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Current Accounts and Global Adjustment: The Long and Short of It

by Manoj Pradhan and Alan M. Taylor, Morgan Stanley

For the official statisticians charged with coming up with them, current accounts are notable mainly for the routine challenges that arise when estimating a country's net payments balance on international trade, income, and transfers. But when viewed as measures of the difference between a nation's income and expenditure—or, equivalently, the difference between saving and investment¹—the same current accounts become indicators of whether countries are “living within their means.” And if large or persistent enough, such account balances are capable of grabbing headlines and vexing high-profile investors, economists, and policymakers.

Economists have a more neutral, or less value-charged, way of describing such saving-investment imbalances—namely, as the reflection of “intertemporal” choices. For example, countries that are experiencing medium-term growth spurts may run current account deficits whereby their borrowing from the rest of the world will be used to fund promising investments, public or private, the returns from which can service the debt in future periods. Or countries with temporary adverse shocks to income may borrow from abroad (or deplete their foreign assets) to smooth their consumption, public or private. In another vein, countries concerned about shocks to output or exports, access to financing, capital flight, or speculative attacks on the currency may make a policy decision to run current account surpluses in order to build a precautionary stockpile of savings.

Thus, rather than focusing on the basic definition of current account imbalances as the difference between international payments for goods, services, and income, we start from the position that we can gain greater insight by looking at such imbalances as the reflection of inter-temporal private decisions or policy choices. The savings-investment imbalance can then be seen as the result of more fundamental “drivers” like household, corporate, and government saving preferences, and the extent and promise of a country's investment opportunities. In the pages that follow, we reflect on the lessons from nearly 150 years of current account history to understand today's global imbalances.

To offer a brief overview of our findings, history suggests that current account deficits built up when investment accelerated relative to savings during periods of rapid growth. Such deficits then gradually declined or reversed as economies matured and

emerged from such boom periods. Further, depending on the international monetary and financial regime in place at the time, capital flowed rapidly or hesitantly in search of better returns to countries where investment was surging. In some cases, when imbalances built up to unsustainable levels, the crises that followed resulted in dramatic, though often temporary, reversals of global imbalances, as stretched borrowers curtailed investment and leery savers hoarded capital. However, in general, any lasting tempering of current account imbalances has happened only with structural change in the savings-investment equation. Such reversals are in general much less painful (in terms of lower economic growth) for the erstwhile CA surplus economies than for the CA deficit economies.

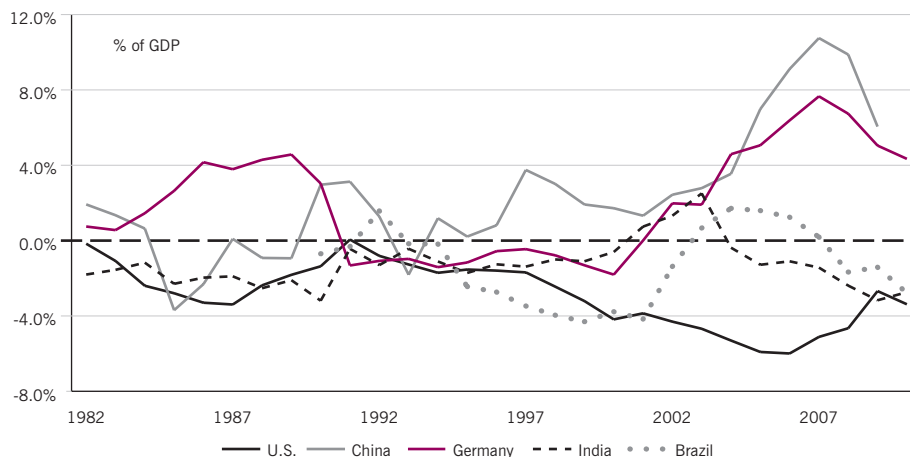
The striking parallel is that these patterns are already evident again in the aftermath of the recent global financial crisis. Indeed, turning to current evidence, signs of adjustment are coming from the U.S. consumer in the form of higher savings and, on the other side of the global equation, as the authorities in China grasp the need to move toward a more consumption-led model. Higher U.S. savings have already helped narrow the current account deficit, while surpluses in China and even Germany have started to shrink as well (see Figure 1).

As always, however, the broader group of EM economies refuse to be painted by the same brush. While the overall trend has been for CABs in the EM world to moderate, the split between countries running deficits and surpluses is quite even (see Figure 2). Asian economies (with the notable exceptions of India and Japan) have run persistent current account surpluses, but these have recently moderated. Latin American economies, by contrast, have fluctuated between running surpluses and deficits, though the latest data show deficits in most countries (besides Argentina). The picture in CEEMEA (Central/Eastern Europe, Middle East, North Africa) economies is quite mixed, with some countries running deficits and others running surpluses.

The Origins and Functions of Current Account Imbalances

Are recent patterns of CA imbalances a matter of concern? Should we welcome the start of a reversal process? To begin to answer these questions we need to ask why CABs arise in the first place and what, if any, concerns they raise.

Figure 1 **Current Accounts Show Rebalancing Underway**



Sources: Alan M. Taylor (2002), "A Century of Current Account Dynamics," *Journal of International Money and Finance* 21(6): 725-748. Óscar Jordà, Moritz Schularick, and Alan M. Taylor (2010), "Financial Crises, Credit Booms, and External Imbalances: 140 Years of Lessons," NBER Working Papers 16567.

