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**Sovereign Investment Vehicles and the Case for Social Returns:
Toward A Research Agenda**

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Introduction

In the broader global dialogue on the nature and goals of state investment vehicles, substantive debate has centered on the strategic objectives of sovereign wealth funds (SWFs). Today there is little challenge that SWFs seek financial returns as a function of various disclosed and undisclosed mandates. These are required to support the specific operational requirements of these vehicles, including defined liability structures. Conversely, there is considerably less agreement on the extent to which SWF pursue other non-financial strategic objectives, including those in support of national policy agendas related to, for example, economic or national security. In this research note, we propose to move this discourse in a new direction and so posit the question: Are sovereign investment vehicles candidate investors in projects or products with dual return structures that include the expressed goal of generating social returns?

For purposes of this brief we do not constrain our analysis either geographically or with regard to a specific form or return structure or a defined investment vehicle or asset class. Rather

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at this stage we take an expansive view returns attributable to projects or vehicles that are demonstrably impactful in delivering social benefits (e.g. healthcare, education, social stability, improved governance), are socially responsible in form or outcome, and/or result in sustainable development.² Our objective—modestly at this stage—is to define a research agenda through which to study the role of sovereign investment vehicles as sources of long-term investment capital in projects that drive social, as well as financial, benefits, i.e. that demonstrate a dual return structure.

Thesis and Approach to Analytical Framework

Our thesis is based upon several assumptions. These are purposely presented as such, rather than as hypotheses, as they remain as yet relatively less structured and somewhat unrefined. First, we observe that most sovereign investment vehicles represent stable and long-term pools of capital and assume they will support investment horizons consistent with the gestation of social development projects.

Second, we note among certain SWFs existing interests ranging from “developmental” projects and investments in sustainable resources to socially responsible mandates and progressive philanthropy targeted specifically at the socio-economic dimensions of development.³ We suggest therefore that sovereign investment vehicles can and do support projects with objectives other than strictly financial or geo-strategic.

Third, we accept that SWFs, as institutional investors, operate within a governance context or liability structures that will place certain fiduciary and/or statutory constraints on their

² We include in our analysis “innovative finance” as defined by the World Bank: “Innovative financing involves non-traditional applications of solidarity, PPPs, and catalytic mechanisms that (i) support fundraising by tapping new sources and engaging investors beyond the financial dimension of transactions, as partners and stakeholders in development; or (ii) deliver financial solutions to development problems on the ground.”

³ See examples further below.

investment activities, including their return requirements. Therefore we further assume that sovereign investment vehicles will differ markedly in their ability to engage in “dual-return” programs.

Fourth, in addition to constraints on investment activities, SWFs face significant operating hurdles to the investment in social return projects. Principal among these are investment size/scale and analytical capacity relative to institutional size. Here we assume somewhat paradoxically that larger funds will have more operating flexibility and greater analytical capacity to pursue dual return projects. However, larger funds generally prefer larger sized investments and so may not be able to achieve scale economies from investing in smaller scale projects traditionally associated with social finance, micro-finance, or impact investing.

Lastly, we have observed through our preliminary analysis of what is more broadly referred as social finance⁴, an intricate network of capital providers, information agents, servicers, and consultants, including both private and state institutions as both investor and investee. We refer to this network as an “ecosystem”⁵ as it represents an ever-evolving infrastructure necessary for the efficient execution of social finance. Accordingly, we assume that sovereign investment vehicles, rather than establishing a separate agenda, will define roles within, as well as actively leverage, this ecosystem in order to enhance their risk-adjusted returns attributable to dual return investments.

Our approach to developing an analytical framework is informed by these assumptions. It aims to place social returns broadly defined at the center of a process of financial intermediation, both direct or indirect, that links capital sources (in our case, sovereign wealth or

⁴ Generically defined as a form of financial intermediation, which offers both financial returns, as well as social dividends.

