



The Health of Nations

A New Asset Class: Investing in Healthcare Sector Development

The Role of Sovereign Wealth Funds

Sovereign Wealth Funds can achieve their return objectives and contribute to sustainable development of high-quality health systems through investments in healthcare infrastructure and services in the emerging markets

Non-OECD countries will have to increase annual healthcare expenditures by almost USD650 billion to attain the average level of high-income countries. Healthcare sector investment supports economic development and a number of countries with large Sovereign Wealth Funds («SWFs») need to invest in health and social infrastructure (education, employment and other services).

Sovereign Wealth Funds have a natural advantage when it comes to capitalizing on the emerging market healthcare sector development opportunity

SWFs of non-OECD countries (with a population of almost 2 billion) manage about USD3.1 trillion in assets. These countries spend about 4.7% of GDP (USD290 billion) annually on healthcare; substantially less than the high-income country average of 11.2%. SWFs have extensive regional networks and can take longer investment horizons than traditional private equity investors putting them in a privileged position to generate considerable returns from the growth in demand for healthcare in the emerging markets.

The debate on the role of Sovereign Wealth Funds in regional economic development is at an early stage

There is an urgent need for applied research, advocacy and consultation to guide and inform SWF healthcare sector investment strategies and to support SWFs in finding an appropriate role in healthcare and infrastructure development. Health and economic development highlight the importance of identifying the true beneficiaries of a country's wealth. As SWFs will inevitably play a greater and more influential role as investors, it is timely to reflect on how these investments drive healthcare sector development.

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About Santeum Partners

Santeum Partners is an independent financial advisory boutique dedicated to value creation in the healthcare sector. Based in Switzerland, the Santeum Partners team works at the interface between industrialized and emerging markets. Santeum Partners supports investors, entrepreneurs, top academic institutions, research centers, healthcare companies and the public sector in developing opportunities and building successful, sustainable leading companies. Santeum Partners aims to contribute to global sector growth, innovation and health.

Introduction

«The issue of Sovereign Funds is coming under a lot of scrutiny. I believe transparency, reporting and accountability are integral elements in the way we do business because they build trust and bring integrity into the business world. We need to move away from the mentality of charitable giving toward long-term social investment. We need to promote the concept of civic responsibility.»

Her Royal Highness, Queen Rania of Jordan speaking at the Global Reporting Initiative conference, Amsterdam, May 2008

This report outlines the reciprocal relationship between economic development and health. It explores the opportunity for Sovereign Wealth Funds («SWFs»¹) to profitably invest in healthcare across emerging market countries. These investments contribute to the creation of sustainable, high-quality health systems, improve health status and support the prevention of lifestyle-related diseases associated with rapid economic development².

Sovereign Wealth Funds and Economic Development – A Nascent Debate

«Sovereign wealth funds have been grabbing the headlines of newspapers around the world. The debate is raging over their potential global financial impact and their investment policies. Strangely, the development dimension is missing from the debate»

Javier Santiso, Director, OECD Development Centre

The SWF universe currently holds more than USD3.7 trillion in assets. Of these, approximately USD3.1 trillion are located in non-OECD³ countries that face the challenge of improving health status and healthcare services. Until the late 1990's, SWFs primarily focused on wealth preservation and conservative investments to ensure that future generations benefited from an ephemeral natural resource. However, there is a growing realization that these funds can and should play an important role in economic development, especially in the less-developed world; ensuring that the current generation is in an optimal state of wellbeing and health as a pre-requisite for economic reforms, growth and sustainability. The debate on the role of SWFs in ensuring

¹ A Sovereign Wealth Fund (SWF) is a state-owned investment fund composed of financial assets such as stocks, bonds, real estate, or other financial instruments funded by foreign exchange assets. A SWF can be structured as a fund or as a reserve investment corporation. Some funds also invest indirectly in domestic state owned enterprises. In addition, they tend to prefer returns over liquidity, thus they have a higher risk tolerance than traditional foreign exchange reserves (Source: Sovereign Wealth Fund Institute)

² See the Santeum Partners report: «Sustainable and Profitable Healthcare Investment in the Middle East, Background and opportunities, Part I: United Arab Emirates (12 May 2008)»

³ OECD = Organization for Economic Co-operation and Development

that current generations, especially the youth, benefit from current wealth through improved education, employment opportunities and healthcare, is indeed complex.

