

Impact of the Lower Dollar and Higher Oil Prices on the US Current Account Balance

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In September I updated my current account projection model from a 2005 base to a 2007 base (Cline 2007, 2005). The dollar has fallen significantly in the two months since those estimates were prepared. In the same period, and perhaps not fully coincidentally, oil prices have surged to nearly \$100 per barrel. This note considers which effect is the more dominant: current account improvement from further dollar correction or current account deterioration from higher oil prices. Oil turns out to be slightly more important, if the price remains high at about \$100.

At the time of my September 2007 estimates, the Federal Reserve's broad real index for the dollar (March 1973 = 100) stood at 90.6, down from an average of 96.7 in 2006. By November 7, 2007, the Fed's broad real index had fallen to 86.3. This means that the dollar now stands close to its two all-time troughs on this index, which were 84.0 in October 1978 and 84.2 in July 1995. The trade-weighted real value of the dollar has fallen 10.8 percent from the 2006 average. Against the peak full-year level of 110.8 in 2002, the broad real dollar has fallen 22.1 percent.

The acceleration of the decline is noteworthy. The dollar has fallen by about the same proportion in 2007 alone as it fell during the four years 2003–06 (about 11 percent in each case). The recent decline of the dollar seems closely related to eroding foreign confidence in the face of more severe than expected losses by major US financial institutions from the subprime mortgage problem, as well as to the recent reduction in US policy interest rates.

My September update found that the baseline current account path had improved somewhat from a deficit of about 7–7½ percent of GDP in 2010 estimated in my 2005 book to only 5.1 percent in 2010 and 5.4 percent in 2012. The narrowing of the deficit baseline was attributable in part to a decline in the dollar by about 6 percent from the base used in the 2005 projections. The improvement also reflected somewhat lower prospective US growth and hence import expansion, as well as a much more favorable position for net international liabilities than previously expected thanks mainly to large increases in prices of equity owned abroad in 2005–06.

Now the significant further decline in the dollar since September holds the potential for further narrowing the baseline deficit. In the KGS model (Cline 2005), each percentage point of foreign real appreciation brings a reduction in the current account deficit by 0.14 percent of GDP by the third year and about 0.16 percent by the fifth year. So the decline of the dollar by about 5 percent from September to early November of 2007, if not reversed, would be expected to reduce the current account deficit baseline by 2010 by about 0.7 percent of GDP.

However, the price of oil has also surged since the September estimates. Each dollar per barrel of oil adds about \$4 billion to the US trade deficit annually. In 2006, oil

imports were \$302 billion; oil exports were \$32 billion; and the average price of crude oil was \$58 per barrel. For 2007 as a whole the outcome will likely be about the same. However, the recent surge in oil prices to nearly \$100 per barrel suggests that in 2008 and after the net oil import bill could be approximately \$175 billion higher annually than the outcomes in 2006 and 2007.¹

Table 1 reports revised current account projections with the real value of the dollar held constant at its early-November 2007 level. As indicated in the table, this implies a real foreign appreciation of 12 percent against the 2006 base. The upper panel of the table assumes that oil prices return to \$60 per barrel and remain at that level. In that case, the baseline deficit by 2012 stands at 4.4 percent of GDP. However, there is a J-curve effect in 2008, when higher prices for imports as a consequence of the additional depreciation have not yet been offset by lower import volumes given response lags. Next year, as a result, the current account deficit could widen again temporarily, from a projected 5.4 percent of GDP in 2007 to 5.8 percent.

In the lower panel it is instead assumed that oil plateaus at \$100 per barrel in 2008 and after. In that case, the baseline current account deficit by 2012 stands at 5.6 percent of GDP. The higher oil price thus adds about 1.2 percent of GDP to the current account deficit. Oil at \$100 per barrel instead of \$60 thus has about the same adverse impact as an 8.5 percent real appreciation of the dollar. With the additional influence of the J-curve, in 2008 the current account deficit swings upward temporarily to 7 percent.

