State Capitalism: The rise of sovereign wealth funds

13th November 2007

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Sovereign Wealth Funds (SWFs) have existed since 1953 and are here to stay. Their size and influence is set to grow. Already valued around $2.2 trillion, on current trends they could even reach $13.4 trillion in a decade. Here I provide a comprehensive and up to date analysis of SWFs, detailing the largest 22, what drives them and their likely future impact.

1. The Super Seven: There are already seven big SWFs that have over $100 billion in assets. These are the funds that dominate and include Abu Dhabi, GIC of Singapore, Norway, Kuwait, China, Russia and Temasek.

2. The Secret Funds: Whilst one way of looking at these funds is their size, another is to analyse their investment approach and philosophy. A number of funds are not so transparent and include the UAE funds, China, Qatar, Brunei, Venezuela, Taiwan, Oman and Kuwait.

3. Three Crucial Implications:

(a) The influence of SWFs on financial markets is set to grow. Expect these government controlled funds to: take bigger financial stakes in equity and bond markets across emerging economies; to feed more money into alternative investments such as hedge funds and private equity; to boost strategic links with countries that have not shared fully in globalisation or which have been shunned by the West; and to take more strategic stakes in sensitive areas within developed countries. It is these last two areas, which I call State Capitalism, that is the most problematic aspect of sovereign wealth funds.

(b) There is a serious likelihood of Western governments and SWFs clashing over what they can buy and where. A protectionist backlash against strategic investments would be damaging for global trade. There is a huge difference between what is needed and what is likely to happen. There is a strong case for SWFs to adopt the best practice of open funds like Norway. But many governments will argue that it is their money and why should they be so transparent when other areas of financial markets are not. In addition, there is a strong case to be made to encourage the opening up of markets from which SWFs emanate (the so-called level playing field). But this will take time and we are more likely to see Western governments seeking to protect national champions and strategic sectors, as is their right. The aim should be to improve governance and transparency and promote an investment framework that is fair and commercially driven.

(c) The rise of SWFs should be seen as a further sign of a shift in the world economy and Western countries should seize this as an opportunity to work with emerging economies such as China and Russia and others to find common ground rules and a code of practice. Although multilateral groups like the IMF and World Bank or even the World Trade Organisation may be best placed to decide a code of practice the danger is that they will be ineffective. In fact more SWFs may invest strategically in order to position their economies on the world stage! Yet, as long as investments by SWFs are made for commercial reasons, and not for political purposes, then these funds should be accepted.

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1. The impact and implications

1a. Introduction

This Report focuses on a major global issue - the rise of sovereign wealth funds (SWFs). We have been at the forefront of this debate, although we have talked about it in terms of State Capitalism - as it is this, rather than all aspects of SWFs, that is the crux of the issue. State Capitalism is the use of government controlled funds to acquire strategic stakes around the world.

The growth of SWFs and the location of the countries from which they originate provides another example of how the balance of economic and financial power is shifting.

SWFs are not new. In fact some of them have a long history, with the first being established as long ago as 1953. Of the twenty two largest SWFs that are examined in this report, seven were in existence before 1990, six started in the 90s and nine since the millennium. A number of smaller funds have started in recent years and, as existing funds prove successful, this may well encourage other countries to establish their own. Given how long SWFs have been in existence, it is remarkable how focus on them has only recently become a big issue, particularly in policy circles. Why is this?

The change seems to be occurring on both sides. On the SWF side, the difference is that now the number of countries pursuing such a strategy of having their own fund has soared and the amounts at their disposal are huge. Although many SWFs are keen to ensure high investment returns, there is now added concern about where and what they could buy. China's fund is just the latest example.

