# Global Imbalances: The New Economy, the Dark Matter, the Savvy Investor, and the Standard Analysis<sup>1</sup>

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# 1. Introduction

The longer the current global imbalances persist, the less agreement there is about how they ultimately will be resolved. The growth of the U.S. current account deficit after the turn of the century was first met with warnings that such large deficits were unsustainable, that foreign finance would not be provided indefinitely, and that the situation would culminate in an abrupt interruption to capital inflows, sharp compression of the U.S. current account, and a global slowdown or worse (Obstfeld and Rogoff 2000, 2004, Roubini and Setser 2004, Mann 2004, Mussa 2004). As equity inflows gave way to debt inflows, and then as private purchases of U.S. assets gave way to foreign central bank purchases, these early warnings were echoed and amplified. But the longer the deficit persisted and the further it expanded without obvious adverse consequences, the larger swelled the ranks of the doubters. It was argued that foreigners would continue to direct substantial amounts of capital toward the U.S., thereby financing the country's deficit, because the flexibility of the American economy had delivered a permanent increase in the productivity and profitability of investment (Cooper 2004). It was argued that the U.S. could run deficits and finance a large external debt at low cost – that the U.S. external position was sustainable – because U.S. foreign investments earn a significantly higher return than foreign investments in the United States (Kitchen 2006). The

<sup>&</sup>lt;sup>1</sup> Forthcoming in *The Journal of Policy Modeling*.

apotheosis of this view was the assertion that statistics are misleading and the U.S. deficit is not, in fact, a deficit at all. That as late as 2005 America was officially receiving net interest income from abroad meant that the country still had more foreign assets than liabilities, implying the existence of significant un- or under-recorded U.S. exports of goods and services (Hausmann and Sturzenegger 2005).

In this note I sort through these interpretations with an eye toward their consistency and compatibility. I raise questions about the internal consistency, conformance with the facts, and predictive content of each of the arguments challenging the mainstream analysis of U.S. current account sustainability. Moreover, I show that several of these objections to the standard sustainability arithmetic are incompatible with one another. In other words, it is not always possible for the skeptics to take succor in one another's arguments.

#### 2. The Standard Analysis

The standard analysis that the current pattern of global imbalances is unsustainable is based on arithmetically capitalizing the implied debt flows (Mussa 2004, Roubini and Setser 2004, Yoshitomi 2006). The indefinite maintenance of a current account deficit of 7 ½ per cent of GDP by a country whose rate of nominal GDP growth is 5 per cent (3 per cent real growth plus 2 per cent inflation) implies an eventual ratio of net external debt to GDP of 150 per cent. For an economy like the U.S. with a capital/output ratio of 3, this means that foreigners end up holding half of the country's capital stock. Quite apart from whether foreign investors would be willing to allocate such a large share of their portfolios to claims on the productive capacity of the United

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States, there is the question of whether Americans would feel comfortable allowing them to do so. As evidenced by the reaction surrounding China's recent offer to buy the U.S. oil company Unocal and the political backlash against the efforts of a Dubai-based company to purchase the right to manage six U.S. ports, there would likely be a strong negative reaction against extensive foreign ownership of productive assets in the United States, which are regarded, rightly or wrongly, as essential to the national security in the post-9/11 world.

Note that the share of the U.S. capital stock owned by foreigners would be even greater to the extent that foreign capital must flow in not just to finance the current account gap but also to offset the balance-of-payments consequences of U.S. investment abroad. To be sure, the share of the capital stock owned by foreigners would be less to the extent that foreign holdings are in the form of other financial assets. But here the fear would be that the U.S. would have a strong incentive to inflate away or otherwise expropriate the value of these claims. By implication, finance for the indefinite maintenance of deficits at current levels will not be forthcoming.

The only uncertainty, according to the standard analysis, is whether the adjustment begins early and proceeds gradually, with minimal disruptive effects, or whether it is delayed until an abrupt correction becomes unavoidable. In the first scenario, capital inflows begin tailing off relatively early, allowing the current account balance to be compressed by, say, <sup>1</sup>/<sub>2</sub> per cent of GDP each year, permitting the deficit to fall to 2 <sup>1</sup>/<sub>2</sub> per cent of GDP by 2016 and the debt/GDP ratio to stabilize in the neighborhood of 50 per cent.

