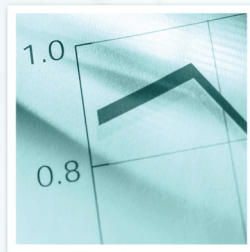


THE LIMITS OF FISCAL POLICY IN CURRENT ACCOUNT ADJUSTMENT

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DEPARTMENT OF THE TREASURY • OFFICE OF INTERNATIONAL AFFAIRS

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"To those who argue that it is up to others to act or to act first, I would say, 'Be careful what you wish for.' A disorderly adjustment of global imbalances could be produced not only by inaction, but by unbalanced actions. For example, substantial fiscal adjustment in the United States, in the absence of measures to increase demand in other countries, could reduce global demand in the same way as a fall in private consumption in the U.S. would."

Rodrigo de Rato Figaredo
April 4, 2006

FISCAL POLICY AND CURRENT ACCOUNT ADJUSTMENT

Fiscal expansion during the economic downturn of 2001 aided accommodative monetary policy in averting a downward deflationary spiral in output and in returning economic growth and employment to trend. However, in an environment of full employment and strong economic growth, large fiscal deficits are an unwelcome drag on long-term U.S. growth prospects. For that reason, the United States Government has committed to cut the U.S. fiscal deficit in half, to levels that are below historical norms. Yet, the emergence of more recent fiscal deficits against the backdrop of already large and persistently growing U.S. current account deficits has reignited a debate over the possible effects of fiscal policy on the current account balance.

Some notable economists and foreign policymakers have advocated that the United States pursue fiscal consolidation as a means to rein in the U.S. current account deficit. While the United States Government does not have a target for the current account balance, informed economic policy should include an understanding of the potential effects of fiscal policy on U.S. external accounts. This report reviews the current state of knowledge about the relationship between fiscal policy and external balances, and examines the likely consequences of a change in U.S. fiscal policy on the U.S. current account balance and on economic growth.

The primary conclusions of this report are that, while domestic economic policy considerations favor cutting the budget deficit, fiscal policy is a poor and potentially costly tool with which to cut external deficits. There are still questions over



how large an effect fiscal policy has on the current account balance. Even studies that have found a strong link between fiscal policy and the external balance suggest that an unrealistically large fiscal shift would be necessary to reduce the U.S. current account deficit to what some have suggested would be more sustainable levels. Yet, the cost of fiscal consolidation on that order of magnitude would be high for both the U.S. and foreign economies. Hence, while the U.S. government remains committed to cutting the fiscal deficit in half by 2009, it is important to emphasize that reducing global imbalances is a shared responsibility of both current account surplus and deficit countries.

