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Meddling in the Markets: Foreign Manipulation

FELIX K. CHANG and JONATHAN GOLDMAN

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No bombs need fall from the sky. Yet damage can be inflicted on the United States through market manipulation that would be as costly to recover from as any conventional attack. The threat of financial and commodity market manipulation is not new. What is new is the ability of a foreign government to use manipulation in a way that would cause a swift and systemic economic crisis in the United States. Such actions could be taken without ever clashing with the American military—offering those without the military capability to penetrate America's defenses an asymmetric tactic for direct attack. That a foreign government could do so should be a major concern for all of America's political and military strategists.

Market Manipulation

Many economists harbor doubts whether such an incident could ever occur. They discount the idea that any country would attempt large-scale market manipulation against another, because the harmful effects of any such effort would inevitably rebound on the perpetrator, given the complex interrelationships among national economies. Since rational leaders would not take any action that would ultimately harm their own interests, no legitimate government would seriously consider such a strategy.

Yet, in August 2007, two members linked to the Chinese government and economic research institutes did just that. In a speech, one commented that "Beijing's foreign reserves should be used as a 'bargaining chip' in talks with the United States." The other intimated that China could use its

large foreign exchange reserves of dollars to precipitate a "mass depreciation of the dollar," if the United States continued to pressure it to revalue its currency. Although China's central bank eventually disavowed the comments and reiterated its role as "a responsible investor in the international capital markets," the idea of such an action had clearly been surfaced at the highest levels of the Chinese government.[1]

The danger of a destabilizing market manipulation incident has historically threatened only those countries whose economies were heavily reliant on a single commodity or financing instrument. Developed nations with deep and diverse economies, such as the United States, have seemed above this sort of manipulation. Many countries in the developed world have, however, increasingly grown attached to financing their accounts and budget deficits with debt that is traded internationally. While doing so gives these governments access to new capital and aids in sustaining their economic growth, the resulting debt is exposed to external influences—possibly manipulation—affecting foreign exchange and interest rates. The danger from manipulation would be higher still if any single entity were to gain control over a substantial portion of a nation's traded assets.

The market movements that led to the European Exchange Rate Mechanism's demise in 1992, the Mexican peso devaluation in 1994, the Asian financial crisis in 1997-98, and the near collapse of Long-Term Capital Management (LTCM) in 1998 demonstrated the possibility of such actions. The first two examples illustrate how foreign speculators could amass enough leverage that they might overwhelm the ability of European central banks to counter their actions and, in doing so, disrupt national economic policies. The third example, the Asian financial crisis, reveals how a crisis in confidence among foreign investors could spread from the markets to the actual economy, ruining economic interests and spreading panic on a global scale. The LTCM incident highlighted the fact that a swift and systemic crisis could not only be caused by an entity as small as a hedge fund (albeit a heavily leveraged one), but was also capable of imperiling the world's largest economy.[2]

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Historically, American markets have not been immune to market manipulation, at least of the nonsystemic sort. The Hunt brothers tried to corner the silver market from 1979-80. A decade later, Solomon Brothers endeavored to do the same in the US Treasury market. As recently as 2006, British Petroleum attempted to corner the American propane market, while UBS and Credit Suisse traders tried to squeeze certain US Treasury securities in the repurchase market. These events underscore just how prevalent manipulative schemes really are. They serve as important reminders that any market, even the most knowledgeable and resilient, can be misled.[3]

Fortunately for the United States, its financial and commodity markets are so large and diverse that triggering a swift and systemic economic crisis would be difficult, due to the enormous amounts of capital required. That may not, however, always be the case. In August 2007, a near-systemic crisis gripped the global debt markets when financial institutions worldwide reacted to the chain of consequences emanating from the deterioration of US subprime mortgages. Even after the Federal Reserve aggressively and repeatedly slashed interest rates, it was not until spring, well into 2008, before the debt markets began to loosen. All this has demonstrated just how quickly underlying economic factors can combine into a crisis that threatens American economic stability, even in the absence of a manipulative incident.[4]

Converging Factors

Over the course of the last century, a number of related economic factors have developed. Individually, they may not appear overly menacing. As they have converged, however, the combination has made the United States vulnerable to the kind of swift and systemic economic crisis previously described—one triggered by means of market manipulation. As modern central banks evolved, they were hailed as a mechanism that would help keep inflation at bay, provide liquidity to a nation's banking sector in times of crisis, and play a critical role in maintaining economic growth. The central bank does so through control of a nation's currency and monetary supply. As creations of governments, most central banks are not free from political influence; they are only as independent as the rules governing them permit. Even the 300-year-old Bank of England did not gain its full independence until 1997. So, in spite of their economic focus, political motives are present in the decisionmaking processes exercised by central banks around the world.

Since the 1970s, electronic funds transfers have become the prevalent form of transaction in the global financial industry. They have permitted financial transactions to be conducted with ever-increasing speed and in ever-larger volumes. That speed and volume have become so great that complex trading strategies can effectively be hidden from view; the collapse of the LTCM dem-

“Historically, American markets have not been immune to market manipulation, at least of the nonsystemic sort.”

onstrated this phenomenon on a large scale in the latter-1990s. Electronic transactions can also outpace the markets’ ability to contend with them, as was seen during the market crash in October 1987 when the full impact of computer-directed selling and an illiquid market was first felt. In the ensuing carnage, the US equity market lost a stunning 23 percent of its overall value.

