

**Comments on “The Unsustainable U.S. Current Account Position Revisited”  
By Maurice Obstfeld and Kenneth Rogoff<sup>1</sup>**

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December 12, 2005

**I. Introduction**

Authors in Victorian England often released one chapter of a new novel at a time as part of a weekly or monthly periodical—a format known as “serial publishing”. The author would then have a chance to gauge the public’s reaction to the latest installment and adjust the storyline. The public would not know how the story would evolve—and instead would have to keep buying the periodical, installment by installment, continually reassessing how the novel might end.

Reading the latest variant of the Obstfeld-Rogoff analysis of the U.S. current account position reminded me of what it must have felt like to read a chapter of the latest Dickens novel in the weekly periodical. Each version of the Obstfeld-Rogoff analysis is more sophisticated, as the authors incorporate the feedback and suggestions from earlier versions.<sup>2</sup> With each version the U.S. current account situation also becomes more serious—and you can’t help but think that the storyline is near its climax and some sort of resolution must occur soon. Will the U.S. current account deficit improve in conjunction with a gradual depreciation of the dollar and a period of strong growth—similar to the benign adjustment in the United States during the 1980’s? Or will the story end with sharp exchange rate movements, slower growth and higher inflation—as occurred during the more disruptive period in the 1970’s?

My comments on Obstfeld-Rogoff are divided into three main sections. First, I discuss several key insights from the paper that deserve to be highlighted and that have important policy implications. Second, I briefly mention several issues which could have meaningful implication for the analysis, but which are not addressed in the paper. Third and finally, I propose two reasons why the conclusions and key results in the paper may be too negative. The authors end the paper implying that the U.S. current account is likely to unwind in a scenario that Charles Dickens might have labeled as “the worst of times”, but is there reason to believe that this story could instead end as “the best of times”?

**II. Three Important Contributions of Obstfeld-Rogoff**

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<sup>1</sup> Prepared for NBER conference in Newport, Rhode Island on “G-7 Current Account Imbalances: Sustainability and Adjustment”. Held on June 2, 2005.

<sup>2</sup> Also see Obstfeld and Rogoff (2000) and (2005).

Obstfeld-Rogoff develops a general equilibrium model to show how an unwinding of the U.S. current account deficit will affect currency movements. Then it performs simulations to assess the magnitude of these effects under different scenarios. The model is fairly straightforward, but yields very powerful results and is a useful framework to explore several policy implications. While the paper presents a number of insights, I will highlight three: the way in which current account adjustments affect exchange rates (in contrast to how exchange rates affect current account balances), the role of flexibility in product markets, and the role of different types of productivity growth.

One contribution of Obstfeld-Rogoff is that the framework used in the paper forces us to rethink causality and the relationship between trade balances and exchange rates. Most people discussing the subject of global imbalances begin by focusing on the different factors that will reduce the U.S. trade deficit (such as raising savings in the United States or a large dollar depreciation). Instead, Obstfeld-Rogoff starts by simply assuming that the current account deficit is reduced, and then analyzes how this affects real and monetary variables, including the exchange rate. In other words, Obstfeld-Rogoff takes the opposite approach from most analyses by asking how a reduction in the U.S. current account will affect the U.S. exchange rate, rather than how the U.S. exchange rate will affect the U.S. current account deficit.

This approach of focusing on the real exchange rate as an outcome, instead of a cause, of an adjustment in the U.S. current account deficit is particularly useful because it highlights the real adjustment that must take place in the U.S. economy when the current account deficit shrinks. The analysis shows that any reduction in the U.S. current account deficit will cause a substantial depreciation of the dollar. Many policymakers tend to focus on other “cures” for the U.S. current account deficit—such as raising U.S. national savings or structural reform in Europe. These policymakers generally believe that accomplishing these goals would reduce the need for a dollar depreciation. Although these goals are all worthwhile and will facilitate any adjustment, Obstfeld-Rogoff shows that these adjustments will not, in and of themselves, be sufficient. Even if the United States increases national savings, and Europe and Japan adopt structural reforms to raise productivity growth in non-tradables, a dollar depreciation will still occur.

