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Chapter 1

The Recent Investment Activity of Global Sovereign Wealth Funds

This chapter encapsulates the most recent findings on sovereign wealth fund (SWF) investment activity globally. The key research proposals addressed herein relate to the position of global SWFs among conventional and alternative asset managers, SWF allocation strategies, their recent investment behavior and its likely evolution in the foreseeable future.

1.1. Stylized Facts on Sovereign Wealth Funds' Contemporary Investment Strategies

Sovereign wealth funds have historically been viewed as conservative asset managers; however, the global financial crisis of 2007–2009 has materially affected their investment allocation behavior. On the one hand, numerous SWFs had to help recapitalize cash-strapped domestic sectors or companies (stirring up considerable controversy, cf. Gelb 2014), on the other hand, their numerous holdings (e.g. illiquid asset classes) suffered significant value erosion. Consequently, SWFs have been forced to rethink their investment strategies and map out plans to approach the investment process from a broader perspective (cf. Alsweilem 2015).

Among the key factors driving portfolio allocation decisions by worldwide SWFs since the last global financial crisis, have been (cf. Kunzel 2010):

- **SWF** subtype: global SWFs can broadly be classed as: macroeconomic stabilization funds, savings funds, pension reserve funds and reserve investment corporations, this classification has significant implications for portfolio allocation patterns (e.g. SWFs that by virtue of their explicit or implicit mandate do not need to preserve a substantial proportion of their assets in investments easily convertible into cash, have more latitude in selecting relatively illiquid and risky, i.e. volatile asset classes);
- **SWF time horizon**: longer-term (especially intergenerational) SWFs whose activity is projected for whole decades rather than single years can afford more exposure to illiquid and risky investments such funds can extract illiquidity and anticyclical premia over asset managers that are constrained by the prospect of short-/medium-term withdrawals and the need to prove their performance in a relatively short time frame;
- **SWF funding base**: the investment policy of an SWF has to be a function of funding scale and stability, as the SWF's assets are primarily derived

from a single resource, limited, non-renewable or nearly depleted resources, the SWF's investment strategy has to account for implied volatility in the availability of such resources (commodity or otherwise based);

- national policy toward SWFs: the role of a given SWF must be reconciled
 with other SWFs originating from the same country (if the country
 operates more than one SWF) or other agencies playing similar roles
 to SWFs, furthermore political interference with the investment
 activity of an SWF can detract it from efficiency oriented investment
 management;
- **SWF maturity**: mature, experienced and fully fledged SWFs are more likely to apply broader diversification to their portfolios, are more inclined to seek exposure to nontraditional asset classes and employ sophisticated portfolio strategies, whereas recently founded SWFs need time to arrive at their predefined asset allocation;
- **reaction to the crisis**: the SWFs that suffered heavy losses during the last global financial meltdown have been compelled by their mandators to rearrange their portfolios toward a greater readiness to support the domestic economies, higher liquidity, broader diversification into alternative assets, emerging markets and advanced risk metrics (e.g. factor based investing, cf. Masih 2014).

1.2. Recent Investment Activity of Global SWFs

According to the latest available estimates (TheCityUK 2015), global SWFs rank at the top of the largest non-conventional (alternative) investment management institutions by aggregate assets under management and their scale is becoming significant even to mainstream (conventional) asset managers – whose record of activity is by far more established (Figure 1.1). Despite such prominence, global SWFs tend to keep a lower profile in the mass media than most other financial institutions, are not routinely obligated by law to perform publicly available information disclosures, and are thus considered relatively obscure to the point of being demonized in popular culture (Drezner 2008). Numerous fast growing SWFs come from emerging markets and derive their assets from the extraction of natural resources or non-commodity exportation (Appendix 1).

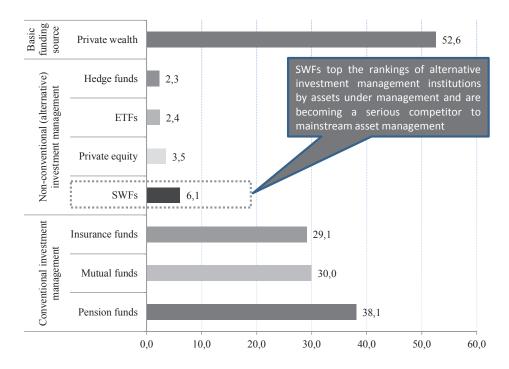


Figure 1.1. The Structure of the Global Fund Management Industry (Including Conventional and Non-Conventional Institutions) by Assets under Management at the end of 2013 (in USD in trillions) Source: UK, The Leading Western Centre for Sovereign Wealth Funds, TheCityUk, June 2015, available at: http://www.thecityuk.com/research/our-work/reports-list/sovereign-wealth-funds-2015/ [accessed: 16.08.2015]. Note: about one-third of private wealth is incorporated in conventional investment management. Note: the SWFs' asset under management total differs from that contained in Appendix 1 due to a different time period under survey and different sources used.