⁵ A companion brief, also part of our research agenda, focuses specifically on an outline of the ecosystem of social finance.

large investment funds) with capital seekers, specifically funds, programs, or individual projects or vehicles that support social development. In doing so it must identify and define the roles, functions, and operating objectives of a variety of institutions that form the informational and transactional ecosystem that facilitates the intermediation process. In this context, social returns, or more specifically dual returns, constrain product specification as exercised through modes of financial engineering, which define the types and characteristics of funding structures and so their corollary, i.e. investments. Using this approach, we intend that our research will eventually lead to the specification of a model of SWF investment in social development with a specific focus on defining the propensity and scale of this form of investment, as well as the design features of investment products and vehicles to facilitate such intermediation.

Mandate, Investment Strategy, Asset Class: In Search of a Paradigm

A review of the literature of what we broadly define as social finance is challenging as the scope of this field encompasses various forms of finance, ranging from socially responsible investing (SRI) to sustainable development to impacting investing, and including philanthropy as well as official development assistance (ODA). We view both philanthropy and ODA as outside the practical scope of our framework and so will de-emphasize both. However, and importantly, we will return specifically to philanthropic “investment” as it may intersect with other forms of impacting investment.⁶

Furthermore in accepting such an expansive view of social finance, we likewise struggle to define a common investment paradigm to analyze its role at the institutional level. Specifically, are investments with dual return structures “permitted investments” under an investment mandate? Certainly, elements of what is traditionally SRI (e.g. excluded investments)

⁶ Here we note in particular the work done by Temasek through Temasek Foundation.

are made expressly part of investment mandates between asset owners and institutional investors. Similarly, should we think of such investments as more formally a dimension of an institution's investment strategy? Would they not be considered in the context of strategic asset allocation decisions, especially as they may impact risk-adjusted returns? Finally, in the latter context, some have suggested that dual return investments might in fact be an asset class (e.g. impact investing) or perhaps a sub-asset class - somewhat akin to alternatives. In this respect, it is not only returns that must be analyzed, but also the risk contribution in a broader portfolio context. Thus, while dual return structures generally result in financial returns lower than those of market-based investments, do they offer diversification benefits, i.e. are their returns less correlated – either at the asset class or factor level – with those of the investor's portfolio as a whole?

As a baseline through which study SWF investment in social return projects, we propose a multi-factor analytic model of *both demand- and supply-side variables*, enlightened by these questions. The proposed model includes four demand-side factors and four supply-side factors as follows:

1. Fund size and maturity
2. Demonstrable constraints – spending rates, liability structures, etc. - on SWFs to invest in dual return vehicles
3. Fund investment style and investment horizon, as it impacts interest in investment projects which generate other than financial returns
4. Fund asset allocation policy as reported and/or articulated through reference portfolios
5. Financing barriers or constraints that prevent the completion of markets
6. Size and scale of target social return vehicles

7. Vehicle product structure and specification
8. Risk/return structure, including measurability and diversification benefits resulting from lower return correlations

A Simple Taxonomy

To build a definitional foundation under the expanse of social finance we reference, we offer here a simple taxonomy with the modest objective of establishing a comparative baseline between SRI, sustainable development, and investment investing.

Socially Responsible Investment (SRI)

Socially responsible investing (SRI), also known as sustainable, socially conscious, green or ethical investing, describes an investment strategy, which seeks both financial return and social benefit. Thus a socially responsible investing strategy is one, which views successful investment returns and responsible corporate behavior as indivisible. In general, socially responsible investors encourage corporate practices that promote environmental stewardship, consumer protection, human rights, and diversity.

SRI combines investors' financial objectives with concerns about social, environmental and corporate governance issues - ESG factors. SRI investors believe that by combining certain social criteria with rigorous investment standards, they can identify securities that will earn competitive returns and also create social impact. In addition to using conventional financial screening criteria, SRI analysts gather information on industry and company ESG practices and review these in the context of a country's political, economic and social environment.⁷

⁷ Emma Sjöström, "The Performance of Socially Responsible Investment - A Review of Scholarly Studies Published 2008-2010," Published by AP7, Stockholm School of Economics, October 24, 2011

Additional, "socially responsible investing" also refers to practices that seek to avoid harm through negative screening of companies included in an investment portfolio that may be engaged in activities inconsistent with the SRI mandate such as businesses related to alcohol, tobacco, gambling, weapons, and/or the military.

