Budget Office)
Sources: U.S. Treasury, Office of Management and Budget, and Congressional Budget Office



The sharp nominal rise in budget deficits during FY2009 and FY2010 and the concomitant rise in overall debt were exceptional. In order to get a sense of the true significance of recent changes, it is useful to examine deficit and debt levels as a percentage of GDP (gross domestic product). As seen in Figure A, it is apparent that during FY2009 and FY2010

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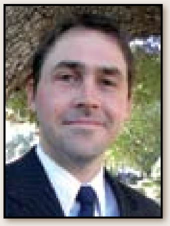

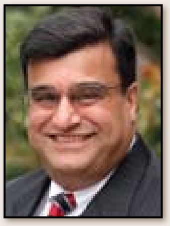

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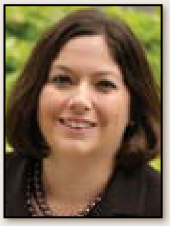

Angie Johnson
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TAMPA BAY ECONOMIC ANALYSIS

by Brian T. Kench, Ph.D.

The Tampa-Metropolitan Statistical Area (Hernando, Hillsborough, Pasco and Pinellas counties) continues to adjust to decreased home values and elevated rates of unemployment. However, for the first time in 41 months, the Tampa-MSA has observed a year-on-year increase in payroll jobs. The most recent data show that the area gained 1,500 jobs between November 2009 and November 2010, a 0.1 percent increase (Figure 1). In addition, the U.S. and Florida started to experience year-on-year increases in payroll jobs, a sign that the worst of the storm may have passed at the local, state and national levels.

The Tampa-MSA has lost 10.8 percent of all jobs since its March 2007 peak of 1.27 million. In some sectors, however, the area has observed an increase in jobs over the last 12-month period for which data exist (Table 1). The November 2009-on-November 2010 change in jobs was positive in mining and logging, computer and electronic product manufacturing, retail trade, insurance, other finance, professional and business services, physicians, ambulatory care, hospitals, amusement, gambling and recreation, other leisure, and local and state government.

The unemployment rate in the Tampa-MSA was 12.6 percent in November 2010, which is higher than the national unemployment rate by 2.8 percentage points and 0.4 of a percentage point higher than the unemployment rate for the state of Florida. In the same month,

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Figure 1: Nonfarm Payroll Jobs — Percent change on previous year (NSA)

Source: Bureau of Labor Statistics

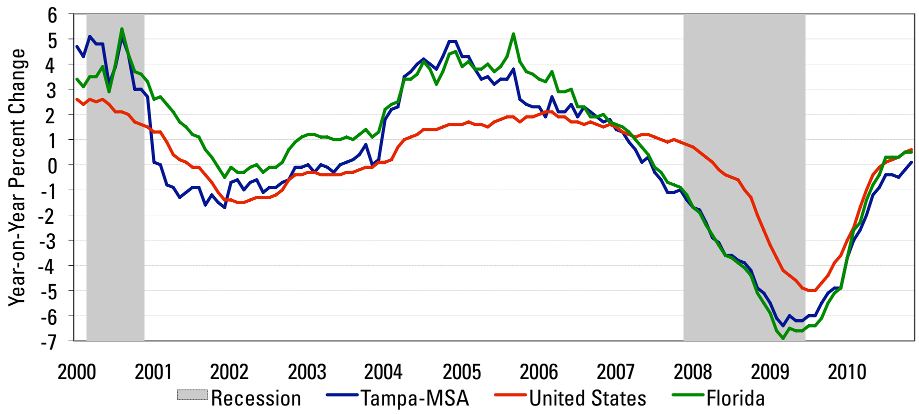

Table 1: November Nonfarm Payroll Jobs: Tampa-MSA Percentage Change on Previous Year (NSA)

