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Is the Current Account Deficit Sustainable?

Should policymakers be worried that the U.S. current account deficit is on track to set an all-time record in 2004, reaching a level near 6 percent of GDP? Though some believe that the issue is a relatively minor one, NBER Research Associates **Maurice Obstfeld** and **Kenneth Rogoff** argue that the risks may be even more serious today than they were a few years ago. With the United States today absorbing roughly 70 percent of the current account surpluses of China, Japan, Germany, and of all the world's other surplus countries, the increasingly popular view that the current situation is sustainable seems unlikely. This is all the more true when one considers that government deficits rather than high investment now account for the lion's share of the U.S. current account deficit.

In **The Unsustainable U.S. Current Account Position Revisited** (NBER Working Paper No. 10869), Obstfeld and Rogoff update their earlier work and extend it in a number of dimensions, including allowing for global transmission effects. These refinements, together with today's higher deficit (5.5 percent in 2004 versus 4.4 percent in 2000) lead them to conclude that a very gradual re-equilibration of global current account imbalances would imply a depreciation of 15-20 percent in the real trade-weighted dollar. A sudden rebalancing would involve overshooting, with a doubling or more of the dollar's long-term movement. The fact that dollar depreciation tends to favor the U.S. net asset position — because the bulk of U.S. liabilities are effectively indexed to the dollar whereas only roughly half of assets are — turns out to be relatively unimportant to this calibration.

Taking into account the fact that equilibration of the U.S. current account will affect global demand everywhere — not just in the United States — does, however, make a big difference. Just as the United States must absorb considerably more non-traded goods and services relative to traded goods (these include both goods where the United States is a net exporter and goods where it is a net importer) when its current account deficit closes up, foreigners consumers must be induced to start consuming more of the global supply of tradable goods now that U.S. demand is shrinking.

Thus, the bulk of the short-run pressure for dollar depreciation is driven by the need to get U.S. residents to consume fewer tradable goods of all types and for foreigners to consumer more of them, with the opposite true for production. With traded goods comprising only 25 percent of GDP in most OECD countries, a shift in net imports of 5 or 6 percent of GDP (that is, a closing of the U.S. current account deficit by that amount) implies a massive change in the relative price of non-traded versus traded goods, with non-traded goods becoming relatively cheaper in the United States and more expensive abroad. It is true that the price of the goods the United States exports must also decline, and that U.S. import prices must rise. However, contrary to much analysis in the press, this effect is quantitatively much less important, and plays only a secondary role.

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The requisite depreciation, of course, depends on the empirical parameters of the economy as well as on the nature of the shock leading to equilibration (a rise in productivity in the foreign non-traded goods sector will reduce global imbalances with somewhat smaller exchange rate effects than would be caused by a rise in U.S. savings). Obstfeld and Rogoff show that an exchange rate change alone (say, caused by appreciation of the Asian currencies) will have only a relatively limited impact on the current account, absent shifts in underlying savings behavior and productivity.

While the analysis does not give a definite timetable, it does point out a number of factors that suggest rebalancing will happen within the next few years. These include the open-ended security costs of the United States, high energy prices, the still expansionary stance of monetary and fiscal policy, and rising old-age pension costs. The authors note that global rebalancing could turn out to be relatively benign, as it was in the late 1980s. Then, despite a 40 percent drop in the trade-weighted dollar, the global economy was able to absorb the shock reasonably well. But post-9/11, the Iraq war, and a succession of tax cuts, the situation appears more nearly parallel to the early 1970s, when the results were far less satisfactory.

Obstfeld and Rogoff consider a number of possible economic developments that might lead to rebalancing, including changes in savings and productivity. Higher foreign productivity helps in the short run if it is focused in the non-traded sector of the economy (where the bulk of output lies). But if foreign productivity increases are disproportionately concentrated in the traded goods sector, the imbalances will get worse before they get better.

The overall conclusion here is that the global economy is more vulnerable today than it seemed four years ago, when it already looked worrisome. If the current account closes up under relatively benign circumstances, then the effects may not be too traumatic, even though there will still likely be a spectacular short-run depreciation of the dollar, 20-40 percent on a trade-weighted basis. But if it occurs concurrently with another major shock, say to security or energy prices, or to consumer confidence, then the global output ramifications could be considerable, with interest rates rising, vulnerabilities in Europe and Asia due to appreciation of their currencies, and risks of financial crises.