A second important contribution of Obstfeld-Rogoff is that it highlights the importance of flexibility in product markets to facilitate a smooth adjustment of global imbalances. The economic literature has a long history of exploring the importance of flexibility for economies to adjust to a variety of shocks—so the importance of flexibility is not surprising. Obstfeld-Rogoff’s model, however, not only highlights the importance of flexibility to the adjustment process, but also provides a useful framework to assess the magnitude of these effects. For example, when Obstfeld-Rogoff drops their baseline assumption of full pass-through and instead assumes that pass-through from exchange rates to prices is 50%, then the corresponding impact of reducing the U.S. current account deficit on exchange rates roughly doubles. In other words, focusing on the 4 scenarios that provide the baseline case in Table 1, the impact of reducing the U.S. current account deficit to zero would correspond to a 14% to 32% depreciation of the dollar under the case of full pass-through, but a 29% to 65% depreciation assuming 50% pass-through.

Moreover, even an assumption of 50% pass-through may be too high. A study by authors at the Federal Reserve Board estimate that the pass-through of exchange rates to import prices in the U.S. was about 20% over short time horizons in the past decade.<sup>3</sup>

This conclusion that greater flexibility in product markets will reduce the exchange rate impact of an adjustment in global imbalances has important policy implications. Countries with more rigid product markets will face an important tradeoff. If they are concerned about the impact of a dollar depreciation on their exports and growth, one solution to minimize the impact is to reduce product market rigidities. Countries that are unable or unwilling to tackle reform will face a greater currency appreciation. Neither option is politically popular, but Obstfeld-Rogoff suggests that a choice must be made.

A third contribution of Obstfeld-Rogoff is that it clarifies exactly how productivity growth can help reduce global imbalances—and especially the role of the type of productivity growth. More specifically, the paper shows that stronger productivity growth in major non-U.S. economies, such as Europe and Japan, would not necessarily lead to a reduction in the U.S. current account deficit. In fact, higher productivity growth in the tradable sector in countries outside the United States could actually have the opposite effect and increase the U.S. current account deficit. Instead, it is only higher productivity growth in the non-tradable sector (outside of the United States) that would help reduce global imbalances. This is an important distinction—and one which is often overlooked.

This insight that the form of productivity growth can have important effects on global imbalances has important implications. For example, as Obstfeld-Rogoff points out, strong productivity growth in the U.S. non-tradable goods sector since the middle of the 1990's may have been an important factor in explaining the widening of the U.S. current account deficit over this period. The authors write that they hope to explore this issue in a follow-up paper, and I encourage them to follow through on this issue. A closely related implication is that reducing global imbalances while simultaneously raising growth in non-U.S. economies is possible and feasible. Japan and most countries in Europe have not benefited from the rapid productivity growth in the non-tradables sector experienced in the United States over the past decade, but they can learn and benefit from the U.S. experience. With appropriate policies, countries can not only reap similar gains as in the United States, but even reap faster gains since they can simply adopt first-best practices that were only learned over time in the United States.

### **III. Other Issues to Explore**

Although Obstfeld-Rogoff addresses a number of key aspects of any adjustment in the U.S. current account deficit, their modeling framework does not include several factors that could affect the adjustment process and the central results. In particular, the paper downplays the role of global financial markets—especially how different actors could respond to a rapid adjustment in the dollar. The paper simulates how a dollar depreciation affects asset market valuations, and argues that the magnitude of these effects is second order. There are, however, a number of other ways in which financial markets, foreign

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<sup>3</sup> Faust et al. (2005).

actors, and investors could respond to the adjustment in the U.S. current account deficit and affect the depreciation of the dollar.

For example, if the dollar depreciated rapidly, it is likely that foreign central banks would loosen monetary policy to stimulate growth and stem the appreciations of their currencies. How would this affect the results? Similarly, at least 26% of net capital flows into the United States in 2004 were purchased by “official” institutions (largely central banks)—a market participant that may behave differently than profit-maximizing investors.<sup>4</sup> Will the way in which the U.S. current account deficit is financed (such as through portfolio inflows versus foreign direct investment versus government bond purchases) affect the adjustment process? Also, as Bernanke (2005) highlights, low interest rates in the United States reflect high savings (relative to investment) in the rest of the world. In the framework used in the paper, it is difficult to see how changes in savings and investment abroad will affect the results. If foreigners became alarmed about a dollar depreciation, they might increase private savings. How would this complicate the adjustment process?