To provide markets with liquidity on a daily basis, traders have long used leverage, mainly in the form of derivative instruments. Derivatives provide a means to hedge risk as well as take advantage of arbitrage opportunities. They are also used to magnify various trading strategies. Since the 1990s the amount of leverage on international markets has grown exponentially. It has increased even faster in this decade as the Federal Reserve’s interest rate cuts pumped greater liquidity into global markets. The massive amount of leverage that international financier George Soros used to derail the European Exchange Rate Mechanism in 1992 has become common just a mere decade later. That amount of leverage and its corresponding market-moving potential are now available to an increasing number of well-capitalized traders, private equity funds, and sovereign wealth funds. In a crisis, such leverage could very easily serve to hasten market failure.[5]

Another factor is the US government’s willingness to consistently run large federal budget deficits. Because of the federal budget’s enormous scale, surpassing $2.8 trillion in 2007, financing even a fraction of such a budget has required substantial issuances of US Treasury securities. When coupled with foreign demand, such issuances can feed a virtuous cycle where increased debt levels do not increase US interest rates. When they occur in tandem with foreign exchange rate pegs to the dollar, however, the issuance of such securities may eventually lead to financial imbalances on a global scale.[6]

Some imbalance is to be expected, due to foreign central bank demand for dollars, the world’s main reserve currency, as a reserve asset. Further exacerbating this imbalance, however, has been the persistent US trade deficit. Whenever American companies sell dollars to buy local currencies in an effort to pay for foreign imports, foreign central banks buy US Treasury securities in

an attempt to maintain their foreign exchange rate. Doing so not only keeps their export-oriented economies competitive in the global marketplace, it helps to build a currency reserve providing a buffer against the sort of financial crisis that ravaged Asia in 1997-98. So long as nations can keep their domestic inflation in check, foreign central banks can amass vast reserves of US Treasury securities, such as those currently seen in China, Japan, and the Middle East.[7]

Of course, anyone can buy (and sell) US Treasury securities, including those nations that are adversaries of the United States. Before the 1940s, those who held US Treasury securities were more likely to be institutions and investors rather than foreign central banks. America's Cold War antagonists, such as the Soviet Union, never held large amounts of US government debt for fear of creating strong financial and trade ties between the two camps.[8] Today many nations accumulate dollar reserves both as a reserve asset and a means by which to finance trade. In doing so, a few foreign central banks have amassed enough reserves that they could exert a major impact on US financial markets.

In February 2005, when the central bank of South Korea—a country holding $200 billion in dollar reserves at the time—hinted that it would diversify its foreign exchange holdings into other currencies and purchase fewer US Treasury securities, the financial markets were immediately unnerved. Despite the fact that the South Korean central bank never suggested it would sell its securities, the South Korean currency dramatically rose against the dollar and fixed-income markets slumped. While markets have become accustomed to such diversification strategies as more countries have adopted them since, one wonders what the impact would be if a country holding far more US Treasury securities actively sold them.[9]

In the meantime, the growth in global demand for oil has strained the world's production capacity. As a result, the price of oil on commodity markets has steadily risen over the past eight years and become highly sensitive to supply disruptions. Certainly disruptions in supply from any major oil producer will send oil prices sharply higher. Of course, oil is a largely fungible commodity; and a rise in its price impacts all of its consumers, just as it did when OPEC, along with Egypt and Syria, stopped oil shipments to the United States in October 1973. The current tightness in the oil market, however, has a structural cause. The economic growth of China and India since the 1990s has been so rapid that it elevated the worldwide demand for oil. For the moment, this heightened demand has outstripped the pace at which the oil industry can expand reserves; an industry still suffering from years of underinvestment during the 1980s and early 1990s.[10]

When the price of oil began to rise early in this decade, national governments—who had handsomely rewarded western oil companies in the past for their ability to marshal the necessary technical skills and financing

to develop oil fields—discovered that they no longer needed to do so. Rather, their state-owned oil companies could hire the same oilfield services to provide these skills. As capital markets were extended in the 1990s, nations executed financing through debt issuances and equity markets in much the same manner as western oil companies. All of this enabled energy nationalism, which first arose from the nationalist movements in the early 1960s, to regain its stature in the developing world and to threaten western oil companies with possible exclusion from the world's best oilfields.

Politics and Market Manipulation

One need not look far to see examples of short-term political goals prevailing over long-term economic interests, particularly when national leaders take economic resilience for granted. Political priorities often trump economic concerns. The use of economic means to advance political priorities is symptomatic of that phenomenon and can take many forms—from sweeping measures, for instance tariffs and embargoes, to highly targeted ones, such as sanctioned corporate espionage and leverage over financial and commodity instruments on international markets.