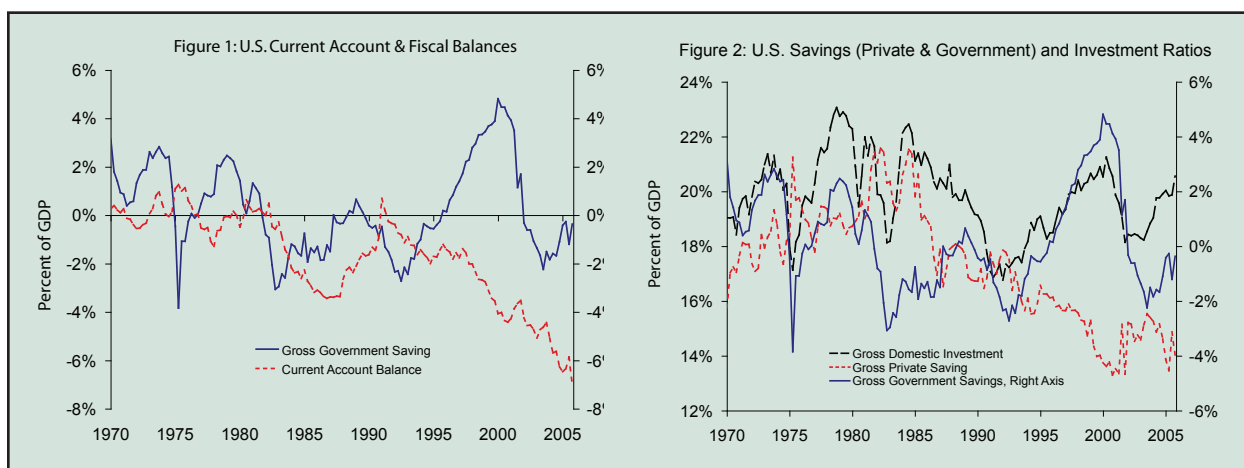
FISCAL AND CURRENT ACCOUNT BALANCES LINKED BY ACCOUNTING

Fiscal policy and current account balances are linked by an accounting identity that expresses the latter as the difference between national savings and national investment. National savings can be decomposed into private savings and government savings (or, in the case of a fiscal deficit, dissavings). Thus, if private savings and national investment do not change, an increase in the fiscal deficit necessarily implies an equal sized drop in the current account balance. However, this is

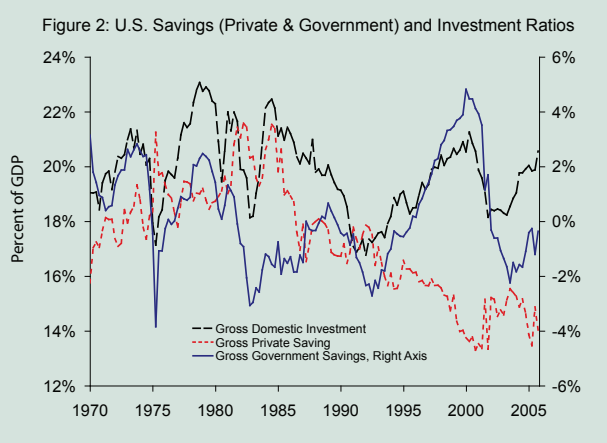
an *ex post* accounting identity, not necessarily an *ex ante* causal relationship. Private savings and investment are unlikely to remain constant as fiscal policy adjusts. Even the assumption that fiscal policy is exogenous is questionable.

CASUAL LINK IN QUESTION

An unresolved and lively academic debate continues over if and how shifts in fiscal policy interact with changes in private savings and investment behavior. If current fiscal deficits are expected to be repaid at a later date with higher future taxes, individuals may increase current savings to pay for the anticipated future taxes, so called Ricardian Equivalence.¹ Or, if higher fiscal deficits raise domestic interest rates, private savings may rise as the opportunity cost of current consumption in terms of future consumption increases, and investment may decline due to higher borrowing costs. Conversely, some posit that the causal link between increased deficit spending and a larger current account deficit is the stimulus of consumption and investment that raises domestic interest rates, consequently attracting greater foreign savings. An independent central bank further complicates the picture, as monetary policy would likely act to offset any expansionary or contractionary effects of changes in the fiscal stance.



