



Strategic Analysis

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Jobless recovery is no recovery Prospects for the U.S. Economy

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Introduction

The U.S. economy grew reasonably fast during the last quarter of 2010, and the general expectation seems to be that satisfactory growth will continue in the two year period 2011-12. This report argues that the expansion may, indeed, continue through 2012 and perhaps for another quarter or so in 2013. But with large deficits in both the government and foreign sectors, satisfactory growth in the medium term cannot be achieved without a major, sustained, and discontinuous increase in net export demand. This, of course, cannot happen automatically, and it certainly will not happen without either a cut in the domestic absorption of goods and services in the U.S. or a revaluation of the currencies of the U.S's major trading partners. Both might impart a deflationary impulse to the rest of the world while the latter might also cause a resumption of inflationary pressures.

Following our usual custom, we make no short-term forecast. Instead using the Levy Institute's model rooted in a consistent system of stock and flow variables, we trace out a range of possible medium-term scenarios in order to evaluate strategic predicaments and policy options without being at all precise about timing.

The Current State of the U.S. Economy

The new Congress, elected last year, has changed the rules of how policy will be formed, at least, for the next two years. Early deliberations of the new Congress are firmly fixated on cutting the budget deficit –after having achieved a compromise with the White House in continuing President Bush's tax cuts for some limited extensions of government transfers and cuts to payroll tax withholding —so that any talk about fiscal stimulus receives no consideration and is even subject to ridicule. Hence, the burden of fighting high unemployment seems to have fallen mostly on the shoulders of the Federal Reserve (Fed). The announcement in mid-November of last year of a second quantitative easing (QE2), the Fed's new round of long-maturity asset purchases, is an attempt to engineer a loosening of the credit markets and spur growth and employment. But what could the effects be of this second push by the Fed? The effects might be similar to those of QE1, and an analysis reveals the following: In November 2008, the Fed announced large-scale purchases

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of mortgage-backed securities and debt issued by Government Sponsored Enterprises (GSEs). Its securities holdings began to climb sharply in early 2009. As shown in Figure 1, the monetary base (a broad measure of the Fed's liabilities) had already begun to rise several months earlier while new asset purchases for QE1 ended earlier this year.

The effects of QE1 and the other stimulus policies adopted by the Fed since late 2008 have not been welcome in many quarters here and abroad, and much debate will continue for some time to come. Notably, however, as shown in the same figure, a trade-weighted index of the dollar's value against a basket of foreign currencies has declined quite a bit. This development has



provoked captious commentary especially from some world leaders, but it may have, in fact, helped to spur real (inflation-adjusted) U.S. exports, shown as the red line in figure 1. In the same figure the yield on a 10-year inflation-indexed Treasury security is shown as well, which can be used as a measure of the real interest rate. This rate has tumbled from well over 3.5 percent to negative levels. Contrarians to the Fed's strategy doubt that it can succeed in reducing *real* long-term interest rates over a prolonged period, its remarkably sustained trend notwithstanding.

The expansionary fiscal policy initiated by President Obama (Blinder and Zandi 2010) reinforced by the accommodative and even aggressive monetary policy so that (real) short-term interest rates remain at zero percent and significantly low long-term interest rates have brought the Great Recession to an end. Yet, with all this help, the recovery from the recession of 2008 has not been robust confirmed by the stubbornly high levels of unemployment and underemployment. Over the next few years, policy and market developments are likely to prove important for the performance of the U.S. economy. Growth and employment, in particular, have been far below the levels of productive potential and there is a widely accepted view that most of the policy shifts underway will turn out not only ineffective but counterproductive.

The experience drawn from the efforts to reduce budget deficits in Europe could be seen as lessons of counterproductive and ineffective policy. Greece, Ireland, the United Kingdom, Portugal, and Spain—all of these countries are implementing tax increases and drastic spending reductions, in the form of cuts in public sector wages, government workforces, and social spending. Meanwhile, the financial system continues to create new demands on the public purse in Europe, where the member governments of the Eurozone lack the power to conduct independent monetary policy suited to their needs. Notably, many large banks on the Continent and in Britain hold significant amounts of bonds from countries such as Greece, Ireland and Portugal that may default on many of their obligations. Separately, a mortgage crisis similar to the one in the United States has developed in the Irish banking system that has lead many depositors to suddenly withdraw funds (Krugman 2010). Bondholders are still skittish, and yields on many European government bonds have climbed significantly, notwithstanding, the European Central Bank's (ECB) large purchases of government bonds and its lending to troubled Eurozone banks. The leaders of Ireland have joined those of Greece in agreeing to an international bailout effort and pressure is being applied to Portugal to

follow suit. However, opposition to these efforts remains strong in much of Europe since these bailouts require even more draconian austerity measures.