Countries without a strong military must find alternative or supplementary ways to fight a superior foe, if they are to prevail. That may entail hobbling an adversary's economy. The OPEC oil embargo against the United States in retaliation for supporting Israel during the Yom Kippur War underscored such a strategy. Though ultimately unsuccessful, it did demonstrate that the United States could be markedly impacted, if actions were executed under the right economic conditions. Foreign governments still regard the United States as vulnerable to this type of market manipulation; primarily, because the American government is so beholden to its economically sensitive citizens. Many of these foreign governments believe that once the American public is forced to endure hardship, it will pressure Washington to concede to at least some of their demands.

The Case of China

Despite a symbiotic economic relationship whereby China benefits from economic and industrial development and the United States benefits from high consumption and low interest rates, the two nations still harbor a disruptive political disagreement over the fate of Taiwan. For Beijing, the political stakes are high. Taiwan's reunification "plays a special role in maintaining the legitimacy of the [Chinese] communist regime because it involves territorial integrity and national unity, a symbolic value to Chinese nationalism."[11] Nationalism is especially important in light of the demise of commu-

"Fortunately for the United States, its financial and commodity markets are so large and diverse that triggering a swift and systemic economic crisis would be difficult."

nism as the *raison d'être* for China's one-party rule. So, Chinese leaders believe that they have little flexibility on this issue.[12] Even though China has markedly improved its military capabilities in the last two decades, its leaders recognize that, should any dispute result in open conflict, winning a military struggle against the United States—Taiwan's principal protector—would be difficult. A more logical way for China to improve its odds would be to pressure Washington by means of financial and commodity market manipulation. Such an asymmetric tactic would strain the will of the American public and potentially sow confusion in Washington, allowing Beijing to gain a diplomatic or possible military advantage.

China's ability to precipitate such an incident largely rests on its rise as a leading economic power. Its growth has been nothing short of remarkable. By loosening the communist fetters on its economy and injecting easy bank credit, Beijing pursued an export-driven economic development policy similar to that of Japan and Southeast Asia during the 1970s and 1980s. China's success can be seen in its rising share of global industrial production and the accompanying demand for raw materials. The continuation of China's extraordinary growth has confounded many of its fiscal and monetary policy critics.[13]

Among the most important factors contributing to China's economic boom has been the ability of its central bank, the People's Bank of China (PBOC), to keep the exchange rate between the Chinese renminbi and the US dollar generally fixed, while keeping inflation at bay. A stable exchange rate encourages export-oriented businesses to make the long-term investments needed to build a new and increasingly sophisticated manufacturing base. Learning from the Japanese experience, China has been loath to allow a speedy revaluation of its currency. The fact that the PBOC has begun to do so over the last two years has not been the result of American pressure. Rather, the central bank has done so in an effort to stem domestic inflationary pressures.[14]

By maintaining its currency at a particular level against the dollar, the PBOC has accumulated an enormous amount of dollar reserves from China's trade surplus and foreign investment inflow. At the end of 2007 the PBOC held reserves approaching $1.5 trillion, more than any other central bank. No doubt, China's central bank sees the benefit of holding such reserves as a hedge against the sort of speculation that triggered the Asian financial crisis. But China has been concerned about the expansion of liquidity within its capital-controlled borders. As the only Chinese entity allowed to invest overseas, the PBOC placed $200 billion of its foreign exchange reserves—$80 billion of which is dedicated to external investment—into a sovereign wealth fund called China Investment Corporation, in an attempt to rebalance capital flows. The fund has already invested $8 billion in Blackstone and Morgan Stanley. It is reportedly planning to put in an additional $3 billion to $4 billion into a US private-equity firm that invests in distressed financial institutions, thereby sidestepping the potential political backlash from direct investment in iconic American companies.[15]

At the same time, China has become a major contender in international commodity markets, particularly in energy and metal arenas. Its expanding economy has dramatically accelerated the country's demand for electricity and fuel. Those demands are so great that they helped boost the pace of global oil consumption, significantly contributing to the increase in oil prices since 2000.[16] Similarly, the Chinese economy has driven advances in the demand for aluminum, copper, iron, and nickel. The prices for these metals have more than doubled in recent years, as Chinese firms import huge quantities for industrial use and large-scale construction projects.[17]

China's Economic Might

Of the countries in the world that could precipitate a financial and commodity market incident, China heads the list. The PBOC's substantial holdings of US Treasury securities place it in a strong position from which to take advantage of the dollar's weakened state. As mentioned previously, Chinese officials are well aware of their ability to influence the American economy through the sale of securities. Selling even a portion of their holdings would cause the dollar to tumble and set off a spiral of selling. If such an event were to occur US short-term interest rates would sharply rise and American corporations and financial institutions would find access to capital far more expensive.[18]

Beijing could also influence international commodity markets through its links to oil-rich countries. Many of these governments are already unhappy with the United States—such as Iran and Venezuela, whose combined oil resources comprise 18 percent of the world's total. If even one of these nations were to initiate a supply disruption, the price of oil would

surge. China and Iran have already found a common interest in restraining what they perceive as American hegemony. Beijing supported Tehran in the United Nations Security Council when the latter faced economic sanctions over its nuclear weapons program in 2006. Their relationship was further strengthened the following year when Sinopec, a Chinese oil company, won the right to develop the Yadavaran oil and gas field in Iran. Venezuela's President Hugo Chávez, who shares a similar view of the United States, clearly prefers Chinese oil companies to western ones.[19]