Affirmative Action and Highly Qualified Minority Students

Some supporters of affirmative action have argued that eliminating racial preferences would harm highly qualified minority students by discouraging them from applying to elite colleges and universities. This concern rests on the assumption that minority students are uncomfortable attending schools without significant minority populations, and that not having a large enough minority population at elite schools discourages minority applicants.

In **Would the Elimination of Affirmative Action Affect Highly Qualified Minority Applicants?** (NBER Working Paper No. 10366), NBER Research Associates **David Card** and **Alan Krueger** report that the college application decisions of highly qualified minority students are "not very sensitive to changes in the racial and ethnic composition of the student bodies at selective public colleges and universities" and that fears "that ending affirmative action would cause a diversion of highly qualified minority students away from the elite colleges and universities appear to be unfounded."

Comparing data from all SAT-takers in California and Texas in the 1994 to 2001 admission cohorts with administrative data from the eight University of California campuses covering 1995 to 2001, Card and Krueger determine that the probability that a student asks the College Board to send his SAT score to a particular campus is a good proxy for the probability that a student will apply to the same institution. They conclude that students' decisions to send SAT scores to a particular campus can substitute for actual applications data.

Public colleges and universities in California and Texas offered preferential admission to minority applicants until the late 1990s. In 1995, minority applicants to the University of California at Los Angeles (UCLA), the University of California at Berkeley, the University of Texas at Austin, and Texas A&M enjoyed higher average acceptance rates than whites and Asians despite substantially lower grade point averages and group SAT scores that were more than 100 points lower on average.

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After preferences were banned in California in 1998, admission rates among black freshmen applicants to Berkeley, UCLA, and UC San Diego fell from 45-55 percent in 1995-7 to 20-25 percent in 1998-2001. Between 1997 and 1998, the fraction of blacks and Hispanics in Berkeley's freshman class fell from 22 percent to 12 percent. System-wide, changes in minority admission were far more muted. In California, acceptance rates fell by about 7 percent for blacks and 4 percent for Hispanics.

Banning affirmative action admissions had similar effects at Texas schools. At Texas A&M the decline began in 1996. Black admission rates fell by an estimated 30 percent and Hispanic admission rates fell by an estimated 15 percent.

Although there are differences in the behavior of white and black application patterns in California and Texas, differences that may reflect the fact that elite Texas schools are located in small cities while elite California schools are in large urban areas, the end of affirmative action produced few changes in before-and-after score-sending behavior. There was a small, short-lived dip of less than 5 percent in the relative probability of sending scores to selective schools in both states from 1997-9, but the probabilities recovered after 1999. There was no change in behavior for highly qualified students, with the exception of high-GPA Hispanic students in California. They were significantly more likely to send their scores to the most selective University of California schools after affirmative action was abolished.

— Linda Gorman

Effects of Taxes on Labor Income

Taxes on labor income and consumption spending encourage households to shift away from work in the legal market sector and toward untaxed uses of time such as leisure, household production, and work in the shadow economy. In **Tax Effects on Work Activity, Industry Mix and Shadow Economy Size: Evidence from Rich-Country Comparisons** (NBER Working Paper No. 10509), authors **Steven Davis** and **Magnus Henrekson** assess the long-term effects of persistent tax rate differences among countries. The authors stress that taxes affect work activity directly through labor supply-and-demand channels and indirectly through government spending responses to available tax revenues. They find that higher tax rates on labor income and consumption expenditures lead to less work time in the legal market sector, more time working in the household sector, a larger underground economy, and smaller shares of national output and employment in industries that rely heavily on low-wage, low-skill labor inputs.

