

**SOVEREIGN WEALTH MEETS MARKET FAILURE:
GOVERNMENT PARTICIPATION VS GOVERNMENT INTERVENTION IN MARKETS**

Sang Yong Park* and Leslie Young**

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*Professor of Finance and Dean of School of Business, Yonsei University, Seoul

**Professor of Finance and Executive Director, The Asia Pacific Institute of Business, The Chinese University of Hong Kong.

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1. Introduction

Two crises afflict the global economy: one financial, the other environmental. Economists analyze both issues in terms of the appropriate roles for markets and governments. But this dichotomy is inadequate, given the globalization of financial markets and environmental issues: we should consider all the ways in which governments and markets can interact at the global level. This can provide a better understanding, both of how the crises arose and of how to deal with them. The obvious way to deal with global financial and environmental crises is for national governments to join together to replicate the role of a global government, i.e., to negotiate agreements on global financial regulation and global emission standards. Such efforts have not gone very far. This paper suggests that business-style partnerships between governments can provide another useful path forward by harnessing national self-interest to alleviate market failures.

Section 2 argues that the financial crisis arose, not just because regulation failed, but also because national governments entered markets in a un-business-like manner. Section 3 proposes a mechanism that would allow governments to interact in a business-like way: by forming consortia of Sovereign Wealth Funds (SWF), which we call “mutual wealth funds” (MWF). Section 4 suggests how the governance of a MWF can be designed to alleviate some market failures in finance. Section 5 argues that MWF can play a useful role in alleviating market failures in environmental issues. Section 6 concludes.

2. Origins of The Financial Crisis

2.1. Un-businesslike Decisions by Deficit and Surplus Countries

Globalization means that goods and capital flow freely between countries and have a significant impact on their internal economies. Since governments are interacting via markets, just like private businesses, they ought to manage their deficits and surpluses in a business-like manner, if they are to avoid adverse market reactions. By that standard, how have the major surplus and deficit countries performed?

Suppose a corporation enjoys a massive surplus. No responsible management would lend most of that surplus to a single borrower via the simplest financial instrument, i.e., a bond with a fixed coupon that allows no flexibility in repayment and no claim on assets in the event of default. And no responsible management would keep lending to the same borrower when past loans had already driven yields close to zero. But that was how China, Japan, and other surplus countries lent to the US.

Suppose a corporation is already highly leveraged, but needs a lot more capital. No responsible management would raise that capital only via bonds with a fixed coupon: it would build in some flexibility in repayment by issuing some equity. And no responsible management would borrow more without a business plan to pay back the new loans, or at least a plan to balance the increased loan outgoings with increased earnings. But that was how the US borrowed.

When the largest corporate entities — sovereign governments — depart so radically from business-like decisions, that distorts prices and markets all over the globe. Consider this analogy. Suppose that the US auto industry has grown so large in so many congressional districts that it always gets bailed out with (newly-printed) money because it is “too big to

fail”; the auto industry maintains employment by selling its surplus output to auto rental companies at big discounts, which encourage the rental companies to sell off last year’s fleet at even bigger discounts. Then distortions would surely spread to other markets: petroleum and steel prices would skyrocket, bus and motor-cycle production would collapse, an industry would arise to dismantle one-year-old cars into components for sale back to the auto industry, etc.

Distortions in finance were likewise spread far and wide by the un-businesslike decisions of sovereign governments that poured trillions of dollars of current account surpluses into US agency and Treasury securities. This depressed the yield on all low-risk assets and created excess demand for assets that seemed of low risk, but promised a higher yield. The new funds from the surplus countries had to find new borrowers. Inevitably, these were riskier: the sub-prime borrowers in the US housing market. So global banks switched from the intermediation of savings into productive investments, to the more profitable repackaging of high-risk assets into pseudo-riskless assets, such as the higher tranches of Collateralized Debt Obligations. This repackaging was carried out offshore, beyond the purview of demoralized US regulators and was risky, unstable and opaque.

Had surplus countries invested like responsible corporate managers, they would have diversified across many countries and instruments, equity as well as debt — instruments that would have been offered by deficit countries, had they raised capital like responsible corporate managers. The yield on low-risk assets would not have been driven down relative to risky assets; there would have been little profit in repackaging risky assets as pseudo-riskless assets, and perhaps no financial crisis.