Despite chronic inscrutability (the average Linaburg-Maduell transparency ratio, the most widely applied metric of SWF information disclosure standards, for the 79 largest global SWFs amounts to 6 on a scale from 1 to 10: see Appendix 1), the funds' assets have been conspicuous for exponential growth in defiance of the downward volatility plaguing numerous investment management institutions amid the global economic crisis of 2007–2009 (Figure 1.2). The SWF expansion has been driven both by continued funding from governments and capital gains accumulated in continued pursuit of superior returns at a time when international interest rates have been hovering close to zero (cf. Preqin 2015).

The unabated ascent of global SWFs, particularly driven by a proliferation of non-commodity funds, despite a number of systemic challenges persistent in the global asset management industry, can be attributed to the following SWF hallmarks:

- **stability**: state control over SWF assets makes them less susceptible to panic withdrawals triggered by shrinking rates of return (even amid economic crises);
- **long-termism**: the intergenerational character of SWFs helps them overcome interim pricing pressures in search of long-run returns (this feature is accompanied by the infrequent use of short/medium-term benchmarking by SWFs);
- lack of short-terms liabilities: SWFs' role as intergenerational asset managers is bolstered by the absence of short-term liabilities and the resultant leeway in asset allocation (although the recent crises have compelled some funds to recapitalize selected industries and companies);
- **portfolio structure**: although the diversification of SWF portfolios has been on the continued rise, they are still significantly exposed to illiquid asset classes (e.g. real estate, infrastructure and private equity) whose valuations are immune to short-term pricing changes;
- **growing role of emerging economies**: the global shift of geopolitical and economic gravity toward emerging markets has wide-ranging implications for the distribution of capital (i.e. burgeoning number of non-commodity SWFs established by export-pushed countries);
- **competence and experience lags**: numerous SWFs are gradually embracing sophisticated investment management techniques such as the so-called "smart beta" (Wiśniewski 2015), yet their overall commitment to state-of-the-art risk-adjusted investment management is still limited (this factor has practical implications for the complexity of portfolio strategies).

As displayed in Figure 1.3, the growth of global SWFs has been broad-based, as the vast majority of SWFs either expanded or maintained asset sizes in 2013–2015. The dynamics of the SWFs industry attests to spectacular resilience amid the mixed fortunes of the global asset management industry since the advent of the new millennium. It has also been a function of the aforementioned SWF specific traits. Last year saw a slowdown in new SWF startups, as only one fund was de facto remodeled (Ireland's Strategic Investment Fund reestablishment from the assets of the National Pension Reserve Fund whose activity dates back to 2001, see Appendix 1).

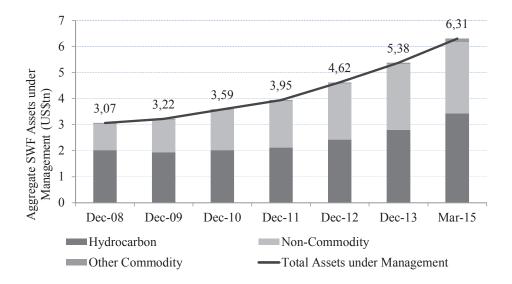


Figure 1.2. Aggregate Sovereign Wealth Fund Assets Under Management (USD in trillions), 2008–2015 Source: 2015 Preqin Sovereign Wealth Fund Review: Exclusive Extract available at: https://www.preqin.com/docs/reports/2015-Preqin-Sovereign-Wealth-Fund-Review-Exclusive-Extract-June-2015.pdf [accessed: 12.08.2015]. Note: the SWFs' asset under management total differs from that contained in Appendix 1 due to a different time period under survey and different sources used.

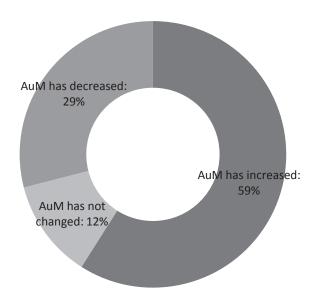


Figure 1.3. Change in Sovereign Wealth Fund Assets Under Management (AuM) 2013–2015 Source: 2015 Preqin Sovereign Wealth Fund Review: Exclusive Extract available at: https://www.preqin.com/docs/reports/2015-Preqin-Sovereign-Wealth-Fund-Review-Exclusive-Extract-June-2015.pdf [accessed: 12.08.2015].

