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Introduction

Everyone knows that the United States is the dominant state in the world today. It has by far the most powerful military, it has the largest economy and its currency is the primary medium of exchange for international transactions. In the language of international relations theory, the United States is a hegemon. But is it economically advantageous to hold this sort of hegemonic position?

At first glance, this question might seem puzzling. Common sense tells us that it must be advantageous to be a hegemon because the most powerful state can use its power to advance its interests and achieve its goals more effectively than any other state. But common sense may be missing something. Even if we assume that a hegemon acts only with a view to its own interests, it may be that others can gain from the hegemon's actions and policies without bearing their proportional share of the costs.

Consider how this might work. All states benefit if there is an international order that is peaceful, that respects property rights (so that economic actors are willing to trade and invest), that contains relatively few barriers to trade and that has a reliable medium of exchange. But peace, secure property rights, a free trade regime and a stable international monetary system are public goods and so face familiar collective action problems. Why will any given state contribute to the costs of providing these goods if it could enjoy access to the goods as a free rider instead? If all states seek to ride free, how will the goods be produced? One answer to these questions, most closely associated with the seminal work of Charles Kindleberger, is that the United States, as a

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hegemon, has an overwhelming interest in these goods so that it will provide them even if it has to bear the full costs of provision on its own (Kindleberger, 1981; Kindleberger, 1973). As Brawley has argued, Kindleberger implies that "a significantly large state would consume enough of [the] public good that it would be willing to provide it by itself"(1995: 88). On the other hand, Kindleberger insists that leadership "thought of as the provision of the public good of responsibility, rather than exploitation of followers or the private good of prestige, ... remains a positive idea" (1973: 304).

Later work by Keohane and Snidal showed that, as America's hegemonic position declined somewhat and other states became more economically important, these other large economic actors would also find it in their interest to contribute to the provision of these collective goods, so that a co-operative international regime could be maintained even if the hegemon declined (Keohane, 1984; Snidal, 1985).

This position is often characterized as the "benevolent hegemon" theory, although it would be more precise to describe it as the "beneficial hegemon" theory, since the underlying assumption of most of the contributors to the discussion is that states are rational actors pursuing their own interests. The claim is simply that, under the circumstances of the second half of the twentieth century, the United States's pursuit of its own interests (properly understood) would lead to policies that benefited rather than harmed other states.

This brief summary obviously overlooks the nuances and complexities of this literature. What is important about that literature from my perspective, however, is that it asserts, explicitly or implicitly, that the United States bears a disproportionate share of the costs of providing the collective goods that make a co-operative international economic order possible while other states are able to ride free to varying degrees. So, while everyone gains from co-operation, others gain more, proportionally, from the international economic order than the United States.

That is the claim that I want to challenge. In the larger project of which this is a part, I argue that the United States enjoys a crucial positional advantage in the international economic order because of the size of its economy and because of its role as the provider of the key currency for reserves and international exchange. This positional advantage enables the United States to tilt the rules of international trade to its own advantage and, what is less often noticed, to achieve distinctive benefits in trade, investment, and currency transactions. Common sense may be right after all.

In this paper I will focus on one part of this overall argument: the advantages of the US dollar's position as the key currency. I will argue that, even though all states gain from the existence of a reliable medium of exchange for international trade, the United States has received impor-

Abstract. Accumulating debt is usually harmful for states, but a cyclical deficit policy and large-scale borrowing have been beneficial for the United States. While structural changes in the international political economy may cap America's future ability to process debt, an empirical analysis of the economic dimensions of hegemony over the last quarter century shows unambiguously that the hegemon reaps disproportionate gains in the area of trade and investment. This finding provides new insight on whether it is advantageous to be a hegemon.

Résumé. Les États pâtissent généralement de l'accumulation des dettes, mais une politique de déficit cyclique et le recours à de larges emprunts ont pourtant été bénéfiques aux États-Unis. La capacité future de la puissance américaine à gérer sa dette sera peut-être entamée par les changements structurels subis par l'économie politique mondiale. Toutefois, l'analyse empirique des dimensions économiques de la situation d'hégémonie durant les vingt-cinq dernières années met à jour, et sans ambiguïté aucune, les gains disproportionnés générés par l'hégémon dans les domaines du commerce et de l'investissement. Cette recherche apporte un éclairage nouveau au débat sur les avantages liés à la position d'hégémon.

tant economic gains (beyond the ones like seignorage that are familiar from basic economics) from the fact that the dollar, as opposed to another currency, is the key currency. I will also show how the size of the American economy reinforces the dollar's key role, strengthening the positional advantage of the United States in international economic affairs. Lastly, I demonstrate why other states have not, to this point, mounted a serious challenge to the dollar's role despite the disproportional benefits it provides to the United States, and I will briefly touch upon the question of the extent to which this is likely to change with the rise of the euro.

Let me make clear at the outset that this is a positive, not a normative, analysis. Some may applaud these effects of American hegemony and others bemoan them, but these are not my concerns in this paper. My goal is simply to draw attention to what I believe to be some neglected facts about how the current international economic order works and to offer an explanation of why it works this way. In the first part of the paper I look at the empirical data on the question of how much the United States gains (or loses) from its position as provider of the key currency. In particular, I draw attention to new data in economics on the net international investment position (NIIP) and valuation adjustments that demonstrate that the United States gains from its position, and to a much greater extent than previously realized. In the second part of the paper, I offer an analysis of why the United States is able to achieve these gains. Throughout the analysis, I operate within a rational actor framework in which the underlying assumption is that every state pursues its own economic advantage in international economic interactions. So the puzzle is not why the United States would seek economic gains but why it is able to achieve such substantial gains in an environment in which other states also seek to maximize their gains.

The Extent of the Benefits

In presenting the evidence, I do not refute the liberal understanding that all states are *potential* beneficiaries of a system of open exchange but simply seek to show that the balance of gains from international commercial and monetary relations tend to benefit the hegemon more than other states. Moreover, in elaborating the particular advantages the United States enjoys, I do not mean to imply that it is entirely free of the discipline of the market, or that it does not face political constraints but that its room for policy maneuver is more elastic than it is for other states. Some will find this so obvious as not even worth stating, let alone substantiating, but as indicated in the previous section this has not been the default position in the international relations literature.

