SOVEREIGN WEALTH FUNDS AND THE (IN)SECURITY OF GLOBAL FINANCE

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Sovereign wealth funds (SWFs) sit at the intersection of high finance and high politics. Their net worth is currently estimated to exceed $3 trillion—more than the value of all private equity or hedge funds. SWFs were responsible for 35 percent of total mergers and acquisitions activity in 2007. Between March 2007 and June 2008, these actors injected $59 billion into Western financial institutions, including high-profile equity purchases of Barclays, Citigroup Inc., Credit Suisse, Merrill Lynch, Morgan Stanley and UBS.[1] In an echo of the Japanese foreign direct investment boom from two decades ago, SWFs have also moved into acquisitions of high-profile real estate. In July 2008, a sovereign wealth fund based in the United Arab Emirates purchased 90 percent of the Chrysler Building in New York.

The explosive growth of these funds raises regulatory and geopolitical concerns. The deputy secretary of the Treasury wrote in *Foreign Affairs* earlier this year that "SWFs are already large enough to be systematically significant...[and] they are likely to grow larger over time, in both absolute and relative terms...."[2] Market analysts and regulators are concerned about the transparency of these funds.[3] Free market enthusiasts fret about the ideological implications of SWFs and the protectionist backlash they could create.[4] Politicians in the advanced industrialized states fret that SWFs now possess bargaining leverage over the economic and political futures of major economies. Many policy analysts argue that SWFs are symptomatic of shifts in the global distribution of power away from the advanced industrialized states and towards authoritarian, capitalist governments in the developing world.[5]

Are these fears of sovereign wealth funds justified? This paper examines the sovereign wealth funds phenomenon and the security concerns they provoke in the United States. In most respects, the growth of SWFs has marginal effects on American national security and foreign policy. Sovereign wealth funds are a symptom of other national ailments, like persistent macroeconomic imbalances and a failure to diversify America's energy supply. However, as symptoms go, SWFs are

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relatively benign in their foreign policy effects. If anything, these investments demonstrate the complex interdependence of the Pacific Rim and Middle East with the American economy. However, some negative policy externalities come with these funds. Their growth will significantly impair democracy promotion efforts in the developing world and increase the fragility of cooperation in global finance.

A Primer on Sovereign Wealth Funds

I will define sovereign wealth funds as, "government investment vehicles that acquire international financial assets to earn a higher-than-risk-free rate of return." They are not a recent invention—Kuwait created the first modern fund in 1953. Nor are they alien to the advanced industrialized states. Norway's central bank controls the second largest SWF in existence. Several other economies within the Organization for Economic Co-operation and Development (OECD)—including Australia, New Zealand and the United States—house sovereign wealth funds as well.

What is new about sovereign wealth funds is their size, anticipated rate of growth, recent investment trends and countries of origin. The combined heft of SWFs is currently estimated to be between $3 trillion and $3.5 trillion—or between 1 and 1.5 percent of global asset markets. They have grown at an annual rate of 24 percent over the past five years. The inelastic demand and high price of oil, combined with the persistence of global macroeconomic imbalances, lead many analysts to predict an annual 20 percent growth rate over the next decade. By 2015, their total valuation could range in size from $9 trillion to $16 trillion—or close to 4 percent of global asset markets.[6]

To seek higher rates of return, sovereign wealth funds have shifted from bond and index funds to assets that carry greater risk. SWF cross-border mergers and acquisitions more than doubled between 2006 and 2007.[7] They have also been attracted to purported alternatives such as hedge funds, derivatives, leveraged buyout firms and real estate. There are reports that SWFs operate as increasingly large speculators in commodity futures markets.[8] Sovereign funds based in Bahrain and Dubai have begun to leverage themselves in order to make bigger overseas acquisitions.[9]

Although the concept of a sovereign wealth fund is not new, close to half of the top forty SWFs have been created since 2000.[10] In the past four years, Saudi Arabia, Russia and China created large SWFs. Press reports indicate that Brazil, India and Nigeria will create new funds in the near future. Two kinds of governments are pumping money into sovereign wealth funds: commodity exporters and countries running fiscal and trade surpluses. Commodity exporting countries hold approximately two-thirds of total SWF assets.[11] For the oil exporters, the incentive to create a SWF is three-fold. First, these economies want to create assets that ensure a long-term stream of revenue to cushion themselves against the roller coaster of

commodity booms and busts. As many economists have observed, these countries are simply converting assets extracted from the earth into a more liquid form. Second, many of these governments are trying to build up reserve funds for the day when all of the oil has been extracted from below ground. Third, by focusing on foreign investments, these governments are attempting to forestall the "Dutch disease" of rapidly appreciating currencies. Overseas investment via sovereign wealth funds can accomplish all of these tasks.