Consequences of China's Actions

The simultaneous dramatic devaluation of the US dollar and a sharp increase in oil prices would immediately unsettle global equity and bond markets. During such times of uncertainty, institutions and investors normally seek a safe haven where their assets will hold value. For much of the twentieth century, that haven has been the dollar. In this hypothetical, however, the dollar would be at the epicenter of uncertainty, as China unloads its US Treasury securities in favor of gold or euros. Aggravating the situation, institutions and investors of all stripes would magnify the selling pressure as they tried to shed their own devalued US assets—liquidity would rapidly disappear.

Were the dollar to unexpectedly fall 10 percent along with equivalent declines in American equity and bond markets, these changes would reduce American wealth by $1.3 trillion (or 11 percent of gross domestic product [GDP]), according to one International Monetary Fund working paper.[20] Beyond the immediate market upheaval, the combined effect of any sudden loss of wealth, a lack of liquidity, and higher energy costs would stagger the US economy. American companies involved in the importation of raw materials or oil would see costs soar. Those companies reliant on Chinese suppliers would find their supply chains in total disarray. In the long run, the collapse could cast doubt on the reliability of the US dollar as a risk-free asset, permanently impacting interest rates.

Of course, China would also feel the repercussions of its actions. The value of its remaining dollar holdings would decline, lowering its national wealth by as much as 4.5 percent of GDP.[21] Assuming that trade was not suspended altogether, Chinese business would suffer as the revalued Chinese currency made Chinese goods less competitive. The resultant economic recession in the United States would further reduce the demand for Chinese products. Many Chinese exporters would be pressed to the limit as their margins dwindled. The small appreciation of China's currency in 2006 has already caused some to scramble to find ways to stay in business.[22] Unemployment would undoubtedly increase in many of China's cities, especially those with economies closely connected to exports. Yet a cooling Chinese economy could ease infla-

tionary pressures and permit the PBOC to lower official interest rates in an effort to keep the economy afloat. Higher oil prices, however, would keep inflation as an ever-present threat. At the same time, lending rates might actually increase as the demand for credit becomes greater, given the likely rise in nonperforming loans, accompanied by a decline in Chinese corporate credit quality, both of which would place greater strain on China's banks.

Even though the United States might be the primary target of China's market manipulation efforts, the reverberations would be felt worldwide. Financial losses from a sudden decline in the US dollar and on various markets, as described previously, could reduce wealth in Western Europe by 3.1 percent, Japan by 4.1 percent, Latin America by 1.1 percent, and Taiwan by 8.1 percent of GDP. About two-thirds of these losses would stem from the dollar's devaluation with the remaining third coming from the drop in America's equity and bond markets. Those countries holding dollar-denominated bonds issued by foreign governments could lose as much as another one percent. Any slowdown in American and Chinese economies at the same time when accompanied by higher oil prices would have a ripple effect around the world.[23]

Failure of Deterrence

Financial and commodity market manipulation on this scale could bring about unintended and unforeseen consequences. In this hypothetical case, whether the creditor, China which owns the US Treasury securities, or the debtor, the American government which issued them, would hold the upperhand is unclear. The creditor can pressure the debtor, but if pressured, the debtor can always default on obligations. In the early 1980s, when Latin American governments defaulted on their obligations to US banks, the creditors were threatened as much as the debtors who found themselves without access to required capital.[24]

Is the terror of economic turmoil so terrible when compared to the alternative possibility of losing the ability to govern? Among authoritarian states, China being one, that decision has rarely been a difficult choice. Maintaining power and dealing with the consequences is frequently preferred to the alternative. Moreover, given the fact that the choice of market manipulation does not require direct military confrontation, that option may appeal to Chinese leaders.

Deterring such a strategy might be more appealing if neither side took measures to protect themselves. After all, in such a case both might be deterred from acting irrationally, especially when each side is beholden to the other. In this scenario, that may not always be true. China's leaders have far more at stake than those of the United States. When one side perceives its

risks far differently than the other, deterrence is often difficult to achieve. Differences in risk perception can destabilize the balance as easily as new defensive measures. In any case, an adversary's perceptions can never be fully known; requiring a greater reliance on one's own defensive measures. An example of such a relationship was the fact that neither the Soviet Union nor the United States ever ceased developing new defensive capabilities, despite the prevalence of nuclear deterrence during the Cold War era.

Defensive Measures

Actions the United States might take to counter an economic crisis brought about through financial and commodity market manipulation should be exercised on two fronts. First, America should quickly move to mitigate the worst effects of these manipulative shocks. Then, it should move to dissuade any adversary of his ability or willingness to continue.