There is a longstanding debate about whether it is advantageous to be the key currency. In the 1970s, Benjamin Cohen (1977) saw the system producing disproportionate benefits to the United States while Fred Bergsten (1975) was more skeptical and thought the disadvantages outweighed the advantages. It has long been known that key currency status produces certain advantages: the privilege of interest-free loans, the inflation tax (seignorage) and policy autonomy. There are two components to seignorage. On the one hand, the key currency country, in this case the United States, receives an interest-free loan when people all over the world hold dollars. Dollars travel to other countries because Americans have bought something from other countries, merchandise, a service or an asset. As long as the dollars stay abroad and do not come back in search of goods, services or assets, foreigners holding dollars are extending an interest-free loan to the United States, or the Treasury, to be more precise. The dollars abroad are nothing but paper IOUs, that is, claims on the United States, but as long as they stay abroad nothing is being claimed, and the funds can be recycled through the banking sector.

The second aspect of seignorage is related to the first. The more dollars in circulation the more the United States is able to borrow interest free from foreigners. It therefore has an interest in extending dollar use and may be tempted to print more dollars. Excess printing amounts to an inflation tax that increases the dollar supply and reduces the value of the dollars held abroad and therefore the value of what the United States has to pay back in the form of goods, services or assets.

Aside from seignorage, the key currency country gains in terms of policy autonomy since it can transfer the costs of adjustment onto other countries. These gains were highlighted by Benjamin Cohen who argued against a return to the dollar standard in the late 1970s (1977). Key currency status also has disadvantages however. The downside of the United States's key currency status was understood to be the comparative cost

of fiscal or monetary policy, as opposed to the exchange rate, as a tool of adjustment (Bergsten, 1975).

Under the Bretton Woods fixed exchange rate system, the United States had greater policy autonomy than other states because of its liquidity-creating role, which allowed it to run balance of payments deficits through dollar outflows on the financial (what was then called the capital) account without generating a loss of confidence in the currency. Eventually, however, foreigners lost faith in the United States's commitment to convert dollar claims into gold, fixed at \$35 per ounce, causing the United States to unilaterally suspend dollar convertibility and for the system of fixed exchange rates to collapse.

Under flexible exchange rates, dollar outflows are instead corrected through a lower price of the key currency, as its supply exceeds demand, or higher interest rates to induce dollar inflows to counteract outflows. In today's system of (for the most part) flexible exchange rates, dollars are being exported on current account, with Americans purchasing foreign goods in exchange for dollars. The cost of persistent dollar exports on current account is the buildup of external liabilities as a consequence of capital imports (that is, exports of dollar assets) on the financial account, and the possibility of higher growth-inhibiting interest rates, to finance the deficit. Under flexible exchange rates, the cost of depreciation has for the most part been borne by foreigners because the United States primarily sells dollar denominated assets while Americans hold foreign currency denominated assets abroad. Therefore, external liabilities are more or less insulated from changes in the exchange rate. Dollar depreciation does not increase the value of the United States's external liabilities but increases the value of its external assets.

On the other hand, appreciation does not lower the value of external liabilities but lowers the value of American assets. In principle, the two effects could cancel out, or appreciation could dominate the effect of depreciation or the other way around. In practice, however, over the last quarter century, growth in net external liabilities has to a greater extent been curtailed by depreciation than raised by appreciation on a cumulated basis. Although there have been years when net external liabilities have increased as a result of appreciation, the net effect of exchange rate movements—weighing years where appreciation contributed to growth in net external liabilities and years when depreciation diminished net external liabilities—has been to limit the growth in net external liabilities. Moreover, external liabilities are not only affected by exchange rate movements but by changes in the relative value of foreigners' capital holdings in the United States as compared with Americans' capital holdings abroad. Again, it is of course possible for a key currency country to suffer capital and exchange rate losses. For instance, a net capital exporter may still see its external liabilities grow faster than its external assets. This has

not, however, been the experience of the United States in the last quarter century. There is now new evidence from economics that the United States has consistently benefited from capital and exchange rate gains, that is, valuation adjustments (Cline, 2005; Gourinchas and Rey, 2005; Lane and Milesi-Ferretti, 2002). I will draw on that evidence and perform an empirical analysis based on data from the Bureau of Economic Analysis (BEA) and the statistical bureaus of other industrialized countries, to support my claim about the advantageous position of the United States, which is still the key currency country.

The empirical proof for the hegemon's ability to reap disproportionate benefits has three components: first, a capacity to sustain a long-term deficit policy, second, a return differential between borrowing and lending and, third, valuation adjustments. The United States has been in deficit on current account for 30 of the 37 years in the period 1970 to 2007. Elsewhere, I argue that deficits have increased flexibility at various levels: by enhancing consumer choice, by raising the government's policy autonomy and by providing the American government with a source of bargaining power to negotiate agreements that facilitate the outward extension of American firms. However, all these aspects cannot be developed here. Therefore, I concentrate on demonstrating how trade deficits have produced monetary rewards in the form of valuation adjustments and a return differential on net lending.

Valuation adjustments are changes in the value of assets as a result of changes in the market price of the asset or the currency in which they are denominated. How have Americans gained in terms of valuation adjustments? The value of the smaller stock of American foreign assets has increased at a faster rate than the larger stock of foreign assets held in the United States. Averaged over a quarter century, the change in the value of American overseas assets has been a bit more than 2 per cent higher a year than the value of foreign assets in the United States.

