



Investment Analysis of Sovereign Wealth Funds in the world

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Abstract

SWFs play an important role in global financial market. With more active investment, increasingly optimized portfolio and stronger endurance to risk, SWFs are growing fast both by scale and by quantity. In this essay, the status quo of SWFs is discussed at first, and investment strategies are analyzed thereafter. After presenting global investment routes of SWFs, this article finally ends in summarizing their development trends.

Keywords: SWFs, Investment strategies, Development trends

1. Concept and status quo of SWFs

Sovereign Wealth funds are public assets accumulated from certain taxes and budgets, compulsive pension funds, revenues from natural resources and surplus of balance of payments, administrated in the form of foreign currencies by government. Sovereign Wealth Funds (SWFs) refer to the funds set up by government to manage and operate sovereign wealth.

SWFs came into being in 1950s and have been growing fast in latest ten years. They become vital part in merger and acquisition since the worldwide diffusion of the sub-prime crisis and continuous dollar depreciation caused by lower rate in U.S. in 2008. SWFs have been established in 36 countries and areas with total capital of 3.3 trillion dollars which is more than all of hedge funds in 2007, according to International Financial Service London (IFSL). IMF forecasts that foreign assets administrated by sovereignties will reach 12 trillion dollars in 2012, as governments, especially those of emerging countries, increase another international asset of 800 or 900 billion dollars each year.

Insert Table 1 Here.

With the continuous depreciation of U.S. dollars in recent years, both oil-exporting and trade-surplus countries set apart portion of foreign exchange reserves to establish special investment agencies in international market for the purpose of value maintenance and appreciation at the premise of necessary liquidity and security of foreign exchange reserves. The scales of SWFs are rather large because of special capital resource and government background, and will increase rapidly in the short time. Some SWFs are even as same size as government pension funds or central bank reserves.

2. Investment strategy of SWFs

SWFs usually seek for long-term stable revenues from investments in foreign capital market. Investment strategy is mainly based on two considerations: the goal of funds and the rules of accumulation and exit set according to funds' future cash flow. The corresponding asset allocation strategies include goal, expected risk level, liquidity, return rate, investment time period, laws and regulations of funds. Moreover, they should not disturb macroeconomic stableness and domestic financial market, and should be in line with the management policy of foreign exchange reserves by treasury of finance. Compared with other institutions, SWFs pursue for more systematic investment strategy, and therefore, are often conservative long-term investors not for controlling when buying equities. Their goal-setting will work on investment and asset management strategy. For example, stabilization funds for mid-and-short term goals are mainly invested in short-term and low-risk asset portfolios; SWFs aiming at long-term investment obtain high return through the adoption of long-term and high-risk investment portfolio; those against national level risk are usually concerned about trade shocks and hold related assets to offset the impact of losses; and those with a clear liability are required to focus on asset portfolio mismatch and balance sheet risk.

Flyvholm(2007) presents the following investment methods for different countries with different characteristics: 1.For oil-exporting countries vulnerable to global economic recession, Long-term bonds should be in outstanding position in SAA; 2. Net importers of oil and primary commodities such as China may hold oil / commodity price-linked SAA including some industry stocks and primary commodity tracing funds to hedge future price risk;3. Countries aiming at long-term investment such as Norway and Singapore may purchase stocks and other long-term assets to bear more credit risk, return curve risk and liquidity risk in portfolio; 4. Countries pursuing for long-term real returns should buy more TIPS to hedge inflation risk.