Here at home, many key interest rates are already at or near record lows, a very unusual situation attributed partly to the Fed's unconventional policy measures (D'Amico and King 2010). While the Fed's relaxed monetary strategy is certainly beneficial, it will not be the motor for economic growth and employment. In sectors of economic activity such as housing construction that are usually regarded as "interest rate sensitive", the Fed's policy has had minimal results. Research of Macroeconomic Advisers shows that even an additional \$1.5 trillion dollar bond purchase by the central bank would reduce unemployment by only two-tenths of a percentage point (Hilsenrath 2010). Low interest rates notwithstanding, many firms seem to be sitting on large stocks of cash waiting for demand for their products to rebound. Moreover, there is increasing tension over exchange rates among the governments of many of the largest economies in the world. This has led to admonitions from many finance ministers around the world that they see quantitative easing as an unfair effort to "manipulate" the value of the dollar, as if they had obviously set some target value for the exchange rate. Some countries are now acting independently to devalue their currencies in order to improve their trade balances. Certainly, this will be of help domestically to many depressed economies, but will complicate U.S. efforts to reduce the value of the dollar against many currencies. Indeed, the United States and other countries may find themselves printing large amounts money simply to maintain the competitiveness of their exports, and even then face the risk of being branded as mercantilist nation-states.

Many of the newly elected representatives in the new Republican House of Representatives were elected after campaigns in which they advocated sharp cuts to government bureaucracies, an end to federal deficits, and even a return to the gold standard (Green 2010). But, we find some solace in polls showing that deficit reduction constitutes the top policy priority for only 4 percent of the electorate (CBS 2010), even though the radical antigovernment contingent is a vocal and highly motivated voter group. We fear, nevertheless, that with a divided Congress, nothing new and dramatic in the way of economic policy will happen. To be sure, mainstream economic thinking, including the Congressional Budget Office (CBO) and the president's advisers continue to adhere to a "stimulate now, cut the deficit over the long run" approach to fiscal policy during a recession. They are relatively cautious in their policy proposals despite the fact that unemployment remains extremely high by historical standards. In the simulations reported in this report, we use the CBO's forecasts for some economic variables, but even these begin with the unrealistic supposition that the economy is likely to heal itself in a baseline scenario with no new major stimulus packages. Like many anti-deficit groups and politicians, the CBO adopts somewhat of an alarmist tone and makes some assumptions that inflate their projections of future federal debt levels (Galbraith 2010). Recently, the leaders of the bipartisan deficit-reduction commission put forward an initial proposal that calls for \$4 trillion in budget cuts. These include deep reductions in spending for bread-andbutter programs, including Social Security, which helps people of modest or low income afford necessary purchases. It is often forgotten that this program helps reduce poverty, a goal that is especially crucial at a time when work and family resources are scarce for an unusually large number of Americans. Other fiscal austerity proposals come from Congress and middle-of-the-road nonprofit organizations calling for a freeze on domestic discretionary spending (e.g., Bipartisan Policy Center 2010). (The term "discretionary" is used to refer to spending that is not mandated by Social Security eligibility rules or other laws, but rather allocated in every year's federal budgeting process.) These misguided plans mostly "backload" spending cuts, but they involve the enactment of some spending cuts within one or two years and encourage an unfortunate presumption on the part of the public that stimulus measures should be off the agenda for the foreseeable future.

Some of the "investments" made under the Troubled Asset Relief Program and other bailout programs have proven to be profitable, but huge liabilities continue to accumulate for others. These ongoing problems foster the impression that there is already plenty of crisis-related spending, though official measures in unemployment indicate that full recovery is far from accomplished and many needs that are more immediate and pressing remain unaddressed. While the fiscal stance is likely to tighten further at the federal level, fiscal troubles remain severe at the state and local level in much of the United States, and budget cuts are planned this year and next in places such as New York City, which recently announced that it would reduce its educational workforce by about 5,400 people (Reddy 2010). Even new bond issues from the State of California are received with skepticism by many investors, and the new Democratic governor is acting in concert with his Republican predecessor reportedly having said that he must ask for cuts not only to the fat in the state budget, but also the bone (Aneiro and Woo 2010).

Finally, as the world economy begins to revive, huge amounts of excess reserves in the private banking system and in sovereign portfolios around the world have generated destabilizing bubbles in commodity and financial markets. Already, capital inflows in some emerging economies have raised fears that the ground was being laid for a repeat of the late-1990s Asian financial crises. Many of these crises began with the bursting of asset bubbles created by foreign investment. At this point, the possibility of future asset booms is not among this nation's pressing concerns it reminds us that we need a better basis for a broad-based and sustainable economic recovery. Moreover, an uptick in inflation led by speculation in asset markets could abruptly end efforts by some central banks to promote higher growth rates and avert a new recession.

A closer look at the data will tell us about the economic challenge now facing U.S. policymakers.

More Precisely

It is by now well known that the U.S. economy has lost millions of jobs since the start of the "Great Recession" and the ranks of the unemployed and underemployed remain still at stubbornly high levels. This despite of the NBER's Business Cycle Dating Committee¹, the arbiter of business cycles having declared that the recession ended in June 2009. Figure 2 shows the dynamics of real

output and the corresponding unemployment rates since 1970. (Shaded areas are the official recession periods.) It can be seen that the "Great Recession" has been the longest, and has generated the largest increase in unemployment. Even in the 1981 recession when the unemployment rate reached 10.8 percent it began rising from a low of 5.9 percent at the end of 1979 – a net increase of 4.9 percent while in 2007 the rise started from 4.4 percent, climbing to 10.1 percent -a higher net increase of 5.7 percent.

¹ See http://www.nber.org/cycles/cyclesma



Our figures are reported on a quarterly basis and do not show the improved February 2011 unemployment rate of 8.9 percent.