A quick exposition of the net international investment position (NIIP) and how it relates to the financial and current account, which together comprise the balance of payments, a country's economic transactions with the rest of the world, is helpful in explaining how valuation adjustments work. When the United States, or any other country, imports more goods and services than it exports, the country is, in effect, exporting capital.² In order to finance the current account deficit, and to balance payments, the United States must be a net capital importer on the financial account. The financial account is the difference between the amount of capital being imported by exporting assets and the amount of capital being exported by importing foreign assets.³ Transactions on the balance of payments are recorded as *flows*, how much capital is flowing in or out of the country on the current and financial account. The international investment position (IIP) or the foreign asset position (FA), on the other hand,

is a balance sheet over the *stock* of financial assets and liabilities with the rest of the world. The United States's IIP is the difference between the value of American overseas assets and liabilities (that is, foreign assets held in the United States). If this seems a bit pedestrian, bear with me, the difference will turn out to be important.

Since American liabilities have outstripped assets since the mid-1980s, the United States is currently a net debtor. These external liabilities are a consequence of the capital it has imported on the financial account in order to offset the capital it has exported by running a trade deficit on current account.

So, what are valuation adjustments? They are changes in the value of assets and liabilities on the IIP as a result of market fluctuations or fluctuations in the exchange rate. In which ways could such changes be advantageous or disadvantageous? Your preference between these two alternatives will help clarify what is involved. Under the following conditions, which would you prefer: to be the in the position of American investors investing abroad or foreign investors in the United States? The United States runs current account deficits for five years, and therefore attracts \$3,200 in foreign capital during this period (on the financial account). Let us say this is done by importing assets worth \$3,000 and exporting assets worth \$6,200, for a net capital inflow of \$3,200. Now imagine that the value of American assets, initially at \$6,900, increases to \$14,000, that is, by an amount of \$7,100. Meanwhile, the value of foreign assets in the United States, initially at \$9,200, increases to \$16,200, that is, by an amount of \$7,000. In other words, even though American investors added less capital to their stock of assets than their stock of liabilities, the value of American assets increased more than the value of American liabilities. The United States's net liability position actually improves by \$100, from an initial net liability of \$2,300 to a net liability of \$2,200 at the end of the five-year period, because of valuation changes and in spite of importing capital net of exports to the tune of \$3,200. In the absence of valuation adjustments, net capital inflows of \$3,200 would raise net liabilities by the same amount. The effect of valuation changes is to make the United States look like a net capital exporter on the financial account, exporting capital worth \$100 over this period. In millions of dollars, this example illustrates how valuation adjustments improved the United States's NIIP between 2001 and 2006 despite substantial net capital inflows, which in the absence of valuation adjustments deteriorate the NIIP. If you are able to see how valuation adjustments can offset the growth in net liabilities despite net capital inflows, you would rather be in the position of American investors during this five-year period.

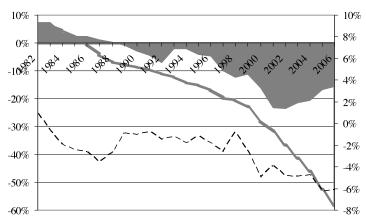
How representative are these changes? While the United States's net liability position improved despite considerable capital inflows during

this period, has it not at other times deteriorated more than we would expect on the basis of net capital inflows so that differences between net financial flows and the NIIP are ironed out over time? Even when measured over a sustained period, such as the last quarter century, the United States has experienced significant exchange rate and capital gains on its net international investment position. As a result, growth in net liabilities has been smaller than what we would expect given the net financial flows required to fund the deficit on current account. Put differently, valuation adjustments curb the increase in America's external liabilities, limiting their constraining effect.

Thanks to the data made available by the BEA, which started reporting the value of FDI in 1982, one can get an idea of the size of valuation adjustments over the last quarter century. Between 1983 and 2006, net financial flows into the United States were roughly \$5.9 trillion. However, during this period the NIIP only deteriorated by \$2.3 trillion. The difference is \$3.6 trillion, which averaged over 24 years is roughly \$150 billion a year. As a share of GDP, the United States attracted capital to the tune of 65 per cent of GDP between 1982 and 2006 in order to fund deficits on current account but the NIIP only declined by 23 per cent of GDP. Economists variably refer to the difference between cumulated net financial flows and total changes in the NIIP (in the form of valuation adjustments) as a "transfer of wealth," a "free ride" or "debt for free" (Cavallo, 2004; Cline, 2005).

What would we expect valuation adjustments to look like if the United States did not have an advantage? Figure 1 shows what the NIIP would have been if the market value of American assets and liabilities increased at the pace of net capital imports. The shaded grey area shows the evolution of the NIIP since the early 1980s and reveals that the United States became a net debtor in 1989. If one were to calculate the NIIP on the basis of cumulated net financial flows over this period without regard for fluctuations in asset price or in the dollar, and add that amount to the 1982 value of the NIIP, one would end up with the white area above the thick grey line instead of the shaded grey area. As such, the white zone represents the deterioration in the NIIP as a result of "valuation adjustments"—changes in the net worth of assets due to changes in market price and the dollar. Of course, the predicted NIIP based on net financial flows (that is, the white area) assumes that countries have the same portfolio, that price changes within each asset class are the same and that foreign exchange prices remain constant or at least that the net effect of changes in currency price is the same across countries, which obviously is not the case. Nor is the point that all asset prices should change in the same way or that the price of a specific asset should change in the same way in different countries or to propose a return to fixed exchange rates; the point is to provide some sort of basis for considering valuation effects.

FIGURE 1 Valuation Adjustments



Source: Author's calculations based on data from Bureau of Economic Analysis, US Department of Commerce (2007a, 2007b, 2007c).

Notes: Net financial flows are measured on the second Y-axis.

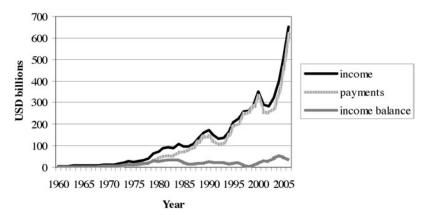
Financial derivatives are not reflected in the data. Valuation adjustments would be even higher if they were reflected.

By comparing the NIIP with and without valuation effects, we can start to appreciate how important they have been in stabilizing net liabilities.