Source: Bureau of Labor Statistics

Industry	11/06-11/07	11/07-11/08	11/08-11/09	11/09-11/10
All Nonfarm Payroll Jobs	-1.0	-4.9	-4.9	0.1
Mining and Logging	16.7	-28.6	0.0	0.0
Construction	-11.4	-14.5	-20.0	-6.6
Computer & Electronic Product Manufacturing	-2.5	-5.1	-11.6	1.0
Other Durable Goods (less Comp. & Elec. Prod. Mfg.)	-6.8	-10.8	-16.6	-11.2
Non-Durable Goods	-3.5	-6.5	-10.8	-1.0
Retail Trade	0.3	-6.0	-6.3	0.1
Wholesale trade	0.0	-5.9	-8.4	-4.7
Transportation & Utilities	-2.7	-6.2	-6.6	-1.2
Publishing	-1.1	-12.8	-10.7	-6.0
Wired Telecommunications Carriers	-4.3	-7.3	-3.9	-1.0
Other Information (less Publishing and Wired Telecom)	3.5	-1.7	-6.9	-7.4
Insurance	1.6	-2.5	-5.7	1.3
Credit Intermediation & Related Activities (Banks)	-5.8	-7.5	-6.9	-1.9
Real Estate	-0.4	-8.3	-1.8	-0.9
Other Finance (less Insurance, Banks & Real Estate)	2.6	6.3	-3.5	14.6
Professional & Business Services	-2.6	-7.8	-4.3	2.6
Physicians	3.9	1.5	0.4	2.2
Ambulatory Care	3.4	2.4	1.1	1.4
Hospitals	3.5	1.5	3.6	1.4
Other Ed. & Health Services (less Hos., Phys. & Amb. Care)	9.5	-0.5	2.8	-0.5
Amusement, Gambling & Recreation	-4.7	-1.9	-6.9	2.7
Accommodation & Food Services	-1.3	-5.1	-3.6	-1.7
Other Leisure (less Amuse., Gamb., & Rec.; Accom. & Food Service)	8.8	-6.5	-13.8	54.0
Other services	2.5	-6.2	-3.7	1.4
Local Government	1.4	0.7	0.6	1.8
State Government	0.4	0.0	1.6	3.6
Federal Government	1.4	3.7	1.4	-2.2

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the deficit reached extraordinary levels (10 percent of GDP in FY2009 and 8.9 percent of GDP in FY2010). The gross federal debt to GDP ratio exceeded 90 percent and the debt held by public to GDP ratio exceeded 60 percent at the end of FY2010. Even the optimistic baseline projections by the CBO indicate that the gross debt to GDP ratio will near 100 percent by 2020. The last time the gross federal debt reached such levels was during World War II, when the U.S. government embarked on massive wartime spending (financed essentially by a captive domestic market for Liberty Bonds).

To gauge the magnitude of the U.S. fiscal imbalances, we can compare the change in the U.S. budget deficit and the gross debt between FY2006 and FY2009, and benchmark it against the experiences of a few key European countries. Table A indicates that the U.S. fiscal arithmetic is comparable to that of several troubled European economies (such as the PIIGS — Portugal, Ireland, Italy, Greece and Spain) in regard to the extent of the change in budget deficit and gross debt between 2006 and 2009. The 2009 U.S. gross debt to GDP ratio was comparatively high (though not nearly as high as the gross debt to GDP ratio for Greece).

Currently, the U.S., unlike many European countries, is neither experiencing a sovereign debt crisis nor is it facing external or market pressures to undertake austerity measures. As the world's largest economy and as the issuer of the pre-eminent global reserve currency (the U.S. dollar), the U.S. finds itself in the envious position of being able to finance its deficits and service its debt without much ado at present. The U.S. Treasury securities are still considered to be among the safest assets in the world, and the current cost of borrowing for the federal government is near historical lows. However, there are several dark clouds gathering on the horizon that may lead to a very different future scenario.

A careful consideration of the factors driving U.S. fiscal imbalances indicates that federal budget deficits are unlikely to turn into surpluses in the foreseeable future. Table B highlights the primary sources of revenue along with the major outlays for the U.S. federal government. Income taxes and FICA (Federal Insurance Contributions Act) taxes currently generate much of the revenue for the federal government. While the recession caused a drop in tax revenue collection, the economic recovery is likely to improve income tax and FICA tax contributions going forward.