Source: Haver Analytics

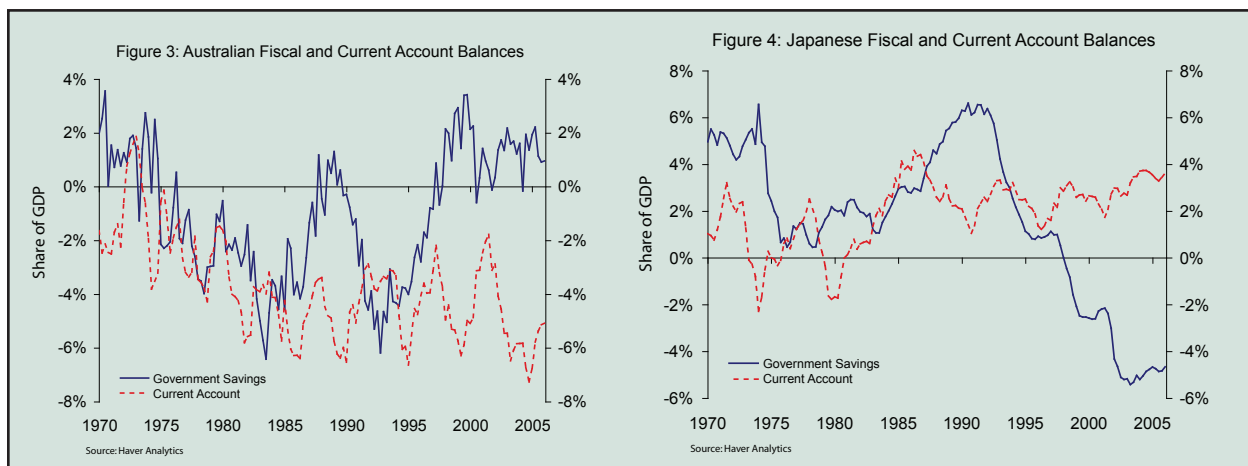


¹Strict Ricardian Equivalence would imply a complete offset of government dissavings by increased private savings, but the assumptions needed are unrealistic. See Barro (1974).



A cursory glance at the U.S. experience and at the global pattern of fiscal and current account balances illustrates the difficulties in determining the effects of fiscal policy on external accounts. Figure 1 plots government savings alongside the current account balance, each relative to GDP, since 1970. There is no obvious correspondence between the current account and fiscal balances, confirmed by a correlation coefficient of -0.08 . Figure 2 illustrates, as shares of GDP, the evolution of investment and private and government savings over the same period. The offsetting movements of the former two series against the last are clearly

deterioration of 11% of GDP from mid 1991 to mid 2003 occurred against the backdrop of a 1% of GDP improvement in Japan's external surplus. Looking across 13 OECD countries, Table 1 reveals that there is actually a negative relationship between the five-year averages of fiscal and current account balances. A more systematic analysis of this group of countries' fiscal and current account balances through time suggests no statistically significant relationship between the two balances.³



apparent. The respective correlations of private savings and investment with government savings are -0.61 and $+0.42$.

Nor is the U.S. case unique.² Figures 3 and 4 plot government savings and current account balance ratios for, respectively, Australia and Japan. In Australia, large swings in the fiscal balance from surplus to deficit and back have had little to no discernable impact on the current account balance. Strikingly, the 9.5 percentage point improvement in Australian government savings from end 1992 to end 1999 was associated with, if anything, a worsening of the current account gap. Japan presents the mirror image. A fiscal

The recent experience of the U.S. economy well illustrates the complex interplay between fiscal balances, private savings, investment and the current account balance. Over the course of the 1990s, the consolidated fiscal position of the United States (government savings) improved by 4.5% of GDP, while the U.S. current account balance deteriorated by 5.1% of GDP. An unexpected rise in productivity growth raised the returns to capital on investment and both realized and expected household incomes. As a result, consumption and investment surged, and private savings plummeted. Rising incomes and firm profits filled government coffers, raising government savings. However, the increase in govern-

²The OECD (2004) finds evidence that U.S. private savings is less negatively correlated with government savings than in other OECD economies.

³ Measured as the unconditional covariance based on a panel regression of quarterly changes in the current account balances of the countries listed in Table 1 on changes in their respective fiscal balances from 1986 Q2 to 2005 Q3.



ment savings fell far short of the combined fall in private savings and rise in investment, widening the current account gap.

Similarly, despite a large fiscal easing from end 2000 to late 2003, the current account deficit remained almost unchanged. A large decline in household wealth as a result of the bursting of an equity price bubble caused a rebound in private savings and a resultant fall in consumption and investment. Income and firm profits fell, leading to a sizeable drop in tax revenues. Active fiscal policy, in the form of tax cuts, to support growth amid fears of a deflationary spiral in economic activity contributed to a further reduction in government savings. However, the sharp drop in investment and rise in private savings almost fully offset the fiscal deterioration. Since end 2003, the 1990s pattern has returned with gradual fiscal consolidation more than fully offset by surging investment and falling private savings, again due in part to surging productivity growth.

ESTIMATED EFFECTS OF FISCAL POLICY ON CURRENT ACCOUNTS ARE SMALL

While these examples help to illustrate the difficulties in extracting causality, a structured analytical framework is necessary to attempt to gauge the effects of an exogenous shift in fiscal policy. Recent studies have used advanced theoretical models to assess causality and to quantify the effects of shifts in fiscal policy on savings, investment, output and the current account balance (see Table 2).