Damage Containment

To stem the damage from China's liquidation of its dollar reserves, the United States would face a challenge similar to that previously faced by other nations during their own financial crises. America would have to sharply increase short-term interest rates in order to lure institutions and investors to buy US Treasury securities on international markets. The ability of the Federal Reserve to stabilize the dollar in the event of such large trade volumes is ambiguous, given the failures of Asian and European central banks to do so during their own crises. Yet in the example we have created, not absorbing the excess US Treasury securities would threaten the credibility of the dollar as a reserve asset.

The United States could also turn to its economic partners in Asia and Europe for assistance from their central banks to support the dollar. As they did during the credit crisis of 2007, central banks would likely agree to coordinate their efforts. Foreign largesse is not without end, however; they would want reassurances that Washington was taking steps to end Beijing's bid to further weaken America's currency. Unfortunately, Washington has few means to temper the concurrent upsurge in oil prices in the wake of a major disruption. Its only real recourse is to release oil from the US Strategic Petroleum Reserve onto the open market. Although the circumstances outlined might merit such an action, its effectiveness in lowering the price of oil is unclear. Given the fact that the reserve contains only a 60-day supply of petroleum, when combined with any increased level of international uncertainty, some might view such a release with diminished euphoria and more with anxiety.[25]

Rollback

Damage control can only do so much. Market manipulation actions could eventually exhaust all damage control efforts and cause even greater harm to the American economy. Mexico, Thailand, South Korea, and other countries learned that lesson during their financial crises of the 1990s. The United States is obligated to seek ways to counter China's ability to execute any market manipulation, thereby reducing its willingness to consider such a plan.

There is the possibility that China might alter its strategy; it could just as easily sell its dollar reserves and derivative assets on world markets. To do so, China would have to execute transactions through over-the-counter markets and financial exchanges, all of which operate on certain assumptions. Any change in those assumptions might well impair Beijing's ability to continue any manipulative effort. In the face of massive dollar sales, the Federal Reserve could levy new requirements on banks under its purview to cover all short positions in US Treasury securities at the end of each trading day. It would, however, have to act on a global scale to be effective.[26] The European Central Bank and Bank of Japan would have to levy similar requirements for over-the-counter markets. Together, they could slow trading and reduce the volume of transactions, giving the markets time to recover. US equity markets have trading curbs for much the same reason. Such a tactic would probably be reinforced with an increase in overnight interest rates and reserve requirements, providing additional stability related to market liquidity.

The Federal Reserve could go even further and require financial institutions to post a bond in order to buy or sell US Treasury securities. Such a move would effectively lower the volume that any trader could execute at one time, diminishing selling pressure even more. While difficult to accomplish, Washington could attempt to restrict the flow of electronic transfers out of the United States, making it even more difficult to repatriate the proceeds from dollar sales. These temporary changes in the manner in which US financial markets operate would undoubtedly diminish America's reputation for operating the freest markets in the world. One can only speculate that such changes would be welcomed during a time of market turmoil.

Even after encountering such hurdles, China might seek avenues beyond the reach of American influence in an effort to continue its market manipulation. In such a scenario the United States should consider action to weaken China's resolve. There are a myriad of ways to increase threats of economic damage to the Chinese economy. Despite the Chinese economy's fantastic growth over the last two decades, it still retains significant weaknesses. China's financial institutions and capital markets remain immature, and their resilience under pressure has yet to be tested. China's equity mar-

kets are a good example of this lack of resilience. Governmental rules and regulations have stunted their development. Only in 2005 did Chinese regulators phase out the two-tiered share system, which permitted a special class of controlling interest shares that was held by the government and created great uncertainty for investors.[27] Chinese debt markets were hobbled in a similar manner. In fact, regulators only began in August 2007 to remove a rigid quota system and lengthy government approval process for the issuance of corporate debt.[28]

Despite the rapidity of China's economic expansion, its equity and debt markets have played a minor role in financing investment. Instead the Chinese banking sector has been almost singularly responsible for channeling capital into industry and investment venues. Given the lack of effective macroeconomic devices available to the PBOC, Beijing has tried to manage the pace of its national economic growth almost exclusively through its banking sector. By fine-tuning its banks' reserve ratios and directing their investments, Beijing has been able to generally control capital formation and regulate economic growth while still keeping inflation in check. As earnings have become a major driver of investment, Beijing's ability to control growth has declined and inflation has returned.[29]

Beijing's constant tinkering has done little to keep its banking sector healthy. Since the late 1990s, the Chinese government has injected more than $260 billion into its banks and removed many nonperforming loans from their portfolios in an effort to ensure solvency. A new loan classification system was put in place to reveal faulty loans more rapidly. Beijing's need to maintain economic growth and unemployment at acceptable levels has resulted in a strategy of continuing loans to wasteful government infrastructure projects and inefficient state-owned enterprises. While the loans have kept many of these enterprises afloat, they have created excess capacity in a number of industries, hindering value creation in the private sector. Meanwhile, the banking sector has begun to accumulate much more debt.[30]

The criticality of China's banks and their inherent brittleness make them an ideal target for nations wishing to ratchet up the threat of economic damage. The aim of such a strategy would be to destabilize the banks by draining their liquidity faster than Beijing could replenish it. Washington might consider freezing Chinese bank assets in the United States, as the US Treasury Department has done to other nations in the past. America could press offshore banking centers to freeze Chinese bank accounts, particularly those belonging to the PBOC. These actions would begin to limit the amount of assets that China could employ in any manipulative effort. Applying even greater pressure, Washington could prevent all Chinese corporate, financial, and government entities from participating in clearinghouse operations managed in the United States. These

operations are a critical link to the functioning of monetary transactions around the world. Without access to these, Chinese entities would find it extremely difficult to transact business even if they had access to capital.

