Understanding Global Imbalances

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Two contemporary issues provide reason to focus on national savings and investment. First, the debate over public pensions, and pensions more generally, taking place in all rich countries. Second, the large global current account imbalances that conceptually represent the difference between national savings and domestic investment. Are all of us living in advanced economies saving enough to provide adequate retirement income for our rapidly aging populations? This question is especially pertinent to Americans, whose household savings rate seems to have disappeared altogether in 2005. And are the countries with large external deficits—notably the United States—inappropriately mortgaging the income of future generations, not to mention courting financial calamity in the meantime?

This paper will not answer either question definitively, but I hope to shed some light both on the issue of saving adequately for retirement, and especially on the second issue of the potential risks posed by large external deficits. The United States will be the focus of attention, but in an increasingly interconnected global economy it is anachronistic to focus on domestic factors alone—and it is simply inappropriate when the issue is the country's external deficit: equal attention must be devoted to the counterpart surpluses elsewhere in the world.

Let's start with some factual background. Table 6.1 shows that the U.S. current account deficit rose steadily from 1995 to 2006, except for a brief pause in the recession year of 2001, both in dollar terms and as a percentage of GDP. This deficit rose from 1.2 percent of GDP in 1995 to 6.0 percent in 2006, the highest annual current account deficit recorded in U.S. history, before receding to 5.3 percent in 2007. In accounting terms, with

Table 6.1
U.S. Current Account, Investment, and Saving[a]

	Current Account Deficit			Saving		
	($bn)	(<=	Investment	Private Percent of GNP	Public	Statistical Discrepancy =>)
1993	72	1.1	17.5	16.2	–1.8	–2.1
1994	107	1.5	18.5	15.7	–0.6	–2.0
1995	92	1.2	18.5	16.2	–0.3	–1.4
1996	101	1.3	18.9	15.8	0.7	–1.2
1997	111	1.3	19.7	15.6	1.9	–0.8
1998	188	2.1	20.2	15.2	3.1	0.2
1999	279	3.0	20.6	14.3	3.7	0.4
2000	397	4.0	20.7	13.5	4.4	1.3
2001	371	3.7	19.1	13.8	2.5	0.9
2002	460	4.4	18.3	14.9	–0.7	0.2
2003	515	4.7	18.3	14.8	–1.6	–0.4
2004	626	5.3	19.2	14.9	–1.2	–0.2
2005	739	5.9	19.8	14.3	–0.4	0.0
2006	798	6.0	19.9	13.5	0.5	0.1
2007[p]	739	5.3				

[a]National accounts basis; differs from balance of payments basis in coverage and timing.
Current account deficit in 2006 was $811 billion in the balance of payments.
Source: Bureau of Economic Analysis.

small qualifications, the current account deficit represents both net foreign investment in the United States, and the difference between domestic investment and national saving. Thus a 5 percentage point rise over a decade suggests either that U.S. investment must have increased, or that U.S. saving must have declined.

Table 6.1 provides information on gross domestic investment (including government investment) and on gross private and public saving in the United States over the period 1993–2006. If we compare 2004 with 1995, there was a modest increase in investment and a modest decline in private saving, together amounting to 2.0 percent of GDP, or only about half the change in the current account. Investment grew strongly to 2000, and private saving declined sharply (4.9 percentage points together), but investment declined during the subsequent recession and then recovered somewhat, while private savings grew to 2004. Compared with the current account, it is interesting how little variation domestic investment and private saving showed over the decade, with a range of barely more than 2 percentage points each, although in 2000 saving reached its low point when investment was at its highest. There are however two additional columns in Table 6.1: government savings and statistical discrepancy. Both columns show substantial variation. The public sector was in rough balance in 1995, with state and local government saving almost offsetting federal government dissaving. The federal budget then improved significantly, running surpluses for the four fiscal years between 1998 and 2001. On national account definitions, gross government saving was positive from 1996 through 2001, reaching a peak of 4.4 percent of GDP in 2000. With the 2001 recession, the federal tax cuts of 2001 and 2003, and increases in federal spending associated with homeland security, the war in Iraq, and farm support, the federal budget moved into deficit again and in 2004 gross government saving was negative by 1.6 percent of GDP—a swing of 6 percentage points from 2000. Yet state and local governments remained gross savers throughout this period, their capital expenditures exceeding their collective modest budget deficits in 2002 and 2003.

To sum up, over the past decade the movements of U.S. domestic investment and private saving alone should have been associated with a deterioration of the nation's current account deficit of 4.9 percent points of GDP 1995 to 2000, compared with the actual deterioration of 2.8 percentage points, and with an improvement during the 2000–2006 period of 0.8 percentage points, compared with a further deterioration of 2.0 percentage points. The discrepancies are explained partly by movements in public saving, which increased by 4.7 percentage points from 1995–2000, but declined by an astonishing 5.6 percentage points over 2000–2004, and by 3.9 percentage points during 2000–2006. Moreover, all such figures are subject to measurement errors, and the statistical discrepancy swung positively by 2.7 percentage points in the 1995–2000

period, which suggests that the investment boom was stronger than actually measured, or that private U.S. saving declined by more than measured. In the 2000–2006 period, the statistical discrepancy swung by 1.2 percentage points in a negative direction.

As shown in Table 6.1, the modest decline in U.S. private saving over the 1995–2006 period is at odds with frequent media references to a sharp decline in savings rates in the United States. Indeed, household saving as a percent of disposable income declined from around 10 percent in the early 1980s, a period marked both by high inflation and a severe recession, to 4.6 percent in 1995, then 1.8 percent in 2004, and apparently became negative in 2005 and 2006. Private savings, as reported in Table 6.1, cover the entire private sector, including corporate retained earnings, and these figures are gross amounts, meaning these include corporate depreciation allowances. Such an inclusion is entirely appropriate in a world of rapid technological change. We should care less about net additions to the measured capital stock than about improvements in the quality of capital, and improvements are usually possible with replacement investment. Almost all investment is new in this sense, and a well-governed corporation assesses any major investment afresh, whether it is financed out of depreciation allowances, retained earnings, or new capital.

The "saving" reported in Table 6.1 is drawn from the national income and product accounts, which have the advantage of being embedded in a well-considered, internally consistent accounting framework. But there are a number of reasons that the current set of national accounts, which were developed in the 1930s and the 1940s, do not well serve the modern knowledge economy, nor do these accounts adequately capture savings from the perspective of the individual household, whose reported saving rate is now near to zero.

Economists define "saving" as consumption that has been deferred in the current period with the objective of raising future consumption—if not one's own, then perhaps that of one's progeny. By this standard definition, much current U.S. spending on education should be counted as saving (and investment). Most people do not attend school or college for its current consumption value (although there may be some); rather, individuals pursue education, and forego earnings, because they or their

parents (or society, through free compulsory education) believe it will improve their life prospects, including their future income. Evidence supports this belief: a summary of empirical work suggests that for individuals in the United States, an additional year of schooling increases annual earnings by roughly 10 percent (Card 1999). The rate of return on a college education for a white male has been reported to be 13 percent (CEA 1996). Americans spend a lot on education—7.2 percent of GDP in 2004 counting public and private spending together—and U.S. expenditures on education are notably higher than in most other countries. Yet educational spending is treated as public or private consumption in the national accounts. A similar claim could be made for certain health-related expenditures, such as immunization programs.

Consumer durables are a large part of household expenditure in the United States, 8.4 percent of GDP in 2004. While the services provided by these durables are, for accounting purposes, consumed in the year of purchase, these durables provide a stream of services for many additional years: over 10 years for the average automobile and over 20 years for some household furniture and appliances. Thus the purchase of consumer durables represents "saving"(and investment) in the strict sense of the term. Yet in the national accounts household purchases of appliances, automobiles, furniture, home computers, pianos, and television and audio equipment are treated as nondurable consumption goods (the purchase of new residential housing, including original appliances, *is* treated as investment). While many such durable goods are discarded every year, the total U.S. stock of household durable goods is rising by about $250–300 billion a year. In many cases, the replacement equipment is superior to discarded equipment, thanks again to continuing technical improvement, and promises to last even longer; thus, such purchases should more properly be regarded as investment.