Figure 2 **Current Account Balance (% of GDP)**

Surplus	Latest	Ave Since 2000	Deficit	Latest	Ave Since 2000
Argentina	1.4	2.7	Brazil	-2.8	-0.8
Chile	1.5	0.9	Colombia	-2.9	-1.5
China	6.1	5.5	Cz. Rep.	-1.8	-3.4
Hong Kong	8.7	9.4	Hungary	0.7	-6.5
Indonesia	1.1	2.4	India	-3.9	-0.7
Israel	4.4	1.4	Mexico	-0.3	-1.3
Korea	4.1	1.9	Peru	-0.6	-0.7
Malaysia	8.0	13.1	Poland	-1.5	-3.4
Russia	5.6	9.2	Romania	-6.6	-7.3
Singapore	24.2	18.6	S. Africa	-2.5	-3.0
Taiwan	11.8	7.3	Turkey	-4.8	-3.4
Thailand	6.0	3.4			

Source: Haver

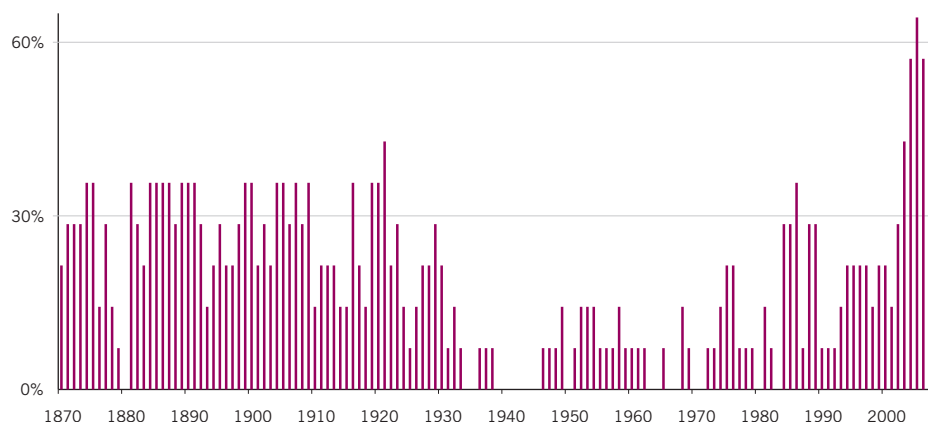
Current account imbalances by themselves are not necessarily a problem. The history of progress is synonymous with surges in growth that have catapulted economies to an advanced state. In many cases, investment opportunities exceeded domestic saving, and the gap showed up as a current account deficit that needed to be financed by borrowing from the rest of the world. Capital moves from countries where savings exceed investment opportunities to countries with high-return projects that need funding—hence, our earlier identification of CABs as reflections of the savings-investment gap.

Clearly, the re-routing of capital across borders to seek out good investment opportunities is an efficiency-enhancing

way to allocate resources. If this means that CABs in some countries will remain in deficit while those opportunities are present, while others remain in surplus, then current account imbalances need not be a reason for worry. In this sense, any policy of trying forcibly to constrain current accounts is potentially counterproductive because it prevents capital from flowing internationally to where it gets the highest return.

It is when current account deficits finance excessive consumption or highly risky investment, or when current account surpluses are due to excessively high savings that a medium-term problem arises. As always, the difficulty lies in defining "excessive," but most would agree that pre-crisis

Figure 3 A “4% Cap” Would Have Been Breached Most During the Gold Standard and After 1985



Sources: See Figure 1

consumption in the U.S. as well as savings in China could be defined as being excessively high. In both such cases, internal rebalancing in the form of a change in savings or investment spending is then likely to be needed to drive external rebalancing towards smaller current account imbalances.

Should We Cap Current Accounts?

To the extent that current accounts reflect imbalances elsewhere in the economy, restricting the size of the current account means that the underlying imbalance has to balance itself rather rapidly some other way. Capping the current account is then a bit like squeezing a tube of toothpaste with the cap still on. Unless you stop squeezing, either the tube splits or the cap blows off. Similarly, capping current accounts will mean that either savings have to rise rapidly relative to investment (so that consumption falls precipitously) in deficit countries (and that consumption must be raised in surplus countries), or the cap on the current account will simply be ignored.

One such “rule” limiting current account imbalances to 4% of GDP was an idea floating around the G20 summit in Fall 2010. Arguably, such a rule might have been proposed as a “trigger” value to focus the attention of the world on current account imbalances. But how would such a rule have performed in practice in the past? In other words, is the current experience of global imbalances really so different that we need to cap current accounts?

Looking over data for 15 countries (which are all developed countries now, but were not always so) since 1870, we find that a 4% rule would have been violated heavily over that time span. As can be seen in Figure 3, at least 10% of the countries in this sample were in violation almost every year (except during the era of near-financial autarky from

1940 to 1970). And, indeed, in many years the proportion of countries violating the rule was over 30%. In other words, the world has seen unbalanced current accounts many times in the past and, from that perspective at least, drastic measures like capping current accounts are not called for.

Why Have CA Imbalances Occurred Throughout History?

Fundamental causes lay behind these flows in the long run, including differences among countries in endowments and technologies, as well as in demographic trends. But also important have been the general decline in transport costs and the rise of global financial development and market integration, which have increased the possibility for efficiency gains from foreign investment as country growth patterns have accelerated and diverged.