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The estimated tax effects are large for the authors' preferred tax measures. Cross-country comparisons in the mid-1990s indicate that a tax hike of 12.8 percentage points (one standard deviation) leads to 122 fewer hours of market work per adult per year and a 4.9 percentage point drop in the employment-to-population ratio. It also increases the size of the shadow economy by 3.8 percent of official GDP, and it reduces by 10 to 30 percent the share of national output and employment in "Retail Trade and Repairs," in "Eating, Drinking, and Lodging," and in a broader category that includes "Wholesale Trade and Motor Trade and Repair." The evidence suggests that tax rate differences among rich countries are a major reason for large international differences in market work time and in the industry mix of market activity.

The authors' broad-brush international comparisons are useful for several reasons. First, the focus on national outcomes provides information about the impact of taxes through their effects on the composition of labor demand. Because home production is highly substitutable for many market goods and services produced by less skilled workers, taxes on labor and consumption twist labor demand away from less skilled workers, amplifying their negative effects on aggregate employment.

Second, countries with high tax rates on labor income and consumption expenditures have relatively generous tax-funded programs for social security, disability insurance, sick leave assistance, unemployment insurance, and general assistance. The benefit sides of these programs also alter labor supply incentives in ways that discourage market work activity and increase employment in the underground economy. To the extent that government spending on these programs responds to the availability of tax revenues, the full response to differences in taxing capacity must take into account the indirect effects that show up through the expenditure side of government behavior. Conceivably, the indirect expenditure effects are larger than the direct effects of taxes.

Third, there are large, highly persistent differences among countries in tax rates on labor and consumption and in the scale of tax-funded social insurance programs. The persistent character of national differences in tax rates makes them well suited to assessing long-term effects.

— Les Picker

Pension Assumptions and Earnings Manipulation

In **Earnings Manipulation and Managerial Investment Decisions: Evidence from Sponsored Pension Plans** (NBER Working Paper No. 10543), co-authors **Daniel Bergstresser**, **Mihir Desai**, and **Joshua Rauh** identify a simple way to manipulate firm earnings: by manipulating the assumed rates of return on the firm's pension assets. They further show that such manipulation is linked to CEOs' incentives, and that firms change investment decisions both to justify and to capitalize on this type of earnings manipulation.

Many firms have pension plans that are large enough to allow them to substantially increase reported earnings in the short run by changing the assumed long-term rate of return for the pension assets they manage for their workers. Those managers who determine that manipulating the rate-of-return assumption can boost their firms' stock price, as was apparently the case during the 1990s, have strong incentives to set this long-term rate of return assumption opportunistically, particularly as they undertake mergers and approach option vesting periods.

In their study, Bergstresser, Desai, and Rauh investigate the degree to which managers are opportunistic with these assumed returns. The researchers evaluate the extent to which choices on assumed returns intersect with the managers' own option exercises and with their firms' merger activities. Bergstresser, Desai, and Rauh create a measure of the sensitivity of a firm's overall profits to the assumed long-term rate of return on pension assets. They show that this sensitivity measure is an important determinant of the levels of, and the changes in, assumed rates of return. Specifically, a firm whose pension assets are twice as large relative to its operating income as the median firm in the sample makes a long-term rate-of-return assumption that is, on average, approximately 10 basis points higher than the median. A firm in the 90th percentile of sensitivity, on average, has a long-term rate-of-return assumption that is 40 basis points higher than a firm in the 10th percentile. Such differences in return assumptions can have a significant impact on reported earnings for these firms.

The researchers further show that firms make particularly high return assumptions in periods leading up to the acquisition of other firms. This relationship is especially strong for firms whose reported income is the most sensitive to pension assumptions. Indeed, assumed long-term rates of return are approximately 30 basis points higher for firms that are acquiring other firms. The evidence indicates that as managers prepare for acquisitions and for exercising their options, they have an increased incentive to produce higher earnings and share prices — and increase their assumed rates of return in order to do so.

Asset allocation within pension plans is another investment decision that may reflect earnings manipulation. Instrumental-variables analysis suggests that managers increase equity allocations to justify their higher assumed rates of return on pension assets. Large equity allocation in most firm pension plans remains a persistent puzzle. The authors note that their analysis suggests that the interaction of managerial opportunism and pension accounting may help to explain part of this puzzle, as managers increase equity allocations to justify a rate-of-return assumption. The study concludes by showing that managers who are the least constrained by their shareholders appear to be the most aggressive with their rate-of-return assumptions. Indeed, the evidence suggests that the earnings manipulations being examined do not benefit shareholders.