Among American households, 70 percent own their residences, and for many years houses and condominiums increased in value, as have equities in the long-term trend. Capital gains do not add to the national stock of productive capital (although these may reflect retained earnings and intangible investments, on which more below), but such gains do add to the accessible wealth of individual households, hence to their ability to consume in the future. Thus from its perspective a household is "saving"

by investing in housing or in the stock market. The net worth of American households has continued to rise from year to year (excepting modest setbacks in 2001 and 2002), averaging 6.4 percent a year from 1990–2006, to reach nearly $58 trillion at the end of 2006, which is over five times disposable income. Over 60 percent of gross household assets were held in the form of financial assets, the remainder being in home equity and durable goods. (These figures for household assets include nonprofit organizations, but they account for less than 10 percent of the total.)

This increase in U.S. household net worth has occurred despite substantial mortgage refinancing, and the consequential withdrawal of home equity, making it available for other purposes—to repay other consumer debt, to buy consumer durables (especially automobiles), or to finance vacations. Financial market innovations, such as home-equity loans and reverse mortgages, have increased the liquidity of home equity, making it increasingly available for other purposes. Of course, home equity as a potential liquid asset depends on home prices, which rose significantly over 1995–2005, but dropped from 2006, strongly in some regions, which reduces some of the "saving." Smith and Smith (2006), however, find house prices in many U.S. markets still below values justified by fundamentals such as rents, mortgage interest rates, and tax treatment. In the longer run, one of the fundamental factors is new household formation, which is likely to hold up better in the United States than in most other rich countries where birth rates have fallen more sharply and where immigration is less important.

Extensive net worth, especially among older U.S. households, suggests the likelihood of significant bequests to the next generation. For example, the 2004 Survey of Consumer Finances shows Americans in the 55-64-year-old age group with a mean net worth of $844,000, and those aged 65–74 years with a mean net worth of $691,000. Given high and increasing longevity, these bequests are likely to be received by persons in their late 50s or 60s and nearing traditional retirement age in the United States. Such generational transfers of course do not add to national productive wealth, but they do add to household wealth just as people are entering a period when they might need more financial capital to fund potentially long retirements. To the extent that such transfers are anticipated by the

recipients, these expectations might act to reduce household savings out of current income.

Last but not least, there is the consideration of pension entitlements from both public and private sources. Publicly financed Social Security provides virtually all future American retirees, after the age of 66, with an annual income up to a maximum of $23,000, escalated for inflation. Career military and government employees have much more generous government-supported pension rights. Many private corporations have promised defined benefit postretirement pensions to their employees. While these defined benefit programs are in decline, and not all are fully honored due to corporate bankruptcy, they remain an important claim by millions of workers, for which corporations are enjoined to save—one reason for the growth in corporate saving in recent years, to a cumulative total of $1.8 trillion in pension assets (Wilcox 2006). These pensions are publicly guaranteed up to a maximum annual amount of $48,000 (escalated for inflation), and while the Pension Benefit Guaranty Corporation is now technically insolvent, few doubt that it will somehow be preserved by government action. (Defined benefit plans have gradually given way to defined contribution plans, but their value is included in the household net worth discussed above.)

The United States is noted, among rich countries, for having relatively generous terms for personal bankruptcy, and only modest social inhibitions for invoking this status in case of burdensome personal debt. It remains to be seen whether the recent tightening of the conditions for personal bankruptcy will result in a discernable increase in personal savings.

In short, the average U.S. household appears to have many sources of future income. It is not clear that it needs to save more, as such behavior is measured in the current system of national accounts, or that it will do so. Of course, there is a wide dispersion of household net worth; direct equity ownership in particular is highly concentrated. Many households should no doubt save more given their own self-interests. But if concern is really with destitution or even genteel poverty for some people in retirement, that should be the focus of policymakers' attention, rather than lamenting the low total of private household savings in the United States.

Yet an entire society is less than the sum of its parts when it comes to savings behavior. A private perspective differs from an all-encompassing social perspective. Nations need to be concerned with an adequate flow of total income, not counting transfers between buyers and sellers or between benefactors and heirs. Capital gains per se do not add to a country's capital stock, although these may reflect additions to the capital stock, including especially the growth of intangible capital, as we shall see.

But the United States does not do a good job of measuring corporate saving either. This is most obvious in the case of spending on research and development (R&D), which is clearly motivated by the expectation of future payoffs (and is thus, strictly speaking, savings and investment). Except when undertaken directly by government, spending on research and development does not enter into the national accounts at all, but rather is handled as an intermediate business expense, netted out in calculating final demand and output. (Apparently an agreement has been reached within the OECD to change this practice in the coming years.) Yet on such evidence as we have, U.S. spending on research and development produces exceptionally high rates of return, roughly 25 percent in terms of private return and 50 percent in terms of social return (see Fraumeni and Okubo 2005, p. 279), and a mean of 100 percent on agricultural research (see Frederico 2005, p. 112). But the point is not limited to expenditures on research and development. Corrado, Hulten, and Sichel (2006) estimate that there may be $3.6 trillion of intangible capital in the U.S. corporate sector and $1 trillion annual investment, built through systematic expenditure on research and development, personnel training, and branding, that is not recorded either as investment or as part of the capital stock, even though this intangible capital generates future value. It exceeded investment by the business sector in tangible capital (excluding housing) by 120 percent. Counting it would have added nearly $1 trillion annually to GDP during the period 2000–2003.

The basic system of national accounts was developed in the 1930s and 1940s, at the height of the industrial age, and strongly emphasizes physical capital as the major source of future earnings. This legacy does not serve well a knowledge-based economy, where value lies increasingly in teams of highly skilled employees operating in complex interdependent systems. Physical capital of course plays an important role in the contemporary economy, but the key to generating future income streams is building the teams and product innovation.

Expenditures to build intangible capital may be expected to raise equity prices, so some of the "capital gains" that are not recorded as personal income or saving may in fact reflect the accumulation of capital, both tangible and intangible, through retained earnings (including depreciation allowances) by corporate business. In addition to funding defined benefit retirement plans, corporations in this way are saving on behalf of individuals.

Government investment is now included in the national accounts as investment rather than consumption (with allowance made also for depreciation), but with the same emphasis on bricks and mortar (and on durable weapons platforms such as aircraft carriers) as private investment. Expenditures on research and development, education, and public health are counted as consumption, not investment. If American expenditures on durable goods, education, and research and development are reclassified as saving, U.S. private saving, plus public expenditure on education and research and development, is one-third of GDP. Allowing for expenditures on intangible capital beyond R&D would raise the savings ratio even further. This does not sound like shortchanging the future. (This reclassification should also be made for other countries, of course, but the magnitude of the additional contribution would be considerably smaller in all but a few countries.)

The federal budget went from deficit to surplus to deficit again during the past decade, while the U.S. current account deficit grew continuously. Thus there is no easy one-to-one relationship between the government deficit and the external deficit, as the current experiences of Australia, with its budget surplus and large current account deficit, and of Japan, with its large budget deficit and large current account surplus, should remind us. Other things equal, however, a larger budget deficit increases the current account deficit by raising yields on long-term U.S. Treasury securities, regarded around the world as attractive investment instruments, higher than these would otherwise be.

The foreign exchange market for the U.S. dollar is not subject to systematic U.S. intervention; the U.S. dollar floats against other currencies

that are allowed to float. The U.S. current account deficit is large because foreign investment in the United States is large. Table 6.2 shows foreign capital inflows, private and public, and U.S. capital outflows for the 2000–2007 period. Over $1 trillion in foreign private funds entered the United States in 2004—much larger than the current account deficit in that year—and again in 2006 and 2007. Indeed, foreign private capital inflows have exceeded the U.S. current account deficits, usually by substantial amounts, in every year since significant deficits began in the early 1980s. In addition, nearly $400 billion of foreign official funds, reflecting a buildup of foreign exchange reserves in central banks, also entered the United States in 2004, dropping to $259 billion in 2005 but exceeding $400 billion in 2006 and 2007. It has been said that foreign central banks are financing the U.S. current account deficit and, incidentally, the U.S. budget deficit. This is an inappropriate attribution of selective inflows against selective outflows in the U.S. balance of payments. It would be as true to say, as France's President de Gaulle did in 1963, that foreign central banks (partially) financed U.S. capital outflows.