Meanwhile, in terms of countries into which this money is flowing, there now seems to be far more awareness of the existence of SWFs. In particular, three broad issues stand out as bringing this to wider attention. One, is the potential for these funds to make more strategic investments - hence the term State Capitalism. Second, is the surge in size of these funds and the likelihood that they will continue to grow. Third, is the increased concern about the lack of transparency of some of these funds. All this has focused attention on the fact that, as the consequences of State Capitalism are not clear, there are no ground rules regarding how SWFs should behave and thus no rules as to what they can buy. This, in turn, has added to concerns about future protectionism.

In many respects, SWFs are their own worst enemy. Their air of secrecy, including for some a lack of transparency has, in recent years, led to some concern. Although the funds may argue that there are others within the financial markets that are equally secretive, it is the suspicion about their intentions that makes this a more problematic area. This need not be the case. Some SWFs are very open - Norway is perhaps the best example of a fully transparent fund.

There are many challenges with SWFs: a major one being their opaqueness, an additional challenge being how one defines a SWF. Allowing for certain exceptions, their main characteristics are: ownership by a sovereign nation state rather than a regional or local state entity; not national pension funds and not central banks or authorities that perform roles typical of a central bank. This is a credible set of qualifying assumptions. It does, however, exclude the likes of Saudi Arabia's Monetary Authority (SAMA), which has reserves of $251 billion, and which also acts as a conduit for the investment of Saudi government funds totalling $116 billion.

The biggest is the Abu Dhabi Investment Authority (ADIA), but as it not a transparent fund, the estimate of $625 billion may not be spot on. The uncertainty about some funds is highlighted by some of the wide guesstimates that exist. Take Kuwait as an example. The figure of $213 billion cited in this Report is based on a reply to a Parliamentary question and seems to be more reliable than most other estimates, which vary widely. If any of these figures are not spot on it is a reflection of the secrecy of the SWFs themselves! Overall, it is calculated that the estimated size of the top 22 SWFs is $2.2 trillion. If you add in recent smaller funds, such as Azerbaijan, Trinidad & Tobago, Ecuador, Nigeria and others, $2.3 trillion is the likely scale.

1b. Scale - the Super Seven

This Report shows that within the major SWFs there is a Super Seven. These are the seven funds already with over $100 billion in assets. The Super Seven are:

- Abu Dhabi,
- Singapore - GIC,
- Norway,
- Kuwait,
- China,
- Singapore - Temasek,
- and Russia.

In fact, three of these are also among the five largest if one uses a different benchmark, such as the size of funds as a proportion of GDP. So, in relation to GDP, the five big funds are:

- Abu Dhabi,
- Brunei,
- Kuwait,
- Qatar,
- and Singapore - GIC.

1c. Rapid growth rates and future size

Given the scale of these funds now, an important issue is their likely future size. There are a number of driving forces behind these funds.

(i) The movement in oil and other commodity prices: petrodollars and revenues generated by the recent boom in commodity prices have been particularly important for the growth in

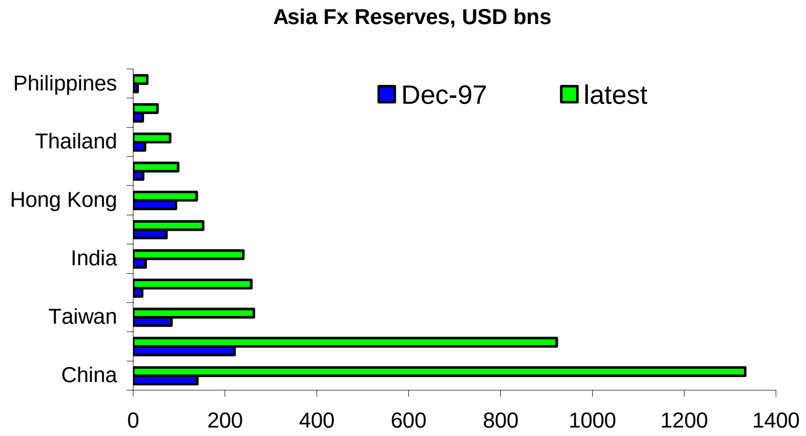
SWFs. Sixteen of the largest twenty two funds have commodities as their main source of income.