The rise in unemployment mirrors the drop in jobs. Post World War II employment -as a share of the population of working age (14-64) fluctuating but has has been followed the trend shown in Figure 3. When the 2007 recession started, employment has been very much below trend with no visible prospects resuming its trend. In earlier recessions (shaded areas) once recovery began employment rehabilitation soon followed. In the 1990, 2001 and 2007 recessions, structural changes have affected the reaction of employment to output progressively so. Notice that in the 1990 recession employment began falling somewhat before the official beginning of the recession, and kept falling for some time after the recession ended. This phenomenon was intensified in 2001, and is similar to the 2007 recession as well.

More than 7.0 million jobs have been lost since the last peak of employment in November 2007, and, as of December of last year, about 19 million jobs need to be created to have employment returned to its pre-recession trend adjusted for increases in the current population.

Comparing employment trends of all post-war recession periods,² Figure 4 shows that the effects of recessions on employment do not vanish after three years –the only exception being the 1969 recession—and that



Figure 3. Employment as a share of working-age population



employment usually remains below its trend. But, in December 2010, three years after the Great Recession began and a year and a half after it ended, employment was still below trend by more than 8 percent (or 19 million jobs). Significant improvement in the employment situation is not in the offing, as the BLS report for February 2011 shows. The results from a household survey show a very small decline in the unemployment rate to 8.9 percent, while a separate survey of businesses found a total increase of 192,000 employees on U.S. payrolls last month. In the household survey, approximately one million people, or about .6 percent of the labor force, said that they wanted to work, but were no longer bothering to look for a new job because of a lack of opportunities. Over 5

² For an analysis of employment in recessions see also Shierolz (2011).



Figure 5. Growth in real GDP and the unemployment rate

unless the final estimate is revised upward.

percent of the labor force was working part-time, but searching unsuccessfully for full-time employment.

The evolution of the U.S. economy in 2010 has been in line with our latest projections (Zezza 2010, Papadimitriou et al. 2009). In our December 2009 report we argued that the U.S. government should postpone any measures to reduce the federal deficit. Our simulations, conditional on this assumption, proved to be accurate indeed in projecting but employment, overly optimistic for real output growth,

Our simulations were based on the assumption that household net borrowing, already in negative territory, would have levelled as a share of income, while firms borrowing would slowly go back to positive values, which is roughly the situation now. These assumptions together with our assumptions on the direction of housing prices and the stock market and with the path that fiscal policy and net exports have followed implied that the economy would recover, but at a high, and slowly declining, unemployment rate as shown in Figure 5. Fast forward, in the last section of this report we will adopt a similar set of assumptions to update our projections on the prospects for the U.S. economy in the medium term.

The major determinants of consumer spending—the largest (70 percent) component of GDP —are now steadily improving. Real wages have grown in the last two quarters, after more than two years of precipitous decline as indicated in Figure 6, although are still lagging by about 4.7 percent from their pre-recession level. Their recent growth is attributed to a moderate rise in the real wage per worker following the decline began at the onset of the recession, and then entering a brief period

of stagnation. Real wages, of course. are affected by employment increases and this is so reflected for the last two quarters. Since the dynamics of real wages per worker can be substantially different among worker groups, with jobs in the finance and management sectors taking most of the gains in the recent decades³, the effects of a rise in real wage per worker on aggregate demand may be lower than what could be thought of at first sight.

⁸ annual percent growth rate 6 4 2 0 -2 -4 Real personal disposable income Real wages Source: B.E.A -6 92 10 90 94 96 98 00 02 04 06 08

Figure 6. Real disposable income and wages

³ See Arestis et al. (2011).



The other major source of fuel for consumer spending is disposable income. During this recession, real disposable income has been sustained by a fiscal intervention that helped prevent a further deterioration in consumption that would have impaired growth substantially more as shown in Figure 6. The next Figure 7 shows the major determinants of personal disposable income, compensation namely of employees (line 1): ditto plus proprietors' income. rental income income, and from assets (line 2); government

transfers to persons (line 3); and personal taxes (line 4).

Real disposable income has been sustained by a dramatic fall in tax payments and large increases in transfer payments—both significantly larger than what was registered in the 2001 recession. These are partly due to the recession—when unemployment increases, so do payments for unemployment benefits, etc.—and also to specific government interventions put in place by the Obama administration. As Figure 7 shows, both effects—the drop in tax revenues, and the increase in transfers—have begun to level off, with current transfer receipts back to the pre-recession level. If these trends continue taxes and transfers will not provide further stimulus to income and consumption.

Household borrowing has remained negative as shown in Figure 8, while it was a major determinant in fuelling the sustained aggregate demand boom of the 2000s. Together with foreclosures, negative borrowing is responsible for the decline in the stock of household debt outstanding, which went down to 117.6 percent of personal disposable income from its peak at 130 percent in the third quarter of 2007. It has been suggested that the fall in borrowing does not imply necessarily a change in consumers' habits towards credit, but rather is the statistical outcome of the recent wave of

bankruptcies, and the resulting increase in the number of loans written off by the institutions that hold them (Whitehouse 2010). If this were the case, we would presumably witness a sharp fall in the income and spending data series for specific groups of individuals who were more likely to take out mortgages or loans they could not afford, but not for social groups that were less affected by the mortgage crisis -assuming that credit was still available to them. A plausible outcome of this

Figure 8. Households Borrowing and Debt





Figure 10. Debt Burden (Fed measures)



Figure 11. Propensity to save out of disposable income



scenario would be a small increase in the average saving rate of U.S. households. To the contrary, the saving rate has increased dramatically—as we will discuss later—an observation that is more in line with the view that households have changed their habits and not just defaulted on much of their debt.