Why are so many foreign funds being invested in the United States? The answer lies partly in the attractiveness of U.S. financial assets, which are claims on a robust, innovative economy offering good returns, liquidity, security, and relative stability. But the answer lies also in the high savings relative to investment opportunities present in other economies, particularly but not exclusively in other rich countries. Investment opportunities have been limited in Japan and continental Europe, while savings remain relatively high in these countries. The excess private savings have been partially, but only partially, absorbed by large budget deficits in other major countries, such as Japan and Germany. The difference has been invested abroad. In addition, since the rise in world oil prices started in 2003, oil-exporting countries have seen their export revenues soar, and with that also their current account surpluses. Table 6.3 provides data on the allocation of current account positions in 1997, 2000, 2005, and 2006. An increase in the U.S. current account deficit of about $400 billion over the 2000–2006 period was accompanied by even greater increases in the current account surpluses of Japan, Germany plus its close economic associates the Netherlands and Switzerland, China, Russia, and the nations of the Middle East; the last two listings mainly reflect

Table 6.2
Capital Flows in the U.S. Balance of Payments
($ billion)

	2000	2001	2002	2003	2004	2005	2006	2007[p]
Foreign Capital Inflow	1047	783	798	864	1462	1204	1860	1864
Private	1004	755	682	586	1064	945	1419	1451
Official	43	28	116	278	398	259	440	413
U.S. Capital Outflow	561	383	295	325	905	427	1055	1206
Private	559	377	291	327	910	447	1063	1183
Official	1	5	3	–2	–4	–20	–8	23
Stat. Discrepancy	–69	–10	–42	–13	86	–18	–18	84

p = preliminary
Source: www.bea.gov

Table 6.3
Current Account Balances
($ bn)

	1997	2000	2005	2006
United States	–141	–417	–755	–811
Japan	97	120	166	170
Germany, Netherlands, Switzerland	41	5	230	263
Hong Kong, Korea, Singapore, Taiwan	39	80	88	91
Other advanced economies	29	–58	–166	–230
China	34	21	161	250
Other Developing Asia	–27	18	–4	28
Central and Eastern Europe	–21	–32	–62	–88
Commonwealth of Independent States	–9	48	88	98
Middle East	11	72	197	234
Western Hemisphere	–67	-48	35	45
Africa	–6	8	16	29
Discrepancy	14	–179	7	87
NB: fuel exporters	16	151	348	423

Source: IMF *World Economic Outlook,* September 2005 and April 2008

the impact of higher oil prices on their current account balances. Central Europe and other rich countries (mainly Spain, Britain, and Australia) experienced negative movements in their current accounts, while Latin America (including oil-exporting Venezuela but also Brazil) experienced a significant positive movement. For most years there is a significant statistical discrepancy, indicating higher recorded deficits than surpluses.

The surpluses of the members of the Organization of Petroleum Exporting Countries (OPEC)—mainly the Middle Eastern countries plus Venezuela and Nigeria—will undoubtedly decline after several years, either as oil prices decline or as the oil-exporting countries learn to spend their higher income, which accrues initially to governments in almost all significant oil-exporting countries. The International Monetary Fund, however, projects these surpluses to rise somewhat in 2008 and to recede but

remain high through 2009 (IMF 2008, p. 258). Thus these surpluses can be considered transitory, although enduring for several more years.

Augmented Germany, China, and Japan have the largest surpluses after the oil-exporting countries. Table 6.4 provides data for recent years on national saving and domestic investment in Japan and Germany, along with the newly rich Asian economies of Hong Kong, Singapore, South Korea, and Taiwan, and developing Asia. Saving has declined in Japan, and private saving even more since 2000, as the large public sector deficit declined from 7.7 to 5.8 percent of GDP, 2000–2005. In Germany alone, savings rose slightly, and private savings even more, since the government deficit rose by 4 percentage points between 2000 and 2005. Savings levels remained roughly unchanged in the four Asian Tigers, and rose a remarkable 8 percentage points in developing Asia, which is dominated quantitatively by China but also includes India, Indonesia, and a number of other significant developing countries. All these regions record significantly higher saving rates than the United States, as indeed do other regions of the world, including Latin America and Africa, but for reasons discussed earlier, the real difference is lower than the recorded difference.

What is more noteworthy is the decline in investment in most other rich economies, including Japan, Germany, and newly rich Asia. Recorded

Table 6.4
Savings and Investment
(percent of GDP)

		1992–1999	2000	2005	2006
Japan	S	30.6	27.8	27.2	27.8
	I	28.1	25.2	23.6	24
Germany	S	21	20.1	21.7	22.8
	I	21.9	21.8	17.1	17.8
Newly Rich Asian Economies[a]	S	33.8	31.9	31.3	31.4
	I	31.1	28.4	25.9	26
Developing Asia	S	31.8	30.3	41.3	43.8
	I	32.3	28.2	37.2	37.9

[a]Hong Kong, South Korea, Singapore, Taiwan
Source: IMF, *World Economic Outlook,* September 2006 and April 2008

physical investment remains higher in most places than in the United States. Germany (along with the United Kingdom) is the major exception; there investment has been in a slump for some years. In developing Asia, by contrast, investment has risen sharply, led by China where investment exceeds 40 percent of GDP, an amount that is considered to be too high both by Chinese authorities and by some foreign analysts. This is the only such case of a developing country with too much investment (as distinguished from investment in the wrong places) that I can recall. But the growth of investment in China has fallen short of its increase in saving. Rapid economic growth permits China's consumption to rise rapidly even when the rate of saving increases.

Recall that, apart from measurement errors, a country's current account position (which equals net foreign investment) is the difference between domestic investment and national savings. Thus saving in excess of domestic investment (or private saving in excess of investment plus government deficits) implies investment abroad, net of inward flows of foreign investment. Why are several of the world's major economies investing so much abroad?

A major part of the answer, I believe, lies in demographic trends. Birth rates have declined in all rich countries, although differentially, and in many developing countries as well, most notably China, which introduced its one-child policy in 1979. The result is the prospect, or the actuality in Japan and Germany, of declining population growth, despite an increase in longevity. More pertinent than total population for saving and investment is the change in the age composition of populations. In most advanced economies, the aging of societies, with its implications for pensions and healthcare, has been widely discussed. Less widely discussed has been the decline in the population of young adults—those individuals who receive contemporary education, enter the labor force, form new households, and require housing and, for their children, schooling. For China, Germany, Japan, and the United States, the world's four largest economies, Table 6.5 shows the population aged 15–29 years in 2005 and this age cohort's projection to 2025. Apart from the United States, where birth rates have declined less than in other rich countries, and where immigration continues to be an important source of new young adults, the projected decline in this age group is remarkable. Yet this is the age

Table 6.5
Population Aged 15–29 Years

	(million)		(percent)
	2005	2025	Change
China	321	259	–19
Germany	14.2	11.9	–16
Japan	22.6	17.8	–21
United States	61.9	66	7

Source: U.S. Census Bureau

group that provides the most educated, most flexible (occupationally and geographically) new members of the labor force. A decline in this age group not only implies a loss in economic flexibility, but also a decline in the need for investment to equip new members of the labor force, for investment in housing and its accoutrements, and for investment in education. Residential housing investment, in particular, is reduced to less than full replacement plus some allowance for geographic mobility in rich countries. In poor growing countries such as China, demand for housing will remain robust as the population upgrades housing quality, as well as moves from rural to urban areas.

With these demographic trends, the prospects for significant increases in domestic investment in rich countries are limited. Replacement of obsolete equipment, necessary in a world of continuous technical change, will continue to take place. Some capital deepening will continue to occur, although that implies lower returns to capital, making such investment unattractive compared with investment abroad. Investment in Germany and Japan is closely related to export prospects. If these weaken due to appreciating currencies, investment is likely to suffer.

The United States stands out among the world's rich countries as having a prospective continued rise in young population, partly because the fertility rate has declined noticeably less in the United States than in other rich countries (to 2.1 children per woman of childbearing age, compared with 1.4 in Japan and Germany, and 1.0 in Hong Kong and Singapore), partly because of continuing immigration on a significant scale.

The future needs of aging, low-growth societies with limited domestic investment opportunities can be met by profitable external investment. (Excess private savings can be, and in Germany and Japan have been, absorbed in financing budget deficits, but most government expenditures are not oriented toward increasing future income.) This is what is happening now. Most countries with prospective declines in new entrants to the labor force show significant current account surpluses, reflecting their foreign investment. Spain is a notable exception, as are several central European countries. These nations are below the rest of Europe in per capita income and are still in a catch-up phase, requiring additional productive investment; Spain is building vacation and retirement homes for many northern Europeans, as well as upgrading its housing stock.