There are many canonical examples of such real factors driving substantial capital flows in history, such as investment booms in the land-rich frontier economies in the late 19th century (for example, the U.S., Canada, Argentina, Australia), or in countries rich in natural resources (Norway in the 1970s). Government policy also matters, and the long rise and fall of capital flows during the last 100 years clearly reflects in part the shifting impact of capital controls at the global level. In what follows, we shall consider some of these examples in more detail.

If investment surges and subsequent maturing of economies were distributed randomly through history, what explains the preponderance of large current account imbalances in the early and late part of the sample in Figure 3? Clearly, the monetary regime has a lot to do with it. The gold standard and the post-1985 region saw the “4% rule” consistently violated by a large number of countries. Figure 4

Figure 4 **CABs Were Highest During the Gold Standard and in the Post-Bretton Woods Era (Mostly Post-1985)**

	Gold Standard	Inter-war Gold Exchange Standard	Bretton Woods	Post-Bretton Woods	All
%	1870-1913	1919-39	1946-73	1974-2008	1870-2008
Australia	-7.1	-3.6	-2.2	-4.2	-4.3
Canada	-7.7	-1.5	-1.8	-1.2	-3.0
Germany	1.8	-0.1	1.2	1.5	1.1
U.K.	4.5	1.3	0.2	-1.3	1.2
Japan	-0.1	-0.1	0.3	2.2	0.6
U.S.	-0.2	1.0	0.4	-2.2	-0.3
Average deficit	-3.2	-1.4	-1.6	-1.8	-1.4
Average surplus	2.1	0.7	0.7	2.7	1.1

Sources: See Figure 1

also shows that current accounts have been wider, and more persistent, during these more financially integrated eras when capital controls have been less restrictive in general.¹

These patterns show the interaction of capital flows with monetary regimes, depending on the choices countries make when confronting the classic macroeconomic policy “trilemma.” By this we mean that national policy makers can choose at most two, but not all three, of the following policy “goods”: (1) mobile capital; (2) fixed exchange rates; or (3) independent monetary policy. Thus, for example, the desire to have both fixed exchange rates and independent monetary policy during the Bretton Woods era explains the very low degree of capital movement in this period. At other times, different solutions to the trilemma—notably, the abandonment of fixed exchange rates after Bretton Woods—have accommodated large-scale flows.

The era of the gold standard, like the period since the mid-1980s, was a time of global integration, both in terms of trade and financial markets. Both regimes have provided a stable environment with very few restrictions on capital flows across borders. Nonetheless, both these periods have seen financial crises that have been global in nature and effects. For example, during the four-and-a-half decades that the gold standard flourished, capital flows slowed for a while after all three such global crises, but in each case they resumed their mobile ways after a few years.

The experience of the global financial crisis of the last few years has been a similar one. Since capital flows were and continue to be relatively unhindered, countries with excess savings (those with current account surpluses) have been able to finance the shortfall in savings in other countries (reflected

in their negative current account balances). The continuing large-scale cross-border flow of capital has meant that CA imbalances meaningfully different from zero have been able to stay in place for longer. This explains why so many violations of our hypothetical 4% rule have been seen during these two eras.

During the inter-war years of the gold exchange standard and the Bretton Woods era, however, capital flows were not plentiful and unhindered. The attempt at recreating the gold standard during the inter-war years was doomed from the start because countries entered the system with exchange rates that were already misaligned. The credibility of the system as a whole was suspect and its tenure wasn’t assured. One perceived advantage of the Bretton Woods era, on the other hand, was that it allowed capital controls to become a ubiquitous tool that kept capital flows from dictating what monetary policymakers could and could not do with domestic monetary policy. As a result, both regimes were associated with significantly lower international flows of capital—and this in turn meant that large CA balances could not be so easily sustained.

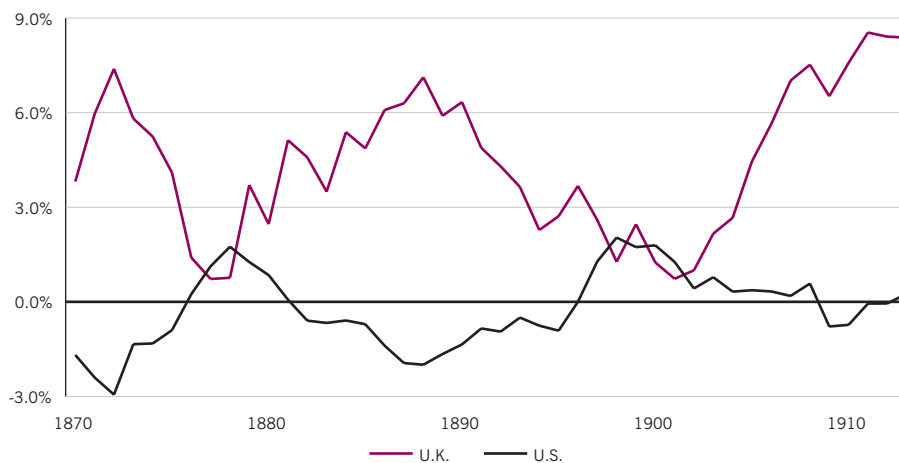
Can Large Imbalances Be Sustained?

Looking back at a number of now-advanced economies since 1870, it is immediately apparent that large current account surpluses and deficits can and have been sustained for long periods of time. In the early stages of development, settler economies—that is, the emerging markets of yesteryear—were able to sustain large current account deficits for significant periods of time, particularly when capital flowed rapidly across borders to finance rapid surges in investment.