A closer look at Figure 1 shows how these valuation adjustments have offset the growth in net liabilities. From Figure 1, we see the evolution of net financial flows as represented by the dotted line, whose values can be gauged from the secondary axis. The United States has imported more capital than it has exported since 1983. Net capital inflows increased up until 1988. Although net capital imports remained positive, capital was imported at a slower pace between 1988 and 1992. The NIIP (again, the shaded grey area) continued to deteriorate. The trend from 1992 to 1998 was again to increase net capital imports. Except for between 1993 and 1994, when the NIIP actually improved about 5 per cent of GDP, there was a general weakening in the net liability position. Similarly, the NIIP improved by 1 per cent of GDP in 1999 even though net financial inflows amounted to 2.5 per cent of GDP. The other surprise is the considerable improvement in the NIIP between 2001 and 2006 (as discussed in the numerical example above) despite accelerating net capital inflows. Cumulated net capital imports between 2001 and 2006 amounted to 31 per cent of GDP whereas the NIIP recovered by 1 per cent of GDP.⁷

Second, the *return differential* is the difference between the return on investments owned by Americans abroad and the return on investments

FIGURE 2 Balance of Income



Source: Author's calculations based on US Bureau of Economic Analysis (2007b).

owned by foreigners in the United States. Americans have consistently received greater payments on a smaller stock of foreign assets than foreigners have received on a greater stock of assets held in the United States. A positive return differential despite growth in net liabilities is unusual. Normally, we should expect a higher stock of liabilities than assets to generate higher income payments than receipts. Yet, notwithstanding two decades of net debtor status, income on American overseas investment has continued to exceed payments on foreign investment in the United States (see Figure 2). The positive return differential implies that accumulating net liabilities has so far been less onerous than it usually is. Still, the secular increase in net liabilities over the past 25 years involves risks. Regular current account deficits and the associated increase in net liabilities leaves the United States vulnerable to higher interest rates in the future that could wipe out this positive differential.

Valuation Adjustments and the Return Differential in Comparative Perspective

Are other countries in a comparably favourable position? There are examples of other countries gaining from valuation adjustments but no other country has such a large spread between net foreign assets and the cumulative current account (Lane and Milesi-Ferretti, 2006: 31). Nor is there any country that has enjoyed positive investment income for such a long time despite recurrent sizeable current account deficits and a concomi-

tant deterioration in its net international investment position. Whether we are surprised by the facts or not, the United States appears as something of an anomaly.

According to Lane and Milesi-Ferretti, three other countries— Britain, Switzerland, and Canada—also benefit handsomely from the discrepancy between the value of the net foreign asset position and the cumulative current account in the period 1972–2004 (2006: 31). Among these countries, the United States and the United Kingdom stand out. Uniquely, they have benefited from persistent current account deficits in the form of a positive income balance and valuation adjustments. In contrast, Switzerland remains a net creditor. While valuation adjustments have worked in Canada's favour, its trade balance has consistently been positive, its income balance has been negative for at least 16 years, and on the whole its net liabilities are lower than the United States's when scaled to either GDP or population (DFAIT, 2006; Statcan, 2006a; Statcan, 2006b; USCB, 2006). Australia is another case in point. Like the United States, it has had persistent current account deficits, and its net liabilities are much higher when scaled to GDP and population but unlike the United States it did not experience substantial gains in the form of valuation adjustments or benefit during the person considered by Lane and Milesi-Ferretti from a positive income transfer on current account.8 In particular, the change in net liabilities was actually lower than the cumulated current account for the period 1972–2004 and the income balance was negative for the entire duration of this period (Lane and Milesi-Ferretti, 2002). So, while the United Kingdom and Canada have experienced substantial capital and exchange rate gains on the net international investment position, Australia has not. And, while the United Kingdom, like the United States, benefits from positive net income flows, Canada and Australia do not.

The United States and the United Kingdom are the only two countries that have enjoyed a positive balance of income on current account despite large current account deficits. Only they have experienced substantially positive capital and exchange rate gains notwithstanding net liabilities that are a sizeable share of GDP. Out of the two, the United States has enjoyed higher capital and exchange rate gains despite higher net liabilities. When scaled to population, the United States's NIIP is 321 per cent higher than the United Kingdom's, 218 per cent higher when scaled to GDP (ONS, 2006a; ONS, 2006b). The structure of the United States's and the United Kingdom's investment position is optimal; both countries are long in foreign equity and short in debt (Lane and Milesi-Ferretti, 2006: 224). It is certainly interesting to note that the current hegemon of the international system, and the hegemon of the nineteenth century, have both experienced extraordinary positive valuation adjustments. At the moment, I do not have an account for the success of the

UK, but I think I can point to some positional advantages enjoyed by the United States that have contributed to these gains.

Why the Debt Is Strategic

Why has the United States experienced positive valuation changes and a positive return differential? A possible explanation is that American investors are smarter, or better at picking winners, than foreigners investing in the United States. That would be an essentialist or cultural argument, one which locates the reason for these gains in American character, the attributes of the government or the American people. An alternative explanation is serendipity, chance or fate. A more plausible explanation, is that the United States benefits because it enjoys a structural advantage. That is what I will try to show in this section. After pointing to the structural advantage which make the benefits higher and the constraints looser for the United States, I will highlight the risks associated with a trade deficit strategy.

The Asymmetry in the Structure of the Investment Position

Why does the United States benefit from valuation adjustments and what explains the positive return differential in view of sizeable net liabilities? The reason can be found at three different levels: the structure of the United States's international investment position, superior capital gains within each investment category and a hedge against the cost of depreciation by borrowing in dollars.

Before moving on to the next section, I should make clear right away that the current arrangement whereby foreigners are able to invest in the United States and Americans are able to invest abroad is mutually beneficial. The requisite monetary calculation may however look quite different depending on whether the investors are private or official. Whereas private investors are motivated by narrow economic rewards, official investors at times have broader, more long-term, political economy objectives, such as sustaining an export market, repaying dollar denominated debt or avoiding inflation and social instability. For those reasons, foreign governments are often willing to sacrifice monetary gains in their dealings with the United States that they would not be prepared to sacrifice in their dealings with other states.