The researchers allow that other factors likely may affect firms' long-term rate-of-return assumptions. A variety of tests for these alternative explanations do not detract from the basic results concerning the opportunistic nature of these changes. To the degree that pension earnings are capitalized into market prices, they say, the opportunistic use of assumed rates of return led to aggregate levels of overvaluation. Their data on asset allocation add another mechanism by which pension accounting could have contributed to market overvaluation, as higher assumed rates also appear to be associated with higher equity allocations. While market participants were capitalizing pension earnings, the researchers point out, firms were increasing equity exposures to justify those very pension earnings.

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— Matt Nesvisky

The Effect of Opening Equity Markets on Economic Volatility

Many countries worry that opening domestic stock markets and other financial markets to foreign investors exposes them to the potentially volatile mood swings of the global economy, with riches rushing in one day, ushering in new wealth, only to suddenly rush out on another day, leaving economic ruin in their wake. But in **Growth Volatility and Financial Market Liberalization** (NBER Working Paper No. 10560), co-authors **Geert Bekaert**, **Campbell Harvey**, and **Christian Lundblad** find that opening up financial markets has no effect on economic volatility and, by more broadly spreading risk, actually can, in some cases, make things calmer than they were before liberalization. "It is often claimed that liberalizing equity markets leads to excessive volatility," the authors state. "Our research suggests that this statement is not supported by the data."

Bekaert, Harvey, and Lundblad looked for the effects of liberalization by probing various countries for evidence that making financial markets more accessible to foreigners was followed by potentially destabilizing swings in purchases of goods and services — something they call "consumption growth volatility." They note that financial crises of the 1990s in Mexico and Southeast Asia "focused attention" on the notion that when foreign speculative capital can simply leave "at a whim," entire economies are destined to suffer much sharper changes. But the authors found that in general, economic conditions are not more volatile in countries that make it easier for outsiders to invest.

They found that in 40 countries that had removed restrictions on foreign portfolio investment or "liberalized," 26 experienced a decrease. Bekaert, Harvey, and Lundblad discovered that the countries experiencing the greatest reduction in volatility were those that had opened both equity markets and the capital account. That is, countries that made it easier for foreign investors to buy domestic stocks and also to move money into and out of the country at their individual discretion were the least likely to experience increased volatility.

These findings appear to challenge the notion advanced by some policy experts that countries, particularly emerging markets, should institute some form of capital control to keep sudden monetary inflows or outflows from destabilizing internal economic conditions. For example, Chile is often singled out for praise as having shielded itself from global market volatility by making it relatively difficult for investors to quickly withdraw their cash from the country. But Bekaert, Harvey, and Lundblad said that their "results suggest that maximum decreased volatility occurs when both the equity market liberalizes and the capital account is open." They find that Chile's lower volatility is related to the development of their social security system rather than to their relatively closed capital account.

In addition, when the authors confined their analysis to emerging markets — those generally considered most likely to suffer the negative effects of liberalization — for the most part, opening up equity markets did not "lead to a significant change in consumption growth volatility." "This is an important result," they state, "because (previous studies have) mostly assumed that liberalization leads to significant increases in volatility."

Overall, they note their failure to find a link between liberalization and increased consumption growth volatility is "remarkable" considering that their analysis includes conditions that prevailed in 1998, when the Asian economic crises prompted a precipitous drop in consumption in places like Korea, Thailand, and Indonesia. The authors did find instances in which other factors could cause a move toward market liberalization to spark an increase in volatility.

Bekaert, Harvey, and Lundblad caution that their observations address only the "average effects" of financial market liberalization. They note that an individual country's ability to take advantage of the positive benefits of financial market liberalization is closely tied to the overall quality of its government institutions and financial markets. "Our research suggests that if the country is economically fragile, has low quality institutions and a poorly developed financial sector, equity market liberalization may not reduce real variability at all," they write.

— Matthew Davis

"In 40 countries that had removed restrictions on foreign portfolio investment or 'liberalized,' 26 experienced a decrease in growth volatility after liberalization while 14 recorded an increase."