Sustainable Development

A reasonable point of departure for a definition of sustainable development is The United Nations 2005 World Summit Outcome Document, which refers to the "interdependent and mutually reinforcing pillars" of sustainable development as economic development, social development, and environmental protection.⁸ However, the most common definition of sustainable development derives from the 1987 Brundtland report (which brings together of environment and development): "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts. The first is the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given. The second encompasses the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs."⁹

Agenda 21 is an action plan of the United Nations (UN) related to sustainable development and was an outcome of the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in 1992. It is a comprehensive blueprint

⁸ 2005 World Summit Outcome Document, World Health Organization, 15 September 2005

⁹ World Commission on Environment and Development (WCED). Our Common Future. Oxford: Oxford University Press, 1987 p. 43.

of action to be taken globally, nationally and locally by organizations of the UN, governments, and major groups in every area in which humans directly affect the environment.¹⁰

Agenda 21 clearly identified information, integration, and participation as key building blocks to help countries achieve development that recognizes these interdependent pillars. It emphasizes that in sustainable development everyone is a user and provider of information. It stresses the need to change from old sector-centered ways of doing business to new approaches that involve cross-sector co-ordination and the integration of environmental and social concerns into all development processes. Finally, Agenda 21 emphasizes that broad public participation in decision-making is a fundamental prerequisite for achieving sustainable development.

Impact Investing

Impact investment is defined as investment in businesses or funds that intentionally set out to generate social and environmental good alongside financial returns. It has been driven by the recognition that governments and charities alone do not have sufficient capital to solve the world's social and environmental problems, so private capital investing in socially driven business is needed.

Generally speaking, impact investors seek to move beyond the SRI mandate to avoid investments in "harmful" companies or the encouragement of better corporate practices related to the environment, social performance, or governance. Instead, impact investors actively seek investments in businesses and funds that can provide solutions at a scale that purely philanthropic capital normally cannot reach. This capital may take the form of equity, debt,

¹⁰ See <http://www.un.org/esa/dsd/agenda21/index.shtml>

working capital lines of credit, and loan guarantees. Recent prominent examples include equity and debt investments in microfinance, community development finance, and clean technology.¹¹

The Unique Case of Philanthropy

As noted above, we exclude here consideration of direct philanthropy from our taxonomy of social finance and dual return structures. A basic justification for this approach is that philanthropic programs, while encouraging accountability, de-emphasize financial returns. However, with respect to the role of institutional investors, we wish to highlight certain unique structures that indirectly link philanthropic endeavors with institutional investment programs. A case in point, with reference only to structure, is The Children's Investment Fund (TCIF), departed widely from the typical hedge fund structure by directly linking philanthropic contributions to the fee structure of the fund.¹² Such models can fulfill a dual return objective indirectly by establishing a channel between traditional investment mandates (and financial returns) and funding for social or sustainable development.

SWF Wealth Management and Social Finance: "Mind the Gap"

Sovereign Wealth Funds (SWF) represent large pools of state investment capital. The largest among these - Abu Dhabi Investment Corporation at \$627 billion, Norway Government Pension Fund at \$560 billion, Government of Singapore Investment Corporation at \$247.50 billion, for example – have been long established as important global investors. As such they have the capacity to both participate in and fundamentally alter the social finance landscape. Such effects would not be limited to social impacts via investment, but could in fact extend to the development of both products and markets for social finance through improved scale, price discovery and liquidity.

