Reproducing the North–South Divide: The Role of Trade Deficits and Capital Flows[1]

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The North–South divide can be conceived in several different ways and demarcated along many different dimensions. This essay emphasizes two interrelated aspects of the divide: (1) the gap in economic performance between rich and poor nations and (2) the dependency induced by the transactions that link them. It explores the intertemporal flows and asymmetric exchanges surrounding trade imbalances as a key mechanism that perpetuates both.

The yawning income gap between the richest and poorest nations is the most dramatic and visible dimension of the North–South divide and one that has marked the global political economy for at least two centuries (e.g., Maddison 1995, 2001; Pritchett 1997; O'Rourke 2001; Mayer-Foulkes 2002). That it has persisted—and, indeed, widened—during the globalization era is a major challenge to several strands of contemporary theory that predict its demise. As the top line in Figure 1 shows, the GDP per capita of the OECD countries was about 45 times that of the low-income countries in the early 1960s (read on the right-hand axis in the figure).[2] That ratio grew to about 73:1 in the early 1990s and has declined only to the high 60s early in the twenty-first century.[3] The gap between middle- and low-income countries, portrayed in the bottom line and calibrated on the left-hand axis, traced a similar path, widening from 3.2 to 4.6 over this era. The income ratio between the OECD and middle-income countries has barely budged for nearly half a century: Beginning at about 14.1, it grew as high as 16.3, before declining to a level almost identical to where it began by 2005.[4]

At the heart of the mechanisms that affect this divide are the complex of transactions that constitute the bridge across it—international trade and the various capital flows that provide its balancing finance. These transactions have grown rapidly in recent years, as shown in Figure 2.[5]

Trade as a percentage of GDP is between 2.5 and 3 times higher today than in the 1960s in every income category. Most factor flows, including migration, technology, and investment capital, have grown even more rapidly over the same period (O'Rourke 2001; Obstfeld and Taylor 2004; Lane and Milesi-Ferretti 2006). Indeed, the stock of financial assets held outside the country of issuance tripled from 1990 to 2003 (International Monetary Fund 2005a). According to several theoretical currents discussed below, these flows alone should erode the North–South gap, but Figure 1 makes clear that they have not. This essay

[2]The aggregated measure of GDP per capita in constant US dollars for each income group was taken directly from World Bank (2006) data.

[3]The staggering growth in this divide from the eighteenth century to the middle of the twentieth is a worthy issue of study in its own right, but beyond the bounds of this essay. Angus Maddison (2005) puts the ''West to the rest'' ratio at 1.3:1 in 1500, 1.9:1 in 1820, 3.1:1 in 1870, 5.2:1 in 1950, and 6.7:1 in 2001.

[4]For the various ways in which global income inequality can be conceived and measured, especially in the context of the convergence hypothesis, see Somesh Kumar Mathur (2005), Charles Kenny (2005), and D. Quah (1997).

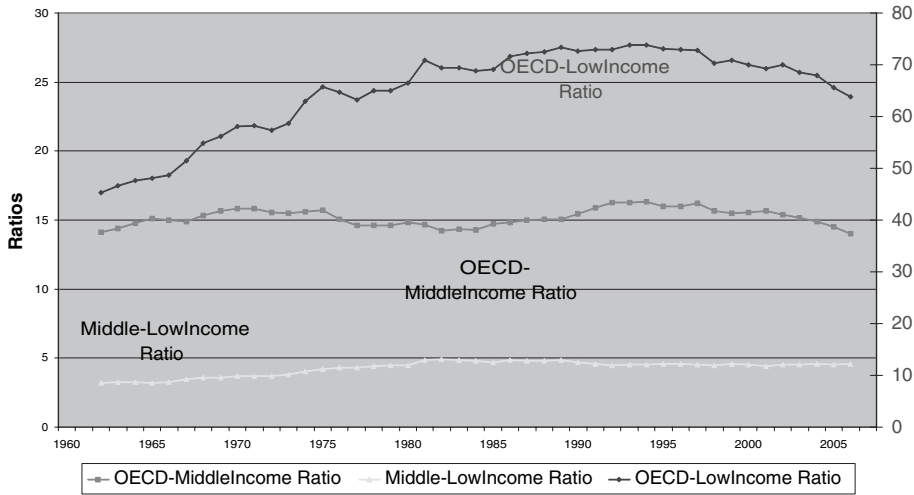[5]The data are taken directly from the World Bank (2006).

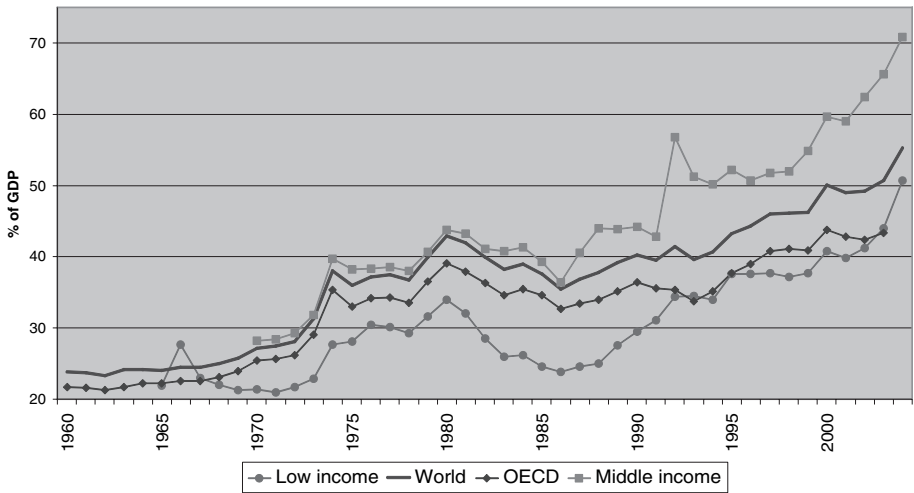Fig. 1.   Income Ratios between Country Categories

Fig. 2.   Trade as a Percentage of GDP

examines one potential explanation that the massive imbalances in trade experienced by nations of the South have overwhelmed the effect of the more heralded expansion of global trade volumes.