Gapping

The ability to borrow at low cost is tied to the continued role of the dollar in the world economy. As world income grows, the demand for liquid dollar assets grows, and the United States is quite capable of providing a

wide range of assets—cash, bank deposits, public and private bonds (McKinnon, 2001: 4). Recycling low-cost foreign capital by lending to households on soft terms, banks act as intermediaries between the international and home market. The United States has long been regarded as a financial intermediary, providing long-term loans through direct investment and purchases of other foreign securities while satisfying foreigners' demand for liquidity by offering them low but "safe" returns on short-term securities held in the United States (Despres, Kindleberger and Salant, 1966).

This view of the United States as "banker of the world" has been taken to another level in the characterization of the United States as a "world venture capitalist." Over time, the net foreign asset position has become increasingly leveraged; like a venture capitalist, the United States has a leveraged portfolio, purchasing risky assets through low-cost borrowing (Gourinchas and Rey, 2005: 15–16). When undertaken by banks, the practice of borrowing short—in effect selling low-yield securities to buy high-yield securities—is called "gapping." Private investment bankers call this *strategic debt*.

The first structural advantage lies in the structure of the United States's IIP. Since foreigners come to the American market for liquid dollar assets, we should expect the relative share of risky assets to be smaller on the liability side than on the asset side. This asymmetry is reinforced by the fact that American investors do not seek safe investment solutions in other countries but higher returns than they can achieve at home. With access to a cheap (foreign) supply of capital, they are well-positioned to undertake risky investments abroad.

It seems plausible that the American government's ability to secure investments at home, both militarily and through a strong tradition of property rights protection, has reinforced the low risk premium on American borrowing. It also seems plausible that the American government's influence has encouraged risk taking on the part of its firms, especially when undertaking foreign direct investment abroad, which would have been prohibitively costly for firms not backed by a government capable of advocating on their behalf. For example, there are many well known examples of the American government negotiating with foreign regimes, and even intervening militarily, to protect American property. However, space does not permit a systematic exploration of these hypotheses in this article.

In addition to the higher returns that arise as a result of the structure of the United States's international investment position, the United States also enjoys higher returns on its assets than it pays on liabilities within each investment category (Gourinchas and Rey, 2005: 17–18). The return differential is highest on foreign direct investment. Returns on American direct investment abroad is 6 per cent higher than returns on foreign direct investment in the United States (Kouparitsas, 2005: 2). Again, the pro-

pensity to venture into riskier areas could explain part of the higher return on American foreign direct investment. There are other reasons as well. The Congressional Budget Office notes three reasons: a longer history of American FDI abroad than FDI in the United States, greater risk taking, tax incentives for foreign firms in the United States to under-report profits and for American firms to overstate overseas profits (CBO, 2005). According to the study, the incumbency advantage of American firms abroad is the most plausible reason for the higher returns, while they see risk taking as accounting for 20 per cent of the higher gains and find little support for tax-induced profit shifting (CBO, 2005).

By collapsing the various dimensions of the United States's advantage—the asymmetry in the structure of its investment position, the asymmetry in what it receives and pays within each investment class, as well as built-in safeguards against the cost of depreciation—we can get a better idea of where the benefits are most conspicuous.

Table 1 provides a systematic comparison of the amount of capital the United States has attracted and the amount it has sent abroad, as well as the change in the market value of the assets, by underlying detail. In the aggregate, investment over the 25-year period spanning 1982–2006, has been positive sum. American investors have gained from investing abroad and foreign investors have gained from investing in the American market. Of course, some American investors have lost money on their foreign investment and some foreign investors have lost money on their American investments but overall the increased integration of financial

TABLE 1
Capital flows and the Asset and Liability
Position in Comparative Perspective,
1982–2006

US Outflow Relative to US Inflow	
1 Total assets	55.2%
A. Official assets	0.1%
B. Private assets	66.1%
i. portfolio investment	57.6%
ii. FDI	99.2%
Change in Market Value of Assets R	elative to Liabilities
2 Total assets	84.3%
A. Official assets	2.8%
B. Private assets	100.6%
. (C.1:	90.0%
i. portfolio investment	

Source: Author's calculations based on US Bureau of Economic Analysis (2007a, 2007b, 2007c).

markets has been mutually rewarding. Notwithstanding these joint benefits, the tables below suggest greater benefits for American investors abroad than for foreign investors in the United States.

The table depicts capital flows and changes in the international investment position in comparative perspective in the quarter century between 1982 and 2006. Row 1 in the table reveals that the United States exports about half the amount of capital it imports. If we compare American capital outflows with American capital inflows, we see two outliers. First, as shown in row 1A, American official investment is negligible in terms of official investment in the United States. Second, the amount of American foreign direct investment is roughly the same as foreign direct investment in the United States (row 1B.ii).

Despite overall outflows being about half the amount of inflows, row 2 indicates that the change in the value of all American assets held abroad is 84 per cent of the change of all foreign assets held in the United States. As shown in row 2B, the change in the value of American privately held overseas assets is comparable to the change in privately held foreign assets in the United States.

Table 2 takes into account how much capital is exported and imported when comparing changes in the market value of American assets and liabilities. In so doing, it points to changes in the market value of American foreign assets relative to foreign assets in the United States per dollar invested. Thus, we are able to see how much the United States gains relative to countries investing in the United States both on a cumulated and yearly basis, as shown in rows 1 and 2, respectively.

TABLE 2
Changes in the Market Value of Assets
Relative to Liabilities per Dollar Invested

1 Total assets	152.7%
A. Official assets	4075.3%
B. Private assets	152.1%
i. portfolio investment	156.2%
ii. FDI	135.3%
Average Yearly Change	
2 Total assets	2.2%
A. Official assets	165.6%
B. Private assets	2.2%
i. portfolio investment	2.3%
ii. FDI	1.5%

Source: Author's calculations based on US Bureau of Economic Analysis (2007a, 2007b, 2007c).