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The mechanism behind this adjustment is no mystery. The gradually declining foreign demand for additional U.S. assets leads to a decline in their prices, including that of the dollar. Falling asset prices and their mirror image, rising interest rates, compress absorption in the United States.<sup>2</sup> Slowing domestic demand makes more U.S. exports available, while the weaker exchange rate switches foreign demand toward them. The econometric rule of thumb is that a <sup>1</sup>/<sub>2</sub> per cent improvement in the current account will require a 5 per cent decline in the real effective exchange rate of the dollar.<sup>3</sup>

In the second scenario, capital inflows continue to finance current account deficits at current levels – or, even worse, they continue financing the dollar at current levels, in this case implying that the deficit as a share of GDP will widen further.<sup>4</sup> The debt/GDP ratio is then on a path to 150 per cent or higher, threatening portfolio equilibrium abroad and political equilibrium in the United States. At some point foreign investors, alarmed, pull the plug. Capital inflows fall sharply, precipitating a sharp fall in the dollar.<sup>5</sup> This produces sharply lower asset prices, sharply higher import-price inflation, sharply higher interest rates, and a sharp fall in demand in the United States and globally.<sup>6</sup> Such is the conventional wisdom.

<sup>&</sup>lt;sup>2</sup> Presumably through a combination of rising household saving and declining corporate investment. <sup>3</sup> Note that this implies a 50 per cent decline in the dollar over the decade in which the 5 per cent of GDP swing in the current account occurs.

<sup>&</sup>lt;sup>4</sup> Other things equal. The idea that capital inflows are forthcoming in the amount needed to support the dollar at current levels is a corollary of the view that emerging markets, committed to a strategy of exportled growth, are reluctant to see their currencies rise against the greenback. The classic statement of this view is Dooley, Folkerts-Landau and Garber (2003).

<sup>&</sup>lt;sup>5</sup> The dollar must fall further than in the other scenario (other things equal), because debt stocks are higher, adjustment having been delayed, and it is necessary to crowd in additional exports in order to finance them. This point is developed by Blanchard, Giavazzi and Sa (2005).

<sup>&</sup>lt;sup>6</sup> Model-based simulations of the two scenarios are in Faruqee, Laxton, Muir, and Pesenti (2005).

## 3. The New Economy

Three quite different arguments are made for why this standard analysis is incorrect: the so-called "new economy," "dark matter," and "savvy investor" views. The new economy view is that the preceding underestimates the appetite of foreign investors for claims on the United States. Rapid productivity growth and high corporate profitability make the United States attractive as a place to invest, so much so that the rest of the world will be prepared to continue providing foreign investment in the amount of at least 7 per cent of U.S. GDP for an indefinite period. Financing even a \$1 trillion current account deficit, which is what a 7 per cent deficit currently implies, requires less than 15 per cent of the more than \$8 trillion of gross foreign savings outside the United States.<sup>7</sup> And placing that share of foreign savings in the United States is attractive.<sup>8</sup> Claims on the United States are secure. The economy is buoyant. With the U.S. growing rapidly, this foreign investment will produce an attractive rate of return and the country's debt/GDP ratio will not rise explosively.

The fact that U.S. economic growth will accelerate relative to trend is essential for this story. But it still implies that foreigners will hold an uncomfortably large share of the U.S. capital stock. Say that the growth of output doubles from  $2\frac{1}{2} - 3$  per cent to  $5\frac{1}{2}$  per cent, while inflation continues running at 2 per cent. (I pick this unrealistically rosy

<sup>&</sup>lt;sup>7</sup> This is where the so-called global savings glut (e.g. Bernanke 2005) and slowdown in investment in East Asia ex Japan (e.g. Rajan 2006) enter the story. Careful readers will note that I have now alluded to all four components of the global current account identify: U.S. saving/absorption (where I discussed the standard analysis), U.S. investment (where I introduced the new economy view), and now foreign saving and foreign investment. Not coincidentally, this is how I structure my discussion of global imbalances in a previous paper (Eichengreen 2006).

<sup>&</sup>lt;sup>8</sup> Of course, more than 15 per cent of gross foreign savings would have to be poured into the United States insofar as Americans also invest abroad. For more on this see below.

scenario to drive home a point.<sup>9</sup>) A current account deficit of 7 ½ per cent of GDP still implies a debt/GDP ratio of 100 per cent, or that foreigners will hold a third of the U.S. capital stock. And the premise that it is the growth of the productivity of the real economy that is attracting foreign investors implies that they will concentrate their holdings in claims on U.S. productive capacity, not on U.S. debt securities. Hence there is still reason to fear a political backlash against foreigners "buying up the U.S. economy." If so, even sharply faster productivity growth in the United States, as assumed here, will not sustain external deficits at current levels indefinitely.