The high level of trade is a defining attribute of the globalization era, but less noticed is the huge imbalance in national payments accounts that exists alongside it. The North–South divide in this regard is reflected in Figure 3 showing that the average trade balance over the 1975–2005 time period is positive (1.8% of GDP) only among upper income countries.[6] By way of contrast, among lower

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[6]The recorded trade balance across all countries averages −6.1% of national GDP, even though the actual global total of imports *must* be identical to exports. The average is negative when normalized by GDP because the largest economies generally run surpluses and the smaller incur deficits. For example, Japan's 2004 trade surplus of about $100 billion dollars represents only about 2% of its GDP, whereas Nicaragua's deficit of 26.3% of GDP amounts to less than $1 billion. In absolute terms, these two nations average a surplus of about $50 billion dollars, but a deficit of about 12% when measured as a percentage of GDP. The large average deficit cannot be the result of statistical discrepancies because reported global exports usually slightly exceed reported imports (International Monetary Fund 2005b).
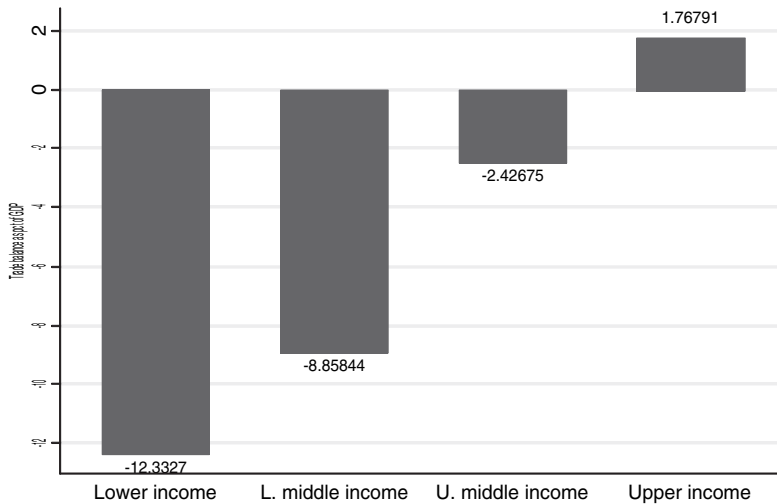
Fig. 3.   Trade Balance by Income Group, 1975–2005

income countries, the average trade balance is a *deficit* of 12.3% of GDP. To put this number in some perspective, it should be recalled that recent US trade deficits about *half* that size have produced a (wholly justified) cacophony of alarm bells (Obstfeld and Rogoff 2001, 2005; Roubini and Setser 2004; Setser and Roubini 2005). It is worth noting that those who have minimized the dangers of the United States deficit have universally declared that the United States is a special case in which such deficits are more benign than elsewhere; virtually no commentator has defended trade deficits of this size as healthy for most economies (Bernanke 2005; Clarida 2005; Levey and Brown 2005).[7] Yet the implications for developing countries have not been addressed.

Figure 4 makes the same point in a different way, by displaying the incidence of trade deficits that exceed the threshold of about 5% of GDP generally identified as a significant risk factor for macroeconomic, currency, and banking crises (Milesi-Ferretti and Razin 1996; Summers 2004). This figure makes clear that dangerously high trade deficits are the *rule* in low-income countries, occurring in more than three-quarters of all nation-years and about half the time in lower middle-income countries.[8] By way of contrast, such levels are rarities among Northern nations. Among the G-7 countries usually considered the core of the global system, it has happened only twice in the 280 nation-years since 1965 (the United Kingdom in 1974 and the United States in 2004–2006).

Large trade deficits arise in less than 2% of nation-years among high income OECD countries if Greece, Portugal, and Ireland are excluded. Among all upper income countries, large trade deficits constitute about 13% of the cases, about one-sixth the incidence among lower income countries.

The pattern that large trade deficits are more or less exclusively a poor country phenomena motivates us to consider whether such deficits are a causal factor in perpetuating the North–South divide by constraining growth and reproducing

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[7]For a treatment of the United States as a special case, see Bruce Moon (forthcoming).

[8]Data are aggregated from the national level using thresholds for the four income groups derived from World Bank sources.
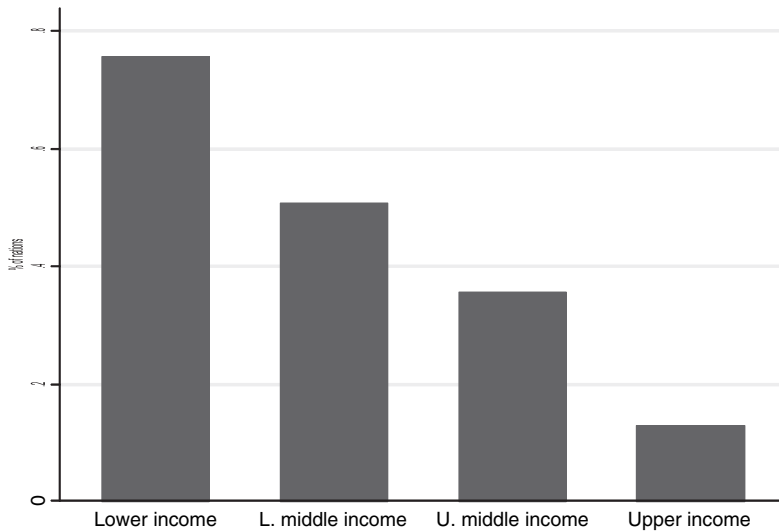
FIG. 4.   Percentage of Nations with Trade Deficit at 5+% of GDP

dependency in the South.[9] If the expansion of trade *volumes* brings benefits, the accompanying expansion of trade *deficits* may bring dangers as well (for doubts concerning the beneficial effects of trade liberalization, see Rodrik 2001). Yet, despite their ubiquitous appearance in recent years, trade deficits have received almost no attention in empirical studies. As Cesar Calderon, Alberto Chong, and Norman Loayza (2002:1) note, ''this lack of cross-country empirical evidence is surprising given the fact that the position of the current account is typically used as one of the main leading indicators for future behavior of an economy and is part of the everyday decision process of policy makers.''