Changes in the spending habits of consumers are evident in the data on consumer credit shown in Figure 9. Both revolving and non revolving credit have been falling, relative to disposable income, since the beginning of the recession, with the largest share of the drop from their peak in August 2007 recorded in 2010, after the official end of the recession the previous We have vear. argued. however, that what may matter most for consumers' decisions is not the level of debt outstanding, but rather the debt burden, relative to disposable income. The debt burden has been declining steadily since the beginning of the recession (Figure 10), and it is now below its 2000 level -earlier than the burst of the dot-com bubble and the start of the housing market frenzv. Undoubtedly, the fall of the debt burden is the joint consequence of falling total debt outstanding and low interest rates. A word of caution is necessary, here, in that given that the stock of debt is still high relative to GDP, any increase in interest rates would quickly reverse the downward trend. Assuming that very low interest rates continue, further reductions in debt outstanding should make households more

confident in increasing spending.



It was mentioned above that the household saving rate has, since the recession began, significantly increased as evidenced in the data. As Figure 11 shows. the propensity of households to save out of disposable income, after declining to an all-time low in 2005 has now jumped to about 6 percent of GDP, a level close to its value in the first half of the 1990s, though still much lower than its peak of almost 12 percent in the early 1980s. Rising household

assets,

whether in equities or housing, play a critical role in the ability of households to borrow and spend. The large increase in equity prices was undoubtedly a major determinant of spending during the dot-com bubble, as was the run up in home prices up to 2006. A widely used measure of equity prices, the Standard & Poor's 500 Index, along with a measure of prices in the housing market, both deflated by a general price index for consumer goods are depicted in Figure 11. The recent data on these indexes show divergent trends after 2008 with the stock market index recovering rapidly and the housing market remaining stagnant. The evidence overall points to a modest increase in the pace of consumption, especially if real disposable income continues to rise, and an even larger increase with the implementation of government policies to sustain income, such as the recent cut in payroll taxes.

Real investment, both residential and non-residential, began growing again in the last three quarters of 2010 after a prolonged period of dramatic fall as shown in Figure 13. The largest increase in non-residential investment, however, was for transportation equipment (56 percent in the last quarter of 2010 over the same quarter of 2009) and was fuelled by specific measures that have now expired. Other components of investment, such as "equipment and software" (increase of 16 percent) and "other industrial equipment" (increase of 18 percent), also increased; these increases



Figure 13. Profits and investment

were not necessarily due to macroeconomic policies. Irrespective of these all significant increases in components of non-residential investment, its level is still 12 percent below its pre-recession peak in the first quarter of 2008. On the other hand, the increase in residential investment shown in the figure may be due to resales of foreclosed houses together with the end of the downward slide in residential property values. The latter have stabilized in real terms since late 2009, but remain substantially (58

Figure 14. U.S. Balance of payments on current account



residential investment anytime soon.

percent) below their peak at the end of 2005, and even below the average during the 2000s. In Figure 13, a simple measure of aggregate profits is also shown⁴. Casual observation of the trends depicted in Figure 13 seems to suggest that there is a lagged response of nonresidential investment to profits⁵. It can be surmised, then, that the recent in corporate profits, surge should it continue, may be an important factor in aggregate demand growth, since no stimulus can be expected from

The effects of net exports, foreign debt, the value of the dollar, and international imbalances on the economy are of crucial importance, and to these we turn, next.

In Figure 14, the U.S. external balance and its component parts are shown. In the last 20 years, net exports have been a drag on aggregate demand, with imports systematically surpassing exports. Buoyant domestic demand in the U.S. combined with a strong dollar, generated a large and growing external trade deficit, which peaked at 6.4 percent of GDP in 2005, with the largest share (now 3.8 percent) being non-oil trade. Since then, the nonoil trade deficit has begun to drop, while the ratio of oil imports to GDP has remained relatively stable, fluctuating between 1.5 to 3.8 percent of GDP. The decline of the dollar against other currencies (Figure 15) helped close the (nonoil) deficit reinforced by the effects of the recession having hit the U.S. more severely than its trading partners. If oil imports are excluded, the U.S. external balance is now close to a deficit of 1 percent of GDP,



the overall external with balance being 3.5 percent of GDP, as shown in Figure 14. Oil imports are, therefore, a major factor in U.S. net current payments to the rest of the world. Movements in the price of oil are therefore quite important, and seem to be linked to the dynamics of the U.S. dollar. Figure 16 plots the aggregate. trade-weighted nominal index of the value of the U.S. dollar, along with a measure of the international price of oil. After 2001, oil prices move in the opposite direction to the value of the dollar: the correlation between

⁴ Corporate profits with inventory valuation and capital consumption adjustments, NIPA Table 1.12 line 13

⁵ Confirmed by exploratory econometric analysis, which shows a long run response of investment to profits of about 0.5, i.e. an increase in real profits of 1 percent implies a long-run increase in investment of 0.5 percent.



the two figures is zero before 2001, and a negative 0.8 from 2002 to 2010. Dollar devaluation, or expected dollar devaluation, will push upward the international price of oil, a fact which is consistent with oil diversifying exporters their reserves away from the U.S. dollar and/or interested in other currencies not pegged to the U.S. dollar. A devaluation of the U.S. dollar, though effective - as we will argue later- in improving the overall trade balance, will not necessarily reduce the cost of U.S. oil imports.