However, the U.S. revenue generation system is crying out for a radical overhaul that will not only streamline tax collection but also improve future economic efficiency. The current tax structure is riddled with tax expenditures — a veritable panoply of credits, deductions and exemptions. They distort economic incentives and narrow the tax base. As recommended by the Bowles-Simpson Debt Commission, elimination of tax expenditures will allow for an efficient tax code with lower marginal tax rates for all, and surprisingly, provide for a truly progressive tax system. The cost of tax expenditures, according to some estimates, is as high as $1 trillion a year. So, elimination of tax expenditures and rationalization of income tax rates (all marginal tax rates could be lowered significantly) will widen the tax base and provide the right

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Tampa Bay Economic Analysis

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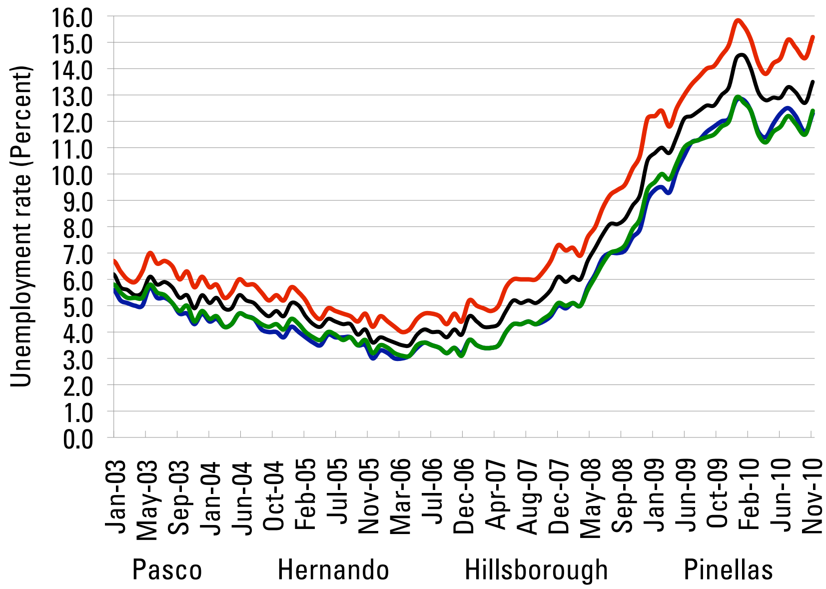
the unemployment rate was 15.2 percent in Hernando County, 12.3 percent in Hillsborough County, 13.5 percent in Pasco County, and 12.4 percent in Pinellas County (Figure 2).

The S&P Case-Shiller home price index for the Tampa-MSA reveals that home prices continue a four-year drift downward. After peaking at 238 in July of 2006, the index has declined 43 percent to 136 in September of 2010.

Figure 2: Unemployment Rates

Source: Bureau of Labor Statistics



Residential building permits in the Tampa-MSA hit a peak of 2,636 in August of 2005 and a low of 252 in November of 2009. After a minor uptick in permits, likely the result of the federal homebuyer tax credit, the Tampa-MSA had a 1.1 percent change in permits from October 2009-on-October 2010 (Figure 3). In summary, the local housing market is very weak and will remain so for some time.

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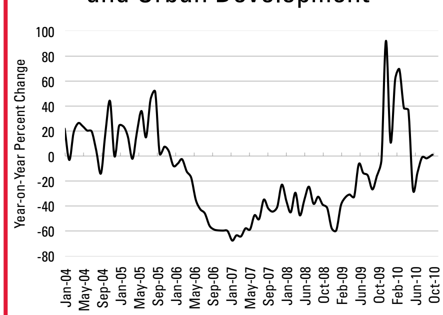
Figure 3: Tampa-MSA Building Permits

Source: Department of Housing and Urban Development



THE GREAT DIVERGENCE — INEQUALITY IN THE UNITED STATES

by Joshua D. Hall, Ph.D.