Trade Deficits, North and South

A surprising divergence of theoretical views concerning the basic nature of trade deficits makes the absence of serious attempts to adjudicate their effects mysterious, and potentially damaging to efforts to understand (and narrow) the North–South divide. Trade imbalances can be conceived in at least two ways, which correspond to theoretical expectations concerning their effect on growth and with it the North–South divide. Orthodox Liberals emphasize the capital flows that finance deficits—and laud their potential for growth. Political economists and policymakers, especially in the South, emphasize the trade deficit itself—and fear

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[9]A strong case can be made that in the South the expansion of trade volumes and the advent of large trade deficits should be thought of as part of a single syndrome—often as a deliberately engineered pairing of liberalization consequences (Gourinchas and Jeanne 2003:1; Moon (Forthcoming)). Several studies have found that in the South, unlike the North, more open economies typically run larger trade or current account deficits (Van Wijnbergen 1992; UNCTAD 1999; Moon 2001, 2005; Chinn and Prasad 2003). Other studies have also linked various liberalization ''events'' —IMF programs, capital account openings, entries into preferential trade areas—to increases in trade deficits (Soloaga and Winters 2001; Evrensel 2002; Hutchison and Noy 2003; Chinn and Ito 2005; Mody and Saravia 2006). It is widely acknowledged that ''one of the main motivations behind the push towards the international financial integration of less developed countries has been to accelerate their growth by attracting foreign capital'' (Gourinchas and Jeanne 2003:1). Since that implies trade deficits, the current essay is concerned with more than intellectual curiosity about the North–South divide because it has direct relevance for the evaluation of programs that rest upon the belief that the capital flows that finance trade deficits produce developmental benefits in poor countries.

the long-term consequences of the political and economic liabilities it creates. This essay is intended to unpack these alternative theoretical positions, to examine their implications for the North–South divide, and to confront them with empirical data concerning the growth effects of these transactions.

Liberal Perspectives

Liberal theorists treat trade imbalances as epiphenomenal manifestations of more interesting and important forces, allowing trade deficits to be ignored. And ignore them they do—but not before deriding those who do take notice. For example, Paul Heyne (1983:705) has stated that ''it might even happen that, if I make my position unmistakably clear, some critic will be able to rescue me from error, and show me why those who speak of trade deficits are in fact making sense, not wandering in darkness and confusion. It is not only backwoods editors or small-town journalists who treat deficits in merchandise trade as if they were more than they are.'' Until the rapid deterioration of the United States trade balance in the late 1990s, only a handful of studies on the topic had appeared and most were dedicated essentially to a denial that there was anything to worry about, largely on the grounds that trade deficits were inherently temporary and necessarily self-limiting. In this belief, they mirror Adam Smith ([1776]1937 [bk. IV, Ch. III, pt. 2 par. 2]) famous observation that ''nothing…can be more absurd than this whole doctrine of the balance of trade.'' Thus, Heyne (1983:716) concludes that ''a government that tries to watch over the balance of trade has embarked upon a task that is intricate, embarrassing, and fruitless.''

Instead, when deficits have been noticed at all, liberal theorists have focused on the capital flows that are thought to balance them.[10] As Eric Fisher (1990:412) puts it, ''balance-of-payments accounting serves as a tedious reminder that a current account deficit is simply the sum of the capital account surplus and the loss of official reserves.'' The conception that trade imbalances could not exist without compensating capital flows is a key linchpin of the equanimity with which liberal theorists view trade deficits. If these capital flows are market transactions in financial assets between willing (income-maximizing) buyers and sellers, then the judgment of the investors that provide such capital would seem to certify that the imbalances should not be considered worrisome.[11]

The liberal focus on the national demand for capital yields a simple explanation for the above pattern in trade deficits. Since investment opportunities exceed domestic saving in poor countries, rates of return are relatively high in the South and capital naturally flows from the North to take advantage of them. Trade deficits are thus strongly related to ''stages of development'' (Siebert 1989; Sinn 1990; Eichengreen 1992; Genberg and Swoboda 1992; Roldos 1996; Chinn and Prasad 2003).

Liberals have generally assumed that capital inflows swell the available pool of investment funds and, thus, generate future growth in the South. Barry Eichengreen and Michael Mussa (1998:12) put the classic case for international capital mobility this way: ''Flows from capital-abundant to capital-scarce countries raise welfare in the sending and receiving countries alike on the assumption that the

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[10]Although acknowledging that such flows *can* become excessive, there is little basis within this theoretical tradition for considering that eventuality to be common and few grounds on which to identify the point at which such may occur. The sole exception is found in empirical analyses that have fixated on the sustainability of imbalances and their propensity to end in explosive crises, such as those that marked the late 1990s. However, these studies have not considered the desirability of flows *below* crisis-inducing magnitudes.

[11]A methodological point follows: the presence of investor confidence (or credit-worthiness) contains information that should independently predict future growth, which could bias upward the estimate of the actual effect of capital inflows.

marginal product of capital is higher in the latter than in the former.'' The beneficial effects of these flows for poor countries are an important source of the widespread expectation that the North–South gap must diminish over time (Fischer 1998; Gourinchas and Jeanne 2003). Of course, that judgment surely must depend on how the gains are divided between the initiator and the recipient of the capital flow, a topic discussed below. As a first cut, one would expect the impact to be greater in poor countries, since the capital flows constitute a far larger percentage of GDP in poor countries than in rich ones. The North–South gap should narrow as a result.