Export engines are also using SWFs to keep their currencies fixed at a low-par value.[12] As of 2007, China had accumulated more than $1.8 trillion in foreign assets in order to prevent the renminbi (RMB) from appreciating too rapidly. This keeps Chinese exports competitive in the United States. More than 80 percent of these assets exist in the form of foreign exchange reserves—i.e., safe investments with very low rates of return. As these reserves have accumulated, so have the opportunity costs of amassing dollars in such low-yield investments. According to some estimates, the cost is close to $100 billion a year.[13] This explains the 2007 creation of the China Investment Corporation (CIC).[14] SWFs are more of an effect than a cause of the macroeconomic imbalances that have led to the massive, decade-long increase in all government controlled assets.

The Policy Concerns

The growth of sovereign wealth funds has provoked a variety of policy concerns ranging from worries about their effects on corporate governance to fears of a protectionist backlash. Underlying these myriad issues are the twin problems of transparency and sovereignty.

Compared to mutual funds or pension funds, the transparency of most SWFs ranges from bad to worse.[15] The largest sovereign wealth fund, for example, is the Abu Dhabi Investment Authority (ADIA)—an institution that has been in existence for more than thirty years, but which has yet to reveal its fund size, portfolio structure, performance or investment objectives. Until earlier this year, ADIA's official Web site was confined to a single page containing no financial information; it now consists of several Web pages containing no financial information.[16]

The lack of transparency is problematic when combined with the size and sovereignty of these investment vehicles. Sovereign wealth funds are, by definition, extensions of the state. They are therefore viewed as maximizing their country's long-term strategic interests rather than as profit-maximizing actors. Even defenders of sovereign wealth funds as responsible financial actors acknowledge that some SWFs might have strategic objectives in their pattern of acquisitions.[17] The funds themselves have repeatedly insisted that they seek merely to maximize their rate of return. Nevertheless, a recent survey of global financial institutions, including

SWFs, revealed that a plurality of respondents believed that sovereign funds were more likely to seek strategic interests than to maximize their financial returns.[18]

Without a clear read on the intentions of SWFs, their actions have the potential to roil financial markets. As Alan Greenspan pointed out, the strongest check against financial misbehavior is "counterparty surveillance"—the incentive of investors to make sure that their investment funds are acting prudently and profitably.[19] The trouble with sovereign wealth funds is that, in most cases, there is no counterparty surveillance. In a best-case scenario, like Norway, democratically elected parliaments must approve changes in investment strategies. This kind of oversight is consistent with the spirit of counterparty surveillance. In places like Russia and China, however, the lack of transparency, oversight and accountability is much more problematic.

The strongest check against financial misbehavior is "counterparty surveillance."

The political effects of SWFs in both home and host countries are the source of the greatest anxiety. Within home countries, the paramount concern is that sovereign funds increase the chances of corruption and crowd out businesses independent of the state. Within recipient countries, SWF investment decisions have already caused political and financial turmoil in both Iceland and Thailand. When the Norwegian Government Pension Fund shorted several stocks in Iceland's financial sector, the entire Icelandic economy was affected. A key trigger of the 2006 coup in Thailand was Temasek's purchase of a Thai firm linked to the then prime minister.[20]

There are several means through which sovereign wealth funds could, theoretically, influence the policies and capabilities of recipient countries. The most direct means could take place through direct ownership and control of strategic sectors or critical infrastructure.[21] SWFs could sabotage the firms they purchase, crippling the recipient country's capabilities. Leverage could also be exercised through the threat of investment withdrawal. Indeed, the president of the CIC warned the *Financial Times* this year that "there are more than 200 countries in the world. And, fortunately, there are many countries who are happy with us."[22] Alan Tonelson articulated a similar concern earlier this year: "If, for example, the Chinese government held significant stakes in a large number of big American financial institutions, especially market-makers, and if our nation's current period of financial weakness persists, how willing would Washington be to stand up to Beijing in a Taiwan Straits crisis?"[23] The co-chairs of the Congressional Working Group on Sovereign Wealth Funds warned in the *Wall Street Journal*, "Strong arm tactics by our government can be counterproductive given the fact that SWFs can and will take their money elsewhere if the political risk premium for U.S. investment grows too high."[24]