A final issue that is not directly addressed in the paper is the possibility of nonlinearities or “breaks” in the simulated relationships. Although Obstfeld-Rogoff’s model is not developed as a linear model, most of the effects discussed in the paper appear to be roughly linear. Although this result is reasonable for moderate movements in the key variables, large movements of key variables (such as the exchange rate) would likely generate substantially different relationships between these variables. For example, a sudden and rapid depreciation of the dollar could generate massive sales by market participants that had to cover losses—especially hedge funds and other leveraged institutions. On the other hand, a sudden and rapid depreciation could also generate responses by other countries—such as interventions in exchange markets or changes in monetary policy (as discussed above). These non-linear responses are even more likely when evaluating the case of the United States, due to its large size and the magnitude of the required adjustment relative to the size of the global economy. If the dollar depreciated by 40% in a short amount of time—one of the scenarios considered in the paper—there would likely be shifts in some of the underlying parameters of the model. These potential nonlinearities may be difficult (if not impossible) to include in the model, but it would be helpful to have a discussion of how they might occur and how they would affect the central results.

To be fair, one of the strengths of Obstfeld-Rogoff is the simplicity in the model. Moreover, a number of other papers in this volume have focused on asset market effects of an adjustment to the U.S. current account deficit, while Obstfeld-Rogoff introduces a number of points not made in the other papers. Incorporating many of the points discussed above would undoubtedly complicate the model and estimation. Nonetheless, it would be useful for the authors to briefly discuss how each of these factors might affect the central results and implications of the paper.

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<sup>4</sup> Source: Treasury International Capital (TIC) flow data. The actual value of purchases of U.S. assets by official institutions is likely larger than the reported figure, since purchases by official institutions through private institutions are not classified as “official” purchases.

#### IV. Are the Conclusions Overstated?

When Obstfeld-Rogoff presented the earliest version of this paper, the U.S. current account deficit had just reached 3.7% of GDP in 1999. Many people thought their estimates of the forthcoming dollar depreciation were too large and unrealistic. Since then, the dollar has depreciated by 7% against a broad basket of currencies (according to the broad dollar index calculated by the Federal Reserve Board), but the U.S. current account deficit increased to 5.7% in 2004. U.S. net external debt levels have also increased sharply. The current version of the paper predicts an even greater depreciation of the dollar will occur when the U.S. current account deficit declines. Are these predictions overstated?

The top of Table 1 summarizes the estimates from Obstfeld-Rogoff's tables of the real dollar depreciation that would occur if the U.S. current account deficit shrank from 5% of GDP to zero under a variety of assumptions.<sup>5</sup> The right side of the table also includes the comparable estimates from Obstfeld-Rogoff's model under the more realistic assumption of 50% pass-through (instead of full pass-through). This summary shows that Obstfeld-Rogoff focuses on scenarios in which the dollar falls between 12% and 35% in the case of full pass-through, or between 23% and 71% in the case of 50% pass-through (which may even be conservative).<sup>6</sup> These estimates of a large future depreciation of the dollar are bound to cause alarm.

#### [Insert Table 1]

A number of the parameters in Obstfeld-Rogoff are difficult to estimate precisely, and it is obviously possible to use different estimates of these parameters to attain larger or smaller estimates of the expected dollar depreciation. Obstfeld-Rogoff uses reasonable estimates (to the best of my knowledge). The one key assumption which I believe is problematic, however, is that each result is based on the U.S. current account moving to balance. Although the U.S. current account deficit will need to fall in the future in order for U.S. net external debt levels to stabilize, there is no reason that the U.S. current account deficit needs to fall to 0% of GDP. Instead, sustained growth in the United States close to potential would allow the United States to have moderate current account deficits (albeit smaller than today) for an extended period of time.

More specifically, a simple back-of-the-envelope calculation suggests that the United States does not need to reduce its current account deficit to zero in order to have sustainable debt dynamics. Assume that several variables are defined such that:

$N$  is the nominal value of U.S. net foreign liabilities;

$Y$  is nominal GNP;

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<sup>5</sup> It focuses on the range of parameters used for the analyses throughout the paper, with  $\theta=1$  or 2 and  $\eta=2$  or 3.