¹¹ See Monitor Institute - Impact Investing report

¹² Randolph B. Cohen and Joshua B. Sandbulte, Harvard Business School Case 9-206-092, October 26, 2006

Broadly speaking the investment mandate of SWFs is to make long-term investments that maximize risk adjusted financial returns. Their focus is on the sustainability of risk-adjusted returns through scale investment across markets and asset classes. While, specific mandates vary widely, most SWFs maintain a global investment profile and, based on their specific mandates and liability structures, invest in a broad variety of asset classes, including increasing allocations to alternative asset classes such as absolute return strategies, private equity, and real estate. Accordingly, SWFs generally have exposure to most risk categories, including equity market, credit, interest rate, liquidity, currency and country risk. In order to management portfolio volatility, risk management strategies at the fund level will also vary. The Abu Dhabi Investment Authority, for instance, invests in alternative assets and strategies that exploit lower correlations across asset classes to reduce the volatility of its portfolio. To the extent that social finance instruments with dual return structures exhibit low correlations with market traded securities *and alternatives*, they may also be well placed within such portfolios.

All notwithstanding, the gap between current mandates of sovereign investment vehicles and social finance remains wide. For example, despite its practical appeal, impact investing suffers from challenges related to both scope and scale as both relate to the specific investment mandates of institutional investors, including sovereign wealth funds. As such impact vehicles struggle to access the large pools of capital that would facilitate the expansion of investment scale that would meet the investment requirements of large institutions and further attract other asset owners and large institutional investors.

Certainly, there are points of reasonable proximity. For example, a recent discussion paper distributed by NBIM cites in particular increased cooperation among institutional managers related to responsible investment. Specifically the report notes that 655 institutional

investors worldwide (representing over \$78T in assets) have joined the Carbon Disclosure Project, 100 institutions managing nearly \$10T in assets are engage with the Investor Network on Climate Risk, and 470 institutional investors representing over \$50T in assets support the CDP Water Disclosure and to engage “with companies worldwide to disclose and ultimately manage water issues in order to create and sustain long term shareholder value”.¹³ Similarly, the notes that the UN Principles for Responsible Investment, originally launched in 2006 has over 900 assets owners and investment managers as signatories.¹⁴ At the far end of the social finance spectrum, we note several cases in recent years of SWFs – Temasek, Mubadala, International Petroleum Investment Corp. – providing funding to foundations.¹⁵ Among the most prominent of these is the work of Temasek through its Temasek Foundation and associated programs.¹⁶

Still, we are cautiously mindful of the gap and the practical hurdles that remain. As David Wood and his colleagues advise, asset owners face statutory constraints and operate in an investment culture that at the outset may preclude investing in dual return structures.¹⁷ Following conventions of fiduciary duty and portfolio management – “diversified portfolios, standardized forms of investment that exist at scale, benchmarks that determine how the broader market evaluates products, and, especially in recent years, relatively short time horizons for evaluating investment performance” – institutional investors must first justify dual return

¹³ Alexander Cappelen and Runa Urheim, “Pension Funds, Sovereign-wealth Funds and Intergenerational Justice”, NHH Discussion Paper, September, 2012, pp 7-8

¹⁴ Ibid.

¹⁵ This analysis was based upon research undertaken with the support of the Monitor Group using the Monitor-Fletcher SWF Transaction Database.

¹⁶ See for example <http://www.temasekfoundation.org.sg>

¹⁷ David Wood, et al, “Impact at Scale: Policy Innovation for Institutional Investors with Social and Environmental Benefit”, Insight at Pacific Community Ventures and the Initiative for Responsible Investment, Harvard University, 2011

investments on conventional grounds, i.e. financially, and only then can turn to their ancillary benefits.¹⁸

The Role of “Product” Design

As noted, a key component of our broader research framework incorporates the intermediation process. As such, we consider the role of financial products or vehicles, specifically design features of such investment structures, that can bridge the funding gap and facilitate the intermediation process. In Table 1 (below) we present examples of creatively designed funds and/or security that offer opportunities for dual returns. A more complete analysis of such the role of security design in this context is must be driven by several key factors, including minimally liquidity and pricing, risk and return structures, periodicity and contingency of cash flows, and lastly the ability to contextualize non-financial returns through some form of measurement.

Liquidity/Pricing¹⁹

In order for institutional investors to invest in dual return products, liquidity and pricing loom as important criteria. Liquidity for social return products - debt swaps, local currency bonds, livestock insurance indemnity pools, weather derivatives - is low or non-existent, largely as a function of the underdeveloped nature of the markets for such products. Secondly, pricing for these products is directly impacted by liquidity, as lower levels of liquidity result in inefficient pricing. The basic challenges to overcome sequentially are those of size and scale in the development of markets for such products, the development of both primary and secondary markets, and ultimately price discovery and efficiency.