Finally, the United States could endeavor to deprive Chinese entities of access to new sources of capital. Washington might instruct American companies to remit all their outstanding debts related to Chinese entities into a special government-controlled fund, which would be invested in US Treasury securities. That would have the dual effect of removing a potential source of new revenue for China while providing the Federal Reserve with a supplementary source of funding in support of the dollar. Washington might even consider requiring all US equity markets to delist Chinese companies in an effort to diminish their ability to raise fresh capital from international markets. All of these possible measures when combined could bring China's banking sector and many of its export-oriented industries to the brink of collapse.

Policy Implications

American policymakers have begun to notice the vulnerabilities that the United States faces from large amounts of debt in foreign hands. So far announced remedies have fallen short. One Senator suggested that Washington set "a benchmark for foreign-held US debt that would trigger some sort of White House action."[31] Unfortunately, the imposition of such a benchmark in the absence of any crisis would more than likely lead to heightened concerns over the reliability of the dollar and hasten its decline. Any benchmark would serve to attract market manipulators of all stripes. Yet the suggestion does underscore the difficulty associated with tracking the identity of debt holders, often hidden by third-party custodians. For example, if "a German resident holds a US corporate bond through a custodian in Luxembourg, the US (government) survey will attribute the holdings to Luxembourg."[32] Greater transparency regarding the holders of US Treasury securities would provide useful information for not only policy actions related to countering market manipulation, but also those concerned with combating terrorism.

With regard to global economic policy, it would be extremely difficult for the United States to escape any cycle of debt and account deficits. Primarily due to the fact that the factors which created them provide short-term political and economic incentives for both the United States and its trading partners.[33] Rectifying the situation, according to one study, would require a major devaluation of the dollar, by as much as 25 percent, in order to revive and sustain "aggregate growth in the United States . . . so long as domestic demand was curtailed by restrictive fiscal measures while overseas demand was increased by an accompanying fiscal expansion."[34] Such actions would be difficult to achieve even under the best of circumstances, as they would re-

quire unpalatable domestic policies in the United States, China, and elsewhere, and near concurrent implementation.

When addressing the possibility of manipulation of international energy markets, the US government should focus on paring its exposure in the oil market, since that is where potentially hostile countries are most influential. While boosting domestic oil production could lower the price of oil, it would still leave the United States vulnerable to manipulated price spikes. Since the United States principally uses petroleum for transportation and industrial fuels, policies that promote substitutes for these fuels would be the best long-term solutions. Although still controversial, the increased use of ethanol is one step in that direction.[35]

Given the uncertainties in the world's financial and commodity markets and the growing foreign influence over them, Washington needs to have a plan in place to counter the possibility of market manipulation by foreign governments. Financial and commodity crises can occur with alarming speed. To date, America's response to market distortions has been improvised; for example, the Treasury Department's rescue plan during the Mexican financial crisis from 1994-95, the Federal Reserve interventions in the LTCM debacle in 1998, and the credit crisis that began in 2007. In retrospect, everyone in Washington in a position of responsibility could have benefited from an understanding of the true range of options available and their repercussions. Given the fact that financial and commodity market manipulation could be employed as part of a larger confrontation with the United States, these financial plans should be a critical part of America's defense planning.

Conclusion

With the world's primary reserve currency its own, the United States has been able to finance a high-level of consumption while maintaining relatively low inflation and interest rates. As foreign central banks have amassed even greater amounts of dollars, the American government is beginning to risk losing control over its own currency. When combined with a heavy dependence on certain resources, such as oil, this unsettling trend has left the United States vulnerable to manipulation in any number of global markets.

This article examined only China's capability to execute a hostile financial and commodity market manipulation strategy. Other countries—such as a resurgent Russia, which possesses nearly $400 billion in dollar reserves and substantial oil resources—could generate a similar threat. Wherever the threat materializes, the United States has to be prepared with well-coordinated plans capable of countering the gravest of threats to its economic security. In the market, things often have to get very bad before they get better. But as any trader will tell you: it is better never to have to experience those bad times.

NOTES

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1. The former member is Xia Bin, the finance chief at the Development Research Center of the State Council, and the latter is He Fan, an official at the Chinese Academy of Social Sciences. Richard McGregor, "China Affirms Dollar's Reserve Status," *Financial Times*, 13 August 2007, 1; Ambrose Evans-Pritchard, "China Threatens 'Nuclear Option' of Dollar Sales," *Telegraph* (London), 8 August 2007, http://www.telegraph.co.uk/money/main.jhtml?xml/money/2007/08/07/benchina107a.xml.