Democracy, Dictators, and Growth

The notion that democratic political institutions help foster economic growth has gained much attention in recent years. Indeed, the relationship seems intuitive: democracy, checks on government, and strong individual property rights should create a hospitable environment for investments in human and physical capital, and growth should follow naturally. However, in **Do Institutions Cause Growth?** (NBER Working Paper No. 10568), authors **Edward Glaeser**, **Rafael La Porta**, **Florencio Lopez-de-Silanes**, and **Andrei Shleifer** turn this notion on its head, arguing that "economic growth and human capital accumulation cause institutional improvement, rather than the other way around."

The authors first illustrate their point with the example of North and South Korea. Both nations were exceptionally poor in 1950, and between the end of the Korean War and 1980, both countries were governed by dictatorial regimes. Yet, by 1980, South Korea's per capita income had reached $1589, while North Korea's only reached $768. In 1980, South Korea began democratizing, while North Korea remains a dictatorship to this day. "While on average, looking over the half century between 1950 and 2000, South Korea obviously had better institutions as measured by constraints on the executive" explain the authors, "these institutions are the outcome of economic growth after 1950 rather than its cause." In other words, they say, South Korea's economic progress can be linked to the choices made by its dictators, not to the emergence of democratic institutions, which only happened subsequently.

Glaeser and his coauthors then examine the evidence supporting the notion that good institutions produce growth, focusing on three indicators commonly used to measure institutional strength: 1) risk of property expropriation by the government; 2) government effectiveness; and 3) constraints on the executive. The authors contend that these measures are inappropriate for several reasons. The first two indicators measure outcomes rather than enduring institutional characteristics; indeed, they do not distinguish between dictatorial regimes that freely choose those good policies and democratic governments that are obliged to follow such policies. (For example, in 1984, Singapore and the Soviet Union ranked among the top ten countries with the lowest expropriation risk.) The commonly used institutional data from the International Country Risk Guide include "subjective elements" of investor risk, such as law and order, bureaucratic quality, and corruption. "These are clear ex post outcomes, highly correlated with levels of economic development," note the authors, "rather than political constraints per se." Meanwhile, the typical measures of executive constraints are highly volatile and seem to reflect electoral results rather than enduring institutional constraints.

The authors also find that more objective measures of institutions — including those that describe the actual constitutional rules limiting sovereign power, such as judicial independence and proportional representation — have no predictive power for the growth of per capita income. "The bottom line," the authors contend, "is that the commonly used measures of institutions cannot be used to establish causality" between institutions and economic growth.

While the authors find no evidence that institutional factors predict growth, they find some evidence that initial human capital (such as primary school enrollments) can predict growth. Countries with high human capital as of 1960 grew two times faster on average than countries with low human capital. Stable democracies have grown slightly faster than imperfect democracies, but the authors are quick to note that this may simply reflect the human capital effect. The authors also find that initial levels of schooling are a "strong predictor" of improving institutional outcomes over the following five years. And, while nearly every poor nation in 1960 was governed by a dictatorship, some have remained in poverty while others have managed to grow. This evidence implies "that it is the choices made by the dictators, rather than the constraints on them, that have allowed some poor countries to emerge from poverty."

"[I]nstitutions have only a second order effect on economic performance," conclude the authors. "The first order effect comes from human and social capital, which shape both institutional and productive capacities of a society." They argue that this conclusion has important implications for economic thinking and policy. First, research on institutional economics should focus on actual rules rather than fuzzy assessments of institutional outcomes. Second, the results offer no support to the view that democracy and constraints on government are preconditions for economic development. Indeed, the authors point out that the economic success of postwar East Asia "has been a consequence of good-for-growth dictators, not of institutions constraining them." Finally, while the authors embrace the notion that democracy and constraints on government are certainly essential human values, they are skeptical of the viability of democracy in nations with low levels of human capital. To the contrary, "countries that emerge from poverty accumulate human and physical capital under dictatorships, and then, once they become richer, are increasingly likely to improve their institutions."

— Carlos Lozada

> "The economic success of postwar East Asia has been a consequence of good-for-growth dictators, not of institutions constraining them."

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