(ii) The growth in foreign exchange (FX) reserves. The importance of reserves as a key driver behind SWFs should not be overlooked. Total global FX reserves are $5.75 trillion, with Asia accounting for $3.66 trillion. Reserves are rising sharply. For instance, a decade ago, Asian central banks accounted for one-third of global currency reserves, now they account for two-thirds.

(iii) The investment performance and returns achieved by the fund, which will clearly be influenced by many factors, including the macroeconomic and financial climate and the fund's own strategy. There are, in essence, two parts to SWFs: one, is a fund management, asset allocation investment; the second is a strategic investment.

(iv) Discretionary factors. Among the six of the largest twenty two that do not rely on commodity prices, the financing varies. Some, like China, may rely on transfers from FX reserves. Others, like Malaysia's Khazanah Nasional (number twelve in size) may be partly financed by debt. A key factor will be how governments wish to finance these funds and the amount that they wish to funnel to them.

Chart 1



Source: Standard Chartered

Some of these funds have recently enjoyed rapid growth. Growth rates were estimated last year for twelve funds, ranging from zero to 100%. Given such a wide spread, it is clear that it is hard to say anything definite about potential growth rates. Taking out the extremes, and looking at this in relation to other data, a good guide to average annual performance is just under 20%.

If this growth rate was repeated over the next decade the funds would reach $13.4 trillion. But, of course, the last few years have been spectacular for the world economy and for financial markets. Whilst that may suggest caution about the future growth rate, many of the funds may continue to be fed by growing FX reserves. Even if we just assumed that there were no additions to these funds and that they experienced only a modest return over the next ten years, matching an average of the annualised returns seen on US and emerging equities over the last decade then the size of these funds would grow to $5.2 trillion, in itself a large number. Furthermore, the aims of SWFs vary and whilst some may seek to maximise returns, the strategic element sometimes works against that principle. This makes it hard to gauge their likely future size, although it will be fair to assume they will be large and their influence will grow.

There is every likelihood that the SWFs that countries in the West are most concerned about will continue to grow significantly. Take China, for instance. China's new SWF, the China Investment Corporation (CIC), will have an initial capital of around $200 billion and will absorb an earlier fund, established in 2003, the Huijin Investment Company. There is no ideal level of FX reserves, despite many academic studies attempting to determine some magical formula. Yet China's behaviour appears to suggest that they believe FX reserves have reached a significant level to allow China to cope with any external shock. That level would appear to be around $1.1 trillion. Reserves have continued to rise, to around $1.4 trillion, coinciding with the establishment of its $200 billion fund. The amount allocated to this fund looks set to grow. With China committed to a gradualist appreciation of the CNY, its currency reserves look set to keep rising, reaching $2 trillion in early 2009. As reserves grow, it would be no surprise if additional amounts were used in stages to swell the size of China's SWF to, say, $600 billion within two years! Recent developments within China have put a lot of emphasis on this new fund being performance dependent, particularly as behind the scenes not everyone appears happy with its remit. This, in turn, could encourage The State Administration of Foreign Exchange (SAFE) to become more aggressive in its managing of remaining FX reserves, to lessen the argument for more funds going into the new SWF. Furthermore, the new CIC fund, will also use some of its funds to help restructure the financial sector.