Global Healthcare Expenditure Overview

Healthcare spending represents around USD4.7 trillion or about 9% of global gross domestic product («GDP»). High-income countries such as the United States and Switzerland spend about 15% and 11% of their GDP on health, which can be compared to about 7% among upper middle-income countries. The 30 member countries of the OECD constitute less than 20% of the global population but account for around 90% of the world's spending on healthcare.

Table 1 indicates the substantial imbalances that exist in health expenditure across the globe, both in relative (to GDP) and absolute terms (per-capita spending). For non-OECD countries to reach the average healthcare expenditure levels of high-income countries (11.2%), they would need to increase their annual healthcare spend by almost USD650 billion⁴. The differences in healthcare expenditures are large even in the industrialized world. This is primarily due to a diversity of structures, reimbursement systems, public sector involvement and efficiencies across different health systems. For example, in the United States per capita expenditure on healthcare was USD6,350 in 2005, compared to an average of USD3,886 for other high-income countries.

Table 1: Health Expenditure Overview

Country Income group	Total expenditure on health as % of GDP (2005)	Per Capita total expenditure on health at average exchange rate USD (2005)
Low-income	4.6%	27
Lower-middle income	4.8%	86
Upper-middle income	6.6%	373
High-income	11.2%	3,886
Global	8.6%	681

Source: WHO World Health Statistics 2008

For non-OECD countries to reach the average healthcare expenditures of high income countries (11.2%) they would need to increase annual expenditures by almost USD650 billion

To date, the international community and the multi-lateral organizations have had only moderate success in promoting health outside the high-income countries. This outcome is linked to the range of structural, political and economic barriers to health system development. However, there is a growing body of evidence that manifold opportunities exist for the private sector to profitably participate in building sustainable health systems across the less-developed regions⁵. A multi-sector approach, involv-

⁴ Santeum Partners research estimate

ing governments, regulators, health authorities and the private sector in healthcare investments is the only viable route to healthcare development and quality.

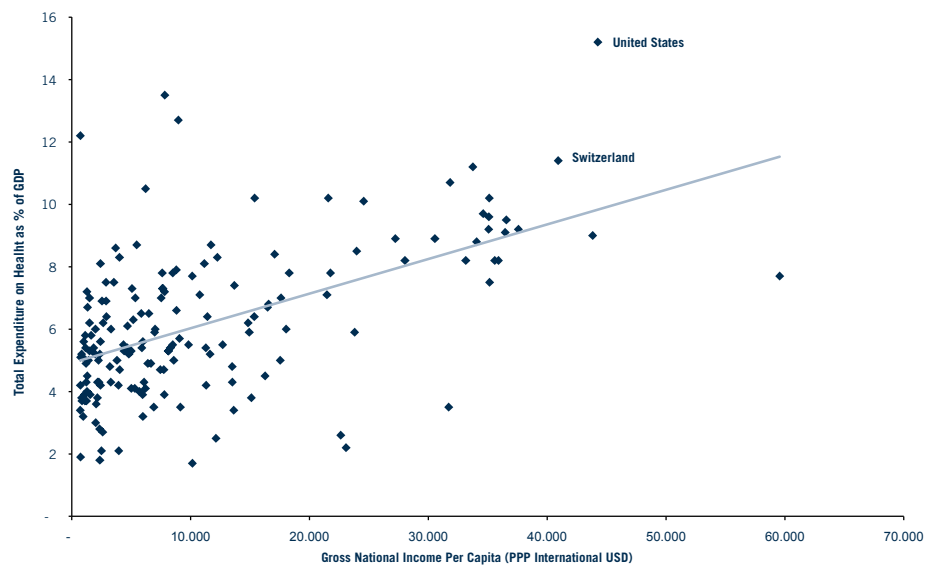
The Reciprocal Link between Development and Health

«When the preconditions of basic infrastructure (roads, power, and ports) and human capital (health and education) are in place, markets are powerful engines of development. Without those preconditions, markets can cruelly bypass large parts of the world, leaving them impoverished and suffering without respite.»