2.2. Politics Deadlocks Economic Policy

Governments have difficulty behaving like business corporations, given their different relationships to their ‘shareholders’. For example, a government might refrain from policies that maximize long-term GDP because it fears to antagonize a public that is short sighted and nationalistic, or because it fears overthrow by a political coalition that would be angered by short term consequences.

The policy of export-led growth under an exchange rate pegged to the US dollar had proved successful for Japan and the smaller East Asian economies, both in economic terms and in promoting the legitimacy of their governments; China adopted the same policy. However, China is much larger and its exports grew much faster; its surpluses piled onto ongoing surpluses from the rest of East Asia and surpluses from the Gulf (that were the result of China’s growth, which raised energy prices). When such a massive country naively followed the economic policies that had worked for smaller countries, there resulted a massive distortion of financial markets around the globe.

Why did China not change its policies? Firstly, because its surpluses grew so fast that they outran its capacity to re-appraise and re-orient policy. Secondly, because the success of export-led growth built up a strong political constituency in the coastal provinces for more of the same. However, the current crisis is dramatic enough to force a policy reappraisal and to disrupt the political constituency for export-led growth. It should bring home that the country as a whole would gain nothing from more surpluses and must re-appraise what to do with those that it has accumulated so far. This is also true for the other surplus countries.

The deficits of the US likewise grew so fast that they outran its capacity to re-appraise and re-orient earlier policies. These policies were likewise locked into place by the political constituencies that earlier success had built up. Globalization had expanded the opportunities of US multinational corporations and banks, hence the wealth of their owners and managers. Lower-income groups had been sedated by the low prices of imported goods and by home ownership that had been funded ultimately by surplus countries. Big budget deficits sedated both rich and poor, by shifting the burden of government onto future generations, who cannot yet vote. Thus, an unlikely coalition of rich campaign donors and poor voters locked high-deficit policies in place.

But now the rich have lost their capital gains and their bonuses; the poor are losing their houses; this generation of voters is losing jobs and pensions. All parties would have been better off had the US borrowed abroad like a responsible business, i.e., by issuing a diversified range of financial instruments within a sustainable business plan. That is what it needs to do today. But US policymakers are busy throwing money at the internal credit crisis and are unlikely to address the international consequences in business-like terms. So surplus countries can best help themselves by using their surpluses to help the US manage its credit crisis.

2. 3. International Impasse

As things now stand, the trillions of dollars of politically-driven international loans have left only a ghastly shadow: a hole of the same magnitude in the balance sheets of US banks, into which their capital has disappeared. Private banks without capital have neither the inclination nor the ability to lend, so sound US corporations cannot get funding, leaving the US economy in recession. The US government is staving off financial and economic collapse by guaranteeing money markets, commercial paper and bank deposits. It has followed the US\$700 billion bailout of banks, carmakers, etc., with a US\$787 billion stimulus package, with more bank bailouts and more fiscal stimuli almost sure to follow. But these policies add massive liabilities onto the US government's balance sheet — already US\$11.5 trillion or 80 percent of GDP. ¹Interest payments in 2008 cost US\$451 billion, the largest item in the US budget after Social Security, Medicare and Defense. ² Will the US ever have the political will to levy the taxes to pay off the mounting liabilities, or even to get them down to a sustainable level? Or will it inflate them away? Rising fear has led foreign creditors to switch their holdings even from government-guaranteed agency securities to the direct debt of the US government, especially short-term debt.

Inflating away the debt has a high long-term cost: the end of the US dollar's reserve currency status, hence of US autonomy in international markets. But the US is drifting toward that solution anyway, as its internal deficit rises from US\$1 trillion so far this year toward US\$2 trillion in the autumn. ³ The Federal Reserve has begun buying up US Treasuries because there is no prospect of covering the deficit with tax increases. Foreign owners of US Treasuries therefore face expropriation through inflation and currency depreciation. By now, none of the countries that hold large blocks — China, Japan, Saudi Arabia, Kuwait, etc. — can avoid that outcome by selling out, for that would trigger panic sales by the others, which would collapse the US dollar, global trade and their own economies. The surplus countries

¹ <http://zfacts.com/p/461.html>

² http://www.treasurydirect.gov/govt/reports/ir/ir_expense.htm

³ <http://www.voanews.com/english/2009-07-13-voa49.cfm>

find themselves arranged in a circular firing squad around Helicopter Ben in a Mexican standoff — exactly the complex business relationship that they had sought to avoid by buying only the simplest securities: bonds issued or guaranteed by the US government.