As Figure 4 shows, the average current account surplus or

1. See Alan M. Taylor (2002), “A Century of Current Account Dynamics,” *Journal of International Money and Finance* 21(6): 725-748.

Figure 5 **The U.S. as an Emerging Market and the U.K. as the Major Provider of Savings**
Current Account Balance (% of GDP)



Sources: See Figure 1

deficit for individual countries—and even all 15 countries for which data are available—shows significant dispersion both over the last 150 years, and during many sub-periods therein. As always, period averages also mask wide fluctuations within a particular period. The Australian settler economy, for example, had a current account deficit in excess of 10% every year from 1881-1890, but had a balance close to zero from 1905-1911. Finally, we also see quite clearly that current imbalances were smaller during the inter-war period as well as the Bretton Woods era. Yet, it is the gold standard and the globalization during that era that provide the best match with the globalized economy in the post-Bretton Woods era that we are in now.

Will the recovery from the financial crisis and the Great Recession push current accounts back into balance? Some progress, as we saw earlier in Figure 1, has already been made on that front. But history suggests that this may be only a temporary phenomenon. Economic setbacks in the past have tended to temper current account imbalances as well, but capital flows typically then resumed and current accounts again moved into deficit or surplus as long as the economic causes for the savings-investment balance remained in place.

Perhaps the most effective way of learning from the past is to consider the experience from a relevant period of history. To this end, we pick an era that was as globalized as today's. The lessons from that first era of globalization are particularly relevant today and support the arguments we have made above.

Current Accounts During Globalization 1.0: 1870-1913

Economic historians instinctively reach for the era from 1870 to 1913 as a useful benchmark for trying to understand contemporary experience. In those distant years, the

world economy was going through what could be termed “Globalization 1.0.” The share of trade in world GDP exactly doubled from 11% in 1870 to 22% in 1913, tariffs and trade barriers were small or declining (with a few exceptions), transport costs fell dramatically, many countries were joining the gold standard system (which by 1914 covered 88% of countries, on a trade-weighted basis), and almost all countries embraced the free movement of capital and labor. As a result, large and growing capital flows emerged.

The major sources of these flows were the high-saving, financial-center countries of the old world—primarily Britain, but to a lesser extent France and Germany. The major recipients of these flows, imperial colonies aside, were the very high-income settler economies of the New World, including the U.S., Canada, Australia and New Zealand, and Argentina, Chile, and Uruguay. These countries had high labor costs, and they were also short of capital since their “endowment” took the form mainly of an abundance of resources (“empty” land but also minerals). Even with the high wages, the rich bounty of crops, ores, and metals in these regions, along with the other extractive activities that could be developed, ensured an extremely high return on investment.

During the gold standard era, the U.S. in many ways resembled an emerging market. It was a country initially dependent on foreign capital, and with significant country (or “political”) risk attributes, including a history of state defaults, a recent civil war, the “silver risk” of the anti-gold standard forces, the lack of a central bank, and an unstable financial system. Until it “graduated” from quasi-EM status to become the eventual financial hegemon, the U.S. went through many cycles of instability, with large swings in its current account stemming from structural and cyclical forces (see Figure 5).

The U.K. was overall a net lender during this period (with an average CA surplus amounting to 4.5% of GDP), thanks to its position as a richer, mature economy. With the main spur of its productivity, the Industrial Revolution, tapering off at the end of the century, the U.K.'s investment slowed down relative to its savings. The U.S., by contrast, was a net borrower (average CA deficit of -0.24%) during this period, in the midst of a growth acceleration driven by expanding resources endowments in the West and a surge in investment that outpaced growth in domestic savings.

During this era, both countries were also moving, though at different speeds, along a path to maturation, which meant fewer large and obvious investment opportunities as well as higher savings. By the end of the period, the U.S. itself was also shifting into near balance on the current account, or even a slight surplus. And, later, of course, the U.S. was to overtake the U.K. as the main net creditor and financial hegemon.

More generally, borrowing and lending took place in great waves, not just in the U.S. and U.K., but throughout the global economy as well, suggesting common shocks at work. In this era of strong international financial linkages, periods of overborrowing (and excessive or poor-quality investment) were punctuated by financial crises and global rebalancing in 1873, 1891, and 1907. Two of these emanated from the U.S., one from elsewhere.

- **The Crisis of 1873:** The crisis was sparked by a clash of domestic and global forces. Domestically, the end of the Civil War and opening up of the West created new investment opportunities, some of which were highly leveraged. Globally, the trend towards countries adopting the gold standard—particularly starting with Germany—meant a relative shortage of scarce gold as reserve demand increased (thanks to more countries joining, and money demand growing due to rising output) and the supply of gold remained inelastic. The famous example from this era is the U.S. transcontinental railroads. These proved to be vital later on, but their financial woes in the 1860s and 1870s were quite severe, thanks to the deflationary environment and the onset of a downturn induced by monetary forces.

- **The Baring Crisis of 1890:** The Baring crisis in Argentina soon led to a credit crunch in London that was felt around the world. Much of the global economy was just getting on its feet after the 1873 crisis, but in some boom regions (like Argentina but also Australia), there were bubble dynamics in place. A global recession began and credit tightened in the U.S. as a result. Coming on the heels of the deflationary trend that had run since the 1870s, this episode raised the greatest threat to U.S. adherence to the gold standard. The threat was barely averted by the fortuitous flood of liquidity from gold discoveries in South Africa and later the Klondike. A stroke of monetary policy luck turned around global financial conditions in the 1900s.