This adjustment is what financial globalization is all about: a decline in home bias in the disposition of savings and investment, especially when indicated by structural economic changes, such as the demographic developments discussed above. Where should such investment take place? Conventional economic theory suggests it should take place in relatively poor countries, with low ratios of capital to labor, because returns in such environments should be higher there. But conventional theory is a vast oversimplification of the complex conditions that both attract global investment (investors want assurance that their investments are secure, subject only to business risk) and that make investment productive. These conditions require an appropriate social and political infrastructure—social order, physical security, rule of law, secure property rights, impartial dispute settlement, and so on. Many of these institutional conditions are not present in the world's poorest countries, and some of these are not present even in middle-income countries. Argentina, Bolivia, Russia, and Venezuela have reminded investors in recent years how insecure private property can be from political action, particularly foreign private property. So today global investors hardly approach very poor countries, unless these nations have exploitable natural resources, and they approach many emerging markets warily. And after the series of financial crises between 1994 and 2001, many emerging markets also approach international borrowing with a great deal of caution. As the memory of these painful experiences has receded with time, however, private foreign investment in emerging markets has begun to pick up,

aided by low interest rates in capital-exporting countries and investors' desire for higher returns. During 2006, for instance, an estimated $650 billion in private funds flowed to developing countries, up from $187 billion in 2000. These went mainly to East Asia (primarily equity) and to central Europe (primarily debt), but a significant amount of foreign direct investment also occurred in Latin America (World Bank 2007, Tables 2.1–2.11).

However, it is not surprising that over the last decade much of the surplus saving in other rich countries went to the United States. The U.S. economy accounts for between 25 and 30 percent of world economic output. The social/political system is stable, private property is respected, and dispute settlement is reasonably quick and fair. Nearly half of the world's marketable securities (stocks and bonds) are issued in the United States. Returns there are better on average than in other rich countries, and more secure and reliable than in emerging markets. The American economy is innovative and relatively flexible. Its long-term future prospects are bright. Given these circumstances, it is not surprising that a growing fraction of world saving should be invested in the United States.

Indeed, in a fully globalized world economy, with no home bias, one would expect roughly 25–30 percent of world saving outside the United States to be invested in the United States—and 70-75 percent of U.S. saving to be invested abroad. Saving outside the United States in 2006 was $9.3 trillion, 27.5 percent of which is $2.5 trillion. U.S. private saving was about $1.8 trillion, 72.5 percent of which is $1.3 trillion. The difference is $1.2 trillion, which is larger than the U.S. current account deficit of $0.8 trillion in that year. Of course, home bias continues to be important, so investment abroad has not yet reached these large two-way amounts. But 15 percent of world saving, which will rise in value from year to year, does not seem to be an unsustainably large number; if anything it is on the low side. Yet that was enough to cover American investment abroad (less loans by U.S. banks, which are directly financed abroad) plus its current account deficit.

Some people are troubled that a significant amount of foreign investment in the United States, but still a minority of total foreign investment, is made by foreign monetary authorities, in the form of additions to their

foreign exchange reserves that are held in U.S. Treasury or other securities. Japan added $480 billion to its reserves during the 2000–2005 period, and together the newly rich Asian economies added over $300 billion. Emerging markets and developing countries taken together (including OPEC members) added an astounding $1.5 trillion to their reserves, exceeding the net private capital inflow into these countries, and a further $1.9 trillion in 2006 and 2007. Why?

The reasons are varied. Oil exporters have experienced an unexpected increase in export receipts because of strong world demand and rising oil prices over the past five to seven years. Their imports have not grown correspondingly, but this is likely to be largely a question of timing. Oil prices may be expected to decline in the future, and oil-exporting countries will gradually move the higher earnings, initially accruing to their governments, into the income stream, which will ultimately lead to a higher demand for imports.

It should be noted that total foreign exchange reserves have grown enormously since the introduction of floating exchange rates in the mid–1970s, contrary to expectations of the advocates of floating exchange rates. Clearly countries are not comfortable with freely floating rates, desire at least to have the possibility of managing these rates, and therefore feel they need higher reserves as economies and foreign trade grow in value. This sentiment was strongly reinforced by the financial crises that took place between 1994 and 1999, in which reserves in several important countries proved to be totally inadequate to deal with the financial pressures on their currencies, initially more from residents than from nonresidents. Since 1999 the major exceptions to this trend of building up dollar reserves are the United States, Canada, and the European Central Bank.

In some cases the growth in reserves is the incidental by-product of an active exchange rate policy, designed to slow appreciation of the domestic currency or even to prevent appreciation altogether. The growth in reserves is not necessarily unwelcome in these circumstances, but it does create problems of monetary management since this buildup is the equivalent of open-market purchases in foreign rather than domestic securities. But the currency policy may itself be motivated by fundamental factors. As noted above, it makes sense for an aging Japan to invest

heavily in foreign assets with positive yields rather than investing at home for lower yields or, worse yet, investing in government securities that finance construction projects with negligible social return. Yet private Japanese savers have been extraordinarily conservative; households keep much of their saving in the postal system, which is backed by the government but offers very low returns to the savers and perhaps, given the use of these funds, none to the nation as a whole. Through buying foreign exchange reserves, Japan's Ministry of Finance is assuring future real returns—command over real resources in the international market—to the entire nation, which through their conservative behavior would not be obtained by relying on private savers alone. In short, the Japanese monetary authorities are acting as financial intermediaries, converting what private savers want now into what they will need in future years. Foreign exchange risk is real to the individual investor, but it is not to the nation: by investing abroad, even in U.S. bonds, it secures a future claim on goods and services in the international market. (Given the magnitude of their reserves, Japanese authorities might be well advised to diversify them into some higher-yield foreign investments, as a number of other countries have done, and as China and South Korea decided to do in 2007.)

The most dramatic growth in U.S. dollar reserves, besides the OPEC member nations, has been taking place in China: an increase of $1.5 trillion from the end of 2000 to the end of 2007, outstripping even its very rapid growth in imports. This growth in reserves has been made possible by China's current account surplus, modest and without trend until 2005, when it shot upward to $159 billion, 19 percent of exports, and further to $250 billion in 2006; and by continued net private capital inflow, particularly of foreign direct investment.

But China still maintains severe restrictions on resident capital outflow. Given the rapid income growth in China in recent years, the high savings rate, and the limited domestic menu of financial investments that Chinese households can hold, mainly in bank savings accounts, the latent private Chinese demand for investment abroad is probably very high. Partly on residual communist doctrinal grounds, partly for the pragmatic reason of not wanting to undermine their fragile banking system, Chinese authorities are hesitant to move soon to full currency convertibility

and free movement of capital. Nonetheless, the Peoples Bank of China, its central bank, can be thought of as investing abroad on behalf of the public, and against the day in which the Chinese currency will be fully convertible (a stated Chinese objective) and capital outflow may be large. It is undoubtedly true that China, unlike Japan, has many potentially profitable investments at home. But it is also true that the banking system as it is currently constituted does a poor job of allocating capital, and that, as noted earlier, in recent years Chinese authorities have considered aggregate domestic investment to be excessive. A similar argument may be made with respect to the more modest, but still significant, buildup of reserves by India and a number of other developing countries that continue to maintain controls on resident capital outflow.

Presumably savings will decline in other rich countries as their populations age; this is implied by the life-cycle hypothesis. But the decline may be a very gradual one. Simple versions of the life-cycle hypothesis assume individuals know when they will die, or purchase annuities to minimize this uncertainty. But longevity is increasing, remarkably but unpredictably, so people do not know when to expect to die. Relatively few people in the rich countries currently purchase annuities on top of their defined benefit pensions (whether state-sponsored or private). Nonfinancial assets such as houses or family businesses are not easily liquefied in most countries. So saving continues into postretirement ages. This behavior is especially noteworthy in Germany and Italy (McKinsey 2004), but it is true even in the United States. Table 6.6 shows the median net worth, in constant dollars, in the United States by age bracket for 1995 and 2004. Looking at either column alone suggests a decline in net worth, or dissaving, as people age past 65 years. But different groups are being compared. People aged 55–64 years in 1995 were nearly a decade older in 2004, and their net worth increased despite passing age 65. Those aged 65–74 years in 1995 also increased their net worth further by 2004 through increased savings. This behavior can also be observed by comparing 2001 with 1992. Thus it cannot be taken for granted that in the future aging societies will dissave, at least quickly and reliably, as predicted by standard life-cycle theory; increased but uncertain longevity complicates this assumption.