<sup>6</sup> The smallest estimates are from the simulation assuming a 20% rise in home tradables output, with  $\theta=2$  and  $\eta=3$ ; the largest estimates are from the simulation assuming a permanent rise in military spending with  $\theta=1$  and  $\eta=2$ .

$g$  is the percentage growth of nominal GNP;  
 $C$  is the nominal U.S. current account deficit;  
 $c = C/Y$  is the current account deficit as a % of GDP; and  
 $n = N/Y$  is the U.S. debt to GNP ratio.

Then U.S. external debt will stabilize if  $ng=c$ .<sup>7</sup> If  $ng < c$ , then the U.S. external debt to GNP ratio is rising, and vice versa. Using this simple framework, assume that the United States has real annual GNP growth of 3% and inflation of 2%, so that nominal GNP growth is 5%. Then if the U.S. current account deficit fell to 2.5% of GNP, U.S. net foreign liabilities would stabilize at 50% of GNP—a ratio which appears to be manageable for developed economies. If the U.S. current account deficit fell to 2.0% of GNP, U.S. net foreign liabilities would stabilize at 40% of GNP. If the U.S. current account deficit fell to only 3% of GNP, U.S. net foreign liabilities would stabilize at 60% of GNP. Although it is difficult to know exactly what ratio of net foreign liabilities is “safe”, a ratio of 50% of GNP should be manageable for a developed economy such as the United States that borrows largely in its own currency.

Using the conservative estimate that U.S. net foreign liabilities stabilize at 50% of GNP implies that the U.S. current account deficit would only need to fall from 5.0% (the starting point of the simulations in the paper) to 2.5% of GNP—instead of to 0% of GNP. Assuming that the Obstfeld-Rogoff estimates are roughly linear, the estimated exchange rate depreciations would therefore be only half of the reported estimates. In other words, Obstfeld-Rogoff’s simulations suggest that the dollar would only depreciate by 6%–18% (instead of 12%–35%) assuming full pass-through, or by 12%–35% (instead of 23%–71%) assuming 50% pass-through. Or, if U.S. net foreign liabilities stabilized at 40% of GNP, the dollar would only depreciate by 7%–21% assuming full pass-through, or by 14%–42% assuming 50% pass-through. These results are summarized at the bottom of Table 1, and although these results still imply a substantial depreciation of the dollar, the magnitude is less alarming.

Adding fuel to the fire, Obstfeld-Rogoff does not simply end with these predictions of a large dollar depreciation that would occur if the U.S. current account deficit moves to balance. Instead, the paper closes by speculating if the predicted depreciation will occur in a period similar to the mid-1970’s or the 1980’s. In the mid-1970’s, the dollar depreciation occurred in conjunction with the breakup of Bretton Woods and a period of high inflation and lower real growth. In contrast, the dollar adjustment in the 1980’s was fairly gradual and occurred during a period of fairly strong growth and moderate inflation. In the abstract, the paper states: “Whereas the dollar’s decline may be benign as in the 1980s, we argue that the current conjuncture more closely parallels the 1970s, when the Bretton Woods system collapsed.”

Although Obstfeld-Rogoff raises the important point that the unwinding of large current account deficits can be benign or disruptive, the short verbal discussion of the 1970’s,

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<sup>7</sup> This framework ignores changes in asset valuations due to capital gains and losses on existing holdings. This exercise is similar to that in Mussa (2005).

1980's, and current period does not make a strong case that the current episode more closely resembles the 1970's than the 1980's. Obstfeld-Rogoff just quickly cites a few reasons why the current situation may be closer to the 1970's: loose fiscal policy, soft monetary policy, open-ended security costs, twin deficits, and high energy prices. A closer look at the data, however, suggests that this quick comparison may be overstated.