3. A Way Forward: Mutual Wealth Funds

When corporations lock into business relationships that are too complex to be governed by contracts (because the costs of negotiating and enforcing the contracts would be too high), then they try to make the relationships govern themselves. This they can achieve by restructuring their financial relationships to share the risk, align the incentives and bridge the information asymmetries. For example, companies in Germany or Japan that are locked into complex supply relationships often hold each other's shares. These cross-holdings mitigate the conflicts of interest that might otherwise emerge as they co-develop and install complex technologies.⁴

The international counterpart to such cross-holdings could be achieved in today's circumstances by converting the foreign claims on the US government into equity in its economy, especially its banks. This would provide the foreigners with real claims on the US economy, protect them against expropriation through inflation, and reduce the US incentive to attempt such expropriation. It would also reduce the capital that the US government has to inject into its banks, hence the liabilities that it would have to pile onto its already overburdened balance sheet, hence the danger of a run on the US dollar. Recognition of these dangers is already leading the US Treasury to propose partnerships with private capital.

Many private players holding big blocks of capital are on the sidelines, but each hesitates to be the first to move; none is big enough to be sure that its own actions would make a difference; there are too many to co-ordinate joint action. But the major surplus countries hold the biggest blocks of capital of all; they are certainly big enough to make a difference; their small numbers facilitate joint action. Why not trigger private activity by forming public partnerships with the major surplus countries, currently trapped holding trillions of US dollar securities waiting to be expropriated through inflation?

Because foreign equity holdings are politically sensitive, as shown by the US reaction to CNOOC's attempt to buy a small US oil company and Dubai World's attempt to buy into US port management. China is trying to switch its surpluses into claims on natural resources, but the perception that Chinese companies are ultimately state-controlled derailed Chinalco's recent attempt to buy into Australia's Rio Tinto. Meantime, foreign governments' enthusiasm for equity investment in the US has evaporated, along with their recent investments in US financial institutions. How to swap foreign-held debt for US equity to address all these concerns?

Surplus countries should inject funds into US corporations via a number of competing mutual funds, called "mutual wealth funds" (MWF) that would invest in a range of corporations. Foreign countries bruised by big investments in particular corporations would welcome this diversification. Each MWF would receive funds from a variety of foreign governments, which would get voting rights in proportion to their contributions; no country would hold a controlling block of shares. Each country could manage its contributions via a Sovereign Wealth Fund (SWF), perhaps set up for the purpose.

⁴ La Porta *et al.* 1999, Franks and Mayer, 2002

The US could itself set up a SWF that would participate in each MWF, and get voting rights in proportion to its contribution. Such a SWF has been proposed for the US government by Michael Metcalfe⁵ to channel the capital that it is injecting into banks toward long-term objectives, such as funding Social Security. Such objectives would be consistent with those of foreign SWF, facilitating their partnership in MWF.

In line with the Santiago Principles for Sovereign Wealth Funds⁶, the MWF should have transparent governance, mutually agreed investment objectives and professional management. The diversity of foreign participants and the participation of their own SWF would reassure US citizens that the MWF would operate on market principles, rather than pursuing any foreign government's agenda. For that matter, foreign participation would constrain US politicians from manipulating the investment policies of a MWF to favour their pet corporations (as happened with Troubled Assets Recovery Program) and from pursuing narrow political objectives.

4. Governance Structure of Mutual Wealth Funds

How should a consortium of SWF manage a MWF? To alleviate host country concerns about foreign governments' interference in its economy, the SWF should only set the broad investment strategy, which it discloses, but should delegate implementation to professional managers. How should the managers be selected, monitored and rewarded? Private investors do so on the basis of investment performance, e.g., the returns achieved relative to some benchmark. This approach evolved to allocate the funds of millions of savers amongst thousands of investment managers. Its flaws have been highlighted by the mass exit of investors from hedge funds, which use an extreme version of this approach. Given their scale and long-term investment horizons, SWF can design a better approach.