A growing trade deficit carries the implication that the net

foreign debt rises accordingly. The line marked "net foreign assets" in Figure 17, drawn from the Fed's last Flow of Funds report, shows that this sum had fallen to less than negative 50 percent of GDP at the third quarter of 2010. This line reflects assets and liabilities at their costs, rather than at market prices and does not, therefore, consider exchange rate changes affecting the dollar value of assets denominated in other (appreciated) currencies. In contrast, the dashed line, drawn from BEA data, depicts the same history using market prices. This series now stands at about negative 20 percent of GDP.



The U.S. is in an envyable position not only in being able to borrow from abroad in its own currency, but also to buy assets denominated in strong currencies, or currencies that are expected to appreciate. since Therefore, external deficits - sooner or later reduce the value of the currency of the deficit country, the U.S. experiences capital gains on its foreign financial assets denominated in nondollar currencies-while the value of its dollar-denominated financial liabilities does not change. This second line shows

estimates of this effect based on information from the "U.S. Net International Investment Position" reported by the BEA.⁶ The third line, marked "net foreign direct investment", shows how net stocks

⁶ As an example of the relevance of changes in the value of assets, consider the U.S. stock of financial assets (excluding derivatives) at yearend 2008, which were equal to \$13,117 billion, or 93 percent of GDP. The value of financial assets at yearend 2009 was \$14,867 billion, or 103 percent of GDP, with the \$1,750 billion increase due to





of direct investment, at current values, have fluctuated upward reaching 8 percent of GDP in the third quarter of 2010. Apparently, foreign direct investment has a life of its own, independent of trade imbalances or movements of the U.S. dollar. American companies continue to invest in foreign markets at a faster pace than foreign companies do in the U.S.

Data from the Federal Reserve and the BEA show that irrespective of the Fed's relaxed monetary stance and the downward pressure on the dollar, foreign central banks and others are still willing to buy and hold U.S. dollar denominated assets as exhaustively detailed in Figure

18. It is interesting to note that a major increase is registered in official holdings of U.S. Treasury and other government securities –which have risen to 26 percent of U.S. GDP from 7 percent in 2000—while private holdings of these assets have increased to only 11 percent of GDP from 6

percent of GDP during the same period. A large increases is also shown in foreign holdings of U.S. corporate bonds -which now stand at 17 percent of GDP, a big jump from 2000's level of 7 percent of GDP. U.S. corporate equity holdings held by foreigners, valued at costs, equalled 15 percent of U.S. GDP in 2000, before the dot.com market crash, and were at the same value in the second quarter of 2010, although they are now increasing again. This leads us to conclude that the demand for safe U.S. assets is primarily from overseas central banks rather than foreign investors wishing to diversify their portfolios. This

Figure 19. Net income payments from abroad



net purchases of new assets (\$140 billion or 8 percent of the increase), price appreciation of existing assets (\$1,066 billion or 61 percent of the increase), and exchange rate changes which led to a change in the dollar value of assets (\$358 billion or 20 percent of the increase). The residual \$185 billion is due to other reasons, such as changes in coverage or capital gains and losses of direct investment affiliates and changes in positions that cannot be allocated to financial flows, price changes, or exchange-rate changes. For U.S. liabilities, 32 percent of the increase from 2008 to 2009 was due to new debt, 56 percent to the increase in the market value of U.S. assets held by foreigners, and only 8 percent of the increase was due to exchange rate movements.



observation poses a serious challenge to the notion that foreign accumulation of U.S. assets is a consequence of an overseas "saving glut."

Figure 19 shows the net flows of income associated with the various categories of assets. Although the stock of U.S. foreign debt has increased considerably, its impact on interest payments has not been dramatic so far, mainly due to the decline of interest rates. Net interest payments for foreign liabilities other than FDI have increased to 0.7 percent of GDP.

On the other hand, the U.S. benefits from large income flows on foreign direct investment, on a scale that is puzzling.⁷ U.S. net property income from direct investment is plus 1.9 percent of GDP, and more than offsets interest payments on its outstanding foreign debt. This may be due to accounting incentives for U.S.-based corporations with operating units abroad to repatriate comparably higher profits while overseas-based firms operating in the U.S. with perhaps "lower" profits choose not to do so.

We can obtain a simple measure of the ex-post rates of return on foreign investment by dividing the reported flow of income payments from the BEA to the initial stock of FDI valued at current costs. The conclusion from such a calculation is that the return on FDI in the United States is very low in comparison to the return U.S. investors earn abroad.

Figure 20 shows an index of global imbalances. It is constructed by computing the mean of the absolute values of the current account balances of 169 countries⁸ (see note for the list of countries included), and scaling them in relation to both world GDP and total world exports, with all variables measured in current U.S. dollars. The index covers a thirty-year period (1980-2010), with 2010 data

⁷ See Gourinchas – Rey (2005) for a discussion.