2. Garry Evans, "Hedge Funds Clipped," *Euromoney*, February 1995, 10-12; Thomas Jaffe and Dyan Machan, "How the Market Overwhelmed the Central Banks," *Forbes*, 9 November 1992, 40-42.

3. "Repo Men," *Economist*, 4 November 2006; Chip Cummins, "A Glimpse Inside BP Trading," *The Wall Street Journal*, 30 June 2006, C1.

4. David A. Rosenberg and Kathleen A. Bostjancic, "Credit Crunch in the Money Markets," *Merrill Lynch Economic Commentary*, 6 September 2007; Gillian Tett, "Fears of Crash Unfounded—for Now," *Financial Times*, 18-19 August 2007, 3.

5. While in equity trading the Federal Reserve limits broker loans to investors at 50 percent of the total investment (known as margin) under a provision called "Regulation T." No such provision exists for other sorts of trading.

6. A four-year surplus was the exception at the turn of the millennium. Paul Masson and Michael Mussa, "Long-Term Tendencies in Budget Deficits and Debt," in *Budget Deficits and Debt: Issues and Options, Jackson Hole, August 31–September 2, 1995* (Kansas City: Federal Reserve Bank of Kansas City, 1995), 5-55.

7. When Taiwan faced a post-election crisis in March 2004, its US dollar reserves gave it the cushion with which it rode out the selling pressure on the Taiwan dollar. At this writing, the central bankers in many foreign countries see few alternatives to continuing to buy US Treasury securities. "The Petrodollar Peg," *Economist*, 9 December 2006; Tyler Marshall, "Asia's Stockpiles of Dollars Pose U.S. Economic Risks," *The Los Angeles Times*, 6 April 2004; Francis J. Gavin, *Gold, Dollars, and Power: The Politics of International Monetary Relations, 1958-1971* (Chapel Hill: Univ. of North Carolina Press, 2004), 205-208.

8. The Reagan Administration further restricted hard currency transactions with the Soviet Union.

9. Since 2006, the central banks of Italy, Kuwait, Russia, Sweden, the United Arab Emirates, and others have begun to diversify away from the US dollar, anticipating it further weakening against other currencies. Mark Schieritz, "The Decline of a Superstar," *Atlantic Times*, December 2007, 9; "Diversification Specter Unnerves the Dollar," *The Wall Street Journal*, 17 March 2005.

10. The increase in the price of oil during the 1970s spurred the oil industry to invest in developing new oil resources. By the mid-1980s, the expansion in supply and the concurrent reduction in demand from improvements in energy efficiency led to a collapse in the price of oil. The two trends left a massive spare oil production capacity, which could be brought online in the event of a shortage. That proved useful during the Persian Gulf conflict in 1990-91. The oil industry had little incentive to aggressively invest in new exploration and production projects at that time. Olivier Blanchard and Jordi Galí, "The Macroeconomic Effects of Oil Price Shocks: Why ARE the 2000s So Different from the 1970s?" Massachusetts Institute of Technology Center for Energy and Environmental Policy Research Working Paper 07-01, August 2007, 64-66; "Nervous Energy," *Economist*, 7 January 2006.

11. Suisheng Zhao, *A Nation-State by Construction: Dynamics of Modern Chinese Nationalism* (Palo Alto, Calif.: Stanford Univ. Press, 2004), 280-81.

12. Ibid., 209-47, 280-88; Xiao Gongqin, "Minzu zhuyi yu Zhongguo zhuangxing shiqi de yishi xingtai" (Nationalism and Ideology in China in the Transitional Era), *Zhanlüe yu guanli* (Strategy and Management), 1994, 21-25.

13. Joe Studwell, *The China Dream: The Quest for the Last Great Untapped Market on Earth* (New York: Grove Press, 2003); Charles Wolf, Jr., K. C. Yeh, Benjamin Zycher, Nicholas Eberstadt, and Sung-Ho Lee, *Fault Lines in China's Economic Terrain* (Santa Monica, Calif.: RAND, 2003).

14. Beijing is particularly attentive to the inflation rate, because high inflation is what helped fan discontent among workers who found common cause with reform-minded students at Tiananmen Square in 1989.

15. Henny Sender, "CIC Close to Fund Deal with JC Flowers," *Financial Times*, 8 February 2008, http://www.ft.com/cms/s/0/aeaf55dc-d5b1-11dc-8b56-0000779fd2ac,dwp_uuid=9c33700c-4c86-11da-89df-0000779e2340.html.

16. In 2005, although China accounted for "8 percent of global oil consumption, well below America's 25 percent, it has accounted for as much as one-third of the increase in global oil demand over the past three years, almost twice as much as America." "Gas-fired Dragon," *Economist*, 19 February 2005.

17. "From Accelerator to Brake," *Economist*, 8 October 2005.

18. Francis E. Warnock and Veronica C. Warnock, "International Capital Flows and U.S. Interest Rates," International Finance Discussion Paper Number 840 (Washington: Board of Governors of the Federal Reserve System, 2005).