The performance of an investment fund depends on the manager's skill, but also on unforeseeable shocks: economic, political and natural. Only the skill is under the manager's control; only the skill should be rewarded. All investors should choose investment managers by assessing their skill and the soundness of their investment strategies. But there is no way for millions of busy private investors to assess thousands of investment managers. So managers end up being rewarded according to their investment performance relative to a benchmark; private investors end up allocating their savings on this basis. If an investment fund performs poorly in any quarter, then private investors exit; the fund managers lose performance bonuses, and perhaps their jobs. This prospect induces short-term investment horizons and herd behaviour by the fund managers.⁷

This market failure can be traced to the asymmetry of information between private investors and their investment managers: the investors cannot observe investment skill, so they reward managers according to observable investment performance. Sovereign wealth funds can bypass this market failure. Unlike pension funds and mutual funds, they do not have to compete every quarter for the loyalty of skittish private investors; governments typically enjoin their SWF to invest for the long term. The scale and long-term investment horizon of the SWF allows them to employ full time officials to monitor the management of their funds.

⁵ *Financial Times*, 1/15/09

⁶ <http://www.iwg-swf.org/pubs/gapplist.htm>

⁷ Cipriani and Guarino, 2008

The MWF should invite teams of investment managers to propose long-term investment strategies; all teams who submit substantial proposals should receive payment commensurate with their efforts. Each SWF should appoint expert officials to interrogate the management teams to assess their knowledge and competence, as well as the soundness of their investment strategies. Once a strategy has been chosen and the management team selected, the SWF officials should monitor implementation through monthly reports and should continue the strategic dialogue with the management team in quarterly meetings. The team should be assessed and rewarded primarily on the quality of their analysis and recommendations, and the effectiveness of their implementation. Since the MWF would focus on long-term investments, only long-term investment performance should be rewarded.

To address the political concerns of host countries, investment strategies should be disclosed with an appropriate lag; so should the minutes of the debate amongst the national delegates on MWF investment strategy. In any case, host country citizens can be reassured by the participation of their own government in the MWF.

Since the MWF would be seeking long-term returns by analyzing long-term trends, they should be able to exploit investment opportunities that are not attractive to the mutual fund industry. The long-term investment horizon should also help MWF stabilize financial markets. They can add their voices and votes to other institutional shareholders to improve corporate governance.⁸ In sum, MWF can earn high long-term returns, even as they help improve long-term resource allocation

5. Rescuing the Global Environment

The MWF concept is especially suitable for investment in green projects. Markets can fail to address environmental problems for two well-known reasons. Firstly, research/investment in renewable energy and cleaner technologies requires long-term commitments to projects with uncertain payoffs. They are unlikely to attract funds from institutional investors, whose managers focus on quarterly returns to keep their jobs and bonuses. Similarly, investment analysts tend to focus on short-term returns, intent on discovering investment opportunities just ahead of others in order to capture capital gains. Secondly, firms tend to consider their environmental impact only insofar as it hits their bottom lines, ignoring other social costs. Conversely, they tend to under-invest in green technology and innovation, since they cannot appropriate all the social benefits. Insofar as they succeed via patents and licensing, they impede adoption.

The SWF set up by surplus countries have mandates to promote national welfare, so they ought to address the global environment. They can overcome the above market failures by investing for the long term and taking account of the social benefits to their nation. But the international spillover of environmental problems suggests that SWF should act via an international consortium, which we might call a Mutual Green Fund (MGF).

The difficulties of coping with international spillovers are illustrated by the Amazon Fund that Brazil set up in August, 2008 to solicit international donations to save the Amazon forest.⁹ Norway committed \$1 billion; other surplus countries were conspicuous by their absence,

⁸ Gillan and Starks 2003

⁹ "Paying for the forest", *Economist*, Aug 7th 2008

presumably fearing domestic criticism of donations that would benefit mostly non-citizens. Overcoming such selfishness requires joint international action, so that each country can reassure its citizens that other countries are also contributing. But the Kyoto precedent is unpromising: a vast negotiation yielded mostly grand statements of principle and national commitments that were largely unfulfilled.

How to do better? A neighborhood group trying to improve its environment is typically launched by those with the most motivation and resources. They typically attract others by securing additional benefits for members (such as discounts at local shops).¹⁰ Similarly, international collective action on the environment needs a core group with exceptional resources and motivation — that can offer additional benefits to its members. Countries with large reserves can contribute the most. But why should they, when all countries would suffer from global warming or resource depletion?

Because countries with large reserves are especially exposed. They are trying to transfer purchasing power to the future by holding financial claims on other countries. They have the most to lose in financial terms, were the future to be impoverished by environmental catastrophe or resource depletion. Any large-scale environmental disruption would require forceful government actions — and expenditures. Piling these onto the deficits already necessitated by the current financial crisis might create irresistible pressure to monetize the deficits — with especially unfortunate consequences for those holding the most assets denominated in money.