Jeffrey Sachs, *The End of Poverty*, 2005

As countries become wealthier, they tend to spend more on their healthcare sectors. When basic needs such as food, safety and shelter are met, people spend an ever increasing amount of their disposable income on healthcare. Not only does demand for healthcare increase in line with disposable income; expectations in terms of service and demand for quality also inevitably rise. As a result, efficiency and cost-containment become more important.

Chart 1: Total Health Expenditure as a % of GDP vs. Gross National Income Per Capita



Source: WHO World Health Statistics 2008

⁵ See: «The Business of Health in Africa: Partnering with the Private Sector to Improve People's Lives» International Finance Corporation, 2008

Emerging market countries have to choose with utmost care from the cornucopia of health system models available to them. These choices have to be made in the light of the growing burden of chronic and lifestyle diseases, aging populations, the health challenges of climate change and the consumer demands in terms of quality and choice.

One of the main challenges facing governments is guiding health sector investments towards appropriate and sustainable technologies and services that contribute to overall health system improvement. As an example, the United States, while spending the largest proportion of all OECD countries of GDP on healthcare does not perform well against many countries when it comes to overall health status and the efficiency and equitability of its health system. Emerging market countries have to choose with utmost care from the cornucopia of health system models available to them. These choices have to be made in light of the growing burden of chronic and lifestyle diseases, aging populations, the health challenges of climate change and consumer demands in terms of quality and choice.

It is now generally accepted that the major reduction in death rates from infectious diseases occurred some time before the introduction of widespread vaccination and antibiotics. Improvements in lifespan in the first half of the 20th Century were associated with access to safe drinking water, sanitation, improved nutrition and better housing conditions. Today, we have more than sufficient evidence that citizens of high-income countries generally have longer life expectancies. But, improved health status is not a guaranteed outcome of economic development; we need only look at Russia where following the collapse of Soviet Union, unhealthy lifestyles that accompanied rapid economic growth resulted in a decrease in life expectancy.

Health policy needs therefore to be comprehensive and cognizant of the impact of economic development and the intersectoral nature of health and its determinants.

Health policy needs therefore to be comprehensive and cognizant of the impact of development and the intersectoral nature of health and its determinants. There is growing evidence that disparities in income between the poor and rich result in a generally healthier society. From the collection of timely and appropriate surveillance data to legislation that protects and promotes health to encouraging the private sector to participate in a coordinated, high quality health system, emerging market governments need to take a strongly developmental approach to health and healthcare.

The Role of Sovereign Wealth Funds in Healthcare Sector Development

«The oil price could reach \$500 a barrel, but if we don't create the Middle East, then God help our grandchildren.» *Khalid Abdulla-Janahi, Chairman of Bahrain's Ithmaar Bank speaking at the Middle East World Economic Forum, May 2008*

Health and economic development highlight the importance of identifying the true beneficiaries of a country's wealth. Ensuring that the current generation is optimally healthy inevitably has substantial tangible benefits for future generations. For example, reducing smoking and obesity result in healthier newborn children. Similarly, ensuring that the youth have access to educational and entrepreneurial opportunities that generate high levels of productive employment strengthens the fabric of society. As SWFs inevitably play a greater and more influential role as investors, it is timely to reflect on how these investments (which do have a strategic component) will drive those sectors that must grow to meet real needs in healthcare, transportation, energy, services and education.

The rapid economic development of oil-rich countries in the Middle East casts a particular complexion on the health and development debate. In our recent report, 'Sustainable and Profitable Healthcare Investment in the Middle East - Background and Opportunities', we focused on the challenge of lifestyle-related and chronic diseases in the UAE where diabetes, heart disease and motor vehicle accidents continue to unacceptably afflict the population. These conditions are intimately linked with the rapidity and scale of economic growth. Similarly, economic development has a range of health impacts, some undesirable, ranging from obesity due to sedentary lifestyles and pollution (transportation and communication infrastructure) to occupational safety and environmental health (construction and infrastructure).