Beyond the sheer scale of asset growth, it is by far more intriguing to examine the structural and regional compositions of global SWF investment activity (Appendix 2). Evidently, the investment portfolios of global SWFs are still dominated by traditional assets. Public equity (81%) and fixed income (86%) figure prominently in an average SWF's portfolio globally, however, "brick-and-mortar" alternatives, i.e. infrastructure (60%), real estate (59%) and private equity (47%) also account for large proportions of the holdings.

International disparities in the compositions of SWF portfolios manifest the following characteristics (Appendices 1 and 2):

- North American SWFs are the most diversified in their investment allocations (including substantial exposure to alternative assets), which attests to their expertise and pursuit of investment efficiency;
- recently established SWFs (Latin American and African) are relatively risk averse and centered on fixed income and public equity instruments with visibly lower (than global averages) emphasis on nontraditional assets;
- despite proximity to several globally competitive financial centers,
 European SWFs tend to be relatively conservative (concentrated around public equity and fixed income instruments) and show limited diversification (especially with regard to alternative assets);
- Asian and Middle Eastern SWFs are beginning to emulate their North American peers in respect to portfolio heterogeneity (with Asian SWFs displaying a slightly more pronounced affinity for hedge funds);
- given only a handful **Australasian SWFs** currently in operation, any farreaching interpretations of their portfolio patterns would be unwarranted, yet the distribution of investment per asset class demonstrates a certain **routinization** of investment behavior (equal shares of all alternative asset categories).

The role of commodity importing emerging countries as SWF sponsors is rising in line with the general shift of power from West to East and is being accompanied by spectacular volatility in commodity prices: they have contracted across the board since April 2011 (Figure 1.4) and their growth prospects seem bleak (World Bank 2015).

Despite the aforementioned evolution of the SWF industry, hydrocarbon based funds still dominate the SWF scene (both in total asset under management and the number of fund operations). Non-hydrocarbon commodity SWFs

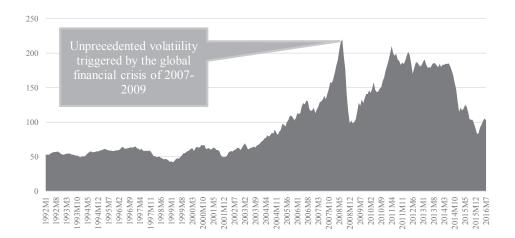


Figure 1.4. International Monetary Fund (IMF) Commodity Price Indices in January 2010 January 2015 Source: IMF datasets available at: http://www.imf.org/external/np/res/commod/images/chart_lg.jpg [accessed: 31.08.2015].

remain negligible in global terms, especially by total asset volumes (Figure 1.5). Extrapolating from historical and current trends, it is safe to predict that non-commodity SWFs will outnumber and outweigh commodity based ones in the following decades, which will have widespread repercussions for the shape of SWF investment policies (the ebb and flow of new SWF assets will follow the economics of export capacity rather than commodity extraction).

SWFs reap plenty of economic benefits related to scale (e.g. revenue and cost synergies in a business where fixed, e.g. regulatory costs are soaring) thus their assets under management routinely outstrip USD 1 billion, although the asset accumulation process is usually protracted and follows the varying dynamics of export receipts (in view of the recent volatility of commodity prices). Contemporary financial markets are placing a large premium on hefty players in the asset management arena, yet according to our empirical findings in the case of global SWF assets there appears to be a "sweet spot" (between USD 1 billion and USD 9 billion) enabling the combined accrual of scale related benefits as well as mitigation of operating (investment due diligence, portfolio selection, political compliance) and industry specific (liquidity, regulatory, asset diversity) constraints (Figure 1.6).

Heavyweights from Asia dominate the global SWF landscape in respect to assets under management (coming out second only to SWFs from the Middle East and North Africa by the number of active fund

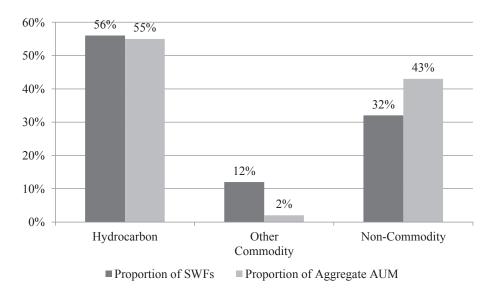


Figure 1.5. Breakdown of Sovereign Wealth Funds by Source of Capital in 2014 Source: 2015 Preqin Sovereign Wealth Fund Review: Exclusive Extract available at: https://www.preqin.com/docs/reports/2015-Preqin-Sovereign-Wealth-Fund-Review-Exclusive-Extract-June-2015.pdf [accessed: 12.08.2015].