In fact, *had* the North–South divide closed over time, it would have been heavily over-determined. Many theories point to the same outcome, most of which invoke some aspect of North–South flows. The convergence of rich and poor countries is central to Robert Solow (1956) iconic neo-classical growth model in which the central mechanism is the declining marginal returns to capital (Swan 1956; Baumol 1986; Barro and Sala-i-Martin 1997).[12] Alexander Gerschenkron (1952) famous invocation of ''the advantages of backwardness'' rests on the assumption that technology will diffuse from rich to poor countries fast enough to narrow income gaps. Since the poor countries can make a more rapid leap then the richer ones simply through emulation, technological diffusion will narrow the gap between rich and poor (Abramovitz 1986). If that technology diffusion is hampered by financial capacity, as argued by Phillippe Aghion, Peter Howitt, and David Mayer-Foulkes (2005), the open capital markets of recent decades should accelerate it. And, indeed, Diego Comin, Bart Hobijn, and Emilie Rovito (2006) have demonstrated that technology convergence is quite rapid and is accelerating.

The role of human capital also should hasten income convergence because the gap between rich and poor countries on all of the usual measures of human capital is decreasing, especially literacy rates and school enrollment, but also life expectancy and infant mortality (Mankiw, Romer, and Weil 1992; Barro and Lee 2001; Kenny 2005; Deaton 2006). Industrialization levels are also converging as poor countries increasingly move away from primary product production (Arrighi, Silver, and Brewer 2003). Production and management techniques are diffusing rapidly as well, driven in part by foreign direct investment (FDI) (Dicken 2003). Constraints that affect small market (poor) countries more than rich ones are rapidly being eroded by growing trade opportunities, including economies of scale. Finally, post-materialist values that de-emphasize income growth are now widespread in developed countries, which would seem to allow a catch-up by those countries for whom growth is still the overriding priority (Inglehart 1997).

In the face of all the reasons to expect a narrowing of the North–South divide, the fact that it has not occurred is a major mystery, suggesting that underlying theories must be rethought or augmented.

Political Economy Perspectives

Outside of liberal theory, the view of trade deficits is quite different. The danger of trade deficits is a theme associated with both the oldest of theoretical traditions—mercantilism—and the newest—the anti-globalization movement, heir to the anxieties of structuralist and dependency theories. Mercantilists have long been wary of trade deficits, not least because they have generally identified less

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[12]Solow's absolute convergence hypothesis has generally given way to conditional convergence in later work. Conditional convergence implies that a country or a region is converging to its own steady state whereas unconditional convergence implies that all countries or regions are converging to a common steady state. In growth regressions, both have been modeled as a negative coefficient on a logged GDP per capita term.

with pure theorists and more with policymakers seeking to navigate the dangerous straits represented by deficits.[13]

Policymakers in poor countries see the balance of trade as a pivotal target of development policy and interpret deficits as an indicator of policy failure. For example, trade deficits have been widely linked to currency crashes (Kaminsky, Lizondo, and Reinhart 1997; Demirguc-Kunt and Detragiache 1998; Milesi-Ferretti and Razin 1998), in the aftermath of which governments are nearly twice as likely to fall (Cooper 1971; Frankel 2005). A deficit carries important signaling information to international financial institutions (IFIs) and investors, thus driving the behavior of agents that possess significant power to shape economic and political outcomes. Current account deficit countries tend to have higher real interest rates by roughly 20–30 basis points for each 1% of GDP in deficit (Obstfeld and Rogoff 2000; International Monetary Fund 2005a:117). Higher interest rates constrain growth even as domestic production and employment fall victim to competitive pressure from imports. Deficit countries suffer exchange rate declines that limit purchasing power for essential imports, but adverse supply and demand elasticities do not usually permit the trade deficit to decline as a result. Trade deficits are, thus, authentic causal determinants in their own right, playing a critical role in the development of poor nations, both as a direct influence on the macro economy and as a significant constraint on national planning that channels foreign dependence and biases policy choices.

Trade deficits place pressure on governments to do things they would not otherwise do.[14] Some may compromise growth, such as the tax incentives and subsidies that are used to attract foreign investment but then also diminish the benefit of the investment that occurs (Aitken and Harrison 1999). Others may be beyond the capacity of governments—especially the kinds of governments that experience high trade deficits in the South. Without adequate government regulation and without strong private financial institutions, volatile capital flows may be quite de-stabilizing. When not sterilized by competent and adequately financed monetary authorities, capital inflows can increase the money supply and induce inflation, appreciate the currency to the detriment of export and import competitiveness, weaken the finance sector, increase debt and/or other liabilities, and induce crisis by creating uncertainty, risk, and vulnerability to both investor-generated and speculator-generated panics.

Such scenarios place institutions under great pressure, to which they will sometimes respond badly or miscalculate the uncertainties. For example, Graciela Kaminsky, Carmen Reinhart, and Carlos Végh (2004) cite repayment pressures to explain pro-cyclical fiscal policy in the South, which exacerbates capital flows that are ordinarily strongly pro-cyclical as well (Gavin, Hausmann, and Leiderman 1995). Thus, fiscal deficits are least available when they are needed most: capital outflows are contractionary, but in such an environment governments cannot borrow money to balance it (Alesina and Tabellini 2005). (Monetary policy to support the exchange rate is also pro-cyclical.) Where regulatory structures are strong and the financial sector well-developed, of course, as in the North,

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[13]This concern is hardly new: 2,000 years ago Emperor Tiberius, worrying over Rome's increasingly adverse balance of payments with India, complained that ''the ladies and their baubles are transferring our money to foreigners.'' For a brief history of the mercantilist view, see Moon (Forthcoming). More broadly, we can see this view as an internationalization of Shakespeare's aphorism from Hamlet: ''Neither a borrower nor a lender be, for loan oft loses both itself and friend, and borrowing dulls the edge of husbandry.'' Keynes' concerns about the impacts of trade deficits led him to propose an Intrnational Clearing Union that would operate on the problem by pressuring surplus countries to act to remove the imbalance.

[14]Of course, Aaron Tornell and Philip Lane (1998) remind us that trade *surpluses* also permit (bad) policies that could not otherwise arise.

the threat is less. Outcomes are not certain, but the scope for failure widens under the pressure of deficits.