Case Study – Mubadala Healthcare Holding

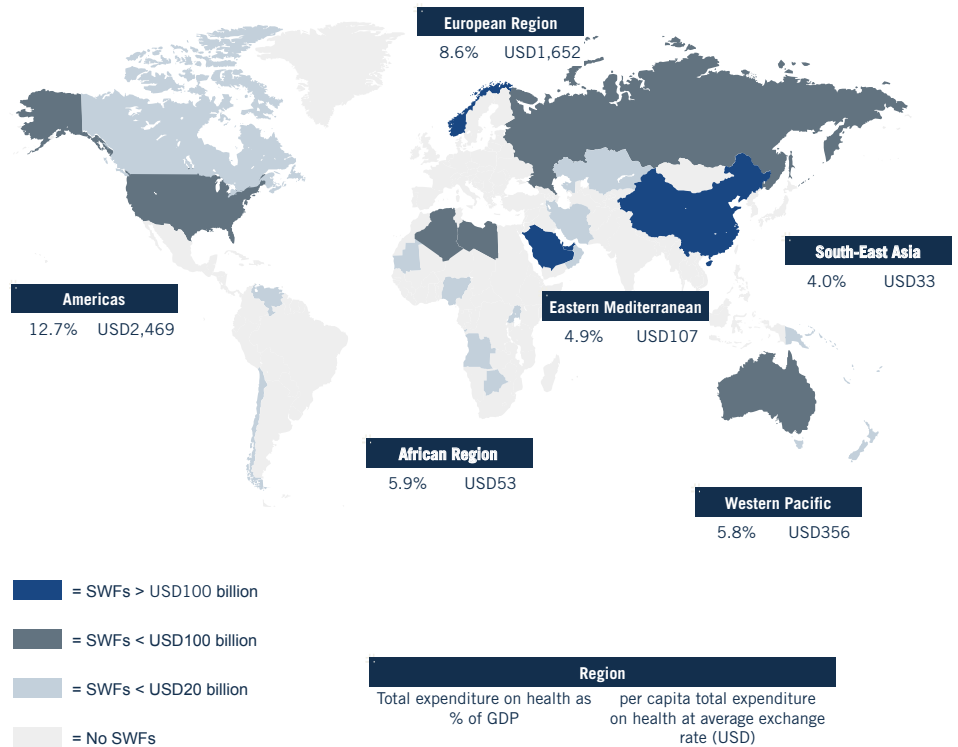
The Mubadala Development Company («Mubadala»), established in 2002, is a wholly owned investment vehicle of the Emirate of Abu Dhabi in the United Arab Emirates. Mubadala has a mandate to invest in the economic development of Abu Dhabi and promote the diversification of the economy. The Mubadala Development Medical Holding Company LLC («MHC»), the healthcare sector investment arm of Mubadala, was established in 2005 to support the development of Abu Dhabi's healthcare sector. MHC's aim is to contribute to creating a sustainable healthcare sector in Abu Dhabi through investments that nurture talent and knowledge and transfer international best-practice and know-how. It seeks and develops high-impact projects with world-class partners and builds on existing successful models from industrialized countries. It aims to ensure sustainability by creating a local healthcare sector that is attractive to work in. MHC's performance is measured both in terms of financial and strategic returns. Strategic return considerations include economic diversification, job and knowledge creation and local development. Notwithstanding, the financial returns always have to be positive. MHC's initial focus has been on top-tier international partnerships that address urgent healthcare needs of the Abu Dhabi population. Projects include the Imperial College Diabetes Centre and the Abu Dhabi Knee and Sports Medicine Centre. MHC recently launched a major tertiary care hospital project with the Cleveland Clinic of the United States and it is currently making a number of strategic investments in projects that will transfer important technology and know-how to Abu Dhabi.