- **The Panic of 1907:** Soon thereafter, a massive investment boom under the new looser financial regime was

followed by the first great global financial crisis of the 20th century, the Panic of 1907. Though the specific trigger was a seemingly harmless failed attempt at a cornering the New York copper market, the cascade of defaults that stemmed from that scheme tainted almost all of the great New York banks and left the system on the brink of collapse until J. P. Morgan arranged a rescue. The political events that followed resulted in the creation of the Federal Reserve in 1913. The economic fallout was a credit crunch that slowed the U.S. economy for several years.

Current Accounts During Globalization 2.0: 1985 Onwards

Like Globalization 1.0, its ongoing successor has seen a dramatic surge in trade in goods and services—and in cross-border capital flows. Like its predecessor, Globalization 2.0 has a set of emerging markets that have been growing very quickly, acting as a magnet for the world's surplus capital.

The lowering of trade barriers through successive rounds of multilateral agreements after 1945 was complemented by the abandonment of capital controls starting in the 1970s following the collapse of the Bretton Woods regime. As goods and services have flowed in greater volumes across borders, so has capital. As in Globalization 1.0, current account imbalances have been sustained for long periods of time. To the extent that these imbalances were driven by excessive consumption in the U.S. and perhaps overinvestment in China, reversal was needed and has already begun.

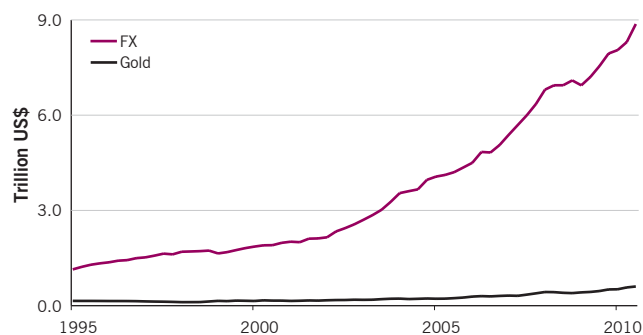
Unlike previous periods of history, however, the global economy has not stuck to a textbook classification of fast-growing, investment-heavy EM economies running current account deficits while richer, savings-rich DM countries run current account surpluses. In the last decade, the U.S. and China repudiated this textbook model all by themselves, with the former running a deficit and the latter a surplus. EM economies, though growing rapidly, have a mix of current account deficits and surpluses. These imbalances have persisted for a long period, but a moderate narrowing of CA balances is evident even here.

A key difference is that Globalization 2.0 has seen the accumulation of large quantities of FX reserves in many EM economies. The experience of the Asian economies during the crisis of the late 1990s and that of the EM world during the last crisis has served to highlight what might be called the “self-insurance” motive behind accumulating reserves. But why is this happening now?

Bucking the Historical EM-DM Relationship

Economic theory suggests that excess saving should flow to areas where risk-adjusted investment opportunities abound. Drawn by investment-led growth in the EM world, capital should flow “downhill” from the DM countries to fast-growing EM economies.

Figure 6 **Global FX and Gold Reserves**



Sources: Company data, Morgan Stanley Research

But if the trend for capital from DM economies to flow into EM economies has indeed prevailed at certain times, the story has refused to stay as simple and clear-cut as that. As with most economic “rules,” exceptions have sometimes appeared, and the exceptions during the last two decades have been far more widespread. The exceptions have taken two forms: first, EM economies have grown rapidly but some of the fastest growing ones have run current account surpluses rather than deficits; second, in aggregate, capital seems to have flowed “uphill” from EM economies to DM economies, rather than the other way around—a phenomenon referred to as the “Lucas paradox.”

Yet there may be a relatively straightforward explanation for why these seemingly contrarian capital flows have appeared. In the last 10 to 15 years, EM policymakers appear to have actively pursued a policy of accumulating FX reserves (see Figure 6) as part of a self-insurance policy. The objective has clearly been to build a “war chest” of funds that is large enough to fight off a speculative attack on the currency—or just to weather periodic shocks to the domestic economy and the more or less predictable reversal of portfolio flows that tend to accompany them. Although some countries experienced drops in reserves during the crisis, they proved more than adequate to ward off speculative pressures until markets became convinced that EM did not share the ills of the DM world.

That this strategy has succeeded is evidenced by the fact that even before the financial crisis the relevance of an institution like the IMF was in question (implying the possibility that EMs no longer needed such a backstop), and even more so by the post crisis experience wherein the EMs have so far avoided a severe recession, or any threat of a default, banking, or currency crisis (without any external assistance).

The policy of accumulating FX reserves amounts to a policy of generating public saving that will not be put to use in the domestic economy. The effective saving-investment balance in the economy thus has to be satisfied by saving *net of the accumulated reserves*. This in turn means that domestic investment outstrips available saving, and foreign private

capital inflows are required to bridge the shortfall. At an aggregate level for the country, however, the sum of public and private saving could well be larger than investment, which translates into a national current account surplus.

Public Saving and “Uphill” Flows

The policy of reserve accumulation also explains why aggregate capital flows have gone “uphill”—that is, from EM economies into DM economies. The objectives of reserve management have been to keep the capital invested in relatively safe and liquid assets, primarily in the form of fixed income securities in the G10 economies, especially U.S. government securities. At the same time, “downhill” flows—from DM to EM economies—have continued in the form of FDI and portfolio flows, which are market-based flows that move much more in accordance with economic theory. But, again, the challenge for DM policy makers is that these flows have been more than offset by the “uphill” policy-driven flows sent out from the EMs to accumulate reserves. Notable among these challenges is the task of preventing such inflows from overstimulating domestic investment or consumption.