A further problem for the view that a permanent acceleration in productivity growth makes foreign investment in the United States more attractive is that productivity is growing even faster in China, which is the single largest national source of finance for the U.S. deficit. Another problem is that there is little evidence of a significant increase in U.S. investment as implied by the story; rather, the growth of the country's current account deficit heavily reflects a decline in national savings.<sup>10</sup> In addition, net finance for the U.S. deficit is being provided by foreign central banks, not by private investors motivated by considerations of productivity and profitability.<sup>11</sup> These doubts are reinforced by the uncomfortable fact that, since 2000, foreign funds have been flowing into debt rather than equity markets, where the latter would be the obvious place to bet on the rapid growth of productivity and profitability.

<sup>&</sup>lt;sup>9</sup> Productivity growth in the nonfarm sector has risen by half since 1995, from 1.6 to 2.9 per cent, relative to the preceding ten years. See for example Bacjys abd Kanbert (2005), Cooper (2004), Clarida (2005), Levy (2005), Mandel (2006) and Plosser (2005).

<sup>&</sup>lt;sup>10</sup> In point of fact, national investment in the United States fell by 2 per cent as a share of U.S. GDP between the 1990s and 2004. U.S. gross national saving has fallen to 13.6 per cent of GDP on the IMF's measure, down by 3.3 per percentage points from the 1983-2000 average and barely half the level prevailing in the rest of the world.

<sup>&</sup>lt;sup>11</sup> To be sure, there have also been substantial private capital inflows into the United States, but these have been fully offset by private capital outflows, leaving it for official foreign finance to fill the financing gap.

Finally, this interpretation implies that the rate of return on foreign investment in the United States should be high, where in fact this has not been the case by comparison with U.S. foreign investment in other countries. U.S. net interest income from abroad remains positive (or it did through 2005), despite the fact that the U.S. is now a net debtor to the rest of the world in the amount of more than 20 per cent of U.S. GDP, according to official estimates.<sup>12</sup> On average, then, U.S. investment abroad continues to pay more handsomely than foreign investment in the United States. The implied rate of return differential is on the order of 2 percentage points.<sup>13</sup> It goes the wrong way for proponents of the "new economy" view.

It could be that foreign investors regard the U.S. economy as a "growth stock." Perhaps they expect substantial capital gains on their U.S. investments that have not shown up yet in recorded payments of interest and dividends because U.S. firms are plowing their profits into additional capital formation. But here the fact that U.S. equity investment abroad is larger than foreign equity investment in the United States is problematic. The net flows that finance the current account are debt flows, as noted above. It is hard to believe that foreign investors anticipate capital gains on their U.S. treasury and agency securities (interest rates being low relative to the norm for this stage of the business cycle and the dollar being unlikely to rise still further), as implied by the growth-stock interpretation.

#### 4. The Dark Matter

<sup>&</sup>lt;sup>12</sup> More on these official estimates below.

<sup>&</sup>lt;sup>13</sup> See Gourinchas and Rey (2005) and Kitchen (2006).

And if foreign investors do in fact anticipate capital gains on their U.S. investments, which would seem to be the only way of reconciling the new-economy view with the fact of relatively low interest payments to date on those assets, then this is fundamentally corrosive of the other rationale for dismissing the possibility of a sharp correction in the U.S. current account, the so-called "dark matter" view. Hausmann and Sturzenegger (2005) have cast doubt on the assumption that the U.S. has in fact been accumulating a large external debt, and in turn cast doubt on official statistics for the current account, by observing that the country's net interest income from abroad remains positive. They argue that since net interest income from abroad remained positive at some \$30 billion in 2005, U.S. foreign investments, properly valued to reflect their income-generating capacity, must exceed U.S. foreign investors' claims on the United States, similarly measured so as to reflect their true economic value.<sup>14</sup> Since U.S. net interest income did not decline significantly in the 25 years through 2005, neither did the value of the country's net foreign investments, again "properly valued." In turn this must mean that the country has not, in some sense, been running current account deficits. The current account statistics must be failing to capture U.S. exports of reputation (the brand value of companies like Disney and Coca Cola, and the reputation of the U.S. government for preserving the value of its debts) that are packaged together with U.S. exports of observable goods and services. In this story, three categories of U.S. exports were un- or underrecorded: U.S. liquidity services (seignorage), U.S. insurance services (secure investments), and U.S. knowledge services (organizational knowledge and brand recognition) because they were bundled with three types of financial instruments,