Figure 1 shows the geographic spread of SWF assets combined with WHO data on regional healthcare expenditures. Global SWF assets exceed USD3.7 trillion; the bulk, around USD3.1 trillion residing in non-OECD countries with a total population of almost 2 billion. These countries face substantial demands on their health systems and infrastructure and most recognize that they are not investing enough in developing their healthcare sectors. This underinvestment has its origins, generally not in an unwillingness to spend more on healthcare and social infrastructure, but is rather due to a lack of expertise and appropriate, successful investment models and the inability of constrained public-sector driven health systems to absorb substantial and immediate investment. This also has immediate consequences in terms of an under-supply of healthcare services, the need to send patients abroad for medical care and the lack

Global SWF assets exceed USD3.7 trillion; the bulk, around USD3.1 trillion, residing in non-OECD countries with a total population of almost 2 billion. These countries face substantial demands on their health systems and infrastructure.

of a solid public sector «foundation» upon which to grow a private health sector. In the longer term, countries that under-invest in healthcare pay a high price when they eventually undertake initiatives to reach industrialized country levels, as it is difficult to make an under-performing health system attractive to the local and international professionals that constitute the backbone of top-class healthcare service provision.

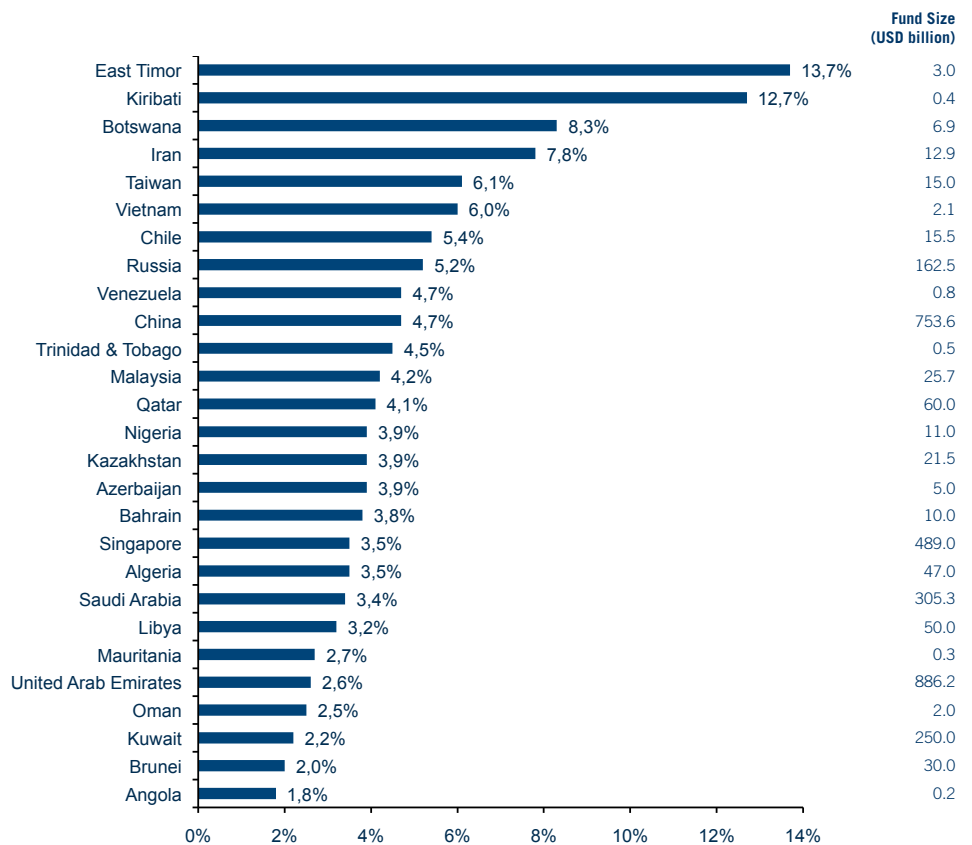
Figure 1: SWF Assets vs. Health Expenditure