Income inequality has several definitions. One measures the percent of income in the top 20 percent of the population relative to the percent of income in the bottom 20 percent of the population. If income rises for the top earners and decreases for the bottom earners, inequality increases. Another perspective measures the income of well-educated workers relative to the income of less-educated workers. No matter what one's preferred definition of income inequality, since the 1980s income inequality in the United States has been growing. The growth in U.S. income inequality over the last three decades has been labeled the Great Divergence. Moreover, in recent years the level of income inequality has reached a level that surpasses what the U.S. experienced in the years prior to the Great Depression. This article suggests that technological progress and education play an important role in the Great Divergence.

Trends of Income Inequality

The nearby figure shows the income share of the top 10, 5 and 1 percent of families (tax filing units) over the last 90 years. The decade preceding the Great Depression also saw a rapid growth of income inequality. Between the Great Depression and World War II, inequality was high and volatile. Between the end of World War II and the beginning of the Great Divergence, income inequality in the U.S. was relatively constant. It was a time of robust growth and stagnant, or perhaps declining, levels of inequality. Both the higher and lower income groups enjoyed the growth of overall average income. Prosperity was widely shared. Real (adjusted for inflation) income for those in the bottom 20 percent of families grew by more than 3 percent annually and real incomes for the top 20 percent of families grew by around 2.5 percent per year. As such, this time period has been dubbed the Great Compression.

After 1980, however, something changed. The nearby figure shows that the share of overall income earned by the top 10 percent of families increased from 33 percent in 1980 to 46 percent by 2008. The share of income for the top 1 percent of families grew from 8 percent to 18 percent over the same time period. Between 1980 and 2007, real income growth in the U.S. has averaged around 3 percent per year. However, Thomas Piketty of the Paris School of Economics and Emmanuel Saez of the University of California, Berkeley have documented that since 1980, 80 percent of real income growth in the U.S. has gone to the top 1 percent of families.

The growth of real income for the bottom 20 percent of families changed from over 3 percent per year between 1947 and 1973 to close to zero percent per year between 1973 and 2008. During the period of the Great Divergence, the top percentiles experienced an increased growth rate in their share of income, while the bottom percentiles experienced a decreased growth rate in their share of income. As a result, income inequality in the U.S. has greatly increased.

The source of rising income inequality

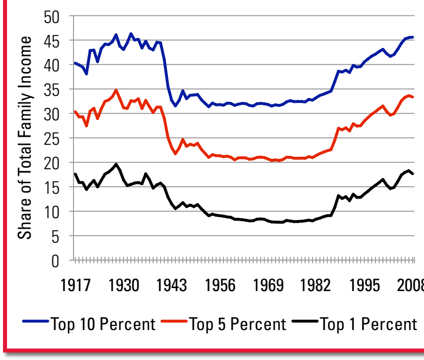
The figure shows that the absolute level of income inequality and the growth rate of inequality rose during the latter part of the 20th century. The natural question is, what is the source of the recent trend in income inequality? The two most prominent responses are globalization and/or technological change. This article offers a third source of the trend: education.

The globalization argument states that as countries become more open to trade, they will become more specialized in producing goods for which they have a particular production advantage. For example, if the U.S. is relatively more efficient in the production of goods that require highly skilled workers, then choosing to trade globally implies that the U.S. will become more focused on producing goods that require highly skilled workers and shift away from the production of goods that require low skilled workers.

Globalization, therefore, has implications for income inequality. If the U.S. becomes more specialized in the production of high-skill intensive goods, then the incomes of highly skilled workers will increase relative to low skilled workers. Income inequality would rise. This argument, however, does not hold up to empirical testing for two reasons. First,

Figure I: U.S. Income Shares

Source: elsa.berkeley.edu/~saez/TabFig2008.xls



while global trade has grown in significance, the overall size of trade relative to total income, especially between the U.S. and very poor countries, is not large enough to have a significant impact on inequality. Second, the globalization argument requires income inequality to fall in emerging economies who choose to specialize in production that requires low skill workers. Income inequality in emerging economies has grown at every stage of economic development.