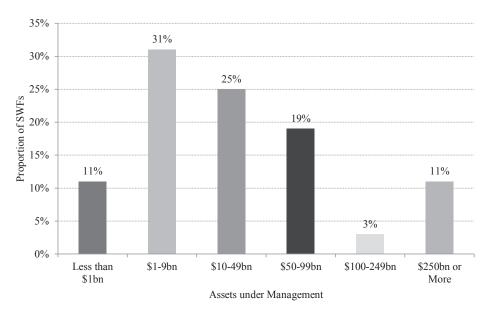


Figure 1.6. Breakdown of Sovereign Wealth Funds by Assets under Management in 2014 Source: 2015 Preqin Sovereign Wealth Fund Review: Exclusive Extract available at: https://www.preqin.com/docs/reports/2015-Preqin-Sovereign-Wealth-Fund-Review-Exclusive-Extract-June-2015.pdf [accessed: 12.08.2015].

operations). Europe, rallied around three major funds and spearheaded by the world's largest SWF (Norway's Government Pension Fund – Global), represents another significant area of SWF activity. North American SWFs (propelled by oil and gas revenues) rank at the bottom of the list of the world's leading SWFs (Figure 1.6).

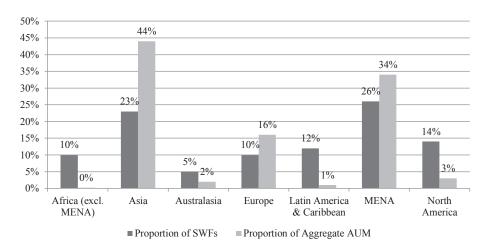


Figure 1.7. Breakdown of Sovereign Wealth Funds by Region in 2014 Source: 2015 Preqin Sovereign Wealth Fund Review: Exclusive Extract available at: https://www.preqin.com/docs/reports/2015-Preqin-Sovereign-Wealth-Fund-Review-Exclusive-Extract-June-2015.pdf [accessed: 12.08.2015].

Although global SWFs are not at the forefront of investment innovation (hedge funds or even certain mutual funds betray by far more ingenuity in asset allocation), they will be forced to adapt to the continued evolution of the asset management industry as well as to the increasingly unstable socioeconomic environment of their business. The following game-changers are likely to define the SWF industry for the years to come (cf. Preqin 2015):

- **declining commodity prices**: as mentioned previously, by varying estimates the prices of hydrocarbons are headed for long-term stagnation or moderate shrinkage, which will complicate SWF funding and put additional pressure on the ability to realize capital gains;
- depletion of natural resources: nonrenewable natural resources (still
 the predominant origin of SWF assets) will become harder or more
 expensive to exploit, which will also reduce SWF financing capacity;

- **liquidity constraints**: it is fair to assume that SWFs will be increasingly used to bail out distressed industries or companies in their home countries to enable such aid, SWFs will have to preserve a liquidity margin (a share of assets easily convertible into cash at the expense of risky and illiquid asset classes);
- **long-termism**: numerous recently founded SWFs are only beginning to formulate their default investment strategies. Once the socioeconomic and political underpinnings of their creation take their final shape, these SWFs will have the ability to take a longer view of their investment policy;
- **contrarianism**: the inherent long-termism of SWF investment activity offers them the unique advantage of breaking out of pro-cyclicality a practical challenge to numerous asset managers benchmarked against single economic or stock market cycles;
- **use of alternative assets**: rising inter- and intra-asset correlations on global investment markets (Kolanovic 2011) make a persuasive case for a more vigorous approach to investment diversification: within and across asset classes this trend will increasingly affect SWF asset allocation practices;
- amalgamation and concentration: evidently, the global SWF landscape is dominated by a handful of institutions (the top ten largest funds account for almost 75% of the total global assets managed by SWFs) their future activity will gain momentum at the expense of smaller funds (which will most likely fall prey to business combinations and varying forms of integration).

Conclusions

At present, global SWFs represent the most powerful institutions among alternative asset managers. Their chronical opacity and ambiguous motives complicate any in-depth analysis of investment behavior and cast doubt on socioeconomic outcomes. Despite such limitations, it is clear that the global SWF industry is evolving toward less dependence on natural resource extraction, more interaction with domestic economies, intergenerational awareness, out-of-the-box investment strategy and market consolidation. Differences in portfolio allocation decisions by global SWFs are primarily driven by expertise and scale

related factors and are liable to change as the competence and impact of newly established funds evolves. Transparency remains the primary objective of worldwide initiatives aimed at tracking the activity of global SWFs.

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