<sup>&</sup>lt;sup>14</sup> The 5 per cent interest rate they use to capitalize income streams has been attacked as arbitrary, but their essential point would still follow for any constant positive interest rate.

respectively: U.S. currency held by foreigners, U.S. treasury bonds held by foreigners, and U.S.-originated FDI (Buiter 2006).

Objections to this analysis include the observation that U.S. net interest payments on the debt securities in which foreigners disproportionately invest have been artificially depressed by the Greenspan Conundrum (the unusually low level of interest rates).<sup>15</sup> They include the observation that there is no reason to take the official figures on net income from abroad as accurate while dismissing official figures for the current account as meaningless.<sup>16</sup> In fact there is ample room for misstating income by using transfer pricing to shift profits between national subsidiaries – and considerable incentive for doing so to minimize tax liabilities.<sup>17</sup>

Perhaps the most fundamental objection is again that foreign investors regard their investments in the United States as a growth stock that will yield higher income and thus capital gains in the future. If this is the case, then perhaps the "new economy" view is right. But, if so, the "dark matter" view must be wrong. U.S. net income from abroad remains positive only because the high future returns on foreign investment in the United States have not yet materialized. As soon as they do, the value of U.S. net liabilities to foreigners will rise sharply. So will U.S. net income payments, assuming that foreigners begin to repatriate some of the associated income gains once their investments have paid off. Once the capital gains have occurred, the incentive for foreign investors to take more such positions will be less, since the likelihood of further gains will have diminished.

<sup>&</sup>lt;sup>15</sup> It is revealing that the average return on foreign investment fell from 3.6 per cent in 2000 to 2.4 per cent in 2003, just when U.S. interest rates were declining (Setser 2006).

<sup>&</sup>lt;sup>16</sup> As Hausmann and Sturzenegger do.

<sup>&</sup>lt;sup>17</sup> Huang and Mascaro (2004) note that this view is supported by the fact that the rate of return on U.S. owned FDI in Ireland was triple that on overall U.S. FDI between 1999 and 2003, which that on U.S. FDI in Bermuda was double the overall average.

The dollar will have to depreciate in order to crowd in U.S. exports, not just sufficiently to offset the decline in capital inflows but now also to service the more expensive net external debt.

"Dark matter" and "the new economy" are two widely cited reasons for questioning whether there needs to be a sharp correction of global imbalances. In fact, one cannot be consistently skeptical on both grounds.

### 5. The Savvy Investor

The third view is that the U.S. can service a large external debt without serious discomfort since U.S. external assets earn a significantly higher return than U.S. foreign liabilities, simply because U.S. investors are more savvy than their foreign counterparts. Kitchen (2006) lays out the scenario in which historical rate of return relationships continue to hold and the U.S. also continues to enjoy the same tendency for its foreign investments to appreciate in value, while foreigners suffer capital losses on their more poorly chosen investments in the United States.<sup>18</sup> He shows that in this case it will cost the United States less than one per cent of GDP to finance a net external debt of 50 per cent of GDP. Indeed, even if the current account does not adjust, the fact that foreigners continue to incur capital losses on their investments in the United States (relative to valuation changes for U.S. investments abroad) implies that the ratio of net foreign debt to GDP stabilizes in the neighborhood of 75 per cent, not the 150 per cent implied by the standard analysis. It will still cost the United States less than 2 per cent of GDP to

<sup>&</sup>lt;sup>18</sup> In this scenario the capital losses on U.S. investments suffered by foreigners are accentuated by the assumption that the dollar depreciates at least modestly against foreign currencies – something that is not also assumed in the next scenario in the text. Gourinchas and Rey (2005) provide a more detailed analysis of the role of exchange rate fluctuations in accentuating historical valuations effects.

service this net external debt, since U.S. investments abroad are so much more remunerative than foreign investments in the United States.