Table 6.6
Median Family Net Worth
(Thousands of 2004 dollars)

Age Bracket	1995	2004
<35 years	14.8	14.2
35–44 years	64.2	69.4
45–54 years	116.8	144.7
55–64 years	141.9	248.7
65–74 years	136.6	190.1
>75 years	114.5	163.1

Source: U.S. Statistical Yearbook, 2007, Table 702

While the rest of the world may continue to produce savings that are available for investment in the United States, can the United States accommodate an ever-increasing amount of such investment? Table 6.7 shows total financial assets in the United States for the 1980–2007 period, financial assets owned by households (the figures include nonprofit institutions), and gross foreign claims on the United States. Several points stand out. First, both total financial assets and household ownership of financial assets have grown faster than GDP over this period, 9.0 percent a year for total financial assets compared with 6.2 percent growth for nominal GDP. This growth in assets reflects increasing financial innovation and layering of financial assets over the physical capital stock, but it also reflects the growth in intangible capital discussed earlier.

Foreign claims on the United States have grown even faster, by 13.7 percent a year over this same period. The foreign share of total financial assets has risen from under 4 percent in 1980 to nearly 11 percent in 2007. Obviously a rise in the share of U.S assets held by foreigners cannot continue indefinitely, although 11 percent remains far below the foreign share expected in a fully globalized economy. But a rise in value can continue indefinitely, so long as the U.S. economy and its financial asset superstructure continue to grow. And growing foreign investment in the United States can be serviced indefinitely so long as directly or indirectly

Table 6.7
U.S. Financial Assets

		($trillion)		(percent)
	Total	U.S. Households[a]	Foreign-owned[b]	Foreign Share
1980	13.9	6.6	0.48	3.4
1985	23.5	9.9	0.96	4.1
1990	35.9	14.6	1.99	5.5
1995	53.5	21.6	3.4	6.4
2000	89.5	33.3	6.42	7.2
2005	119.7	39.5	11.63	9.7
2006	132	43.2	13.85	10.5
2007	141.9	45.3	15.42	10.9

[a]Includes nonprofit organizations
[b]Includes net interbank claims; includes foreign direct investment at current cost.
Source: Federal Reserve, Flow of Funds

this investment adds to the nation's productive assets at yields as least as high as those that must be paid to foreigners.

The risk profile of foreign private claims on the United States is very different from the risk profile of U.S. private claims on the rest of the world; the foreign risk profile is tilted much more toward debt instruments, both short-term and long-term. In contrast, 61 percent of private U.S. claims on foreigners are equity investment (foreign direct investment plus corporate shares), while only 35 percent of foreign private claims on the United States are equity instruments. In this respect foreign claims on the United States mirror their investment behavior at home, at least for the largest rich countries for which data are readily available: Japan, Germany, Britain, France, Italy, and Canada, in order of economic size. At end of 2004, equities constituted only 21 percent of German household financial assets (62 percent of disposable income), 16 percent in Britain (64 percent of disposable income), and 8 percent in Japan (39 percent of disposable income), compared with 28 percent (116 percent of disposable income) in the United States (OECD 2005, annex Table 58). Foreign official investment in the United States includes virtually no equity, so the bias is even greater with respect to total foreign claims on the United States.

The difference in risk profile goes part way toward explaining the fact that although the United States is a substantial net debtor to the rest of the world, U.S. earnings on its overseas investments continue to exceed its payments to foreigners on investments in the United States.

There is another significant asymmetry, seen from the U.S. perspective: foreign claims on the United States are denominated overwhelmingly in U.S. dollars, while U.S. claims on the rest of the world reflect a mixture of U.S. dollar-denominated assets and foreign currency denominated assets. Thus the net international investment position (NIIP) of the United States is sensitive to movements in exchange rates between the U.S. dollar and other currencies. Concretely, depreciation of the dollar, ceteris paribus, reduces the net debtor position of the United States, measured in dollars. Valuation changes other than those arising from currency movements also affect the NIIP, in particular movements in share prices and in the valuation of foreign direct investment. Thus while the cumulative U.S. current account deficit in the 1990–2006 period was $5.2 trillion, the increase in the net debtor position of the United States was "only" $2.0 trillion, well under half. Largely because of the dollar's depreciation, the NIIP of the United States actually increased by $114 billion in 2003, despite that year's current account deficit of $539 billion, and on preliminary figures did not change in 2006 despite a deficit of $811 billion.

Many observers have argued that the large U.S. current account deficit is unsustainable. If they mean recent trends in the deficit cannot continue, that is surely correct; the deficit cannot continue to rise indefinitely as a share of U.S. GDP, as it did (with a brief pause in 2001) 1996–2006. However, if they mean that a large U.S. deficit cannot continue indefinitely, that argument is not correct. Demographic trends in Japan, Europe, and East Asia are likely to call forth current account surpluses for a number of years, so as to build up external assets that can be drawn upon in later decades as populations continue to age. Central banks are sometimes endogenous in this process, intermediating between domestic savers whose behavior (such as in the case of Japan) is too conservative to serve well the national needs or who (as in the case of China) are not permitted to invest freely abroad.

The United States has a vibrant, innovative economy. Its demographics are markedly different from those of other rich countries, in that birth rates have not fallen nearly so much and immigration, heavily concentrated in young adults, can be expected to continue on a significant scale. In these respects the United States, although rich and politically mature, can be said to be a young and even a developing country. It has an especially innovative financial sector, which continually produces new products to cater to diverse portfolio tastes. The United States has a comparative advantage, in a globalized market, in producing marketable securities and in exchanging low-risk claims for higher risk assets. It is not surprising that savers around the world will want to put a small but growing part of their savings in the United States. The U.S. current account deficit as a consequence is likely to remain large for some years to come.

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Comments on "Understanding Global Imbalances" by Richard N. Cooper

Guy Debelle

Australia has had a long history of current account deficits, or capital account surpluses if I were to use the terminology of the 2006 Economic Report of the President. The current account deficit in Australia is currently around 6 percent of GDP and has averaged 4.5 percent over the past 20 years, as shown in Figure 6.1. Net foreign liabilities are around 60 percent of GDP, with much of that being in the form of debt.

In Australia, we had an extensive debate about the sustainability of current account deficits during the 1980s. A lot of the arguments that are being aired at the moment regarding the current situation in the United States bear a striking similarity to the debate that occurred in Australia two decades ago. Now, over 20 years later, by and large, the majority of economists in Australia hold views that are very similar to those put forward in this excellent paper by Richard Cooper. Although it must be said that while most Australian economists are relaxed about the country's current account deficit, it still can engender a significant amount of fear among politicians and the public, almost the reverse of the situation in the United States. The view reached by economists in Australia is akin to the "consenting adults" view of the Lawson doctrine, although it should be noted that this argument was originally made by Australians John Pitchford and Max Corden some time before Lawson.[1]

While it is true that compared to the United States, Australia is a much smaller player in the global capital markets, I don't think that for this analysis, absolute size matters as much as the two countries' respective proportional shares in global investment portfolios. Taking this perspective, the lessons from the Australian experience in the 1980s broadly scale up to compare with United States's current account deficit today.

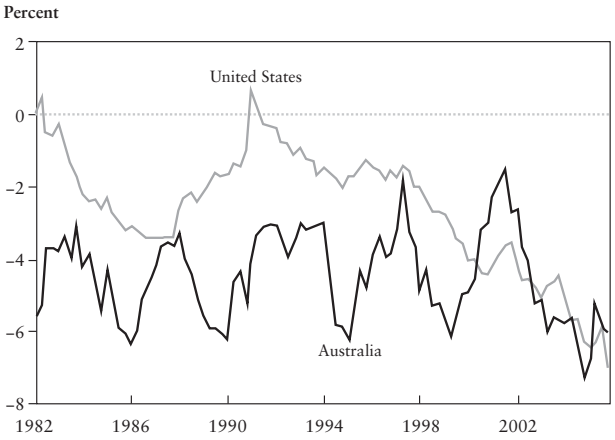

Figure 6.1
Current Account as a Percent of GDP
Source: Australian Bureau of Statistics, U.S. Bureau of Economic Analysis.

Given that I broadly share Cooper's views, whereas a sizeable share of the economics profession, including a number of the economists attending this conference, do not, in my comments I will generally try to amplify a number of the arguments Professor Cooper makes, rather than dwell on the few small issues where he and I may disagree.