Even when one takes into account how much Americans invest abroad and how much foreigners invest in the United States, thus looking at the change per dollar invested, the change in the market value of American assets is still higher than it is for foreign investment in the United States. Despite substantially lower capital outflows than inflows, the change in American assets held abroad relative to foreign assets held in the United States is 153 per cent (see row 1), which implies that American overseas assets have increased 53 per cent more than foreign-held assets in the United States on a cumulated basis since 1982. While governments often have a mixed bag of political economy incentives when investing, private actors are presumably motivated by profit alone, so it is surprising to see that the change in the market value of American private assets exceeds the change in foreign private assets by 52 per cent (row 1B), portfolio assets by 56 per cent (row 1B.i) and FDI by 35 per cent (row 1B.ii). Disaggregating these gains, we see that the United States gains a whole lot more on its official investment abroad than foreign governments gain on official investment in the United States (row 1A), more precisely 4075 per cent more.

The average yearly change is 2.2 per cent higher for American assets than liabilities (row 2), 165 per cent higher for foreign official investment (row 2A), 2.2 per cent higher for private assets (row 2B), 2.3 per cent higher for portfolio investment (row 2B.i), 1.5 per cent higher for FDI (row 2B.ii).

These valuation adjustments explain why the United States's net liability position has risen more slowly than net capital inflows. These gains are not just a matter of the structure of the American investment position, since the change in the value of American assets is higher than the change in its liabilities for every investment category. Moreover, while some of the positive valuation changes can be attributed to superior capital gains, the advantage is also linked to the ability to borrow in dollar-denominated assets and to lend by purchasing assets predominantly denominated in foreign currency. This is the topic of the next section.

Playing Dollar Cycles

As the reserve currency country, the United States has the privilege of borrowing in its own currency. Borrowing can therefore be financed by printing dollars and, as a result, downward pressure on the dollar, not illiquidity, is the main constraint on American borrowing. Of course, the United States itself cannot print dollars at will; someone also has to be willing to hold them. At the same time, the American market's ability to absorb large amounts of goods, services and assets provides foreigners with a motivation to hold dollars.

Under Bretton Woods, the steady outflow of dollars made it less and less credible that the United States had enough gold reserves to honour outstanding dollar claims, the so called Triffin dilemma which led to the system's demise. The credibility issue remains a problem under flexible exchange rates but it has less drastic consequences as dollar depreciation intercedes to bring down the current account deficit and the (dollar) value of net liabilities.

A falling dollar raises export competitiveness while increasing the value of whatever portion of overseas assets are denominated in foreign currency. Meanwhile, the negative effect that depreciation normally has on external liabilities when borrowing occurs in local currency is neutralized since most American borrowing from abroad is in dollars. Since prolonged deficits imply depreciation, the cost of adjustment would have been higher for the United States had it not been the key currency country because the decline in the value of the dollar would have adversely affected liabilities. Although liabilities are not reduced as a result of appreciation when borrowing occurs in dollars (as opposed to foreign currency), protecting against the cost of depreciation is especially important when a country experiences a long-term decline in the value of its currency. Although valuation adjustments seem to suggest a secular decline in the value of the dollar, whether the long term trend has been one of decline is of course an empirical question. According to the data available from the Federal Reserve Bank of St. Louis, the dollar has declined against major currencies over the period in question, that is, 1982–2006, but not on a broad trade-weighted average. This is a matter which merits further research. In particular, the imperfect overlap between capital and merchandise exporters to the United States suggests that the basket of currencies against which the value of the dollar is gauged should be investment-weighted rather than trade-weighted.

It is true that investors in industrialized countries with advanced capital markets also can borrow in their own currency, at least partially, and hedge against the remaining foreign currency risk. Hedging is expensive, though, prohibitively so for small-scale investors. To the extent that hedging has occurred, it has not necessarily translated into exchange rate gains in the form of valuation adjustments. For instance, by 2005, the financial sector in Australia, hedged about 85 per cent of its foreign currency debt (93 per cent in 2001) whereas other borrowers hedged 46 per cent of their debt (38 per cent in 2001) but as mentioned earlier the results have been mixed (Harrison and Hawkins, 2007: 70).

The dollar has come down about 40 per cent against major currencies in a period of five to seven years. There have been two major rounds of dollar appreciation. The first upward trend started at the end of the 1970s when the dollar regained strength after falling for almost a decade between 1971 and 1978. From 1978 to 1985 the dollar appreciated sig-

nificantly against major currencies. Then in the decade spanning the mid-1980s until the mid-1990s the dollar parachuted again. This period was followed by a second dollar rally which lasted until 2002. The dollar is currently in its third downward phase. This weakening is part of a regular pattern of dollar cycles.

What plays a more prominent role in valuation adjustment, changes in asset price or exchange rate fluctuations? Both forces influence the NIIP, but as the value of the asset and liability positions continues to expand in an increasingly globalized economy, we should expect greater impact from a fluctuating dollar. Size matters in considering valuation effects (Tille, 2003). One way to illustrate how the size of the international investment position affects valuation adjustments is to compare two years when the net international investment position was similar. For example, the NIIP in 2001 and 2006 were roughly equal in size, if anything the NIIP was slightly higher in 2001 (\$2.34 trillion) than in 2006 (\$2.08 trillion). How would a 10 per cent depreciation affect the NIIP in either year, assuming 63 per cent of American overseas assets were held in foreign currencv?¹⁰ In 2001, American overseas assets were \$6.9 trillion (and foreign investment in the US was \$9.2 trillion). In 2006 American overseas assets were \$15.3 trillion (and foreign investment in the US was \$17.4 trillion). Since foreign investment in the United States is mostly dollar denominated, depreciation of the dollar would not affect the value of foreign investment in the United States, but it would increase the dollar value of American investment abroad. The effect of a 10 per cent depreciation would therefore have been to reduce the NIIP by \$436 billion in 2001 and to reduce it by \$966 billion in 2006. Despite a similar net international investment position in 2001 and 2006 (in fact, a somewhat higher NIIP in 2001 than in 2006), a 10 per cent depreciation would have reduced the NIIP by \$530 billion more in 2006 than in 2001 because it would have affected a higher asset position. As a share of GDP, the reduction in net liabilities would have been 3 per cent higher in 2006 than in 2001.