In the beginning, SWFs prefer high grade fixed income products and moderate liquidity equity instruments and other long-term, low-fluctuation investments in global financial market for stable increase. However, management styles of SWFs are becoming more active with dollar depreciation and declining rates of US government long-term bonds, and more diversified and risk enduring. This shift emphasizes more on return, so that SWFs can actively expand investment channels, transfer gradually from traditional investments to global diversified portfolios including stocks, real estates, private equities and other risk assets based on effective risk control. According to Merrill Lynch's report, Middle East countries lead in introducing risk asset investment, followed by Russia and other Asian countries. For example, 34%, 17%, 38% and 11% of KIA are real estate funds, direct funds, stock funds and bond funds respectively. The portfolio of GIC includes bonds, stocks, real estate and equity investment etc., too. Further more, SWFs step in strategic industries such as banks, energy companies, ports and stock exchanges in America and Europe. Take Temasek Holdings for example, its portfolio includes equities of Singapore Airlines, ICICI, England Standard Chartered Bank and some Chinese banks. United Nation's Conference on Trade and Development (UNCTAD) concludes that SWFs have changed FDI pattern. Some old SWFs are good at investing in stock market, but some new ones may move to FDI for controlling stake or significant proportion of the shares.

Insert Table 2 Here

3. Global investment routes of SWFs

According to cash flow direction, SWFs are mainly invested in Europe, U.S. and Asian emerging countries by regions; finance and real estate by industry. In addition, as for financial industry, SWFs are not only limited to bank, but also expanded to hedge funds, asset management corporations, private equity investment institutions and stock exchanges as well.

Insert Table 3 Here

(1) Step in American market via the sub-prime crisis. U.S., Europe and other developed countries are always vigilant and even repellent to SWFs for the doubt of their sponsors' political intensions in the investment. However, the sub-prime crisis starting from the summer of 2007 disrupts their plans and gives SWFs an opportunity to enter U.S. market. There is serious liquidity shortage in financial market due to this crisis, which causes urgent funding need to American financial institutions. SWFs from emerging countries not influenced by the crisis become the perfect liquidity providers. Abu Dhabi Investment Authority (ADIA) from the United Arab Emirates purchased 4.9% equities of the Citigroup by 7.5 billion dollars in Nov., 2007. In the same December, China Investment Corporation acquired convertible equity units from Morgan Stanley by 5 billion dollars. Furthermore, capitals from Singapore, Saudi Arabia, Qatar, South Korea, Kuwait, Japan and so on are invested into UBS, Merrill Lynch, Citigroup and other global financial giants.

(2) SWFs development is relatively slow in Europe due to different attitudes. In Europe, there are two opposite attitudes. England and Italy welcome SWFs but other countries doubt even repelling them. The British Prime Minister Gordon Brown stated that London will become a financial hub for international operations. The Italian Government also announced support for free market access for SWFs, and no country restrictions on potential investors. But German Chancellor Angela Merkel said that they should adopt a "common approach" to review the state-controlled foreign investors in the company's acquisition activities, because SWFs make Europe a totally new environment. In France, a report aimed at protecting their own strategic interests from the impact of SWFs is being drafted. The resistant attitude and strict supervisory will certainly hinder SWFs in European market.

(3) Enlarge investment perspective, keep eyes on emerging markets. Recently, the prospects and investment opportunities in Asian emerging market attract SWFs all over the world. From the perspective of economic development, contribution to the global economy in emerging markets is continuing to rise with a relatively sound economic system, particularly, contribution to the growth of GDP is above 40%. In view of investment return, rate of return on investment in sophisticated market is well below that in emerging markets. It's showed that funds invested in U.S. gained 11.5% and 20.2% respectively in 2005 and 2006, while those invested in Asian emerging markets achieved an average return of 19.9% and 36.9% in the same time. It is such a high return on investment that draws SWFs' attention to emerging markets.

4. Development trends of SWFs

4.1 Development trends of investment strategy

(1) More active investment style and stronger endurance to risks. SWFs were often invested in higher security but lower return products such as U.S. government bonds in the past. However, they are shifted to both higher risk and higher return asset for the reason of continuous rate decline of long-term U.S. government bonds and U.S. dollar weakness. ADIA shares similar investment strategy with western asset management corporations or hedge funds, Dubai and Qatar funds prefer to riskier investment strategies like stock market and private equity funds. It's found in the study of American sub-prime crisis that SWFs are regular buyers of junk bonds.