The technological change argument is much more compelling and is not subject to the same shortfalls of the globalization argument. The argument is as follows: during times of increased technological progress, the demand for workers with the skills to effectively harness and utilize the new technologies increases. So those workers with the ability or skills to adapt to new technologies will see a growth in their wages relative to those without those skills. Economists Jeremy Greenwood of the University of Pennsylvania and Mehmet Yorukoglu of the Central Bank of Turkey argue that this is precisely what happened. A surge of information technologies significantly contributed to the quickened growth of inequality since the end of the 1970s.

The idea of technological change playing a large role in the growth of income inequality is widely accepted among economists. The diffusion of new technologies is facilitated by highly skilled and educated workers. In the jargon of economics, technological change is considered to be "skill-biased." But this

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is not the end of the story. Technological change increases the relative demand for highly skilled workers, but it also increases the relative supply of highly skilled workers. Thus, income inequality only increases if the rise in the demand for skills exceeds the rise in the supply.

This directly brings education into discussion of income inequality. For most of the 20th century, educational attainment has consistently grown from generation to generation. During the periods of the Great Compression, the ratio of college to non-college workers grew between 3 and 4 percent each year — a very high rate of growth. Economists Claudia Goldin and Lawrence Katz of Harvard University reported that after 1980 the growth of educational attainment (as measured by the average years of education) fell significantly. The rate of growth of educational attainment was below 2 percent per year.

At the end of the day, two important phenomena have each contributed to the growth of income inequality since 1980. The first is a quickened pace of technological diffusion driven by information technology, while the second is the slower growth of educational attainment. Other factors, such as globalization, deunionization or government policies, have each played a role, but the interaction of new technologies and education is the driving force. In fact, the impact of technology and education on the growth income inequality is significant in emerging economies as well. Emerging economies with a higher quality of education and with workers better able to adapt to new technologies have experienced a slower growth of income inequality.

The future of U.S. income inequality

In the U.S., the quality and quantity of education will play a vital role in future economic growth and the growth of income inequality. Education not only directly raises economic growth through the creation of new innovations, but it also facilitates the diffusion of new technologies. Educated workers earn a monetary reward for their role in the economy. It is this dynamic that contributes to the growth of income inequality. The way to promote economic growth without further increases in inequality is to expand educational opportunities to more people. For the U.S., this means a focus on slowing the high school drop out rate, ensuring more high school graduates are better prepared for college, and/or reducing the cost of post-high-school education for lower income families, among many other possibilities. This not only promotes long-term economic growth, but also allows a larger portion of the income distribution to reap the benefits.

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incentives for workers and entrepreneurs in the economy.

A similar approach on the corporate tax side can make the U.S. a far more attractive destination for global businesses. Elimination of or a sharp reduction in corporate taxes (along with an abolition of various tax loopholes and corporate deductions) will enable the government to improve U.S. competitiveness. It is worth noting that elimination of corporate taxes removes the 'double-taxation' conundrum and allows the government to treat capital gains and dividends as regular income. This will lead to the avoidance of unfair scenarios prevalent under the current system, such as, the billionaire investor Warren Buffet facing a lower tax bracket than his secretary or billionaire hedge fund managers facing unusually low tax rates.

The real challenge for the U.S., however, lies on the expenditure side of the ledger. It may be reasonable to expect defense spending and other discretionary spending to decline or at least not increase significantly over the coming decade as overseas military commitments are reduced and as the economy gets back on the growth track. There is, however, a risk that the U.S. may be stuck for awhile in a 'new normal', characterized by sub-par growth and poor employment prospects, as consumers and financial institutions undertake long overdue deleveraging and re-structure their balance sheets. This may impair not only government revenue collection in the short-run but also lead to higher than planned expenditure for discretionary items like extensions of unemployment benefit programs.