Surplus countries might take the lead via a joint project that promises them specific commercial benefits, as well as general environmental benefits. The US has earmarked \$16.8 billion for renewable energy projects in its Recovery Act. It could leverage these funds by injecting some into an MGF, then invite SWF to contribute. Other countries with promising projects could likewise launch MGF with national funds and invite SWF to contribute. Each MGF could build up expertise in evaluating and commercializing green technologies; its members could channel the technologies developed into their own countries via licensing.

A variety of MGF designs are possible. The host nation could inject equity and invite SWF to contribute more, in return for a pro-rata share in the resulting intellectual property and profits from commercialization. The equity could be leveraged by a loan from the host country's national pension fund. Or, the MGF could sell convertible bonds, which would offer SWF a base return, plus upside participation. The global initiative could be coordinated by a supranational body, such as the UN. Its main political task would be to persuade each SWF to contribute, on the basis that other SWF are participating in a global effort that would yield commercial as well as environmental benefits — and help safeguard the long-term value of their foreign exchange reserves.

By contributing to a variety of MGF, each SWF could diversify across many risky projects. The various MGF would be competing for SWF funds by offering attractive terms for sharing risk and reward and good governance mechanisms, yet consortia of SWF would be cooperating within each MGF. Such international “co-opetition”¹¹ might be the most realistic way forward on the global environment. The Kyoto attempt by all countries to negotiate all environmental matters at once yielded rather grand but unenforceable commitments. By

¹⁰ Mancur Olson, 1971

¹¹ Nalebuff and Brandenburger, 1997

contrast, a consortium of SWF in an MGF would only be seeking mutual benefits as they negotiate a narrow set of commercial issues in a business-like setting. Yet in the aggregate, the MGF could greatly expand research and commercialization of renewable energy, and salvage the global environment.

There are wider political benefits. Global imbalances have provoked political grandstanding that demonizes surplus countries, and foreshadows protectionism. A joint commitment by surplus countries to green projects would diffuse tensions by signaling responsible global citizenship. Participation by the biggest polluters, China and the US, in consortia dedicated to green projects would show joint global leadership, which should encourage other countries to take responsibility for the global environment. Collaboration on green projects would also provide a useful precedent for collaboration by SWF in other inflation-protected investments that use current account surpluses constructively. It would clear the air in more ways than one.

6. Conclusions

A basic theme of microeconomics is the interplay of markets and governments. Under this standard dichotomy, the revelation of a market failure leads economists to debate whether governments can do better by intervention in markets. But globalization requires us to think at three levels: markets, national governments and the global community. In particular, it requires us to consider national government participation in markets. This paper has analyzed today's financial crisis in terms of the failure of national governments to participate in markets in a business-like manner. It has analyzed the environmental crisis in terms of the difficulty of national governments joining together in globally responsible actions, given that they are politically accountable only to their own citizens. It has also argued that some market failures in finance and the environment can be alleviated if governments participate in markets by joining together in business ventures whose ownership and control is structured to address the political concerns of host countries.

SWF have been enjoined to behave as good global citizens; the organizational structure proposed above for MWF should induce them to do so out of collective self-interest. By overcoming the market failure in the private sector due to information asymmetry and the under-pricing of the public benefits of long-term investment, the MWF can strengthen the global economy, while earning high long-term returns. They can do well by doing good.

References

La Porta R, Florencio Lopez de Silanes and Andrei Shleifer, 1999, “Corporate ownership around the world”, *Journal of Finance* **54** 471 – 517

Franks J, and Colin Mayer, “Ownership and control of German corporations”, *Review of Financial Studies* 2002

Cipriani, Marco and Antonio Guarino “Herd Behavior and Contagion in Financial Markets,” *The BE Journal of Theoretical Economics*, 2008

Gillan, Stuart and Laura T. Starks “Corporate Governance, Corporate Ownership, and the Role of Institutional Investors: A Global Perspective” *Journal of Applied Finance*, 2003

Olson, Mancur, *The Logic of Collective Action: Public Goods and the Theory of Groups*, Harvard University Press, Revised edition ed. 1971

Nalebuff, Barry J. and Adam M. Brandenburger “Co-opetition: Competitive and Cooperative Business Strategies for the Digital Economy”, *Strategy & Leadership*, 1997