Suboptimal policy is induced by high debt levels through various mechanisms, including "fear of floating" (Calvo and Reinhart 2002), constraints on monetary policy because of exchange rate risks (Cespedes, Change, and Velasco 2000; Aghion, Bacchetta, and Banerjee 2001), excessive holding of reserves (Bosworth and Collins 1999; Hausmann, Panizza, and Stein 2001; Calvo and Reinhart 2002), and the inability of central banks to serve as lenders of last resort (Chang and Velasco 2000). Daniel Cohen and Richard Portes (2004) describe "gambles for resurrection" in the face of mounting liabilities. Uncertainty about the dispensation of debt reduces investment, particularly long-term growth-producing investment, while also misallocating the investment that does occur toward short-term trading activities (Alesina and Tabellini 1989; Tornell and Velasco 1992). These potential costs must be balanced against potential gains from capital flows that do not appear to be very large, even according to the liberal theory that motivates them. For example, Pierre-Olivier Gourinchas and Olivier Jeanne (2003) apply two variants of a neo-classical model to show that the benefits of international financial integration average around 1% of GDP as a permanent effect.

Despite these concerns, neither political economists nor policymakers are ignorant of the identity relationships among the various categories in balance of payments accounting: They acknowledge that trade deficits are balanced by capital flows. However, they do urge greater attention to the make-up of those flows, how they are secured, and, especially, their connections to their international investment position, a long-term balance sheet for national economies. If trade deficits are financed by capital flows, the result is necessarily an accumulation of long-term liabilities in the form of foreign-owned assets. Loans must be repaid. Portfolio investment may be withdrawn at any moment. Even FDI can be reversed. In the meantime, all these foreign-owned assets (domestic liabilities) earn returns that tend to leak from the economy and thus constrain the growth that would have resulted had they been reinvested.

Nor do critics dismiss the liberal contention that capital flows permit poor economies to raise investment levels beyond the meager domestic savings rates that are characteristic of them. However, structuralists do worry that removing the *current* savings constraint via capital inflows simply introduces a different trade-off, this time with *future* savings. Current capital *in*flows create a liability that strongly predicts future capital *out*flows, which must be financed eventually by future savings. Riding the tiger in this way assumes that the growth induced by capital flows will be sufficient to generate marginal savings that make the process self-financing.

But will it?[15] In economic theory, the critical determinants are the social rate of return on invested foreign capital (which must be high enough to promote marginal savings at or above the private cost of foreign capital) and the dampening effect on domestic savings of the capital inflow (which must be very low).[16] It may not be. Capital inflows do not create a one-to-one initial increase in investment as a substantial portion is diverted to private consumption and reserve accumulation by government (Bosworth and Collins 1999; Mody and Murshid 2005). Moreover, most capital inflows should be expected to eventually reverse—with interest—so that the benefits from investment-spurred growth are always in a race to exceed the costs of the capital acquisition (i.e., interest on

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[15]"Among economic topics on which a large gap exists between theory and empirical evidence, financial integration is certainly well ranked" (Kharroubi 2003:1).

[16]The return must also be transformed smoothly to a form that facilitates repatriation of profits or repayment of loans, a concern that places currency markets and exchange rates front and center.

loans or repatriation of profit). There is no free lunch except in the very narrow sense that it is always possible that you will die before the check arrives.

Clearly, the variables determining the net effect are so many and varied that the outcome is better evaluated empirically than assumed theoretically, a task that we commence below. But the adverse effects of capital flows have generally been thought to lag the deficits themselves, which complicates the task of identifying them.[17] As a result of the intertemporal character of trade deficits, we must choose a research design capable of incorporating both short- and long-term effects.

Before proceeding, however, we must recognize that trade deficits are far more than accounting abstractions: They are also an element of the power relations among countries.[18] Specifically, they introduce two moments of dependency that impose real costs and force trade-offs with values of autonomy, democratic responsiveness, and various social outcomes (Vernengo 2004).

First, despite the reassuring accounting logic that capital flows must balance trade deficits, they do not do so automatically. A price must be paid to attract those capital flows, and the price is not always visible on balance sheets. Political economists are prone to worry that both political and economic dynamics make large import levels almost impossible to reverse and commit a nation to a particular pattern of economic organization—an outward orientation reliant on foreign trade, investment, and aid—virtually forever. This diminishes freedom of action in policymaking and induces dependence on both impersonal markets and particular power-wielding actors.

Second, capital inflows accumulate external liabilities, which must eventually be unwound. The process of doing so again engages the deficit country in asymmetric dealings with external forces, which have an important political dimension. We begin our empirical analysis by asking how deficits are financed as they arise and how the resultant liabilities are eventually reduced as the deficit country returns to external balance.

Financing Trade Deficits

The conventional story is that trade deficits are financed by foreign investors who expect repayment in the form of profit and interest. That is not the only way to finance deficits, however, and an entirely different frame is required if other means are used to balance them. Political economists expect that trade deficits are not only larger in the South than in the North, but also that they are financed differently and thus carry different developmental implications.

In principle, of course, deficit financing can occur in a number of ways as illustrated in the simplified sketch of the major accounts within a nation's balance of payments found in Table 1.[19] Trade deficits can be balanced within the current account by either net income from past investments or through current

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[17]Deficit nations are said to be consuming future goods in the present, suggesting that measures of the current income and welfare of such countries systematically overstate their actual performance (Moon).

[18]Such concerns for trade deficits were once a central element of the mercantilist trade policies that dominated all nations' thinking for centuries (Moon 2000). However, with the advent of liberal trade theory, deficits were consigned to the role of a temporary phantasm by Hume's species flow adjustment mechanism. Even after changes in national and international monetary systems have revealed Hume's argument to be simplistic and anachronistic, trade deficits fit awkwardly into liberal theory and have been considered unworthy of serious study, except in the rare circumstances that they became unmanageable.

[19]This schema uses the ''analytic presentation'' of the categories of the IMF *Balance of Payments Manual 5* (BPM 5), adopted in 1993, which renames the old capital account familiar to many readers as the ''financial account.'' The *new* ''capital account'' consists largely of capital transfers, but also nonproduced, nonfinancial assets (e.g., patents). The former are conceptual cousins of the transfers included in the current account; indeed, until BPM 5, current and capital transfers were not distinguished. This ''analytic'' presentation removes those transactions that are more properly viewed as ''exceptional finance'' from the standard accounts and groups them together.