(2) Expanded investment perspective. SWFs are usually invested in foreign markets and high grade fixed income products and moderate liquidity equity instruments in global financial market at the beginning. But in recent years, they become more active, more aggressive and more portfolio-diversified as the number and size of SWFs increase rapidly. The asset distribution changes from focusing on G7 fixed rate debts to global diversified portfolio including stocks and other risky assets, even to non-traditional investments such as global real estate, private equity, commodity futures and hedge funds. This highly decentralized asset allocation model is conducive to disperse risks and improve earnings.

(3) The rising proportion of self-managed SWFs investments. Some SWFs tend to manage investments by themselves in consideration of management cost, risk and other factors. For example, Norway Global Pension Fund managed 83% of total asset itself, which was 5% higher than 2006 and 6% higher in risk, but 3% lower in management cost at the same time.

(4) Strict discipline and advanced management. Abu Dhabi Investment Authority has a committee consisting of 11 persons to supervise asset distribution strictly. This management model is exactly as same as that of Harvard University and Yale University's donation funds. 60% of Abu Dhabi investment portfolio is linked to a variety of Indices to reduce cost.

(5) Increased portion in equity investment. With the transition from original single sovereignty investment on U.S. government bonds to diversified ones, the true SWFs come into being in recent years for the purpose of discarding traditional investment ideas, making long-term equity investment and focusing on entities. So far, there are 8 SWFs carried out merging or equity investment, they are respectively from Brunei, Canada, China, Kuwait, Malaysia, Qatar, Singapore and the United Arab Emirates. This also promotes FDI in developed countries and may change pattern of FDI in the future.

(6) The increasing investment in financial industry. Home countries of most active SWFs in international market are developing countries in Middle East or Asia, in which development depends on agriculture or manufacturing. Therefore, they choose to invest in financial companies, which is able to disperse economic risks and favor the industrial upgrade. SWFs scramble for financial companies such as banks, securities and asset management corporations since 2006. According to Dealogic, 8 SWFs made 11 investments, amount to 44.9 billion dollars, in 6 financial institutions in Wall Street between March, 2007 and April, 2008. Investment categories involve common stocks, newly issued common stocks and convertible bonds, focused on convertible bonds.

4.2 Development trends of investment pattern

(1) Demand for investment products in capital market is increasing. SWFs' asset management styles, similar to investment funds, pension funds, hedge funds and private equity funds, will cause increasing demand for stocks, bonds, real estate, private assets, derivatives, hedge funds and other investment instruments, and promote the upgrading of valuation standards. Morgan Stanley estimates that net flow of 400 billion dollars' SWFs will enter into global stock markets each year. Among them, 40 billion will enter into infrastructure investment, 60 billion into private equity, 130 billion into real estate, and 30 billion into hedge funds. This will raise global long-term risk-free interest rate by 30-40 basic points and global stock price by 10%.

(2) Third-party asset management and investment service are in need. SWFs commissioned external fund managers for all or part of the management of the Funds. For example, three quarters of SWFs of South Korean Investment Company are managed by external managers. Furthermore, the demand of SWFs for some products involves market analysis, investment valuation, portfolio selection and management, securities trading and clearing and hedging risk as well in asset management chain; Thirdly, legal and financial services are needed by SWFs; At last, investment brokers are also in need.

(3) Co-operations between SWFs are getting closer. The co-operation is made in the form of the composition of the investment team for joint venture. For instance, Temasek and China National Development Bank share-hold Barclays National Bank, GIC and Saudi royal inject capital in UBS. Another example, Dubai International Capital once planned to unite several Middle East countries and investment institutions to set up joint fund targeted at 15-billion-dollar strategic investment in BP, GE and other world top 100 companies.

(4) Competition in investment market is becoming fierce. There is "two-way" competition: one way is competition of demand for SWFs, which is shown significantly by huge losses in Citigroup, Merrill Lynch and UBS and other international institutions after the sub-prime crisis; another way, SWFs compete for investment projects. Especially, competition for investment project among Middle East countries can be described as "scramble" competition, the bid for OMX between Borse Dubai and QIA is a typical example. In addition, Barclays Bank PLC was strongly supported by two SWFs from China and Singapore in acquisition of in July, 2007.