The considerable size of the United States's asset and liability position has served as a bulwark against a weakening of the NIIP. The United States's structural advantage consists in being less affected on the liability side. As long as the beneficial effect of appreciation, by way of limiting the growth in external liabilities, pales in comparison with the benefit from protecting the liability position from deteriorating as a result of depreciation, this arrangement will continue to benefit the United States.

Who Bears the Cost?

The United States has a series of structural advantages, which allows it to prolong trade deficits for longer periods than other countries and, when

necessary, to receive help in the adjustment process. The first of these advantages is the size of its capital and product markets. What makes the United States an attractive investment venue for private actors is the demand for liquid dollar assets, the ability to choose from a wide range of investment vehicles and the perception that the American market is safe. As mentioned earlier, governments, on the other hand, have had a whole set of additional reasons for investing in American assets.

Because the American market is so large, it plays a key role in generating global demand. Almost every state, and certainly every economically powerful state, has an interest in seeing the American economy do well, an interest that is much greater than the interest they have in the success or failure of most other states. The American economy is "too big to fail"; its collapse would have drastic negative consequences for everyone else. As a result, governments have interceded to smooth the dollar's transit when it has fallen too hard or risen too fast. In the 1980s, G-7 governments helped battle an unwieldy deficit by co-ordinating interventions to push the dollar down and by signing onto macroeconomic policy adjustments enunciated in the 1985 Plaza Agreement. Governments also set aside an \$18 billion "war chest" to cruise control the fall in the dollar through co-ordinated interventions (Funabashi, 1988: 23). This turned out to be a whole lot more than the \$10.2 billion needed to pull off the 10 to 12 per cent realignment participating countries had agreed upon. Plaza was a watershed in macroeconomic history. Similarly, at Louvre in 1987, the United States was able to persuade Japan and Germany to take specific policy measures to traverse the American economy onto safer ground. Allied support had to be negotiated and was not always forthcoming but the very fact of a co-ordinated response was due to the realization that negative spill-over effects might bring on a world recession.

The ability to persuade other countries to share the burden of adjustment, often by asking them to intervene in their own economies, has allowed the United States to avoid growth-throttling interest rate hikes that would be necessary if the deficit were entirely privately financed. The United States's current policy towards China is almost a mirror image of the way it dealt with Japan in the 1980s.

Quite apart from the assistance the United States receives in adjusting trade deficits, they can sustain them over a longer time horizon than other countries. In the 1980s, the current account deficit steadily increased between 1982 and 1987 when it peaked at 3.4 per cent of GDP. Comparing the seven-year period between 1982 and 1988, with the one between 2000 and the year 2006 when the deficit reached an all-time high, reveals important differences but also striking similarities. One important difference is that capital inflows, as a result of the integration of the world economy, have more than doubled as a share of GDP. More surprising is the nature of the capital inflow. Between 1982 and 1988, private inflows

averaged 91 per cent of overall inflows whereas between 2000 and 2006 they only averaged 82 per cent. Not only have official inflows increased as a share of overall inflows but the interests financing the deficit have changed as well. Elsewhere, I explore how the shifting composition of reserve holders and Treasury purchasers might affect deficit financing. Although the analysis here is more retrospective, establishing a past advantage, the recent purchase of the Abu Dhabi Investment Authority (a sovereign wealth fund) of a 4.9 per cent stake in Citigroup in exchange for a \$7.5 billion cash injection, points to an interesting mix of incentives. Foreigners are not investing in the United States out of altruism but pursuing the best alternatives available to them. By diversifying their funds, countries with high savings prevent their currencies from appreciating and can avoid inflationary pressures, which could exacerbate income inequalities and fuel social unrest in their own countries. By investing in the American economy, the dollars spent on oil and other foreign goods are finding their way back to the United States to ensure that the economy continues to thrive. The very expectation that foreign investors will step in to pick up assets at bargain prices may be one of the reasons why American investors behave as if they have some form of security in making riskier investments.

A Sustainable Advantage?

How long can this advantage persist? One of the points of my argument is that the advantage has been sustainable because deficits have not been sustainable. If the United States were able to indefinitely raise imports over exports, dollar depreciation would never intercede to correct the deficit, and valuation adjustments would not be significant. I highlight the difference between the sustainability of the deficit and the sustainability of American privilege because my argument, which is the latter, is sometimes mistaken for the former. While I do argue that the United States, as a result of its structural advantage, can maintain deficits for a longer time than other countries, I do not claim that it can do so forever or that it can calculate or control when adjustment will set in. All I am claiming is that these cycles have been beneficial, that they have produced both monetary and policy (autonomy) rewards, and that they are likely to do so in the future. This being said, there are of course risks and limits to such a policy.

To finance continuous deficits, the United States must sell more and more assets, which means it must increase liabilities. No country can increase liabilities to finance growing current account deficits in perpetuity. Anticipating a correction, the demand for American assets will fall and so will the dollar. Private investors will be especially leery of plac-

ing capital in the United States as long as the prospect of purchasing American assets at a discount does not adequately compensate for the expectation of a *continued* fall in the dollar exchange rate. This dynamic has been played out since 2002. So far interest rates have not been growth throttling, but if foreigners expect a sharp decline in the dollar, they will demand a higher risk premium to hold dollar-denominated assets. Interest rates would have to rise to prevent a precipitous slide in the dollar exchange rate. That would not only dampen investment and growth but increase payments on the debt portion of external liabilities, which could ieopardize the positive return differential. In short, the risk is a recession, prolonged and aggravated, because of difficulty attracting foreign capital. The effects on the economy could be huge. Although I have argued that structural advantages combine to limit the downside of running persistent trade deficits while maximizing the benefits, it is of course possible that despite the four successful dollar rounds over the past 25 years, the current round marked the last winning cycle, putting the country's future prosperity at risk. Indeed, some economists have predicted that the United States, as a result of growing liabilities, is headed for a long hard fall (Gray, 2004; Obstfeld and Rogoff, 2005; Setser and Roubini, 2005).