Cooper's analysis of the U.S. current account deficit, made from a savings-investment and a capital account perspective, provides some useful insights which are ignored if one only focuses on the current account itself. It offers quite a different perspective on the issue of sustainability, and calls into question whether what we are observing are indeed imbalances. To his analysis, I would like to add a balance-sheet perspective. In the end, global imbalances are an issue of stocks as much as flows, but the current debate about these imbalances only focuses on the flows. Stocks can change not only because of flows but also from price changes, which are valuation effects. A balance sheet analysis that focuses on the stocks leads one to examine issues such as the treatment of capital gains and valuation effects more generally than in the traditional measures.

Valuation effects are not in included in the balance of payments equation, nor in the national income accounts.

How Are People Saving?

Cooper provides interesting details on the movements in saving and investment in the United States, which have been the counterpart of the nation's widening current account deficit. He makes a number of arguments as to why the traditional measure of saving may give an inaccurate picture of the true financial position of U.S. households. In terms of the imbalances argument, however, one has to argue that these issues of mismeasurement are more relevant for U.S. households than these are for households in other countries, and I think it would be interesting for the paper to spend more time examining this point. U.S. households may spend more on education than do households in other countries, but to have an impact on current account positions, it would have to be the case that the share of education spending is rising faster in the United States than in other countries, or that the rate of return on education is rising faster in the United States than elsewhere. I don't think this is likely to be the case.

The stronger argument that Cooper makes, which I would like to develop further in these remarks, is that the nature by which U.S. households are saving differs substantially from that in other countries, although it is similar to the United Kingdom and Australia. U.S. households have a greater share of their savings in the form of equity investments than do households in other countries. This has important implications about how one thinks about imbalances. The capital gains on these equity holdings are not recorded in the national accounts. These gains are, however, recorded when one looks at national balance sheets (more on this detail later). One can debate the issue as to whether the capital gains that U.S. households have experienced from the rise in house prices also constitutes a source of saving. To my mind, these do not, so in what follows my arguments will focus only on saving in the form of equity holdings. If one treated capital gains from housing in the same way, the argument is even stronger.

Take the case where households in country A save only in the form of bank deposits or the purchase of government securities, but households in country B invest all their savings in equity. Assume that total returns are equalized across these two investments. The national accounts record the interest income earned by the households in country A on their savings as household income, but these accounts only record the dividend payments on the equity holdings in country B as income. The capital gains on the equity investments are not recorded in either the national accounts or balance of payments. Yet the capital gain is a significant part of the return on the equity investment for the households in country B. From the national accounts perspective, the households in country B will be doing less saving than those in country A.

Now take the case where the households in country A lend their savings to the households in country B, who in turn invest the borrowed funds by purchasing equity in country A. Again assume the interest on the loan is equal to the return on the equity investment, which comprises dividend payments and a capital gain. The national accounts will again show less saving in country B than in country A. And country A will be recording a current account surplus while country B will be recording a current account deficit. This is because the net income flows, as recorded in the balance of payment statistics, will be from country B to country A, as the interest payments will exceed the dividend payments (assuming a positive capital gain). Wealth holdings will be the same in both countries, and households' expected permanent income will also be the same. Country B's current account deficit will be persistent, yet I would not say that there is an imbalance here. The argument is even stronger if one allows for an equity risk premium on these investments.

Obviously, the rest of the world, and particularly East Asia, are broadly akin to country A, and the United States, the United Kingdom, and Australia are broadly akin to country B.

So the bottom line is that these measurement issues need to be taken into account when examining the current global imbalances. The problem doesn't necessarily go away but it does result in a different perspective on the scale of the problem. Valuation changes do not make it into the current account, but these shifts do affect the measurement of the stock of liabilities.[2]

A Balance Sheet Approach to Global Imbalances

Extending Cooper's argument that the national accounting system may not be providing the most appropriate metric for assessing global imbalances, I would like to argue that the standard analysis of the current capital account flows should be combined with a balance sheet or stock analysis.

Most analyses of global imbalances start from either the size of a nation's current account or the size of its foreign liabilities relative to GDP. However, measuring foreign liabilities relative to GDP is not necessarily the most appropriate benchmark to use, as it is deflating a stock (foreign liabilities) by a flow (GDP). When assessing a corporation's borrowing, a balance sheet perspective is generally used in the form of gearing ratios, which measure debt against assets or equity. Measures of debt service are used to assess the ability to service that borrowing.[3]

Using a balance sheet approach to assess the external position of the United States suggests that the stock of foreign liabilities should be deflated by the assets held by U.S. residents, which, in other words, is a measure of wealth. One can regard these assets as representing wealth held as collateral against the stock of liabilities. Again, one can debate whether housing wealth should be included in this calculation, so for the purpose at hand, I have performed the analysis with and without incorporating housing.[4]

As one can see from Figure 6.2, this balance sheet analysis presents quite a different picture of U.S. assets and liabilities. Foreign liabilities have risen at a much smaller pace relative to wealth than these have relative to nominal GDP. Obviously this reflects the fact that the value of U.S. households' equity holdings, and financial wealth more generally, have been rising faster than GDP. This situation illustrates valuation effects are at work. Hence, expressing U.S. foreign liabilities as a share of the nation's wealth gives quite a different picture of sustainability or vulnerability. The same analysis holds true for Australia.

As U.S. households are doing more of their saving through equity than other households, then this sort of analysis presents a much more benign picture. In net terms, foreign liabilities have been stable as a share of household wealth over the past few years. In Australia, this share has actually declined, as shown in Figure 6.3.

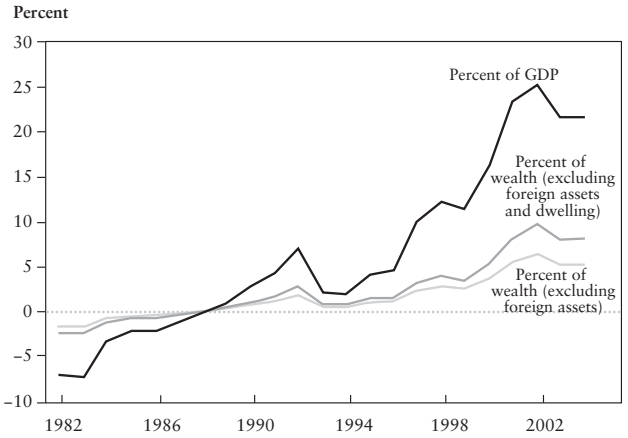

Figure 6.2
A Balance Sheet Analysis of U.S. Net Foreign Liabilities
Source: Australian Bureau of Statistics, Federal Reserve Board, Reserve Bank of Australia, U.S. Bureau of Labor Statistics.

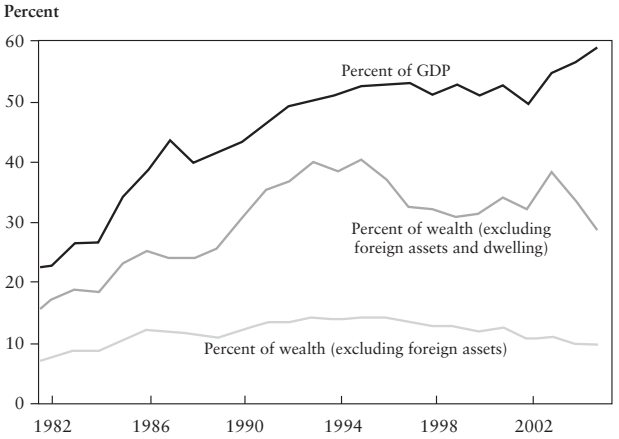

Figure 6.3
Australia's Net Foreign Liabilities
Source: Australian Bureau of Statistics, Federal Reserve Board, Reserve Bank of Australia, U.S. Bureau of Labor Statistics.

In addition, in the event of any depreciation of the U.S. dollar, net foreign liabilities will decrease significantly because of valuation effects, further bolstering the balance sheet of U.S. households.

Why Are the Flows Going to the United States?

Cooper asks an important question: why is it that the bulk of global capital flows are all going to the United States? I think the answer he gives is the correct one, namely that the United States possesses a developed secure financial system that offers a respectable and reliable rate of return. I place particular emphasis on the words "secure" and "reliable." A recent paper by Ricardo Caballero, Emmanuel Farhi, and Pierre-Olivier Gourinchas (2006) formalizes this argument, and concludes that the current alignment of capital flows is stable and liable to persist for quite some time to come.

A conclusion that one can draw from this "secure and reliable" analysis is that in terms of global imbalances, one of the greatest benefits from economic reform in Japan and Europe is to make them more attractive destinations for the world's savers. Similarly, developing secure financial systems in Asia would yield a similar outcome. But this type of institutional change is a slow process that does not take place overnight. Hence as these reforms take root, one would expect investors' perceptions and the ensuing international portfolio adjustment to be quite gradual too.