Over time, in general and not necessarily in every country, it seems likely that SWFs will grow at a faster pace than the rise in FX reserves. The funds will not only be fed by the growth in reserves but are likely to enjoy gains on their investment, swelling their size further. Of course, currency policy itself has a big bearing. The appreciating currencies are, by and large, likely to be those enjoying current account surpluses. The lesson of Asia over the last decade is testimony to how this could continue to play out over the next ten years. As intervention takes place to stem the pace of appreciation, this not only leads to currency reserves rising further, but keeps the currency competitive, underpinning its current account. But at some stage, possibly even in coming years and certainly over the next decade, Asia itself will move from being export driven to relying much more on domestic demand. In which case, current account surpluses will shrink and the growth in currency reserves may slow. Although this in itself may remove one of the drivers of the rise in SWFs it will be replaced by another driver - namely the growth in Asian domestic demand will go hand in hand with the deepening of Asian financial markets. And, if SWFs invest in these markets at an early stage (as they already appear to be) then they are likely to enjoy rapid investment returns, as the capitalisation of these asset markets grow.

The size of SWFs may also grow relative to other types of investment. According to figures quoted from McKinsey, the world has $167 trillion of financial assets. Thus SWFs constitute 1.3% of this total. But this is likely to rise, particularly as the four constituent parts (i) to (iv) outlined above look set to grow. The current $2.2 trillion in SWFs compares with figures of $1-1.5 trillion for hedge funds and between $0.7 trillion to $1.1 trillion for private equity. Yet the growth in SWFs itself is likely to feed both of these areas, as the investment allocation of SWFs may see more funds directed into alternative investments such as hedge funds and private equity. The growth of SWFs, alongside that of hedge funds, private equity, government pension funds and of currency reserves is a clear indication of the shift underway in parts of the financial markets.

The IMF's Global Financial Stability Report from this spring also highlighted the shift underway in markets, although in their analysis the IMF groups the rise in FX reserves and in SWFs together, *"Tentative estimates of foreign assets held by sovereigns include $5.6 trillion of international reserves and between $1.9 trillion and $2.9 trillion in types of sovereign wealth fund (SWF) arrangements. These amount to about 10 times less than the assets under management of mature market institutional investors ($53 trillion) and modestly higher than those managed by hedge funds ($1 trillion to $1.5 trillion) (Financial Stability Forum, 2007). Current IMF projections are that sovereigns (predominantly emerging markets) will continue to accumulate international assets at the rate of $800 billion to $900 billion per year, which could bring the aggregate foreign assets under sovereign management to about $12 trillion by 2012."* But, as we mention above, not only are SWFs likely to grow at a faster pace than the increase in FX reserves, but they could exceed such FX reserves in total size in a number of years.

Not only are FX reserves different to SWFs, but so too are sovereign pension funds. Again these funds are sizeable, whether they are in Chile, Ireland or Saudi Arabia. Collectively, one could argue that all of these (SWFs, FX reserves and sovereign pension funds) are a sign of the increasing might of emerging economies and they reflect another sign of the changing balance of power in the world economy.

1d. Secrecy and accountability

But it is not the age or the size of these funds that has recently prompted attention; it is the opaqueness or secrecy of the fund, and in particular concern about the strategic intention of some funds. Some funds are very transparent. These include:

- Norway,
- Singapore's Temasek,
- US (Alaska),
- Malaysia,
- Canada (Alberta),
- and Azerbaijan.

These funds provide detailed information on their size, returns achieved and their portfolio composition. And many companies have seen these as investors without any apparent issues to date.

In contrast, some funds have very low levels of transparency including

- UAE funds,
- Kuwait,
- China,
- Qatar,
- Brunei,
- Venezuela,
- Taiwan,

- and Oman.

A simple way to picture this is two axes: on the horizontal axis one measures a fund's transparency, from low (or opaque) on the left to high on the right. Meanwhile, on the vertical axis, funds can be measured on how their investment decisions are made, namely conventional (say, asset allocation) to strategic. On this basis, one could construct four boxes:

- Bottom left being low transparency but conventional investment strategy;
- Bottom right high transparency and conventional strategy;
- Top right being high transparency and strategic;
- Top left being low transparency and strategic.