⁸ Countries in the index are:

Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia(1), Australia, Austria, Azerbaijan(1), The Bahamas, Bahrain, Bangladesh, Barbados, Belarus(1), Belgium, Belize, Benin, Bhutan, Bolivia, Botswana, Brazil, Brunei Darussalam(5), Bulgaria, Burkina Faso, Burundi, Cambodia(4), Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Democratic Republic of Congo, Republic of Congo, Costa Rica, Côte d'Ivoire, Croatia(1), Cyprus, Denmark, Djibouti(2), Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea(1), Ethiopia, Fiji, Finland, France, Gabon, The Gambia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong SAR, Hungary, Iceland, India, Indonesia, Islamic Republic of Iran, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan(1), Kenya, Kiribati, Korea, Kuwait, Kyrgyz Republic(1), Lao People's Democratic Republic, Latvia(1), Lebanon, Lesotho, Libya, Lithuania(1), Former Yugoslav Republic of Macedonia(2), Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Moldova(1), Mongolia(2), Morocco, Mozambique, Myanmar, Namibia(3), Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Oatar, Romania, Russia(1), Rwanda, Samoa, São Tomé and Príncipe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Slovenia(1), Solomon Islands, South Africa, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Taiwan Province of China, Tajikistan(1), Tanzania, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan(1), Uganda, Ukraine(1), United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan(1), Vanuatu, Venezuela, Vietnam, Republic of Yemen(3), Zambia, Zimbabwe

Notes: (1) From 1992; (2) From 1991; (3) From 1990; (4) From 1986; (5) From 1985

-and at times, 2009 data projected by the IMF. Countries with missing data after 1992 were taken out of the sample. The chart shows, in spite of the index's decrease during the "Great Recession", that there are still many countries spending more than their income and relying on other countries to finance the imbalance.

The current account balances of some key U.S. trading partners have moderated since the "Great Recession." Similarly, the U.S. current account balance



decreased to about 3.6 percent of GDP from its all time high of 6.3 percent in 2005. Figure 21 reports the current account balances of some countries and groups of countries as percentages of U.S. GDP. As we have observed in Figure 14, the United States continues to face a significant challenge in rectifying its trade deficit, a large part of which is made up of oil imports.

Looking more closely at the data shown in Figure 21 with the exchange-rate lens of Figure 15, we cannot fail to notice that the devaluation of the dollar against the euro has been effective in reducing the U.S. trade deficit with the euro area. The (smaller) revaluation of the Chinese yuan and Japanese yen has been less effective. The deficit with Russia and the members of OPEC is sizeable, and as we observed earlier highly dependent on the movement of oil prices. Japan and Germany rely heavily on exports, but the euro area as a whole is now roughly in balance, since Germany's surplus is offset by the deficits of the other Eurozone countries.

Three Strategic Scenarios

Underlying the main conclusions of this strategic analysis is an econometric model in which exports, imports, taxes, and public and private expenditures are functions of world trade, relative prices, tax rates, stocks of debt and flows of net lending. In what follows, we present projections of the performance of the U.S. economy between now and 2015. These projections are not forecasts, especially not short-term forecasts. We have exercised care to ensure that they are consistent with recent developments and with a significant number of the indicators that we have presented above. Our interest in making these conditional projections is to describe broadly conceived major strategic challenges that are likely to arise over the next five years and to consider alternative strategies to deal with them.

A Baseline Scenario

Our baseline scenario has been constructed, as usual, using a set of assumptions that is as neutral as possible. Our projections for output and inflation in U.S. trading partners is from the IMF World Economic Outlook database (July 2010 Update). In addition, we adopt the revised CBO projections for fiscal policy that imply a declining deficit for the federal government (CBO 2011). Assuming that state and local government deficits stabilize in terms of GDP, we replicate the CBO dynamics of fiscal policy for the U.S. general government. Since CBO projections are based on the current state of legislation, they include the recently enacted compromise bill, which includes a two-year

Figure 22. Baseline. U.S. Main Sector Balances and real GDP growth



extension of the Bush tax cuts, reductions in payroll taxes, and extensions of unemployment benefits and other changes to government expenditures and transfers.

We assume that households keep paying down their debt, although at a slower while nonfinancial pace. businesses get back to positive net borrowing. These assumptions not are inconsistent, in our view, with the latest figures on credit, which show only a modest increase in consumer debt outstanding for December 2010

and January 2011, following several months of decline in consumer debt. The latest data on the stock of mortgages, which is much larger than the total sum of outstanding consumer credit, are consistent with our assumptions.

We further assume a stable U.S. dollar exchange rate, stable interest rates and relative prices, including the price of oil—although this may prove to be a faulty assumption given the recent spike in oil prices due to the political upheavals in the Middle East. Should the situation in these countries deteriorate, the path of the financial balances would change dramatically. We remain, nevertheless, optimistic that things will calm down and prices will return to their pre-upheaval level.

CBO projections frequently underestimate the future path of government deficits. In recognition of this bias, the revised CBO projections (2011) attempt to correct it by providing an alternative projection for the government deficit. Under their hypothesis of a "continuation of certain policies"⁹ the projected deficit stabilizes around 4.6 percent of GDP in 2015.