Is the share of U.S. assets in global portfolios likely to reach saturation soon? Cooper notes that perhaps the United States is slightly underweight in the global portfolio. There has been a notable decline in home bias over the past decade or so, as the process of financial globalization has proceeded, but primarily the destination of these funds has been to the United States. So ignoring home bias, the U.S. portfolio allocation is about right, whereas most other countries are underweight.

A crude characterization of the present situation might be as follows: there has been a general decline in home bias over the past two decades, but there has not been a general portfolio diversification. Instead investors have tended to put their funds in markets which are seen as secure and dynamic. Thus far, private investors in East Asia, and more recently, the oil-producing countries, have judged that the United States provides them with the investment characteristics they are seeking.

Given that their strategy has been to invest predominantly in U.S. assets, and importantly, U.S. dollar-denominated assets, an interesting question arises. If I have a large portfolio in the United States, measured in U.S. dollars, and the U.S. dollar depreciates, do I increase my investment in the United States to bring my U.S. allocation back up to my benchmark, or do I rush for the exits and thereby generate further capital losses on my U.S. investments, which is a large share of my overall wealth portfolio? With their large U.S. dollar portfolios, this is clearly an issue for the world's central banks. Again, valuation effects matter here, which an analysis solely based on flows will overlook.

A final variant on this question is: do we expect to see a rapid portfolio readjustment, or in other words, is there likely to be a sudden stop in the United States? Gabriele Galati and I have looked at the issue of current account reversals from the capital account perspective.[5] We find that there is almost no evidence of a sudden stop taking place in developed countries. By and large, capital flows adjust quite seamlessly, particularly in a floating exchange rate regime.

If the U.S. Current Account Deficit is a Problem, What Might be Done About It?

If, after one has examined the issue from a balance sheet perspective, one still concludes that the U.S. current account per se is a problem, or is symptomatic of some other problem, what should be done about it?

If household saving is too low in the United States, what are the distortions that are causing this inadequate saving? What policies can be put in place to encourage higher saving? I don't think we have good answers to those questions.

One can argue that the U.S. administration needs to address the fiscal situation, but that is an issue of sustainability of the public debt, regardless of whether it is held by foreigners or domestic residents. Moreover, the twin deficits are probably distant cousins rather than identical twins.[6] The Australian experience certainly highlights this point: our budget position has swung from deficit to surplus a number of times with little obvious effect on the current account.[7] Even if one allows for a near twin-like relationship, then the U.S. current account would only decline to a level that many considered excessive only a few years ago.

If one is concerned about the capital flowing into the United States, then would the policy recommendation be that United Stated reimpose capital controls? The capital that is flowing in is coming in willingly: the United States is not forcing the rest of the world to lend to it. This is evident in the fact that U.S. interest rates have been generally low. The rest of the world is providing the funding to the United States (and Australia) at low cost, whose residents can then turn around and invest profitably. Why would you say no to such funding?

Should policymakers in the United States engineer a recession to make U.S. assets less attractive? Or should they adopt policies that make the United States a less attractive place to invest? Clearly that is nonsensical, although it appears that some lawmakers in the United States are considering this solution. Self-imposed restrictions such as the Dubai Ports decision are perhaps the greatest threat here. Financial protectionism may be more of a threat to global stability than trade protectionism in goods and services.

Conclusion

In the very long run, I expect that the configuration of capital flows would not look like these currently do. Eventually, I expect capital to be flowing from the developed world to the less-developed world. I do not expect to see such an extreme allocation of net capital flows where the flows of capital are disproportionately going to a small number of countries. So in that sense the current configuration of capital flows is probably unsustainable, but that does not mean we are on the verge of catastrophe.

Changes such as developing sound and trusted financial institutions that will enhance the attractiveness of Europe and Japan as destinations for international investment flows are very slow moving, and are not likely to result in a rapid reallocation of portfolio flows. Moreover, the large long positions that many global investors hold in U.S. dollars means that there is probably a built-in stabilizer. I do not expect to see a sudden stop in the United States or Australia.

The experience of Australia, as depicted in Figure 6.4, shows that current account deficits or capital account surpluses can persist for quite some time. Cooper's paper provides a number of sound reasons why this might be also the case for the United States; see Figure 6.5. The issues he

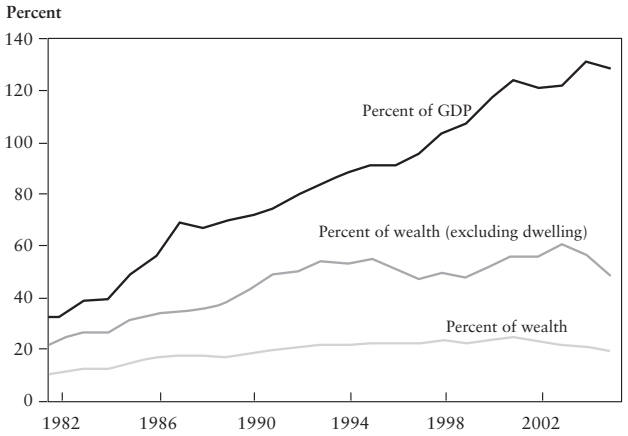

Figure 6.4
Australia's Gross Foreign Liabilities
Source: Australian Bureau of Statistics, Federal Reserve Board, Reserve Bank of Australia, U.S. Bureau of Labor Statistics.

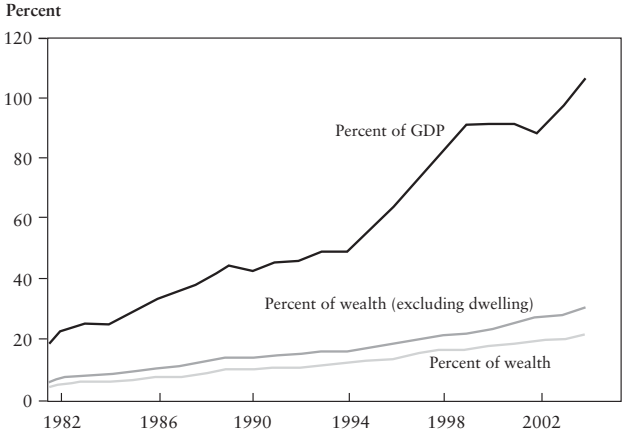

Figure 6.5
U.S. Gross Foreign Liabilities
Source: Australian Bureau of Statistics, Federal Reserve Board, Reserve Bank of Australia, U.S. Bureau of Labor Statistics.

raises about the means by which U.S. households save and the treatment of capital gains on those investments are important and often neglected in the analysis of the current global imbalances. In general, a more considered analysis of the balance sheet of the United States would lead to a more balanced assessment of the global "imbalances," and the sustainability of the current configuration of global capital flows.

■ *The views expressed are those of the author and not necessarily those of the Reserve Bank of Australia.*

Notes

1. Pitchford (1989); Corden (1991).
2. Gournichas and Rey (2005) and Lane and Milessi-Feretti (2004) have written extensively on this, as has Tille (2006).
3. A similar argument applies to the measurement of household borrowing, where household debt should be scaled by the value of household assets, rather than household income, which is generally used.
4. The wealth numbers for the United States are from the Flow of Funds statistics.
5. See Debelle and Galati (2007).
6. See Enders and Lee (1990).
7. See Gruen and Sayegh (2005).

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Comments on "Understanding Global Imbalances" by Richard N. Cooper

Laurence J. Kotlikoff

Richard Cooper's paper provides a highly sanguine view of the U.S. current account deficit, notwithstanding its historically high current value. He marshalls ten points to make this case.

First, the federal government's borrowing and spending, rather than low private saving rates, explain the recent increase in the current account deficit. Second, the rate of private saving has been relatively constant, with increases in corporate saving offsetting the dramatic decline in personal saving that has received so much attention from the press. Third, the concept of private saving is not well measured in the national income accounts because it excludes the acquisition of durable goods, capital gains, and increases in intangible capital. Fourth, older Americas have a lot of wealth and a lot of it will be left to the baby boomers, keeping them afloat during potentially long retirement periods. Fifth, our country spends a lot on research, development, and education, and this type of investment is a form of unmeasured saving. Sixth, the U.S. economy is vibrant, growing, and safe, so it makes a lot of sense for foreigners to invest here. Seventh, the United States is a big economy, so it should attract a large share of international investment. Indeed, according to Cooper this share is lower than one might expect. Eighth, current and projected future demographic changes should lead to more investment in the United States and less in Japan and Europe. Ninth, given the nature of their investments, Americans earn, on average, a higher return on foreign asset holdings than foreigners earn on U.S. asset holding. And since our national income accounts record book, not market, positions, these accounts omit the capital gains Americans earn abroad and, thereby, overstate our current account deficit. And tenth, we can expect to see

ongoing large current account deficits as foreign nationals use the United States to seek a safe haven for their money, and as foreign governments seek large U.S. dollar reserves to protect the values of their currencies.