(5) Higher investment transparency is required and international standards for SWFs to invest may be put on the agenda. As direct or indirect national entities, SWFs are usually not subject to norms of existing laws and regulations for investment funds and pension funds. SWFs and central bank reserves investment are both opaque, because they are not

required to publish information such as investment strategy, daily deals, asset portfolio, trade channels, asset scale, investment management, discipline and derivative usage in most cases. U.S. and Europe strongly require IMF and other international institutions to make related international standards for transparently growing SWFs. Even England, being mildest with SWFs, claims that lowest transparency and supervision standard should be applied to government-backed fund, otherwise SWFs will be seen as the irresponsible ones in global economy. In fact, higher transparency is not only able to enhance trust among trading parties, but also increase credibility on policy process, which benefits SWFs' development.

(6) SWFs will encounter financial protectionism. From the perspective of developed countries, SWFs' merging and acquisition are of strategic intentions and threaten their national securities, and therefore protectionism is roused up. For example, after China National Development Bank and Singaporean Temasek shareholding Barclays Bank from United Kingdom, German government began to wonder whether German banks are acquired by SWFs and examine whether there is a need to set up an institution to review similar mergers and acquisitions. DP World had to give up acquisition intention on P&O which owns the right to operate 6 American ports after U.S. Congress' defense in national security. In addition, developed countries will raise claims and ask emerging countries to further open up capital market in the name of peer-to-peer market opening. U.S. asks for RMB's total liberalization in capital accounts after CNOOC acquisition case.

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Table 1. Types of SWFs

SWFs	classified by capital resource	foreign exchange reserves	Represented by Asian countries and regions such as China, Singapore, South Korea, Malaysia and Taiwan, Hong Kong
		revenues from exporting natural resource	Represented by the Middle East, Latin American countries mainly exporting oil, natural gas, copper and diamonds
		international assistance funds	Represented by Ugandan assistance funds
		other types of national capital	Based on income from fiscal surpluses and privatization of state-owned property in Australia and Ireland etc.
	classified by its purpose	stable type	Smoothing national income inter-temporally to guarantee stable income after the depletion of natural resource and prevent economic and fiscal imbalance caused by price fluctuation , especially oil price fluctuation.
		hedging type	Intervening in foreign exchange market to shunt foreign exchange reserves, offset liquidity surplus and ease depreciation pressure from foreign exchange reserves shoot-up, such as China Investment Corporation
		saving type	Smoothing inter-generational wealth to cope with challenges for the pension system from aging society and natural resource decline and distribute wealth fairly among generations, Such as Government Pension Fund of Norway
		preventive type	Responding to potential socio-economic crisis and development uncertainty
strategic type	Deploying resources globally to support national development strategy and improving national productivity		

Table 2. SWFs' investment strategy and strategic asset allocation

countries/reg ions	fund name	Establish ment	Capital resource	investment strategy and strategic asset allocation
UAE	ADIA/ ADIC	1976	Oil	an important global investor without published SAA
Norway	GPF	1990	Oil	Allotted all over the world with 40% stocks and 60% global fixed assets
Saudi Arabia	unnamed	-	Oil	Invested globally without published SAA
Kuwait	GRF and FGF within KIA	1953	Oil	GRF invested in local, Arabian regional and global financial market; FGF invested around the world according to authorization by board of administration
Singapore	GIC	1981	Others	Invested in almost all global assets without published SAA
Singapore	TH	1974	others	Weight of SAA unknown; 38% Singapore asset, 40% Asian asset, 20% OECD asset and 2% others till March 2006
China	CIC	2007	Foreign exchange reserves	Investment portfolio mainly focusing on international financial products
Russia	Oil stable funds	2004	oil	mainly invested in fixed income assets, 44% dollar assets, 46% Euro assets and 10% Pound assets and divided into two different funds in 2008
Hong Kong	Investment portfolio (HKMA)	1998	other	Two types of assets: sustaining and investing ones
Taiwan	NSF	-	other	-
Australia	GFF	2006	other	Invested domestically
U.S.	APRF	1976	Oil, mineral	53% stocks, 29% fixed assets, 10% real estate and 8% other assets in SAA
Brunei	BIA reserve funds	1983	oil	Invested in global securities, financial assets and real estate, without published SAA
Korea	KIC	2005	other	Global asset allocation, without published SAA
Alberta, Canada	AHTF	1976	oil	Invested globally; 30% fixed assets, 45% stocks, 10% real estate and 15% others in SAA
Chile	ESSF	2006	copper	72% government bonds and 28% currency market instruments; containing dollars, Euro and Yen
Chile	Pension fund	2006		79% government bonds and 21% currency market instruments; containing dollars, Euro and Yen
Botswana	Pula funds	1966	diamonds	Invested in stocks and fixed income instruments in industrial countries, not invested in emerging markets