The financial balances reported in Figure 22 slowly move toward sustainable levels: by the end of the simulation period the external balance is zero, private sector net saving goes back to about 4.6 percent of GDP –still high with respect to its prebubble average—and the budget deficit, also at 4.6 percent of GDP, becomes a mirror image of private sector net saving. These projected main sector balances are broadly in line with the CBO's GDP projection, with our measure of the public sector deficit at all level of governments going down by 5.4 percent of GDP by the end of the simulation period in 2015. The two-year relaxation of fiscal policy contributes to an increase in the real GDP growth rate to about 3.8 percent, but economic growth declines subsequently, as a result of the expiration of the fiscal stimulus measures in 2012. The increase in taxation and the moderation in government expenditure in that year will reduce GDP growth slowly to just below 2 percent by 2015. This is a scenario of "growth recession," in which unemployment declines to 8.6 percent at the beginning of 2012, bu then increases and stabilizes at a high, and undesirable, level of about 9.4 percent by the end of the simulation period (see Figure 25). Our own assumptions take into consideration our beliefs that the slowdown in U.S. growth will not have a large impact on U.S.

⁹ See CBO (2011), p.21-24, and Figures 1-4 & 1-5. "The projected deficit with the continuation of certain policies is based on several assumptions: First, that provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312) that originally were enacted in 2001, 2003, or 2009, or that modified estate and gift taxation do not expire on December 31, 2012, but instead continue; second, that the alternative minimum tax is indexed for inflation after 2011; and third, that Medicare's payment rates for physicians are held constant at their 2011 level", CBO (2011), p.16.

Figure 23. Scenario 1. U.S. Main Sector Balances and real GDP growth



trading partners and that slower growth in the U.S. will improve the U.S. external balance, which will reach zero by the end of the simulation period. Government debt will not decrease, since the government deficit, as a share of GDP, remains higher than the GDP growth rate for most of our simulation period. However, the deficit will tend to stabilize as a share of GDP. Foreign debt, however, will decrease as a share of GDP and so will private sector debt.

In summing up, the baseline scenario using neutral assumptions about what is

likely to happen, and the CBO revised projection of fiscal policy under current legislation, our simulations show that the private sector will continue to reduce its debt and that the external deficit will disappear, but also that unemployment will stabilize at a high level. The simulations also show that the current attempt to address the public deficit "problem" with a cut in spending will not meet with success.

An Enhanced Fiscal Stimulus Scenario

Seeing the results of the baseline scenario simulations, it is inconceivable that things would turn out as depicted, especially during a presidential election season in 2012. Reducing unemployment would become urgent as will spending on infrastructure, education, research and development and other government investment. In our "enhanced fiscal stimulus" scenario, we project the outcome of deferring the adjustment to the public sector deficit assumed in the baseline scenario. We assume that government expenditure continues to grow, in real terms, at its pre-recession average (2 percent for government expenditure on goods and services, and 4 percent for government transfers¹⁰), and that tax rates are kept at their current level. All other assumptions remain the same as in the baseline scenario. Figure 23 illustrates the possible outcome for the three financial balances under these assumptions. Output grows faster in this scenario, allowing unemployment to drop just below 8 percent (Figure 25) by the end of the simulation period. Faster growth, on the other hand, results in a larger foreign deficit, which exceeds 2 percent of GDP.

The main points to be made about this Scenario are, first, the relaxation in the fiscal policy (compared with what is now projected by the CBO) would have to be large to so that the general government deficit rises to over 7.8 percent an increase of more than 3 percent from the baseline scenario and second, if unemployment is to be significantly reduced, by our reckoning, there would have to be a fiscal stimulus much larger than the one assumed.

Filling the Gap in Aggregate Demand with Exports Scenario

Three strategies can be put in place to fill the gap in aggregate demand and reduce unemployment: stimulating private investment, trying to bring about an increase in net exports, or relaxing the government's fiscal stance. Several commentators point out that the most likely effect

¹⁰ Our model determines endogenously some transfers that depend on the business cycle, such as unemployment benefits, so our assumption is related to other transfers.

of OE2 will be on the value of the U.S. dollar. А dollar devaluation will reduce the cost of U.S. exports in foreign markets, and increase the dollar price of U.S. imports: the first effect will directly contribute to U.S. aggregate demand, while the second effect may be beneficial to domestic demand if stimulates it import substitution. A likely price to pay for dollar devaluation is that-when expectations of a devaluation increasespeculators invest in commodities priced in dollar, such as oil, driving up the price of such commodities. Since the

Figure 24. Scenario 2. U.S. Main Sector Balances and real GDP growth



amount of U.S. oil imports is still large, at 2.4 percent of GDP, increases in the price of oil will prove to be costly, in the short term, for U.S. balance of trade, and possibly for domestic prices—although the correlation between the price of oil and domestic prices in the U.S. seems to be much weaker than in previous decades.