In short, Cooper tells us not to worry about our current account deficit or its underlying causes.

I have a much darker and, I believe, a more accurate view of our current account deficit.

Let me begin by pointing out that current account deficits per se are not, in my mind, a matter of concern. If foreigners want to invest in the United States, God bless them—that's a major plus for U.S. workers and taxpayers. Were the term "current account deficit" banned and were we always forced to use the term "foreign additions to the U.S. capital stock" instead, we economists would stop looking at the difference between domestic investment and national saving and start looking at the levels of each on a one-off basis. This is what Cooper is doing, and properly so.

I'm going to do the same, but I'm going to focus on net domestic investment and net national saving. As you can see from Figure 6.6, both have declined as a share of national income since 1960, with the gap between these measures increasing over time.

The main culprit for the recent rise in the U.S. current account deficit is our country's low rate of national saving. Today foreigners are investing four dollars in the United States for every dollar Americans are investing here. Cooper suggests that the government's dissaving is primarily to blame for the current account deficit. I think this view is off base. Like almost all economists, Cooper treats measures of the federal deficit, taxes, transfer payments, personal disposable income, private saving, and government saving as well-defined economic concepts, when these are content-free accounting measures that reflect an economically arbitrary labeling of government receipts and payments. If, for example, we label our Social Security and Medicare contributions to the government as "loans," rather than as "taxes," our measures of the federal deficit, private saving, and government dissaving will radically change. Using this alternative language or a zillion other relabeling schemes would wreak havoc on Cooper's analysis of the sources of the rise in our current account deficit.

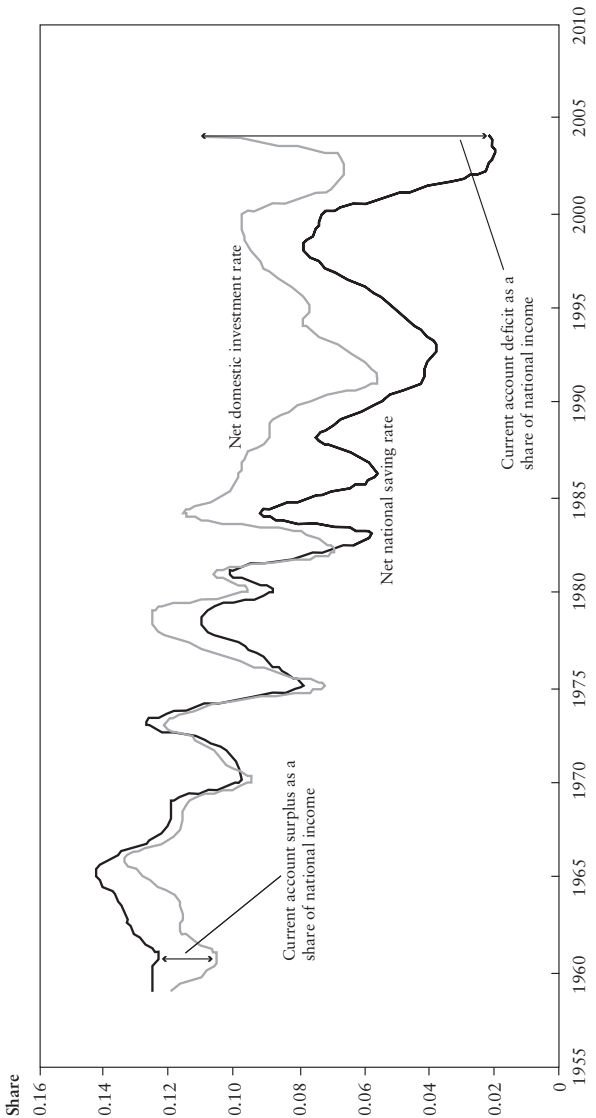

Figure 6.6
U.S. Net National Saving and Net National Investment Rates
Source: U.S. Bureau of Economic Analysis.

I've been belaboring this point for years now, but to little effect on current government accounting practices. My most recent admonition to the profession, entitled "On the General Relativity of Fiscal Language" is coauthored with Jerry Green and is posted on my web site. This paper provides a general proof that neoclassical economic theory does not define any of the conventional fiscal and saving measures included in Cooper's study.

This argument is not meant to be nihilistic. We can study well-defined economic variables, like the current account, but we need to do so using well-defined economic variables, not purely linguistic constructs. In the case of the U.S. current account, the decline in the net national saving rate is not, in fact, due to increased government spending. Government consumption as a share of national income has declined since the early 1960s. The government's share of spending has risen since 2000, but it's still a much smaller share of national income than it was in 1960.

The reason our rate of national saving has declined is because household consumption has risen dramatically as a share of national income. And the group within the household sector that has enjoyed the sharpest rise in consumption is the elderly. This is no surprise. What we've been doing for the past 50 years is transferring ever larger resources from young savers to old spenders and, as the life-cycle consumption model clearly predicts, this practice has led to a decline in national saving. Much of these transfers to the elderly, of course, come in-kind, in the form of medical goods and services, which cannot be saved and consumed later.

Today, we're handing each and every elderly American, on average, more than $30,000 per year in Social Security, Medicare, and Medicaid benefits—roughly 80 percent of per capita U.S. GDP. The real level of the Medicare and Medicaid benefits has been rising at over 4.5 percent per year for the last 30 years. This is pure consumption and this, in part, is why our national saving rate is so low. The rest of the explanation for why the household sector is spending at such a high rate is that we are telling today's baby boomers and even today's younger workers that they too will be able to rip off their progeny through an ongoing policy of pass-the-generational buck.

In short, I view our large current account deficit as symptomatic of an ongoing fiscal policy of intergenerational expropriation. This fiscal child abuse has effectively delivered the United States to the point of national

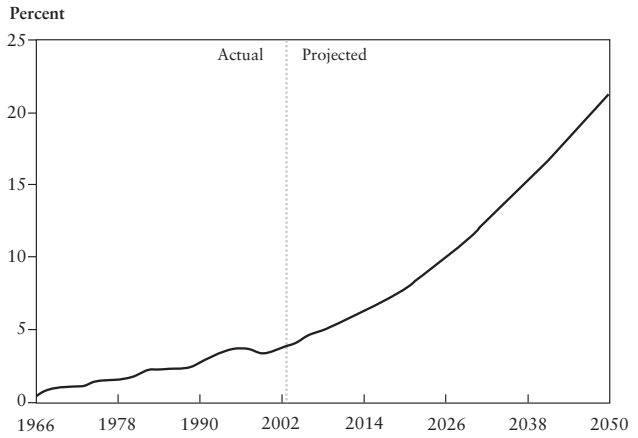

Figure 6.7
Total Federal Spending for Medicare and Medicaid as a Percent of GDP
Source: U.S. Congressional Budget Office. See *The Long-Term Budget Outlook* (December 2003).

bankruptcy. Careful calculations by economists Jagadeesh Gokhale and Kent Smetters indicate that a $63 trillion present-value gap separates our government's projected future expenditures and receipts. As shown in Figure 6.7, the projected costs for Medicare and Medicaid alone will amount to 20 percent of GDP by 2050, and these combined liabilities account for the bulk of the $63 trillion gap. Once U.S. government bond holders, both domestic and foreign ones, start to understand that the United States is, indeed, insolvent, and will be forced to pay its bills by printing money, we will see a financial meltdown of unprecedented proportion.

So, while I agree with much of what Cooper says, I disagree most strongly with his central thesis that the U.S. current account deficit portends no major problems in the future. To the contrary, the current account deficit is symptomatic of a long-term generational policy that has been slowly, but surely, driving our nation broke. When the last straw hits the camel's back, which could happen any day now, we're going to see the bond and stock markets crash, interest rates soar, the value of the

dollar plunge, and inflation take off, notwithstanding the Fed's supposed independence in not reacting to such adverse financial market events.

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Adjustment Mechanisms