Thus, the task of managing public savings and reserves in EM economies has undoubtedly been the single most important factor driving aggregate flows “uphill” in recent times. Country-level evidence on current accounts and FDI inflows shows that FDI flows into CA-surplus countries as well as CA deficit countries have now fallen from levels that prevailed before the Great Recession. More precisely, although such flows have revived in some places, they have stabilized at lower levels in others. In other words, the traditional global providers of long-term capital have continued to pursue investment opportunities regardless of whether they present themselves in countries with an abundance of saving (and hence current account surpluses) or in countries with a saving deficiency (and current account deficits).

Though there are differences between both periods of globalization, the broad similarities between the two eras are unmistakable, making the lessons from Globalization 1.0 particularly important today. We draw on this idea further as we next explore how imbalances eventually adjust.

The Dynamics of Current Account Adjustment

We have considered the determinants of current account equilibrium in the long run, and in particular the influences on national saving and investment that may explain the pattern of international capital flows. However, despite the well-documented tendency in the data for the current account to stabilize in the long run, current accounts can fluctuate and diverge significantly from these paths in the short run. History shows that many different causal factors may lead to such deviations:

- Shocks to (actual or perceived) investment opportuni-

ties at home or abroad that cause investment to flow in or out in response;

- Shocks to expenditure at home or abroad (such as temporary financing to cover a war or emergency);
- Shocks to policy that affect demand directly through expenditure or indirectly via the asset markets (exchange rates and/or interest rates);
- Shocks to external capital market access that reduce the gross inflow of capital and require an external adjustment to close a CA deficit;
- Shocks to confidence at home that lead to capital flight that increases the gross outflow of capital, leading similarly to a CA deficit.

All of these shocks are potentially reversible, of course, so that the impact on CA can go either way. A perceived investment opportunity might cause capital to rush in—but later “news” suggesting lower returns could trigger an exodus of capital. Similarly, “man-made” fluctuations can result from policy reversals.

In this way, CA dynamics can be subject to the same kind of boom-bust cycles as investment in a closed economy. The only difference is that because these flows of investment cross borders, they create links of interdependence between economies and raise issues of a political economy nature—including policy choices about capital controls and the monetary regime—that are absent in an autarkic world without cross-border capital flows.

Do Imbalances Matter?

In the past, some have argued that current accounts really should be paid little attention because current account adjustments can occur very smoothly without any necessary adjustments in exchange rates. One well-known version of this theory has become known among macroeconomists as Williamson’s “Immaculate Transfer.” Other economists have suggested that current accounts are not a worry as long as they are used to finance private investment or consumption decisions—a view now commonly referred to as “the Lawson Doctrine.”

The immaculate transfer theory falls short in a world where “imperfections” such as non-traded goods and limited substitutability among goods ensures that real exchange rates have to adjust in line with fundamentals to bring the current account into a new equilibrium. Indeed, the story holds true today: since 2003, we have seen EM currencies on a real appreciation trend against the United States, with momentum growing after China’s decision to allow its currency to rise.

The Lawson doctrine may appear to work for some resource booms, but it fails to convince given the recent bouts of overconsumption and poor-quality investment booms in assorted DM economies. Ignoring current accounts seems dangerous, but so does thinking of current accounts themselves as the cause or the solution of global imbalances. Rather, they are a good barometer

of underlying fundamentals that may need rebalancing.

Some time ago, many of these considerations might have been confined to a discussion of the trends and cycles in current accounts in the EM space. However, following the emergence of global imbalances and the boom-bust cycle in DM economies, our perspectives have changed. After the humbling crisis, the DM versus EM differences are not so clearcut. Now DM economies also have to grapple with issues of financial sector and sovereign fragility, and the question of current account sustainability looms larger. Thus the lessons from comparative economic research for how current accounts rebalance can be applied more broadly going forward.

Current Account Reversals in History

As with many other important macroeconomic phenomena, current account reversals can be thought of as “rare” events. For serious empirical analysis, this means that, especially given a small sample of countries like the DM subset, a look back over the very long sweep of history is needed to glean any meaningful and robust statistical patterns from a sufficiently large sample. To that end, we have examined DM current account reversals from 1870 to 2008, classifying them according to the direction and duration of the reversal process, as well as the observed patterns of adjustments in domestic consumption, investment, and output growth.

Figure 7 provides descriptive statistics for 81 CA reversals for our eight-country sample, which consists of 37 reversals of surpluses and 44 reversals of deficits. The evidence here buttresses the argument that deficit reversals are typically more painful than surplus reversals. A typical reversal lasted 4.2 years—and this was essentially the average case for deficits as well as surpluses—while the average annual growth rates of real GDP, investment, and consumption were 1.9%, 2.5%, and 1.5%, respectively, for the entire sample (and thus both kinds) of reversals.

But if there was little difference in the duration of deficit and surplus reversals, they differed markedly in terms of real outcomes. For surplus reversals, the average annual growth rates of real GDP and consumption were both 2.4%, and investment growth was a very robust 5.6%. In contrast, for deficit reversals, the average growth rates of real GDP and consumption were a much lower 1.5% and 1.0%, respectively, and investment growth actually turned negative (-0.6%). The very low real consumption growth and negative investment growth figures indicate that deficit reversals were accomplished by a sharp compression of private consumption or investment in contrast to surplus reversals, and no doubt the collapse of investment was also a key driver of the more sluggish growth response.