Source: WHO World Health Statistics 2008 and Sovereign Wealth Fund Institute

The combined non-OECD countries with SWFs spend around USD290 billion annually on healthcare or the equivalent of about 4.7% of GDP. Chart 2 below shows the relationship between % healthcare expenditure (as a % of GDP) and the size of SWFs. The two countries with the largest SWF assets, China and the United Arab Emirates («UAE»), spent 4.7% and 2.6% of GDP on healthcare in 2005 respectively. The UAE Emirate of Abu Dhabi is at the forefront of health sector development investment. It has through its development fund Mubadala, established a dedicated holding company which aims to contribute to the establishment of a sustainable healthcare sector through selective and profitable investment programs (see Case Study – Mubadala Healthcare Holding). In Singapore, Temasek Holdings, a SWF with USD159 billion in assets, has a longstanding tradition of investing in the biosciences and healthcare sectors through its fund activities as well as its foundations (as of March 31, 2007, life sciences, consumer and lifestyle investments represented around 1% of its portfolio). Singapore itself spends around 3.5% of its GDP on healthcare.

Chart 2: Total Health Expenditure as a % of GDP vs. Country SWF Assets



Source: WHO World Health Statistics 2008 and Sovereign Wealth Fund Institute, Department of Health, Taiwan

The New Asset Class: Investing in Healthcare Sector Development

«We're not talking about aid. We're talking about trying to create a new asset class»

Lars Thunell, Chief Executive of The International Finance Corporation, April 2008

«Most interestingly, because of their mandates and objectives, they tend to look for secure investments and long-term returns. Ironically, to date, this has led them to invest the bulk in OECD countries. However, portfolio allocation considerations and infrastructure needs suggest that they will benefit by extending more into Africa, Asia and Latin America.»

Javier Santiso, Director, OECD Development Centre

Investing in the healthcare sector poses unique challenges. Different timelines, investment needs and regulatory environments across countries and sub-sectors (pharmaceuticals, medical devices and health services) are some of the complexities that investors face. The upside is potentially large as healthcare investments benefit from deregulation, privatization, growing economies, demographic change (growing

A globally balanced and diversified investment portfolio should have a healthcare sector allocation of around 10%

populations and increasing life expectancy) as well as from an ever increasing share of public and private spending. The healthcare investment thesis is further strengthened by the nature of its diversification and return potential. Firstly, a globally balanced and diversified investment portfolio should have a healthcare sector allocation of around 10% (in line with healthcare's share of global GDP and public markets value, around 8.5% of the S&P Global 1200 equity index). Secondly, due to its inherent demand profile, the healthcare sector is non-cyclical. There is also a substantial latent demand for healthcare services and healthcare infrastructure investments across emerging markets and the private sector stands to benefit as these economies grow from their current low base of healthcare spending.

Towards a Framework for SWF Healthcare Investment

«We should celebrate a possibility that government-sponsored funds will invest equity in development. These funds would invest as «long-term investors» and not give money as aid donors.»

Robert Zoellick, President of the World Bank, April 2008

As SWF's can take longer investment horizons than traditional private equity investors with limited life funds and have extensive regional networks, they have a natural advantage in capitalizing on the emerging markets healthcare development opportunity. However, many SWFs currently lack internal capacity and expertise in the healthcare investment space. According to a Monitor analysis of 785 SWF investment transactions between 2000 and Q1 2008, only 4% were in the healthcare sector. In terms of value the sector represented around USD 5 billion or around 2% of total investments.

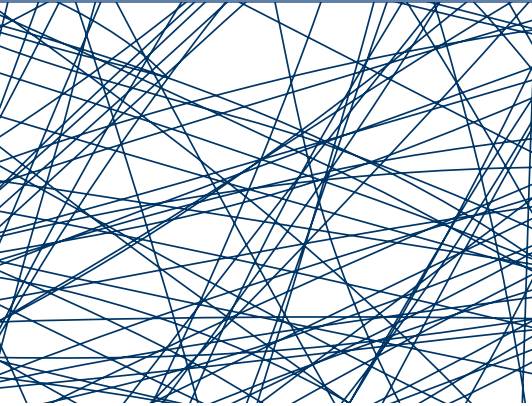
There is an urgent need for applied research, advocacy and consultation to guide and inform SWF healthcare investment strategies and to support SWFs in finding an appropriate role in healthcare and infrastructure development. This is particularly important in the case of countries that have recently begun to garner substantial wealth, yet have limited healthcare and general infrastructure. Some of these countries have young populations and high burdens of disease – straining healthcare, social and educational services to the limit. In the light of a growing range of global health challenges (from climate change to migration to increases in lifestyle-related diseases), demographic and social transition, rapid advances in health technologies, limited healthcare budgets and new players (such as private philanthropic giants) – it is indeed timely to develop capacity among SWFs to play an appropriate and sustainable role in promoting health and wellbeing.