¹⁸ Ibid.

¹⁹ This section is derived from the work of [Navin Girishankar \(2009\), Innovating Development Finance: From Financing Sources to Financial Solutions.](#), World Bank. Retrieved 20 January 2010

Risk/Return

The risk/return profile of the social returns products will form the baseline of the investment decision for institutional investors when considering dual return projects. Market risks remain as with conventional investment products. These include credit, interest rate, equity, inflation, and other related market risks. Also, to the extent that investments in dual return or social return structures disproportionately involve projects in emerging or frontier markets, political, legal, and capital market risks become more acute. Furthermore, the dual return structure of such products itself presents inherent risks, including the ability to monitor and measure social impacts. At minimum, product design must establish a clear basis for financial return – i.e. monetary return via discrete cash flows, as well as provide a transparent means to monitor and measure the social impacts created by the investment decision.

Structure, Periodicity and Contingency of Cash Flows

Additionally, product design must accommodate variability in the structure, periodicity and contingency of the cash flows of the products and their impact on risk and return structures. In fact the timing and contingency of cash flows will be important determinants of the structural design of product and vehicles. For example, periodicity will impact investor ability to match investment flows with liability structures and so manage liquidity risk. Contingency features will influence pricing models and also the co-variability of returns with market-traded or conventional products. Specifically, because contingency triggers may be influenced less by economic and more by social outcomes, returns based on these outcomes should be less correlated with those based on economic or financial factors. As such effective security or product design can offer tangible opportunities for risk reduction at the portfolio level.

Measuring Financial and Social Impacts

Finally, as noted, a key dimension of product specification will be the ability to transparently monitor and measure non-financial impacts and returns. To date, there has been considerable prior work done to develop measurement systems and return metrics for social finance. We outline several of these below to illustrate the extent and foundational strength of these efforts.

The Best Available Charitable Option (BACO)²⁰, one such example, was developed by the Acumen Fund to evaluate social impact. The BACO compares a social venture with other charitable options delivering comparable products and services. The tool measures a social venture's impact on people's lives on a dollar-for-dollar basis compared to a charitable marketplace benchmark and allow donors to assess where their donations are used most effectively.

Impact Reporting & Investment Standards, or IRIS, is a common language for describing the social and environmental performance of an organization. IRIS provides an independent and credible set of metrics for organizations to use when reporting their impact. IRIS indicators span an array of performance objectives and include specialized metrics for a range of sectors including financial services, agriculture, and energy. Similar to financial accounting standards, IRIS provides a basis for performance reporting and organizations need only report on applicable metrics from the IRIS library.

The Aspen Institute has created a system of core metrics within its Aspen Network of Development Entrepreneurs (ANDE), a global network of organizations that invest money and expertise to propel entrepreneurship in emerging market. ANDE members are required to report

²⁰ Michigan Ross School of Business: case 1-428-788, May 2009

on common social and financial indicators to help inform the sector's work, as well as provide insight into successes and challenges. Through the reporting of common indicators, ANDE's core metrics aggregate data to benchmark individual fund or investment performance and holistically measure performance of ANDE's member organizations. The expectation is that over time, these indicators will represent a core baseline to tell the story of the positive financial, social, and environmental impact.

The ANDE core metrics score impact in a number of focus areas, including access to finance, agriculture and food, education, energy, environment, health, and water and sanitation. The core metrics score each ANDE member investment by evaluating the following criteria:

1. Revenue streams and number of employees, and how increases indicate a growing or catalytic business
2. Value of employee wages, as an indicator of benefits passed onto the community
3. Additional capital mobilized, as an indication of new organization's financing activities (loans and investments) and free cash-flow
4. Greenhouse gas emissions, as an indicator of the environmental responsibility of the business²¹

Finally, the Committee on Sustainability of Assessment (COSA) is a non-profit global consortium of institutions developing and applying an independent measurement tool to analyze the distinct social, environmental and economic impacts of any agricultural practices. It claims to be the only non-profit, publicly accessible, and transparent system operating at the global level.