More Recent Evidence on Reversals

Although sudden current account deficit reversals were fairly common in the EM world during the period from the

Figure 7 **Current Account Reversals Over the Last Century and a Half**

CAB Reversals, 1870-2008										
	Absolute size of CAB reversals									
	CAB Reversals				Surplus Reversals			Deficit Reversals		
	Ave CAB	#	Reversal	T	#	Reversal	T	#	Reversal	T
UK	2.3%	10	6.0%	5.8	7	6.4%	5.6	3	4.9%	6.3
US	1.3%	7	4.1%	7.4	3	4.7%	6.7	4	3.7%	8.0
GER	1.7%	5	4.4%	4.0	4	3.9%	4.0	1	6.1%	4.0
FRA	2.1%	8	6.3%	3.5	5	5.6%	4.0	3	7.5%	2.7
AUS	4.5%	17	6.7%	2.1	1	9.5%	2.0	16	6.6%	2.1
JPN	0.9%	4	2.6%	3.0	3	2.4%	3.3	1	3.0%	2.0
CAN	3.7%	14	5.2%	3.9	3	6.2%	3.3	11	4.9%	4.0
NLD	4.1%	16	9.8%	3.7	11	9.1%	3.7	5	11.2%	3.6
TOTAL	2.6%	81	5.6%	4.2	37	6.0%	4.1	44	6.0%	4.1

CAB Reversals, 1870-2008										
	Real GDP, Investment & Cons growth rates during CAB reversals									
	CAB Reversals				Surplus Reversals			Deficit Reversals		
	Ave CAzB	GDP	C	I	GDP	C	I	GDP	C	I
UK	2.3%	1.7%	1.3%	2.9%	1.6%	1.4%	4.0%	1.9%	1.1%	0.1%
US	1.3%	1.8%	1.5%	1.0%	2.1%	1.2%	3.8%	1.6%	1.7%	-0.3%
GER	1.7%	1.0%	1.7%	2.3%	2.4%	2.6%	7.5%	-4.8%	-2.2%	-13.0%
FRA	2.1%	1.5%	-0.5%	0.9%	1.0%	-1.0%	-0.7%	2.4%	0.3%	4.2%
AUS	4.5%	0.9%	0.1%	1.7%	3.6%	6.2%	6.2%	0.8%	-0.5%	1.5%
JPN	0.9%	4.1%	4.1%	5.1%	3.2%	3.3%	4.7%	6.7%	6.6%	6.3%
CAN	3.7%	1.8%	1.5%	1.2%	3.2%	2.6%	13.6%	1.5%	1.1%	-2.2%
NLD	4.1%	2.1%	2.1%	4.5%	2.3%	3.1%	5.7%	1.8%	0.0%	1.1%
TOTAL	2.6%	1.9%	1.5%	2.5%	2.4%	2.4%	5.6%	1.5%	1.0%	-0.3%

Sources: See Figure 1

Notes: T = years, # = Number of Episodes.

1970s to the 1990s, current account deficits in the industrial economies have recently become the focus of considerable attention. Some common features of current account reversals stand out in both DM and EM economies,² and the effects of such reversals on an economy's macroeconomic trajectory have turned out to be profound: monetary and financial conditions tighten, the currency weakens, and real growth is significantly retarded. Some of these effects are noticeably more pronounced in large, but less-open economies where the desired adjustment size inevitably constitutes a larger fraction of the external trade flows.

Ironically, in the global rebalancing we face now, these findings are likely to be of more interest to DM observers than to the EM world. While the EM world does have a split of surplus and deficit nations, the sustainability of deficits in EM economies is likely to be much more assured than it has been in the past. Part of this is due to the accumulation of

“rainy day” reserves to backstop macroeconomic and financial policies in hard times.

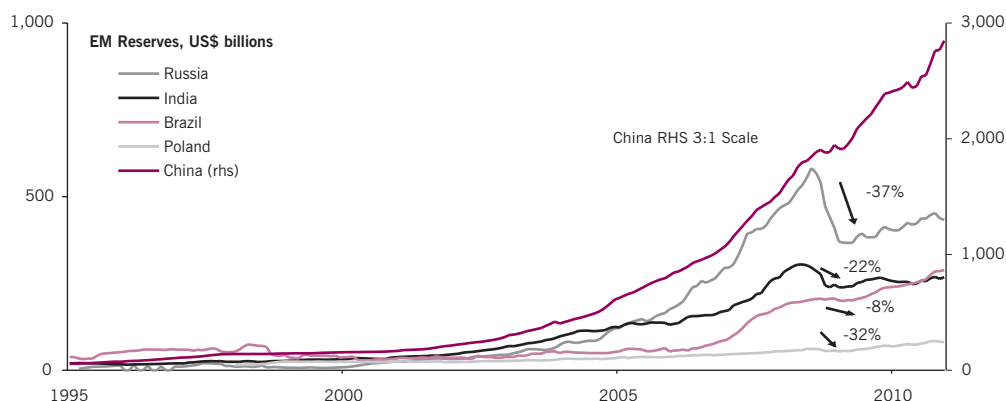
While current account surplus reversals appear to be a less pressing problem, the global current account balance must be in balance. Thus current account deficit reversals in some countries must perforce be accompanied by current account surplus reversals someplace else. Broaching this topic has triggered considerable resistance, with the surplus countries also arguing that this kind of reversal will be painful for them—that it could damage growth, especially in their cherished export sectors.