An analysis by economists at the Federal Reserve Board, Erceg et alia (2005), estimates that a 1% of GDP decrease in U.S. fiscal expenditure shaves, at most, 0.2% of GDP from the U.S. current account deficit. The analysis suggests that a 1% of GDP tax hike induces a current account response of a little more than 0.1% of GDP. In both cases, the increase in government savings lowers real interest rates, which depresses private savings and raises investment. The model is able to generate larger effects – an increased pass through to the current account of 0.5 – but only with implausible assumptions about the reaction of trade to changes in prices. Otherwise, the model's estimated effects on the current account of shifts in fiscal policy are remarkably stable to a variety of robustness checks. Importantly, the fiscal contraction is not without significant cost. In the baseline model the 1% of GDP decrease in government expenditure cuts domestic output by about 1.5% im-

(Table 1) Average Fiscal and Current Account Balances, 2001-2005

	Fiscal Balance	Current Account Balance
Australia	1.2%	-5.0%
Austria	0.9%	-0.5%
Canada	1.1%	1.9%
Finland	3.6%	5.5%
France	-2.2%	0.2%
Germany	-2.6%	2.5%
Ireland	3.3%	-0.8%
Japan	-4.5%	3.0%
Netherlands	-0.4%	3.4%
New Zealand	6.2%	-5.4%
Sweden	1.6%	6.5%
United Kingdom	-0.7%	-1.8%
United States	-2.4%	-5.1%
Correlation:	-0.15	

Source: OECD



mediately and by roughly 0.5 percent over two to three years. A labor tax increase of 1% of GDP produces a smaller 0.8% drop in output initially, but has equivalent costs over two-to-three years.

modest current account improvement shaves an average of 0.2 of a percentage point per year off economic growth over the five years. Growth in the rest of the world actually increases as the rise

(Table 2) Effects of Fiscal Policy on Current Account, Selected Studies

	Fiscal Adjustment	Current Account Adjustment	U.S. GDP Effect
Erceg et alia*	-1% (expenditures)	+0.2%	-1.5%
Erceg et alia*	+1% (revenue)	+0.1%	-0.8%
Brook et alia †	+1%	+0.2%	-4.5%
IMF ‡	+1%	+0.44%	-0.2%

* Peak effect, which takes place within the first five years under both scenarios.

† Effects over six years. ‡ Five-year annual average effect.

A study by researchers at the OECD, Brook et alia (2004), finds a slightly stronger effect of a U.S. fiscal consolidation on the current account. A 1% of GDP decrease in the U.S. fiscal deficit reduces the current account deficit by 0.3% of GDP. The OECD study assumes that the fiscal balance improves by 6% of GDP over a six-year period through both tax increases and expenditure cuts, resulting in a budget surplus and a 2% of GDP reduction in the current account deficit. Yet, again, the fiscal contraction imposes a significant cost. Relative to the baseline, output in the United States declines by 4.5% over the period and personal disposable income falls by 10%. The OECD study also analyzes the effects of U.S. fiscal contraction on other economies. The 6% of GDP fiscal adjustment in the United States lowers output in Japan by 2% and in the euro area by 0.4%.

An International Monetary Fund (IMF) study suggests more positive effects from a rise in government savings.⁴ The IMF model predicts that a permanent, revenue-based 1% of GDP increase in government savings improves the current account balance by 0.44% of GDP, on average, over the subsequent five years. In the IMF model, this

in U.S. savings lowers foreign real interest rates, and under an assumption of perfect capital mobility, spurs investment and consumption abroad. The IMF model, however, is not robust to the relaxation of some questionable assumptions in its baseline form. For instance, if the baseline assumption of

perfect capital mobility is removed, the estimated effect of fiscal consolidation on the current account balance drops to just 0.14%, as private savings falls and investment rises by more than in the baseline model due to lower U.S. domestic interest rates (exactly as occurs in the Erceg et alia (2005) model).