Leverage can also be exercised more subtly, through the cooptation of domestic interests within recipient countries. As previously observed, SWFs have acquired ownership stakes in many Western financial institutions. Private equity and hedge funds rely on SWF investments for a significant fraction of their capital. Even if these SWFs adopt a passive investment posture, it is hard to believe that some implicit degree of cooptation would not take place. For example, after receiving a US$3 billion investment from China's sovereign wealth fund, the CEO of Blackstone wrote an op-ed in the *Financial Times* warning against any measures to block SWF investment, comparing such steps to the Smoot-Hawley tariff.[25]

Even without direct ownership, financial institutions can profit from harmonious relations with SWFs through consulting and asset management contracts.[26] For example, State Street Global Advisors—the group that coined the term "sovereign wealth fund"—has an Official Institutions Group that manages approximately $270 billion in assets from more than seventy government clients.[27] With SWFs sitting on so much capital, the financial sector tends to lobby politicians in their home countries on behalf of these entities. Since these firms represent a powerful interest group within the OECD economies, they could act as a conduit to blunt policy responses to SWFs.

From an American perspective, the authoritarian cast of the fastest growing sovereign wealth funds is an additional source of concern. Sovereign wealth funds based in authoritarian countries theoretically possess two advantages over SWFs based in democratic countries. First, consistent with their regime type, authoritarian SWFs would be expected to be less transparent, allowing them to act with greater agility. Second, because authoritarian societies are better able to suppress dissent, they should be able to make investments that might be unpopular in the short-term but yield much greater long-term rewards. Some analysts are concerned that the "patient capital" of capitalist authoritarian states could cause their SWFs to act in a more strategic and a more profitable manner.[28]

This leads to the final, more existential policy concern. As a long-term development model, sovereign wealth funds are viewed as one component of a possible rival to liberal free market democracy. As Fred Halliday recently (and gleefully) observed, "after three decades of policy, propaganda, and hype about 'freeing up markets,' 'reducing the role of the state,' and 'promoting the private sector,' the SWFs embody a massive and unstoppable shift of influence back to what are in effect state-owned entities. Take that, neoliberalism!"[29] State-led development societies, in which governments use SWFs to buy off dissent and promote development and technology transfer, could emerge as a viable challenger to the accepted political economy of the advanced industrialized states. This would have corrosive effects on the West's soft power. It would be an open question whether the rest of the world would

look at the Western development model as one to emulate. Crudely put, far fewer countries would want what the United States and European Union want.

Evaluating the Policy Concerns

Looking at the empirical record, many of the concerns articulated in the previous section appear to be either overblown or cross-cutting. For example, the argument that sovereign wealth funds co-opt domestic interests in recipient countries also cuts in the opposite direction. Private actors could benefit from their association with a SWF when acting in the SWF's home market. It is possible, for example, that Blackstone has had preferred access to the Chinese market following CIC's investment in that private equity firm. In the time since CIC's investment, Blackstone announced its purchase of a 20 percent stake in a state-owned Chinese chemical manufacturer, as well as a high-end commercial building in downtown Shanghai. In August, they opened an office in Beijing to facilitate even more transactions. Blackstone's successes have occurred while other private equity firms encountered fierce resistance to similar kinds of investment.[30]

The argument that sovereign wealth funds exacerbate market uncertainty also appears to lack empirical foundation. It contradicts the supposed comparative advantage of SWFs—that they can hold large positions for long stretches of time, weathering short-term panics and downturns. Sovereign wealth funds would therefore be expected to function in a countercyclical, stabilizing manner—as their investments in the financial sector earlier this year suggest. Furthermore, in contrast to their private sector counterparts, SWFs traditionally have not been highly leveraged. Their equity investments to date have been focused in regions and sectors where they have local knowledge. The general consensus among financial analysts is that SWFs have taken a long-term, passive approach to their overseas investments.[31] The bulk of recent SWF equity investments in OECD countries have been for either non-voting shares or stakes too small to warrant corporate control.