There are good reasons to believe that the cycle could break. One of the most profound changes in the economic order after the breakdown of the Bretton Woods system of fixed exchange rates was the onset of a competitor currency. A thorough treatment of how the arrival of the euro will affect America is beyond the scope of this article, but some key aspects that will determine whether the euro has the potential to undercut the United State's key position are worth noting.

While the euro serves as a limiting factor, the dollar can be expected to play a continued special role in the world economy. The euro is making an inroad as the currency of denomination for invoicing but the dollar is still the main unit of account (Cohen, 2003: 580). Outside the eurozone, the euro has not yet emerged as a vehicle currency for trade (ECB, 2005). Key commodities, such as oil, continue to be priced in dollars despite the occasional rumour that oil exporters are contemplating a switch to euros (Looney, 2004). The dollar has continued to serve as the primary medium of exchange and persists as the main store of value in international financial markets. Before the euro was launched in 1998, more than 43 per cent of all currency trades involved the dollar, a share that rose slightly above 44 per cent in 2004 (BIS, 2005: 9). As reserve currency, the dollar is still the most popular currency with central banks. Almost 66 per cent of the \$2.6 trillion foreign exchange reserves held globally in 2005 were in dollars (IMF, 2005).

However, the future direction of European monetary co-operation could significantly boost the euro's private use. At present, the United

States emerges well ahead of the eurozone but not ahead of a possible Europe of 15 when all the indicators that determine the size of world capital markets are taken into account. The United States's markets for equity and debt are considerably larger than those of the eurozone. Bank credit is the only financial domain where the eurozone has a lead. Since securities are more "fungible," American capital markets which are based on securities financing have a major advantage over financial markets in Europe which depend on financing through bank loans (Hartmann and Issing, 2002: 320). Simulations suggest that British participation in the eurozone, in particular, will determine its future (Chinn and Frankel, 2005: 20). Yet for political reasons, Britain is one of the EU members least keen on adopting the euro. In addition, the battle for influence within key European institutions and real differences among euro economies also make it unlikely that the euro will be adopted on a scale similar to the dollar any time soon.

Conclusion

When the United States experienced large trade deficits in the 1980s, scholars debated whether a hegemon was needed for the system to remain stable. Central to the theory was the assumption of a benevolent hegemon, willing to shoulder most of the costs of public good provision even though smaller actors would benefit disproportionately from them. In this context, hegemonic decline was viewed as a major threat to international co-operation. Various explanations for why states might nonetheless collaborate were offered in response to this dismal outlook. A seminal contribution to this debate seriously questioned the theory's assumption of a hegemon unable to structure international relations in its favour (cf. Snidal. 1985). The purpose of this article is to provide a better understanding of the benefits of a deficit policy, and how the United States's reserve currency status produces tangible and intangible benefits. The gains come in the form of a return differential on the balance of income and valuation adjustments that check the growth in net liabilities, as well as greater policy manoeuvre. As in the 1980s, not everyone will agree that these gains outweigh the knife-edge walk necessary to achieve them. Resolving that trade-off requires probing into the probability of future failure. In light of the last quarter century, the system seems to have had built-in stabilizers, and America's relative decline to have taken place within welldefined limits. The ascendancy of Europe, the euro in particular, might have tightened those constraints. However, until now the United States has conformed to the game-theoretic finding that an actor with larger resources can afford to wait longer and expose itself to greater risks than anyone else in the system.

Notes

1 This distributional feature of the theory did not receive much attention when the theory was first developed because the focus of the literature was on the fundamental question of whether or not co-operation was possible, not on the allocation of gains from co-operation.

- 2 The trade balance appears on the current account, along with net income receipts and net unilateral transfers (loosely, foreign aid). Both net income receipts and net unilateral transfers are a much smaller portion of the current account and therefore do little to counteract the capital outflow associated with the trade deficit.
- 3 The actors carrying out the transactions can be either private or official and the securities themselves can be issued by a private or government entity.
- 4 Depending on whether one looks at the current or market value of the NIIP, one will conclude that American liabilities started to exceed American foreign assets in 1986 or 1989.
- 5 Since the IIP is a record of all kinds of assets, debt instruments such as bonds, foreign direct investment and stocks, it is preferable to refer to the net foreign claims on the United States as external liabilities not external debt.
- 6 Specifically, it assumes that foreign investors collectively have the same portfolio of American assets as American investors do abroad, that price changes are the same within each asset class and that the net effect of changes in the price of the dollar has been zero, or, alternatively, that the net effect of price changes emanating from differences in asset composition, from differential valuations within each asset class and in the value of the dollar is zero.
- 7 These calculations are based on BEA (2007a, 2007b, 2007c).
- 8 Austraila did experience positive valuation adjustments in the period 1986–2006, although these were not as strong as the United States's. Author's calculations based on (IMF, 2008).
- 9 It is worth noting that the CBO does not include valuation adjustments in calculating the return differential between US FDI and foreign FDI (in the US).
- 10 The assumption of 63 per cent is conservative and based on Cline (2005: 42).
- 11 Here I should flag that, as far as the composition of capital inflows is concerned, there are marginal differences in choosing 2000–2006, as opposed to 1992–2006 (which captures the long-term build-up in the deficit), as the comparator group.
- 12 Between 1982 and 1988, average capital inflows were approximately 4 per cent of GDP whereas they amounted to 10 per cent of GDP between 2000 and 2006. Author's calculations of capital inflows in this section are based on BEA (2007a, 2007b).

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