TABLE 1.   Balance of Payments Accounts

Balance of Payments Accounts
Current Account
Trade balance
Transfers
Official aid
Worker remittances
Income from past investments
Capital Account
Financial Account
FDI
Portfolio investment
Other (loans, trade credits)
Reserves and related items
Exceptional financing

transfers, a category made up largely of official foreign aid and private remittances from workers employed abroad. They can also be financed via the capital account, which registers capital transfers, such as debt forgiveness, investment grants, and migrant remittances.

The importance of transfers for the framing of our analysis may be conveyed by contrasting the descriptions offered by two different sources. The World Bank's World Development Indicators database characterizes them this way: ''the provision or receipt of goods, services, income, or financial items without a quid pro quo.'' The IMF BPM adds this important qualifier: ''Transfers often reflect benefits that cannot be quantified (e.g., improved political or economic relationships between parties).'' The former may better convey the spirit of worker remittances to their families, but the latter certainly better captures the reality of foreign aid between governments. Neither form of transfer is a market-based economic transaction, since they are motivated largely by political, social, or humanitarian concerns. Official development assistance is a power relationship involving the exchange of an intangible, which is probably valued less highly as an asset (power) by the donor than as a liability (dependence) by the recipient (Hattori 2001). That liability of external dependence cannot be assessed within any monetary framework and it has been best treated within the radical tradition of political economy, where it has been a major theme for decades (Payer 1974).

Deficits can also be balanced by capital inflows recorded within the financial account (as portfolio or direct investment, in the form of equity securities, debt instruments, or loans). Within the reserve account, they can be paid for by drawing down reserves or using IMF credits or loans. Finally, they can be balanced by exceptional finance, a category that is dominated by the contra entry for the accumulation of arrears from past debts, an accounting device used to balance the accounts, but which does not signify any actual transaction.

Among high-income countries, the conventional story adequately conveys the major dynamics of deficit funding. The first column of Table 2 summarizes the balance of payments accounts for those 37% of nation-years in which high-income countries have run a trade deficit (328 of the 879 nation-years between 1975 and 2005).[20] Their total financing needs are made up of their trade balance (−3.9% of GDP) plus the income outflows (−1.2% of GDP) that return to foreign investors the interest and profits earned on their assets—which, from the point of view of the country in question, represent liabilities that have accrued

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[20]Oil exporters are excluded from all the analyses reported in this essay.

TABLE 2.   Financing Sources for Deficit Countries (% of GDP)

Financing sources for deficit countries (% of GDP)	High income	Low and middle income
Trade balance	−3.9	−13.6
Income	−1.2	−1.3
Transfers	1.8	9.0
Financial account	3.0	4.6
Reserves and IMF	−0.6	−0.8
Exceptional finance	0.8	2.7

from the financing of past trade deficits. Consistent with the conventional story, the major source of that financing (3.0% of GDP) comes from capital inflows recorded in the financial account: FDI (0.7%), portfolio investment (0.7%), and the ''other investment'' category, which is mostly loans and trade credits (1.7%). Transfers (both capital and current) provide an additional source, but the reported incidence of 1.8% of GDP is reduced to 0.9% by the exclusion of Israel and its huge influx of private and public aid. Exceptional financing is small and the contribution from reserve assets is negative. In short, capital markets provide the finance necessary to balance relatively small Northern trade deficits.

The picture in the South is entirely different. First, 73% (2,242 of 3,075) of all low- and middle-income countries run trade deficits and they are far larger—on average, 13.6% of GDP. Income outflows bring total financing needs to 14.9% of GDP, about three times that for high-income countries. However, the capital inflows registered in the financial accounts are not much larger in the South than in the North, providing less than a third of their financing needs, princi-pally through FDI (2.0% of GDP) and loans (1.9%), many of which come from IFIs and have a concessional element. Instead, the lion's share of funding comes from transfers (9% of GDP), about three-quarters of which are official foreign aid. Together with the 2.7% of GDP from exceptional finance (and a sizable fraction of the loans), it is clear that deficit financing in the South is not a mat-ter of private, market-based capital flows designed for financial profit.[21] Rather, these deficits are financed largely by rich countries and IFIs in the North, who expect repayment not in coin, but in influence.

Trade deficits in the South create a vast network of dependency relations that cannot be captured by traditional views of balance sheets. To assure the steady supply of these flows, governments must govern in ways that will induce other actors to continue them. And such actors typically require much pampering, because their interests are diffuse and they seldom coincide with those of the deficit country. Foreign aid responds as much to political and strategic consider-ations as to the needs of poor countries, constraining foreign policy in deficit countries (McKinlay and Mughan 1984; Hook 1995). Partly for this reason, its contribution to development has been much questioned (Turnovsky 2005). Worker remittances are less overtly political, but dependence on the export of one's people to richer countries is hardly a sign of economic health. IFIs con-tinue flows only so long as deficit countries adhere to their policy tenets, the extraordinarily expansive reach of which is demonstrated by the large literature on conditionality (Gould 2004; Welbourne 2006).

Deficits constitute a policy bias of such disproportionate influence that policy-makers regard them as a most unwelcome inheritance, though in recognition of

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[21]The figures are even more dramatic for low-income countries: transfers contribute 10.1% of GDP and excep-tional finance another 3.9%, whereas capital flows amount to only 3.4%, mostly in the form of loans.

the differences between their short- and long-term consequences, such policy-makers do not necessarily avoid incurring deficits themselves. Trade deficits increase external dependence and reduce autonomy, shifting the fate of the nation to external factors that cannot be controlled, such as international inter-est rates that both endanger floating rate debt and induce capital outflows by changing the rates of return available elsewhere. Most obviously, they invite con-straints to policymaking in the form of IMF and World Bank conditionalities that restrict welfarist approaches (Kozul-Wright and Rayment 2004). Of course, lend-ers and the multinational corporations that provide FDI exert influence in their own way. The policy bias introduced by this structural dependency may well con-tribute to the perpetuation of this pattern, since the neo-liberal preferences of most external actors has been shown to reinforce trade deficits.