While sovereign wealth funds have been increasing their risk profiles, it is not clear that they are acting in a riskier fashion than peer financial institutions. Given the current state of financial markets, large private institutions are also interested in investing in higher-yield assets, particularly in the developing world. After analyzing recent acquisition patterns of several large SWFs, Rachel Ziemba concluded, "Increasingly a vast array of pension funds, endowment funds, sovereign funds all seem to be coalescing to a similar asset allocation—high equity, more exposure to alternatives, real assets like commodities and less exposure to bonds. And everyone wants more emerging market exposure."[32]

The strategic concerns about sovereign wealth funds also rest on uncertain grounds. Financial analysts identify the primary "strategic" goal of SWFs as acquir-

ing expertise or technology that can facilitate economic development in the home country. Many of these investments complement the home country's preexisting comparative advantage.[33] For example, Arab SWFs are more likely to acquire equity stakes in the energy sector, once Singapore's Temasek has been more likely to acquire port facilities. A recent Monitor Group study examined 785 SWF equity purchases from 2000 to 2008.[34] They found that investments in strategic sectors—transportation, defense, aerospace and high technology—comprised less than one percent of the value of all purchases. Even expanding the definition to include energy and utilities, less than 5 percent of all SWF acquisitions were for controlling interests in strategic sectors in OECD markets.[35] Christopher Balding engages in a portfolio analysis of the largest SWFs, and concludes that they "demonstrate an unmistakable preference for domestic and regional equity investment."[36]

Nevertheless, some sovereign wealth funds have made investment decisions based on criteria other than profit maximization. In the United States, the California Public Employees Retirement System decided to divest its holding in firms doing business in Sudan. The recent divest terror campaign has been designed to use U.S. state pension funds to pressure European firms into divestiture from Iran and other state sponsors of terrorism. Norway's Government Pension Fund Global has articulated a set of ethical guidelines to regulate its equity investments. But one country's ethics is another country's politics. In early 2008, Muammar el-Quaddafi threatened to withdraw Libyan SWF investment from African nations resistant to his idea of strengthening the African Union.[37] There is no evidence, however, that any of these attempts to exercise leverage had any policy effects. A recent European Central Bank paper examined stock prices after Norway's SWF strengthened its ethical guidelines for investment and divested from firms like Wal-Mart and United Technologies. They found no significant effect on firm performance or rate of return.[38]

These results are consistent with the general consensus in international relations—threats of economic exit only work under a limited set of circumstances.[39] The literature on economic coercion and economic interdependence also suggests that sovereign wealth funds lack the capability to coerce the OECD economies. Even relative optimists about the utility of financial statecraft place strict preconditions on the ability of states to use it. The sender must be significantly more powerful than the target. The sender must be able to assemble an institutionalized multilateral coalition to enforce the sanctions. The expectations of future conflict between the target and the sender coalition must be low. In the absence of these conditions, financial statecraft will almost always fail.

The home countries of sovereign wealth funds possess none of these advantages in trying to leverage their investments into political gain. Small countries closely allied with the United States—Norway, Singapore, the United Arab Emirates, Qatar,

Kuwait—own and operate the largest SWFs. These economies have the potential to inflict economic harm on the advanced industrialized states, but they would damage their own economies even more in the process. Even when expectations of future conflict are very high, no country has even tried to deploy economic coercion when their own costs exceed those of the target costs.[40] In theory, there is the possibility that states with sovereign wealth funds could create a balancing coalition against the United States and/or the European Union. On many issues, particularly energy prices, the Pacific Rim economies and oil-exporting states have divergent foreign policy interests. The likelihood of coordinated coercion against the established markets is quite low.[41]

Over time, as sovereign wealth funds acquire even more assets in recipient countries, their bargaining leverage could increase. The complex interdependence created by SWFs , however, cuts both ways. To be sure, the United States needs SWF investment to finance its large current account deficit. Nonetheless, most other asset markets are neither big enough nor open enough to cater to large-scale sovereign wealth investments. Large market jurisdictions—the United States and European Union—should be able to dictate most of the rules and regulations regarding these funds.[42] While some OECD economies might need SWF investment, it is equally true that capital exporters need America and Europe to keep their jurisdictions open to inflows. These markets remain the only ones deep and liquid enough to absorb inflows in the trillions of dollars. Indeed, the very countries that are bulking up their SWFs at the moment are the most protectionist when it comes to inward investment.[43]

The International Monetary Fund (IMF) process to create a code of conduct for SWFs bears this point out. In 2007, the G-7 Finance Ministers asked the IMF to develop a code of conduct for SWFs. The initial reactions of sovereign wealth funds to this step ranged from tepid to very hostile. For example, Gao Xiqing, the president of the Chinese Investment Corporation, told *60 Minutes* that an IMF code would "only hurt feelings" and characterized the idea as "politically stupid."[44] Nevertheless, the U.S. Treasury Department persuaded ADIA and the Government of Singapore Investment Corporation (GIC) to jointly issue a set of policy principles regarding SWFs and recipient countries. These included commitments to governance and transparency standards, as well as a pledge to use commercial, rather than political, criteria in determining investments.[45] As of this writing, an IMF Working Group appears on schedule to release guidelines in the fall of 2008.[46]

Are sovereign wealth funds based in authoritarian countries different from those based in democratic countries? Yes and no. On one hand, there is indeed a strong relationship between SWF transparency and the political characteristics of the home country. The transparency of government investment vehicles is closely and positively correlated with the home country's rule of law and democratic accountability.