But what would be the most effective way to increase U.S. net exports? If we look at the breakdown of U.S. trade by countries, reported in Figure 21, and compare it with U.S. dollar exchange rate movements in Figure 15, we see that movements in exchange rates are not sufficient to close trade gaps with individual countries. Compared to the year 2000, the dollar is now devalued by about 20 percent against the yen-with most of the devaluation in the last three years-yet the trade deficit with Japan has remained relatively stable at between 0.5 and 1 percent of U.S. GDP. The devaluation against the Chinese currency is about 24 percent, with most of it in the last two years, but the trade gap with this country has widened. Only the devaluation against the euro, which started earlier, has been recently associated with an improvement in the U.S. trade balance with this area. These figures seem to suggest that a revaluation of the currency of surplus countries may be more effective in closing trade gaps than a general devaluation of the U.S. dollar. Besides, if devaluation is brought about by an increase in liquidity provided by the Fed, which is channelled by international monetary markets towards countries with relatively high rates of return, the currencies that will appreciate are not necessarily those of surplus countries. The Chinese government, which can control or prohibit short-term capital inflows into its financial markets, may hold the power to prevent monetary easing in the U.S. from affecting the value of the yuan.

A coordinated realignment of currencies, or even better some reforms of international monetary institutions, would therefore be a better option than a devaluation of the dollar, and proposals for reforms are being discussed more and more frequently.¹¹ Reforms take time, and may not be feasible in the short term, and therefore exchange rate movements—or the introduction of tariffs—seem a more likely way out in the short term.

In our export-led growth scenario, we examine the effects of a devaluation of the U.S. dollar against all other currencies, as measured in the broad exchange rate index published by the Fed. Since the exchange rate index of the dollar against other major currencies is almost at a historic low,

¹¹ See Zoellick (2010), Zhou (2009) among others.





such a devaluation will imply in our model that the euro (and the ven) will rise to very high values. imparting а deflationary impulse to these areas. The euro area absorbs U.S. exports in an amount equal to 3 percent of U.S. GDP, so a slowdown in the euro area will offset at least the effects part of of devaluation in the dollar against the euro.

We assume a devaluation of 10 percent starting from the second

quarter in 2011, with no effects on the price of commodities or oil. Our simulations show that the impact on trade will be substantial by the end of the simulation period, with the U.S. achieving a deficit of 1 percent of GDP. Government deficit will also improve, since higher GDP growth – exceeding 5.5 percent in 2012 and slowing down thereafter to 3 percent—and lower unemployment, will imply larger revenues and less expenditure for the public sector, so that the deficit will reach 6.7 percent of GDP. However, the impact of the devaluation on GDP implies a reduction in the unemployment rate of an additional 0.8 percentage point, and is therefore not sufficient to get the U.S. out of the stagnating growth path.

Conclusions

Our policy message is fairly simple, and remains similar to that of previous Levy Institute strategic analyses by these and other authors, a fact that is not coincidental, given that events over the years have tended to vindicate the approach we have advocated since the late 1990s (e.g., Godley, Izurieta, and Zezza 2000). The years since our strategic analysis series began have seen huge amounts of private and public borrowing, albeit with the proportions of these two ingredients varying over time. Through most of this century, most commentators, policy-oriented economists, and leaders argued for reductions in government borrowing, but few pointed out the potential instabilities that could arise from a growth strategy based mostly on private borrowing. The recent financial crisis has shown that Hyman Minsky was right to criticize an unstable system in which policy permitted private debt was allowed to explode (1986). A return to normalcy will occur only if U.S. companies find customers other than domestic consumers, firms, and the governments. This can only be the rest of the world. As Martin Wolf put it,

The crucial point is that the US can reduce its huge fiscal deficits, without pushing the country into a deep slump, if and only other sectors expand spending, relative to incomes. This is unlikely to happen in the US private sector, to a sufficient extent, though some expansion of investment is plausible. A good part of the needed adjustment must come from expansion of foreign spending relative to income—in other words, a reduction in the structural current account deficit" (Wolf 2010).

Hence, we have often suggested measures to reduce the trade deficit, including devaluations (e.g. Papadimitriou, Hannsgen, and Zezza 2008). The current account balance has improved and seems

to be righting itself, even in our baseline scenario. However so far, this return toward balance has occurred mostly as a result of a scenario of a financial collapse and a deep recession, not successful economic policy.

Ideally, countries around the world with large surpluses should consider a focus on increasing their populations' consumption levels. In the absence of an internationally coordinated stimulus, though, aggressive domestic policy is crucial for countries that are running current account deficits. Domestic monetary and fiscal stimulus measures have helped and continue to do so (Blinder 2010; Blinder and Zandi 2010). With the economy operating at far less than full employment, we think Americans will ultimately have to grit their teeth for some hair-raising deficit figures, but should take heart in recent data showing record-low "core" CPI inflation (Dougherty 2010). In the next few months, policymaking will be hampered by political rhetoric and realities in Washington, and hence deficits will probably remain far below the levels that would be needed to bring about a strong recovery. On the other hand, export-led growth has the potential to begin to reduce unemployment. Given the likely political tenor of the new Congress, we consider only a moderate fiscal stimulus in this analysis, finding that growth prospects are somewhat improved in a scenario combining this stimulus with a devaluation. Specifically, the unemployment rate declines to about 7 percent by the end of the simulation period. While the policies tested in scenario 2 can only be described as stopgap measures, they could prevent a downward financial and economic spiral. Hence, it will be important for President Obama and Congress to negotiate a mutually acceptable fiscal expansion, despite the difficulties involved in doing so with a divided legislature.

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