Appendix

Non-OECD SWF Assets and Country Total Expenditure on Health as % of GDP

Country	Fund Name	Assets (USD, billions)	Total expenditure on health as % of GDP (2005)	Inception Origin
Middle East and Africa				
United Arab Emirates				
UAE - Abu Dhabi	Abu Dhabi Investment Authority	\$875.0		1976 Oil
UAE - Abu Dhabi	Mubadala Development Company	\$10.0		2002 Oil
UAE - Ras Al Khaimah	RAK Investment Authority	\$1.2		2005 Oil
		\$886.2	2.6%	
Saudi Arabia				
Saudi Arabia	SAMA Foreign Holdings	\$300.0		n/a Oil
Saudi Arabia	Public Investment Fund	\$5.3		2008 Oil
		\$305.3	3.4%	
Kuwait	Kuwait Investment Authority	\$250.0	2.2%	1953 Oil
Qatar	Qatar Investment Authority	\$60.0	4.1%	2000 Oil
Libya	Libyan Arab Foreign Investment Company	\$50.0	3.2%	1981 Oil
Algeria	Revenue Regulation Fund	\$47.0	3.5%	2000 Oil
Brunei	Brunei Investment Agency	\$30.0	2.0%	1983 Oil
Iran	Oil Stabilisation Fund	\$12.9	7.8%	1999 Oil
Nigeria	Excess Crude Account	\$11.0	3.9%	2004 Oil
Bahrain	Mumtalakat Holding Company	\$10.0	3.8%	2006 Oil
Botswana	Pula Fund	\$6.9	8.3%	1966 Diamonds & Minerals
Oman	State General Reserve Fund	\$2.0	2.5%	1980 Oil & Gas
Angola	Reserve Fund for Oil	\$0.2	1.8%	2007 Oil
ASIA and the Pacifics				
China				
China	SAFE Investment Company	\$311.6		Non-Commodity
China	China Investment Corporation	\$200.0		2007 Non-Commodity
China - Hong Kong	Hong Kong Monetary Authority Investment P	\$163.0		1998 Non-Commodity
China	National Social Security Fund	\$74.0		2000 Non-Commodity
China	China-Africa Development Fund	\$5.0		2007 Non-Commodity
		\$753.6	4.7%	
Russia	National Welfare Fund	\$162.5	5.2%	2008 Oil
Singapore				
Singapore	Government of Singapore Investment Corpor.	\$330.0		1981 Non-Commodity
Singapore	Temasek Holdings	\$159.0		1974 Non-Commodity
		\$489.0	3.5%	
Malaysia	Khazanah Nasional	\$25.7	4.2%	1993 Non-Commodity
Kazakhstan	Kazakhstan National Fund	\$21.5	3.9%	2000 Oil
Taiwan	National Stabilisation Fund	\$15.0	6.1%	2000 Non-Commodity
Azerbaijan	State Oil Fund	\$5.0	3.9%	1999 Oil
East Timor	Timor-Leste Petroleum Fund	\$3.0	13.7%	2005 Oil & Gas
Vietnam	State Capital Investment Corporation	\$2.1	6.0%	2006 Non-Commodity
Kiribati	Revenue Equalization Reserve Fund	\$0.4	12.7%	1956 Phosphates
South America				
Chile	Social and Economic Stabilization Fund	\$15.5	5.4%	1985 Copper
Venezuela	FIEF	\$0.8	4.7%	1998 Oil
Trinidad & Tobago	Heritage and Stabilization Fund	\$0.5	4.5%	2000 Oil
Mauritania	National Fund for Hydrocarbon Reserves	\$0.3	2.7%	2006 Oil & Gas
		\$3166		

Source: WHO World Health Statistics 2008 and Sovereign Wealth Fund Institute

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