Multivariate tests also find a strong and positive correlation between a country's political and civil liberties and the quality and transparency of its SWFs.[47] Not surprisingly, SWFs headquartered in the OECD economies are much more transparent than those headquartered in the developing world.

There is less evidence, however, that authoritarian regimes have exploited their opacity to outperform the market or invest their capital more patiently. The recent experiences of Russia and China are revealing in this regard. The China Investment Corporation received considerable domestic flak for its investment in Blackstone after that firm's stock value plummeted by 40 percent. The way in which CIC is financed—through domestic bond sales rather than an explicit transfer of foreign exchange from the central bank's State Administration of Foreign Exchange (SAFE)—actually forces the fund to try to maximize its short-term rate of return. The China Investment Corporation's performance has exacerbated tensions between China's finance ministry and its central bank over the management of foreign reserves. A few months after the Blackstone investment, the head of CIC Lou Jiwei performed worse than expected in Central Committee elections.[48] In response to CIC missteps, SAFE began to act like a sovereign wealth fund, adding more confusion to their foreign investment strategy. Similarly, Russia's central bank received withering domestic criticism when it was revealed that it held over $100 billion in Fannie Mae and Freddie Mac. The bank responded by cutting its exposure by 40 percent, but to do this, it was forced to sell at a low price.[49]

Authoritarian countries might not have elections, but they still must cope with bureaucratic rivalries, domestic discontent and audience costs.[50] Furthermore, while there are sound policy reasons for these countries to set up sovereign wealth funds, they must still cope with the political incongruity of investing billions of government dollars in the developed world while tolerating significant pockets of domestic poverty. In China, Russia and Singapore, governments have had to respond to domestic criticism of SWF investments. In the United Arab Emirates, they have had to address questions of corruption.[51] In many ways, therefore, authoritarian politics can be just as limiting as democratic politics in long-term strategic planning.

This is why the existential threat of sovereign wealth funds as an alternative development strategy is likely overblown. As Kenneth Rogoff pointed out in Congressional testimony last year, "Governments have a long tradition of losing massive amounts of money in financial markets. This tradition is not likely to end anytime soon."[52] Indeed, SWFs based in Nigeria and Ecuador have gone bust in the past. One recent econometric study examined fifty-three SWF equity purchases from 1989 to 2008 and found that, on average, two-year abnormal returns amounted to negative 41 percent.[53] The McKinsey Global Institute estimates that as of July 2008, SWFs had collectively lost $14 billion from recent investments in the financial sector.[54]

Taking a step back, while sovereign wealth funds certainly warrant greater surveillance, these concerns should not be overstated. Perhaps the most interesting trend is among the commentators on SWFs. Many of them were much warier about SWFs in 2007; this year, they are more concerned about Western governments overreacting to these funds with rampant investor protectionism.[55] Longtime market participants aver that, given their past behavior, concerns about transparency have been overrated. One State Street advisor characterizes the transparency push as "simplistic," arguing that critics "have ignored the long history (in some cases decades long) of these official bodies operating with minimal fuss, publicity and controversy and yet in harmony with markets and other participants."[56]

From an international relations perspective, these concerns are not surprising. Opaque actors holding billions of dollars in a $200 trillion asset market are inconsequential. Those same actors simply matter more when they are holding trillions of dollars. Furthermore, a realist approach to the question would argue that past parallel structure good behavior is no guarantee of future good behavior.[57] Concerns about sovereign wealth funds are often voiced in realpolitik terms. As Jeffrey Garten wrote last year, "Who knows what the governments of countries such as China, Russia and Saudi Arabia may look like a decade from now, and what their political motivations might be?"[58] Given the uncertain political alignments between the home countries of significant sovereign wealth funds and the primary recipient countries of cross-border SWF investment to date, it is hardly surprising that recipient countries would want to create governance structures that require sovereign financial actors to signal their intentions. While the IMF transparency initiative might alleviate some of these concerns, the trend of expanding national security exceptions to inward investment is likely to continue.[59]

Some Warning Notes

Sovereign wealth funds are unlikely to disrupt the functioning of the American economy or compromise national security through their investment strategies. However, they are symptomatic of other problems. The rise of SWFs highlights American macroeconomic weaknesses. In the future, they will impair American efforts at democracy promotion. They also threaten to reduce the degree of cooperation in global financial governance.