Table 2 examines the statistics mentioned by Obstfeld-Rogoff, as well as other factors that will determine the impact of a current account adjustment on the U.S. economy. It focuses on the year in which the current account deficit reached its peak in each decade. In the 1970's, the peak current account deficit was only 0.7% of GDP (in 1977)—much smaller than the peak 1980's deficit of 3.4% of GDP (in 1987) and 5.7% of GDP in 2004. Moreover, the U.S. budget deficit (as a percent of GDP) in 1977 was only about half the size of in 1987 and 2004. Although inflation picked up slightly in 2004, it is still well below the level in 1977 and closer to the level in 1987. Military spending as a percent of GDP is actually lower today than in 1977 and 1987. The strongest similarity between 2004 and 1977 is the sharp rise in oil prices. Moreover, several of the variables listed at the bottom of Table 2 (and not discussed in Obstfeld-Rogoff) indicate that any adjustment of the U.S. current account deficit could be smoother—instead of more disruptive—than in the past, such as the higher share of trade to GDP and the stronger rate of global GDP growth.

**[Insert Table 2]**

Therefore, although the current episode does have some similarities with the 1970's—especially the increase in oil prices—it has even more similarities with the 1980's. The current episode also has unique characteristics not previously experienced in the United States, such as the size of the current account deficit and U.S. net foreign liabilities. Therefore, although it is useful to examine history and attempt to draw lessons from the past, this brief discussion suggesting that an adjustment of today's current account deficit will be closer to the disruptive 1970's than the benign 1980's is not very illuminating. It is possible that the authors have examined this question more closely elsewhere, but any such analysis is lacking in this paper. The short statistical summary in Table 2 suggests a more thorough case should be developed in order to claim that “the current conjuncture more closely parallels the 1970s, when the Bretton Woods system collapsed.”

Since the rest of Obstfeld-Rogoff is a carefully written, precise paper, this final section of the paper is not a worthy ending of an otherwise insightful paper. Although Dickens and the Victorian authors that used serial publishing may have believed that crises and catastrophes were necessary to keep the public reading, Obstfeld-Rogoff does not need to follow this approach. This paper is perceptive and informative, and even if there is not a disruptive ending to the U.S. current account deficit, we will keep reading the various installments and updates of this analysis.

## References

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**Table 1:**  
**Real Dollar Depreciation Under Various Assumptions**

	<b>Full pass-through</b>		<b>50% pass-through</b>	
	<u><math>\theta=2, \eta=3</math></u>	<u><math>\theta=1, \eta=2</math></u>	<u><math>\theta=2, \eta=3</math></u>	<u><math>\theta=1, \eta=2</math></u>
<b>Base case from Obstfeld-Rogoff: current account falls to 0</b>				
Outputs constant	14.4	32.3	28.8	64.6
20% rise in U.S. tradables output	11.5	24.0	23.0	48.0
Allowing exchange rate to revalue NFA	13.3	27.3	26.6	54.6
Permanent rise in military spending	15.7	35.3	31.4	70.6
<i>Range</i>	<i>11.5</i>	<i>35.3</i>	<i>23.0</i>	<i>70.6</i>
<b>Range if current account falls to:</b>				
2.0% of GNP	6.9	21.2	13.8	42.4
2.5% of GNP	5.8	17.7	11.5	35.3
3.0% of GNP	4.6	14.1	9.2	28.2

**Table 2:  
Historical Comparison of the U.S. Economy During Peak Current  
Account Deficits**

<b>Variable</b>	<b>Year of Peak Current Account Deficit</b>		
	<b>1977</b>	<b>1987</b>	<b>2004</b>
Current Account Balance (% of GDP)	-0.7%	-3.4%	-5.7%
Fiscal Balance (% of GDP) <sup>(1)</sup>	-2.2%	-4.3%	-4.3%
CPI Inflation	6.5%	3.6%	2.7%
Military Spending (% of GDP) <sup>(2)</sup>	4.7%	5.8%	3.7%
Real Change in Oil Prices <sup>(3)</sup>	62%	-25%	37%
Total Trade (% of GDP) <sup>(4)</sup>	16.8%	18.4%	25.2%
Global Real GDP growth	4.4%	4.0%	5.1%

*Notes:*

*(1) Consolidated government balance on receipts and expenditures.*

*(2) Federal government outlays (on-budget and off-budget) for national defense.*

*(3) Cumulative real change in oil prices over the past 3-year years. Spot oil price for West Texas Intermediate, deflated by the CPI-U Energy.*

*(4) Current value of imports and exports divided by current GDP.*