19. Hugo Chávez also stated, "We will back Iran any time, in any situation" when he visited Tehran. Najmeh Bozorgmehr, "Iran Signals Sanctions Alert by $2bn Oil Deal with China Group," *Financial Times*, 10 December 2007; "With Friends Like These," *Economist*, 2 September 2006; John W. Garver, *China and Iran: Ancient Partners in a Post-Imperial World* (Seattle: Univ. of Washington Press, 2006).

20. Francis E. Warnock, "How Might a Disorderly Resolution of Global Imbalances Affect Global Wealth?" IMF Working Paper Number 06/170 (Washington: International Monetary Fund, 2006), 7.

21. The study evaluates the economic conditions of 2004, when China held $320 billion in US dollar reserves. Ibid., 6-7, 12-13.

22. James T. Areddy, "Yuan's Ascent Begins to Pinch Chinese Exporters," *The Wall Street Journal*, 3 January 2007, A2.

23. The prospect of an economic downturn would drive central banks in some developed countries to cut short-term interest rates to forestall those events. Meanwhile, developing countries, such as India and Mexico, may be forced to raise their short-term interest rates to halt the outflow of money from their countries and stabilize their exchange rates. Among the short-term economic beneficiaries may be Iran, Russia, Saudi Arabia, and Venezuela whose oil-fired economies would enjoy a windfall from higher oil prices. Major currencies, particularly the European euro, and precious metals would also benefit from a weakened US dollar, though the Japanese yen may not appreciate as much since it is less internationalized and hence more insulated from this sort of shock. Francis E. Warnock, "How Might a Disorderly Resolution of Global Imbalances Affect Global Wealth?" 3, 13.

24. The adage "You owe me $1 million and I own you. You owe me $1 billion and you own me" summarizes the debate.

25. The actual number of days of supply the US Strategic Petroleum Reserve contains depends on the amount of oil in the reserve and the current demand for oil. While the decision to release oil from the reserve may immediately influence the price of oil, it would still take 13 days for the oil to reach the open market from the time its released is authorized.

26. Since the US Treasury market has more defined trading hours and regulators fine cheaters, such a requirement could act as a brake on a manipulated decline in the US dollar. A seller would have to sell his US Treasury securities for dollars by the end of each trading day before he could sell the dollars themselves.

27. Although China's equity markets enjoyed a speculative boom since 2006, they still have major problems, including initial public offerings of government-controlled companies deliberately priced to leap on opening day, the lack of a correcting mechanism (short selling is illegal), valuations based on earnings inflated by corporate investment in the equity markets, inefficient and volatile pricing because the government holds the vast majority of shares, and a general lack of information disclosure. Thomas Easton, "Flashing Red," *The World in 2008* (London: Economist, 2007).

28. Jamil Anderlini, "China Move Starts Bond Surge," *Financial Times*, 16 August 2007, 1.

29. James Ahn and David Cogman, "A Quiet Revolution in China's Capital Markets," *McKinsey Quarterly* (July 2007), 18-24; Richard McGregor, "Renminbi at Highest Level Since 2005 Revaluing," *Financial Times*, 7 April 2007; Diana Farrell, Susan Lund, Jaeson Rosenfeld, Fabrice Morin, Niyati Gupta, and Ezra Greenberg, *Putting China's Capital to Work: The Value of Financial System Reform* (San Francisco, Calif.: McKinsey Global Institute, May 2006), 25-80, 111-14.

30. According to McKinsey, Chinese banks need to provide yearly financing growth of 15 percent to keep the economy growing annually at Beijing's target of 7-8 percent. That is well above the 5-7 percent annual growth that China's banking sector can sustain without piling up a large amount of nonperforming loans. Matthias M. Bekier, Richard Huang, and Gregory P. Wilson, "How to Fix China's Banking System," *McKinsey Quarterly* (February 2005), 111-12; "A Great Big Banking Gamble," *Economist*, 29 October 2005; Christopher A. McNally, "China's State-Owned Enterprises: Thriving or Crumbling?" East-West Center *AsiaPacific Issues*, 59 (March 2002), 5-6.

31. Deborah Solomon and John Harwood, "Clinton Brings Debt Worries to the Fore," *The Wall Street Journal*, 5 March 2007, A2.

32. The US government survey referenced here is the "Report on Foreign Portfolio Holdings of U.S. Securities" and published by the US Treasury Department, Federal Reserve Bank of New York, and Board of Governors of the Federal Reserve System. Francis E. Warnock, "How Might a Disorderly Resolution of Global Imbalances Affect Global Wealth?" 4.

33. Wynne Godley and Gennaro Zezza, "Debt and Lending: A *Cri De Coeur*," *Levy Economics Institute Policy Note*, April 2006; "Sustaining the Unsustainable," *Economist*, 17 March 2007.

34. Wynne Godley, Dimitri P. Papadimitriou, Claudio H. Dos Santos, and Gennaro Zezza, "The United States and Her Creditors: Can the Symbiosis Last?" *Levy Economics Institute Strategic Analysis*, September 2005.

35. Jeff Bater and Brian Blackstone, "Oil Prices Pump up Trade Deficit," *The Wall Street Journal*, 12 January 2008, http://online.wsj.com/article/SB120005818017883757.html; "The Real Trouble with Oil," *Economist*, 30 April 2005.