²¹ See <http://www.aspeninstitute.org/policy-work/aspen-network-development-entrepreneurs/metrics-impact/core-metrics>

Product focus has to date been along commodity supply chains (ex, coffee, tea, palm oil, etc.).²² COSA's measurement tools analyze the social, environmental, and economic effects on agricultural producers and their communities. By providing a scientifically-based understanding of sustainability, COSA tools serve a number of functions: a) an effective means of determining policymaking and donor investment priorities, b) structuring and conducting the monitoring and evaluation efforts for initiatives and projects, c) managing suppliers/supply chains for firms wanting to affect their sustainability efforts or to benchmark them.²³ Lastly COSA provides producers with practical business-decision tools to assess the costs and benefits of various sustainability practices.

A Way Forward

Our objectives in this short brief were modest. We understand the challenges of embarking on a yet-uncharted course of research. We sought to draw on a variety of streams of prior work, while maintaining a disciplinary grounding in finance and core principles of investment management. Our immediate challenge was to define the framework for research agenda from which to systematically examine the practical role of institutional investors, and specifically sovereign investors, in social finance and the development of markets for social return investments. The framework offered here with its focus on the intermediation process serves as our departure point.

²² A full list of COSA indicators can be found here:

http://www.thecosa.org/docs/cosita_indicator_groups_and_farm_level_indicators_v2.1.pdf

²³ Giovannucci, Daniele, and Jason Pott "Seeking Sustainability, COSA Preliminary Analysis of Sustainability Initiatives in the Coffee Sector," International Institute for Sustainable Development publication, September 2008.

Table 1

Fund Name	Investment Product	Project/Objective	Amount	Description
Poland's Eco Fund	Debt Swaps	Air protection, nature conservation, water protection and waste management	USD 450 million	Allocating Part of government secured debt to achieve specific development targets
Germany	Debt Conversion Agreement	Health Sector Spending	USD 50 million	Debt2Health is a three party agreement facilitated by the Global Fund between Germany and Indonesia to prioritize health sector spending
World Bank	World Bank Eco Notes	Raising awareness of "green activities"	USD 390 million	Six-year euro-denominated notes with a coupon of 3 percent, plus a potential additional return linked to an ABN-Amro index of "green" equities
IFC	The innovative emerging markets local currency (Gemloc) bond program	Strengthen developing country bond markets and better support economic growth with stability	USD 44.6 million	Currency bond offering in the Sub-Saharan Africa (SSA) that was sold to funds, banks, insurance companies, and pension funds in the eight countries that use the West African Franc
International Finance Facility for Immunization (IFFIm)	Asset Backed Bond Issuances	Net proceeds provided to GAVI (The Global Alliance for Vaccines and Immunization) to support immunization	Aims to mobilize \$ 4 billion	Long term ODA (overseas direct assistance) commitments served as assets to back bond issuances
IFC	Local Currency Loans using derivatives	Funding Hygeia Nigeria Limited, a private sector provider of hospitals and Health Maintenance Organization (HMO) in Nigeria	USD 3 million (390 million Nigerian naira)	Offering currency loans in any country where it is possible to hedge the resulting currency exposure using long-term derivatives or swaps to synthetically transform the cash flows from a local currency loan into dollar cash flows
United States and Europe paying into a single-purpose reinsurer created for the Government of Mexico	Cat bond and Cat Swap	Protection against an earthquake of a specified magnitude occurring in a designated area within three years	USD 450 million	Mexico purchased catastrophic coverage to cover earthquakes. If none occurs during the specified period, the money is returned to the investors.
World Bank	Life-stock Insurance indemnity pool	Syndicate pooling arrangement, which allows participating insurance companies to build collective reserves	USD 5 million	Mongolia's Livestock Insurance Indemnity Pool (LIIP) combines self-insurance by herders, market-based insurance and social insurance.

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