Far more significant, however, is the long-term challenge posed by entitlement spending. Already in 2010, the entitlement spending programs (Social Security, Medicare and Medicaid) accounted for about 41 percent of all federal government spending or outlays. Given that 77 to 78 million baby boomers are likely to become eligible for Social Security and Medicare payments over the next 15-20 years, the U.S. faces a daunting future if current levels of benefits are maintained. An August 2010 CBO report estimated that in 2020, Social Security payments would near $1.2 trillion (accounting for about 5.1 percent of GDP) and Medicare payments would exceed $920 billion (accounting for about 4 percent of GDP).

Table A: Change in Federal Budget Deficit, Change in Gross Debt & Gross Debt, as a percent of GDP: U.S. and Europe

Sources: Eurostat, U.S. Treasury, Office of Management and Budget, and Congressional Budget Office

	Change in Federal Budget Deficit (Percent of GDP) 2006-2009	Change in Gross Debt (Percent of GDP) 2006-2009	Gross Debt (Percent of GDP) Fiscal Year End 2009
Ireland	-17.3	40.7	65.5
Spain	-13.1	13.6	53.2
Greece	-9.7	20.7	126.8
UK	-8.7	24.8	68.2
USA	-8.1	19.6	83.5
Portugal	-5.2	12.2	76.1
France	-5.2	14.4	78.1
Italy	-1.9	9.4	116
Germany	-1.4	5.8	73.4

Another challenge going forward is likely to arise from the potential cost of servicing debt. The global 'flight to safety' resulting from the recent financial crisis created a ready source of demand for significant new issues of U.S. Treasury securities in 2009 and 2010. However, once the global economic recovery gains a more solid footing, risk aversion will decline and the yields on U.S. government securities will rise above the current abnormally low levels. As debt held by the public increases over the coming decade, the interest cost on the debt will be significant (according to the CBO, net interest

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outlays is estimated to go from $187 billion in 1999 to $778 billion in 2020). A major fraction — around 48 percent at the end of FY2009 — of the U.S. debt held by public is in fact held by foreigners (including foreign central banks such as the People's Bank of China). Hence, a sizable portion of the interest payments on the large and growing government debt will actually leak out of the country.

Table B: U.S. Federal Government Revenues and Outlays ($Billions)
Source: Congressional Budget Office

	2008	2009	2010
Revenue			
Individual Income Tax	1,146	915	899
Corporate Tax	304	138	191
Social Insurance Tax	900	891	865
Federal Reserve (Profits)	34	34	76
Other	140	126	131
Total	**2,524**	**2,104**	**2,162**
Outlays			
Defense-Military	595	637	667
Social Security	607	660	696
Medicare	390	429	450
Medicaid	201	251	273
Unemployment Benefits	47	120	162
Other Activities	879	977	1,048
Net Interest on the Public Debt	260	202	228
TARP	0	154	-108
Payments to GSEs	0	91	40
Total	**2,978**	**3,520**	**3,456**

If the U.S. economy attains good nominal GDP growth rates or if the deficit to GDP ratio falls, then the debt to GDP ratio will stabilize or decline. Thus, to avoid a future crisis, the U.S. needs to find ways to reign in the budgetary shortfalls. This may be accomplished by cutting entitlement spending and rationalizing the income and corporate tax structures. Additionally, the U.S. needs to undertake significant structural reforms that can create sustainable real growth. This calls for a shift away from excessive consumption and a reduction in the country's dependence on the construction, finance and retail sectors.

While faster real economic growth is preferable, it is important to note that nominal GDP can increase because of a rise in actual production or because of higher inflation rates. The U.S. may find it tempting to inflate away some of its debt — higher inflation implies that the federal government is paying back debt in dollars that are worth less. However, there is an enormous risk underlying this strategy. The international confidence in the U.S. dollar, which gives America an enormous advantage, will be severely impacted if the country tries to depreciate the dollar through higher domestic inflation aimed at reducing the debt burden. This may, in fact, lead to higher borrowing costs in the future.

Historically, countries with debt to GDP ratios of more than 90 percent have found themselves in financial trouble sooner or later. While the U.S. is unique in some regards, failure to take action to fix the fiscal imbalances now may lead to a severe financial shock in the future that would be costly not just for the American economy but also for the global economy.

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