Available empirical evidence also displays a range of estimates for the effects of fiscal policy on current account balances, but tends to favor the lower-end estimates. Another Federal Reserve study, by Gruber and Kamin (2005), uses a panel of 61 countries over a 21-year period. They find that, after controlling for other variables that affect savings and investment, a 1% of GDP increase in government savings yields about a 0.09% of GDP improvement in the current account balance. Chinn and Prasad (2003), using similar methods but a data set including 18 industrial and 71 developing countries spanning 25 years, report that a 1% of GDP increase in government savings raises the current account balance by as much as 0.38% when all countries are included, but just 0.13% when only industrialized countries are included in the sample.

⁴International Monetary Fund, 2005 U.S. Article IV Report, Selected Issues, Chapter V.



Applying the findings of these models to the current situation is illuminating. In 2005, the U.S. current account deficit was almost 6.5% of GDP and the nominal value of U.S. GDP was about \$12.5 trillion. Some analysts have suggested that the United States could sustain a current account deficit of 2% of GDP. Suppose that the U.S. government chose to use fiscal policy to target a 2% of GDP current account deficit. At one extreme, the Federal Reserve's modeling would suggest (roughly) spending cuts of 22.5% of GDP would be necessary, at a one-year cost of \$4.2 trillion in lost output (34% of current GDP). Or, income taxes would have to be raised by 37.5% of GDP at an estimated one-year cost of \$3.7 trillion in lost output (30% of the current total). At the other extreme, the IMF's model would suggest that tax hikes of only 10.2% of GDP would be necessary, and that the five-year output loss would be a less-severe \$1.3 trillion, or 10% of current GDP.⁵

CONCLUSIONS

The relationship between fiscal policy and the current account still stirs vigorous debate among both policymakers and economists. The debate reflects continued uncertainty over the causal links between the two macroeconomic variables. Despite that uncertainty, the debate has produced some meaningful insights for policymakers. First, even the most favorable models and empirical evidence suggest that only unrealistically large adjustments in fiscal expenditure and/or revenue policies would have a noticeable effect on the U.S. current account deficit. Second, the necessary fiscal adjustment would come at a high economic cost to both the U.S. economy and the world economy.

Fiscal policy is first and foremost a tool of domestic economic policy, and a powerful one at that. The recent fiscal expansion, following a sharp drop in net household wealth and during a pe-

riod when some worried about a potential deflationary output spiral, assisted accommodative monetary policy in returning the U.S. economy to potential growth with full employment. As the U.S. economy has recovered, consolidation has been gradually implemented. Further fiscal policy tightening represents prudent domestic economic policy in the context of a strong economy at full employment. These policies have not only supported the U.S. economy, but have helped to raise economic growth in other economies with weaker domestic demand.

The United States Government shares the concerns of its foreign counterparts over the increasing size of global external imbalances, but believes that adjustment of global imbalances is a shared responsibility of both current account surplus and deficit economies. Available theoretical and empirical evidence suggests that continued fiscal consolidation in the United States is likely to have a positive, but marginal impact on the U.S. current account balance. However, the evidence also makes clear that fiscal policy is a poor tool to address external imbalances, and a tool with high economic costs. The present historically high current account deficit is likely to adjust in a benign manner, as did the current account deficits of the late 1980s, with domestic demand slowing relative to output in the United States and rising relative to output in foreign economies. That adjustment would be aided by policies in other countries that encourage greater investment and consumption. Whatever the adjustment mechanism, flexible institutions and labor and capital markets will help to minimize any economic and financial market dislocations, and thus, social costs. Fortunately, policies that improve labor and capital market flexibility also are likely to facilitate more rapid domestic demand growth and the eventual benign adjustment of current account imbalances.

⁵ These theoretical models involve log-linearized approximations of optimal reaction functions around equilibrium values, and are thus not intended to analyze large policy shifts of the order considered in this thought experiment. However, the clear implication of these models is that "normal" changes in fiscal policy will not generate significant changes in the current account balance. The large, and potentially destabilizing fiscal adjustments discussed here indeed may have greater effectiveness in addressing current account balances than these models would imply, but they are also likely to come at far greater economic costs than these models would suggest.



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