These concerns about the dependency effects of trade deficits were put clearly by Cheryl Payer (1974:214) three decades ago.

> The moral of this work is both simple and old-fashioned: that nations, like indi-viduals, cannot spend more than they earn without falling into debt, and a heavy debt burden bars the way to autonomous action. This is particularly true when one's creditors are also one's customers, suppliers, and employers.

Payer (1974:211) also recognized the difficulty of withdrawing from trade pat-terns once established:

> All nations will find that some imports are genuinely essential, and many more are useful if properly utilized, when they develop new industries and a new pro-ductive capacity. But…the same medicine which, in small doses, aids and stimu-lates the body's own powers of recovery may, in massive amounts, enervate and addict the patient beyond hope of recovery…Just as a ''pusher'' finds it good business to provide free samples on which potential users can get ''hooked,'' so the grant aid of the 1950s served to make poor nations dependent on Western brand names and accustomed to the idea of development via imports, rather than by their own efforts, thus paving the way to the debt slavery of the 1960s and 1970s.

It is not only demand mechanisms that reinforce this continuing pattern of trade deficits in the South, of course. Even though market-based capital repre-sents only a fraction of actual financing needs, average flows in the range of 5% of GDP nearly every year are certainly large enough to create very large liabili-ties, even after the forgiveness and rescheduling of debt. Since liabilities require annual servicing—whether through the repatriation of the profits from FDI or interest payments on loans—they add a large increment to financing needs that require *additional* capital inflows. Like a dog chasing its own tail, deficit countries seldom catch up. In fact, when Payer was writing those words in the middle 1970s, the net liability of the average low- and middle-income country was equiva-lent to 30% of its GDP. By 2000, the international investment position of these countries had deteriorated to a deficit of 63% of GDP, more than twice the level in the 1970s. Meanwhile, the net external position of high-income countries was a *surplus* of 3% of GDP. The contrast between the North and South is even more dramatic with respect to these long-term liabilities than in short-run deficits, since Northern countries are better able to both control macro-economic aggre-gates and adjust to them than poor countries, which have bigger problems and more limited freedom of action for dealing with them.

The perpetuation of such dependency is illustrated by the recidivism in condi-tionality programs documented by Graham Bird, Muntaz Hussain, and Joseph Joyce (2004) as well as Michael Hutchison and Ilan Noy (2003). Their results establish that once under an IMF program, the IMF becomes an unwelcome

partner in policymaking for an almost indefinite period. Bird et al. (2004) find that recidivism is greatest among those with larger current account deficits and higher levels of debt. Aart Kraay and Vikram Nehru (2004), who find that high debt levels lead to default, arrears, rescheduling, and greater debt, consider the distortionary effect of such ''debt distress'' on government policy as do Nancy Birdsall, C. Claessens, and I. Diwan (2002). As noted by Lex Rieffel (2003), almost all debt negotiations involving the Paris Club, London Club, and HIPC initiatives also invoke IMF conditionality and they, too, are a nearly continuous enterprise.

The stickiness of high trade deficits and their pattern of financing can also be illustrated by looking at the incidence of large, protracted deficit episodes. Bruce Moon (2006) identifies 114 episodes in 99 nations in which trade deficits larger than 5% of GDP persisted for 5 or more consecutive years. Nearly two-thirds of these episodes (71 of 114) were funded almost entirely through transfers and exceptional finance, with the attendant dependency effects. Only 14 were marked with surpluses in the financial account equivalent to trade deficits, and only one—Singapore—was able to finance both the trade and income deficits entirely through market-based capital flows.

Moreover, efforts to reduce accumulated liabilities when they become excessive introduce another aspect of dependency. Although conventional accounts assume that deficit nations will eventually unwind their liabilities by running trade surpluses, the reality is somewhat different. Escape from high levels of debt through any means is exceedingly difficult as demonstrated by the fact that 65 of the 114 deficit episodes were still ongoing and liabilities were continuing to accumulate as of 2004. Among those episodes that had been financed largely by capital flows, only four countries had ended the run of large deficits and then subsequently returned their net external position to its previous level. Ten others had made a partial balance sheet recovery, but in only 1 of the 14 were trade surpluses the largest source of improvements in the net external balance. Exceptional finance, largely debt forgiveness, was the major force in reducing liabilities, with the conditionality associated with it reinforcing dependency.

Having established that trade deficits produce extraordinary levels of dependency in the South, we now turn to the second key proposition: the effect of deficits on growth. In doing so, however, it is important to remain aware of the fact that the dependency set in motion by trade deficits may have its own effect on growth. For example, several studies have found that participation in IMF programs significantly slows growth (Przeworski and Vreeland 2000; Stone 2002; Gould 2004; Barro and Lee 2005).

The Empirics of Trade Deficits and Growth

If trade deficits are largely the province of poor nations and if they slow growth, we may have found one important mechanism that has allowed the North–South divide to grow despite the presence of powerful theoretical claims that it should be shrinking. To such claims, then, we should add the high levels of transfers and extraordinary finance that we have uncovered as these could also operate to reduce the North–South performance gap. In fact, we have reason to expect significant growth effects from trade deficits through several channels: the effects of trade deficits themselves, the consequences of the cumulative liabilities they create, the results of government actions designed (sometimes unwisely) to cope with them, and the dependency relations implicit in the deficit syndrome.

To evaluate these claims, we performed a statistical test on growth rates in GNI per capita among deficit and nondeficit nations. The weaknesses of the growth regression literature are well known, but there is no better alternative to answering the fundamental question concerning what accounts for differences in

observed growth rates between countries (Hauck and Wacziarg 2004). Our challenge is to formulate a research design that incorporates the major forces that have been identified by existing theory and previous empirical work, while allowing for the inclusion of the effects of trade deficits that operate in both the short and long term.