Sources: IMF. Table 1.7 in Global Financial Stability Report, Sep., 2007; BIS. Table1 in The Management of National Foreign Exchange Reserves Special Funds.

Table 3. SWFs' investment expansion in 2007

Fund name	Invest project/resident industry/project location
Istithmar	Mandarin Oriental NY/Hotel/U.S.; Serco Gulf/equipment management/ The United Arab Emirates; Cunard Line-QE2/shipment/United Kingdom; Hans Energy/oil reserves /China; Barneys/retail/U.S.; Parks/real estate /United Kingdom
Dubai International Capital	HSBC/finance/United Kingdom; Mauser/industrial package/Germany; EADS / aviation industry/Holland; ICICI Bank /finance/India; Och-Ziff/finance/U.S.; Alliance Medical/ medical industry /United Kingdom; Almatiss/industrial material//Germany; SONY/Electrics/Japan
Kuwait Investment Authority	EADS / aviation industry/Holland
Qatar Investment Authority	EADS / aviation industry/Holland; Care Principles/medical industry/United Kingdom; London Stock Exchange/finance/United Kingdom; Stockholm Stock Exchange/finance/Sweden; Sainsbury/retail/United Kingdom; Bellway/real estate/United Kingdom
Abu Dhabi Investment Authority (UAE)	Suez Cement/construction material/Egypt; Apollo Management/finance/U.S.; EFG-Hermes/finance/Egypt; Prime West Energy Trust/energy/Canada; NASDAQ/finance/U.S.; Citigroup/finance/U.S.
Mubadala Development Corporation (UAE)	Carlyle Group /finance/U.S.; Advanced Micro Devices/computer devices/U.S.
Dubai Stock Exchange	London Stock Exchange/finance/United Kingdom; NASDAQ/finance/U.S.
Khazanah (Malaysia)	Infrastructure Development Finance Corp/finance/India; Yes Bank/finance/India
Temasek (Singapore)	Tata Sky/ Satellite TV /India; Zhongsin / Forest /Hongkong; 9D Salt Corporation /light industry /China; Minh Phu Seafood/ Fisheries /Vietnam; First Flight Couriers/post/India; Citic Resources Holdings /oil/Hongkong; ABC Learning center/childcare/Australia; Barclays Bank /finance/United Kingdom; Standard Chartered Bank /finance/United Kingdom; Merrill Lynch & Co. /finance/U.S.
Government Investment Corporation (Singapore)	CSC-Metro Center/real estate/United Kingdom; Westfield Parramatta/real estate/Australia; Hawks Town/real estate/Japan; Merrill Finance Center / real estate /United Kingdom; WestQuay Shopping Center/ real estate /United Kingdom; Myer Melbourne real estate/ real estate /Australia; Chicago InterContinental Hotel /hotel/U.S.; Hyatt Regency La Jolla/hotel/U.S.; Lasalle-Kungshuset/ real estate /Sweden; UBS/finance/Switzerland

Source: rework from Zheng Lingyun. (2008), SWFs' Foreign Investment: Review and Outlook. Studies of International Finance, 6: 14-19