Other assumptions for the projections in table 1 are unchanged from the September estimates. They are probably a bit too high for US trend growth (which is increasingly seen as about 2.5 percent annually for potential growth). This will tend to overstate the deficits somewhat. Conversely, the 5.5 percent rate assumed for the 10-year Treasury bond rate now seems more likely to be overstated, tending to exaggerate the baseline deficit.

The overall implication is that over the next year or so, there could be an awkward period of swing back into wider current account deficit associated with high oil prices and the J-curve. Nonetheless, over the medium term some rollback in the price of oil seems more likely, suggesting that by perhaps 2009 and after the impact of the recent further correction of the dollar could become more apparent.

References

Cline, William R. 2005. *The United States as a Debtor Nation*. Washington: Institute for International Economics.

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¹ Approximately at \$100 instead of \$60 per barrel, net oil imports would be 1.67 times as large. Net imports in 2006 were \$270 billion. This expansion would result in net imports of \$448 billion, with an increment of \$178 billion. A slight allowance is made for lower import volume.

Table 1. US Current Account Baseline under Alternative Oil Prices
(\$ billions and percentages)

I. Oil at \$60 per barrel							
	2006	2007	2008	2009	2010	2011	2012
Exports, GS	1446	1611	1832	2098	2330	2539	2766
Imports, GS	2204	2305	2550	2678	2850	3085	3339
Trade balance	-759	-694	-719	-580	-520	-546	-573
Transfers	-90	-90	-95	-100	-105	-110	-116
Capital services	43	40	-40	-36	-57	-75	-96
Current account	-812	-745	-854	-716	-681	-731	-784
CA/Y	-6.1	-5.4	-5.8	-4.7	-4.2	-4.3	-4.4
Net foreign assets:							
Accounting: NIIP	-2140	-2691	-2780	-3417	-4016	-4662	-5357
NIIP/Y %	-16.2	-19.4	-19.0	-22.2	-24.9	-27.5	-30.1
Economic: CNCI	900	868	-726	-649	-1032	-1370	-1740
CNCI/Y %	6.8	6.2	-5.0	-4.2	-6.4	-8.1	-9.8
ERvaladj	363	117	692	0	0	0	0
Price valadj	472	77	71	79	82	85	89
Real \$/FC	1	1.042	1.12	1.12	1.12	1.12	1.12
Real \$/FC (-2)	0.972	0.988	1	1.042	1.12	1.12	1.12
Bond rate	4.8	4.6	5.5	5.5	5.5	5.5	5.5
FDI return difference	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Growth: US	3.3	2.1	2.9	3	3	3	3
Foreign	3.5	3.4	3.6	3.6	3.6	3.6	3.6
Oil price: \$/bbl	60	60	60	60	60	60	60
II. Oil at \$100 per barrel in 2008 and after							
	2006	2007	2008	2009	2010	2011	2012
Exports, GS	1446	1611	1832	2098	2330	2539	2766
Imports, GS	2204	2305	2725	2853	3025	3260	3514
Trade balance	-759	-694	-894	-755	-695	-721	-748
Transfers	-90	-90	-95	-100	-105	-110	-116
Capital services	43	40	-40	-44	-74	-102	-132
Current account	-812	-745	-1029	-899	-874	-933	-996
CA/Y	-6.1	-5.4	-7.0	-5.9	-5.4	-5.5	-5.6
Net foreign assets:							
Accounting: NIIP	-2140	-2691	-2955	-3776	-4567	-5415	-6321
NIIP/Y %	-16.2	-19.4	-20.2	-24.6	-28.3	-31.9	-35.5
Economic: CNCI	900	868	-726	-804	-1347	-1856	-2403
CNCI/Y %	6.8	6.2	-5.0	-5.2	-8.3	-10.9	-13.5
ERvaladj	363	117	692	0	0	0	0
Price valadj	472.2	77	71	79	82	85	89
Real \$/FC	1	1.042	1.12	1.12	1.12	1.12	1.12
Real \$/FC (-2)	0.972	0.988	1	1.042	1.12	1.12	1.12
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Foreign	3.5	3.4	3.6	3.6	3.6	3.6	3.6
Oil price: \$/bbl	60	60	100	100	100	100	100