Previous research has examined the effect of trade deficits on growth using several alternative research designs and control models (Moon 2001, 2006; Aizenman, Pinto, and Radziwill 2004). Each replicated and extended a model reflecting the perspectives extant in the literature: the effect of trade *levels* on growth (Levine and Renelt 1992; Frankel and Romer 1999; Bosworth and Collins 2003), the effect of debt on growth (Pattillo, Poirson, and Ricci 2002, 2004), and the effect of capital flows on growth (Borensztein, De Gregorio, and Lee 1998).[22] In each case, trade balance is a significant—and negative—predictor of growth, usually more powerful than the trade volume indicator that is more often used in growth regressions. However, the absence of data on net external positions restricted these analyses to trade deficits themselves. Without that measure of accumulated deficits, long-term effects could be captured only with cross-sectional analyses whose causal claims are precarious.

The availability of new estimates of net external positions from Philip Lane, and Gian Maria Milesi-Ferretti (2006) now enables us to take advantage of the time-series data available for most of the other variables of interest. In particular, we can now separate out the short-term effects of capital flows central to the liberal story, while also seeking the long-term effects of the accumulation of net external position deficits emphasized by more critical perspectives.

We do so with a cross-sectional time-series design for 119 countries between 1977 and 2003. Following common practice, we average the relevant variables over nine non-overlapping three-year periods to minimize the noise of yearly fluctuations. Despite the wide variety of models, research designs, and estimators found in the literature, by now certain independent variables stand out as consistently related to growth (Barro 1991, 1997; Levine and Renelt 1992; Sala-i-Martin 1997; Bosworth and Collins 2003): initial GDP per capita, trade openness, investment levels, and population growth.[23] Each is included in our analysis to establish a control model that will better reflect the impact of the variables of interest—trade balance and net external position. To represent convergence effects in a time series matrix, initial GDP per capita for each nation was expressed as a percentage of the United States value in that year. Both total trade volume (World Bank 2006) and Romain Wacziarg and Karen Horn Welch' (2003) update and correction of Jeffrey Sachs and Andrew Warner' (1995) well-known binary index are used to measure different facets of trade openness. The investment level variable is gross fixed capital formation from the World Bank (2006), also the source of the population growth data. To recognize the sharp differences in global growth over various time periods, total world growth in product is included for each year. The trade balance data are taken from the International Monetary Fund's ''analytic view'' of the Balance of Payments. Net external position estimates are from Lane and Milesi-Ferretti

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[22]See also Daniel Cohen (1997) and Ibrahim Elbadawi, Benno Ndulu, and Njuguna Ndungu (1997) on debt studies and Lucio Laureti and Paolo Postiglione (2005), Milesi-Ferretti, Gian Maria, and Assaf Razin (1996, 1998), Asli Demirguc-Kunt and Enrica Detragiache (1998), William Dixon and Terry Boswell (1996), Gourinchas and Jeanne (2003), Sarah Brooks (2004), Barry Bosworth and Susan Collins (1999), Marcelo Soto (2000), Loungani and Razin (2001), and Assaf Razin (2002) on capital flow studies.

[23]Other variables often found significant in growth regressions lacked adequate data over the time period of this study (i.e., secondary school enrollments, change in real exchange rate, change in terms of trade, and institutional quality). Each was included in analyses not reported due to the small and biased sample that resulted, but the major conclusions were not affected. Other potential variables were found not to be significant when included in the estimated model (i.e., financial depth, global interest rates, oil prices, and inflation rates).

Table 3. Change in GNI per Capita

Change in GNI per capita, PPP	OLS		Random effects	
	coefficient	z	coefficient	z
Trade balance	0.035	2.57	0.033	2.06
Net external position	0.007	3.63	0.005	1.98
Initial logged GDP pc	−.782	−8.67	−.784	−6.76
Trade volume	0.008	2.79	0.009	2.62
WW openness measure	1.135	5.04	1.270	5.19
Global growth	0.625	4.77	0.619	5.01
Population growth	−.708	−8.18	−0.584	−6.01
Investment level	0.195	10.00	0.169	7.65
Constant	−4.41	−6.72	−4.327	−6.75
	$r^2 = 0.28 / N = 813$		$r^2 = 0.28 / N = 813$	

(2006). Estimation was performed with Stata's OLS and random effects cross-sectional time-series routines.

The results for all countries are presented in Table 3, with the first pair of columns reporting the OLS estimation and the second pair the random effects analysis. In each, the control model performed as expected and consistently with existing literature. Of particular interest is the large negative estimate for the initial GDP term, which confirms a significant convergence effect that should act to narrow the North–South divide, all else being equal.

One explanation for its failure to do so is suggested by the estimates for the effect of trade balance and net external position. Contrary to the conventional expectation that the capital flows associated with trade deficits will increase growth, the positive coefficients for trade balance suggest that trade *surpluses*, not deficits, accelerate growth. Furthermore, these short-term effects are augmented by the long-term implications of deficits in the net external position (NEP), where the positive coefficients in both models indicate that deficits in the NEP are associated with slower growth. All of the effects are statistically significant at 0.05.

The impact of these results on the North–South gap may be only roughly estimated, but they are clearly of substantive as well as statistical significance. For a typical deficit country of the South since 2000, which ran a trade deficit of about 13% of GDP and held a net external position of −55%, these estimates project a growth rate about 0.75% per year lower than would be expected of a country in perfect balance. This is a sizable effect in the context of average global growth in both North and South of only about 1.75% per year. Based on the convergence estimates in Table 3, an average country of the South (with a GDP per capita of $3,700) should grow about 3% per year faster than the average high-income country ($19,400 per capita). Thus, it appears that the effects of trade deficits alone erase about one quarter of the expected convergence between North and South.

Conclusion

Despite the neglect of trade deficits in the theoretical economics literature, political economists and policymakers know better than to ignore their developmental effects. As put in a recent UNCTAD (2006:iii) report:

> It is no surprise that…having learned that reliance on foreign savings rarely pays off as a sustainable development strategy, a growing number of developing countries have shifted to an alternative strategy that relies on trade surpluses as the engine for investment and growth.

It is true—as the neo-liberal proselytizers endlessly proclaim—that the North–South divide could be narrowed, if only the poor countries would emulate the economic policies of the rich. This analysis suggests that it is not their expansion of trade *volumes* that should be copied but their prudent avoidance of trade *deficits.*

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