Whether this scenario is politically plausible depends on whether the political process in the United States is driven by the income effects of the debt service, which are modest and therefore pose no problems for "sustainability," and not by xenophobia and national security concerns over foreign ownership of the American capital stock (since under these assumptions the share owned by foreigners would still be substantial). Whether it is economically plausible depends on whether U.S. investments abroad continue to outperform foreign investments in the U.S. by a significant margin. The fact that some foreign investment in the U.S. takes the form of U.S. cash and Treasury securities is consistent with the view that the U.S. is well placed to continue providing liquidity and insurance services to the rest of the world and with the idea that historical rate-of-return differentials will tend to persist. But, as shown by Gourinchas and Rey (2005) and Buiter (2006), these factors can explain only a fraction of the overall differential between the effective rates of return on U.S. foreign assets and liabilities. The rest reflects the superior performance of U.S. FDI relative to foreign FDI in the United States. Kitchen (2006) shows that, abstracting from recession and near-recession years, this differential averages more than 5 per cent.<sup>19</sup> (In contrast, the differential for other private investments is quite small.) When one compares the recent performance of Japanese auto companies' investments in the United States with the performance of U.S. auto companies' investments abroad, one is led to wonder whether recent differentials

<sup>&</sup>lt;sup>19</sup> Gourinchas and Rey (2005) estimate the differential to be smaller because they do not selectively eliminate recession and near-recession years.

will persist.<sup>20</sup> The move of foreign investors out of U.S. Treasury securities in favor of agency securities and now their efforts to pursue new forms of FDI in the United States are additional grounds for skepticism about the persistence of historical yield differentials. So too is the fact that overall U.S. external debt will be significantly larger in the future and presumably, therefore, carry an additional risk premium.<sup>21</sup>

In any case, this view that even large current account deficits will lead to only moderate debts and small net interest payments to foreigners is, if not exactly incompatible, then certainly hard to square with the "new economy" alternative. The new economy view is that foreign savings will continue flowing to the United States in large amounts because foreign investment in America will now pay better than U.S. investment abroad. Unless U.S. investors have some unique ability to find better performing investments abroad, this implies that the historical rate of return differentials helping to sustain the U.S. balance of payments position will not continue to hold. One can argue that the American deficit is sustainable because the U.S. economy is incredibly flexible, productive and remunerative to investors, and also that foreign direct investors in the U.S. will continue to earn only half the yield of U.S. investor abroad only if one is prepared to take the savvy U.S. investor (and dull non-U.S. investor) assumption to an extreme.

<sup>&</sup>lt;sup>20</sup> Huang and Mascaro (2004) show that the difference in returns appears to be associated with the longer presence of U.S. investments abroad than foreign investments in the United States. Thus, as recent foreign investments in the U.S., associated with the recent growth of the U.S. current account deficit, mature, the rate of return differential may show a tendency to close. As the authors write (p.3), "As foreign-controlled companies become older, the pattern of returns on direct investment that has so far favored U.S. companies abroad could diminish." Note that this interpretation is easier to reconcile with the "new economy" than the "savvy investor" view (see below).

<sup>&</sup>lt;sup>21</sup> As assumed by, inter alia, Roubini and Setser (2004).

## 6. In Lieu of a Conclusion

This paper has reviewed four perspectives on global imbalances. The standard analysis suggests that the U.S. current account deficit cannot be sustained at current levels. It suggests that there will have to be significant adjustments in asset prices to compress U.S. spending and significant changes in relative prices to crowd in net exports. At the same time, nonstandard analyses, focusing on the profitability of investment in the United States, the profitability of U.S. foreign investment, and the differential returns on U.S. foreign assets and liabilities suggest that U.S. current account deficits may be easier to sustain than implied by the standard analysis.

As for which view is correct, only time will tell. But uncertainty about whether a disorderly correction is imminent does not justify inaction. That a Category 5 hurricane strikes only once a generation does not absolve the responsible homeowner, living in a flood plain, from putting his house on stilts or investing in flood insurance. For the United States, insuring against a disorderly correction would involve progressively tightening fiscal policy and thus gradually narrowing the gap between absorption and production. The best way for China and other East Asian countries that export to the United States to meet this deceleration in U.S. absorption growth would be by loosening fiscal policy (increasing spending on social security, health care, education, rural infrastructure and the like) and thus stimulating demand at home. With demand growth slowing in the United States and accelerating in Asia, relative prices, in the form of the dollar exchange rate, will tend to adjust. The argument for gradual adjustment starting now to limit the risk of a sharp, disruptive adjustment later is still sound even if an eventual hard landing is less than certain.

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