A recent IMF study of surplus reversals driven by policy measures suggests that adjustments during such reversal tend to be benign, with domestic demand rising, little change in export performance, and imports taking up most of the slack (divided about equally between additional investment goods and additional consumption goods).³ In the context

2. See Sebastian Edwards (2005), “The End of Large Current Account Deficits, 1970–2002: Are There Lessons for the United States?” In *The Greenspan Era: Lessons for the Future*. Kansas City, Mo.: The Federal Reserve Bank of Kansas City, pp. 205–268.

3. See IMF, *World Economic Outlook*, April 2010, Chapter 4.

Figure 8 **FX Reserves in Selected Countries**



Source: Haver

of sharing the worldwide burdens generated by a resolution of global imbalances, surplus countries seem likely to escape very lightly indeed compared to deficit countries. This could be a factor that shapes any future geopolitical bargains in this area, as protagonists on the surplus side like China and Germany face adjustment pressures from those on the deficit side like the United States.

Conclusions

Perhaps the most sobering lesson for policy makers is that 150 years of experimenting has not created an “ideal” monetary regime. Both the Globalization 1.0 and 2.0 regimes had very few restrictions on capital flows. But this has generally meant that current account imbalances persist for long periods of time. Fixed-rate regimes, even ones with credible arrangements like the gold standard, did not keep current accounts balanced. In fact, anchoring to gold meant that domestic policies were effectively dictated by an exogenous constraint—fluctuations in both the demand for and the supply of gold.

One of the lessons from Globalization 1.0, however, is that crises by themselves do not lead to a lasting return to zero CA balances. Longer-term structural factors can keep some countries in net deficit and others in net surplus for decades at a time. **To achieve zero CABs throughout the world, domestic savings must equal domestic investment everywhere.** A highly restrictive monetary regime where capital flows are restricted could achieve this perforce in a relatively short period of time. However, we have tried to show in this paper that current account imbalances do not necessarily require corrective action. Rather, the reasons that they exist need to be examined. If the underlying savings-investment imbalance is driven by sustainable forces, then living with imbalanced current accounts may be the most balanced stance.

But even so, private capital chasing such opportunities

can be susceptible to periods of overinvestment, and even “consenting adults” can cause later problems for everyone. Public finance could also get caught up in a pro-cyclical mentality. Numerous U.S. states, for example, defaulted in the 1870s after the boom turned to bust, and deficit-financed expenditures were exposed as unsustainable. Given that we are emerging from a particularly severe version of this type of overinvestment or overconsumption, we believe that a rapid return to profligate ways is unlikely.

A natural resolution of current account imbalances is already underway and may be preferred to a policy-imposed solution, whether it is the less desirable proposal to cap current accounts or some change the international monetary regime. Since current accounts are driven by the underlying imbalance between savings and investments, it is the underlying imbalance that needs to be resolved if the objective is to bring current accounts closer to a balanced position.

All that said, global rebalancing is already underway and the pattern of current account surpluses and positive “basic balances” across a large part of the EM world means that the rebalancing is likely to bring less pain there than the historical norms would suggest. The EM world has remained in overall CA surplus, even without China’s contribution.

Learning from the EM crises of the 1980s and particularly from the Asian crisis of the 1990s, EM economies have used these surpluses as opportunities to build up FX reserves. These large public savings mean that aggregate saving relative to investment remains in positive territory. However, since reserves purchased by central banks are not used to finance domestic investment, the “available” saving in the economy remains in shortfall relative to investment. To the extent that is so, capital flows into the EM world will remain an important ingredient in the long-term growth story there.

EM economies largely avoided a severe downturn thanks to improved fundamentals but also thanks to the war chest of

FX reserves built up after the crises of the 1990s. FX reserves dipped for most (with the exception of China), but they managed to hold off speculation quite easily and convincingly (see Figure 8). Going forward, we expect economies that have seen the success of such self-insurance to rebuild their reserves and then allow them to grow in line with the size of the economy or the financial sector to maintain their self-insurance capability.

Learning from history, the process of unwinding or reversing imbalances can take a long time (as we saw in Figure 7 earlier). While rebalancing is ongoing, the mix of nominal exchange rate movement and relative inflation movements remains uncertain and can cause serious anxiety for policy makers in particular, whose domain it is to deal with these macroeconomic indicators.

It is easy to see why it is only a small step from the global imbalance debate to currency war tensions, as we have recently discovered in practice. If price adjustment through

differences in relative inflation is sluggish, sharp moves in nominal exchange rates can quickly solve the problem, and those impatient for adjustment will lobby for the latter. On the other hand, under fixed exchange rate regimes, all adjustment must be accomplished through changes in price levels, which, all else equal, is inflationary for a country moving out of surplus, and deflationary for a country moving out of deficit.

Tensions have abated, like the imbalances themselves, since 2007. But there are no “immaculate transfers” here, and no quick solutions either.

MANOJ PRADHAN is an Executive Director at Morgan Stanley whose main responsibilities are Global Economics and Emerging Markets.

ALAN M. TAYLOR is a Senior Advisor at Morgan Stanley and a Professor of Economics at the University of California, Davis.

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