Sovereign wealth funds are simply the latest manifestation of the explosive growth in official assets ranging from currency reserves to state-owned enterprises. U.S. consumption is keeping energy prices high. A low U.S. savings rate, combined with the foreign manipulation of exchange rates, has allowed some Pacific Rim economies to inflate their current account surpluses. Those are the macroeconomic forces that are causing foreign governments to expand their sovereign wealth funds.

Addressing those problems sooner, rather than later, will go a long way towards eliminating SWFs as a political hot potato. Improving the savings rate of Americans, for example, would help to reduce the large current account deficit that is fueling the growth of sovereign wealth funds in the Pacific Rim.[60] Reducing energy demand would also reduce the growth of SWFs among energy exporters—though such a reduction would be partially offset by rising demand around the globe. Recent trends suggest that market forces are moving in the preferred direction. In recent years the Chinese RMB has appreciated by 20 percent against the dollar. High fuel prices will likely contribute to greater conservation efforts and reduced energy demand.

Sovereign wealth funds are simply the latest manifestation of explosive asset growth.

The rise of sovereign wealth funds will also have some negative second order effects for American foreign policy. Sovereign wealth funds impair democracy promotion efforts. These investment vehicles aid and abet the persistence of "rentier states," governments that do not need their citizens to raise revenue.[61] Democratization is a much more difficult policy for the United States to pursue when the target government is sitting on trillions of dollars in assets to buy off discontented domestic groups. Authoritarian governments in the Middle East and East Asia will be more capable of riding out downturns that would otherwise have threatened their regimes. These funds are a means through which authoritarian regimes can guard against the vicissitudes of the free market. As the Asian financial crisis demonstrated a decade ago, market shocks can fell authoritarian governments. Sovereign funds, combined with ever increasing foreign reserves, can forestall economic crises before they topple authoritarian power structures.

More perversely, the growth of sovereign wealth funds, combined with rising nationalism and anti-Americanism in capital exporting countries, would give the United States even less reason to want democratic transitions in these parts of the globe. Consider the effect of a populist or fundamentalist revolution taking over in Saudi Arabia or the Gulf emirates. Rampant anti-Americanism among the Arab populace could encourage a new government to purposefully sell off SWF investments in the United States in order to induce a financial panic. While such moves would be economically disastrous to these countries, such actions are not inconceivable in the early stages of a revolutionary government.[62] Even if China or the Persian Gulf emirates were to democratize more gradually, one could easily envisage nationalist parliaments using their SWFs to constrain U.S. actions. Sovereign funds in democratic societies have been willing to inject political conditionality into their capital markets. As previously noted, interest groups have been eager to use

America's financial muscle to alter the behavior of foreign actors in Sudan, Iran and Russia.[63] There would be no reason to expect other democratic, capital-rich countries to behave differently.

There is one, final, more sobering consideration. The emergence of sovereign wealth funds needs to be considered in the context of other changes in the global political economy. Changes in policy, technology and the distribution of power are shifting the cooperation game in finance to more closely resemble the cooperation game in security studies. As Charles Lipson pointed out 25 years ago, a key explanatory factor for higher levels of cooperation in the global economy is the absence of tight coupling.[64] Historically, the effect of a powerful actor defecting from the rules of the game has not usually had a dramatic and immediate effect in international economics. The globalization of finance, combined with the re-emergence of powerful state actors in capital markets, changes this equation. As Larry Summers has written, there are geopolitical concerns that come with the "financial balance of terror" created by current macroeconomic imbalances.[65]

The shifting of government assets from central banks to sovereign wealth funds and state-owned enterprises exacerbates these concerns. Transparency measures cannot completely erase concerns about the capabilities and intentions of powerful sovereign actors.[66] These concerns, combined with the tight coupling of today's financial markets, will cause the incentive structures in global finance to more closely resemble those of international security. This does not predict the financial equivalent of a third world war. It does mean, however, that policymakers must be increasingly cognizant of that contingency. ♔

NOTES

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