Chart 2 would imply that the SWFs in the bottom right pose little concern, as they are not strategic and are transparent. The other three boxes all prompt questions, with the biggest area of concern relating to the top left segment. The four SWFs here being both strategic in their investment and also having relatively low transparency. Once again this graph demonstrates the difficulty of generalising about such funds, as a number have very different characteristics. The most secretive funds are on the extreme left of the chart. Whilst secrecy in itself does not mean that a fund will be a bad investor, in a global financial environment where transparency and accountability are seen as important positives, such opaqueness should not be encouraged.

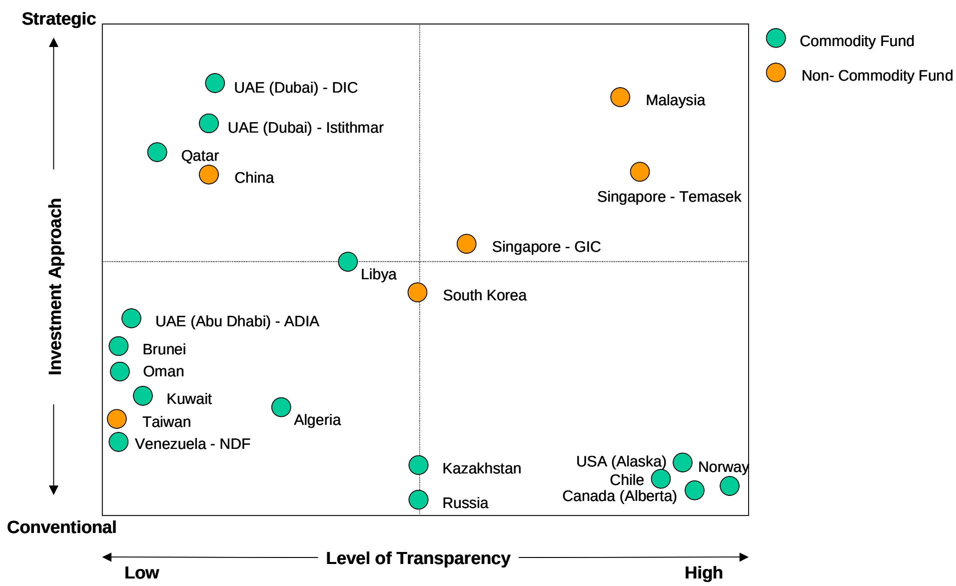
One of the surprising aspects of this chart is the position of Russia - seen as relatively transparent and also less strategic than other funds. Allthough both of these characteristics may change when, as of next year, the Russian fund begins to invest partially in more risky assets (so far it does not invest in global equities), this nonetheless might genuinely raise questions as to why there appears to be such apprehension about their intentions. That the situation is likely to change is perhaps the concern amongst some countries. But if there is change it can be two-way. For instance, in my view the increased US dialogue with China, particularly in areas such as the Strategic Economic Dialogue, plus China's desire to ensure high returns form their fund may account for their decision to allocate some of their new money to be managed by international investment managers. That, of course, leads on to what is best practice for SWFs? The bottom right of this chart highlights a number of funds that may be seen as adopting best practice.

1e. Implications - strategic behaviour

What then are the implications of SWFs? One can look at this in many different ways, in terms of their impact on economies and markets around the world, how the funds themselves might evolve, the likelihood that they will feed protectionist sentiment in the West, and indeed whether governments and funds can work together to ensure some common ground rules.

Chart 2: The Top 22 Sovereign Wealth Funds

Overview of Investment Approach and Transparency



Source: Standard Chartered and Oxford Analytica

The performance aspect of SWFs and the need to ensure high returns is likely to encourage them to take bigger financial stakes in equity and bond markets across emerging economies as well as to feed more money into alternative investments such as hedge funds and private equity. But consider some aspects of their strategic behaviour first.

Strategic stakes are bought: Making investments for purely commercial reasons are one thing, but when they involve government owned funds and the stake is potentially strategic it is clearly another thing. The big worry is that these funds see an opportunity to acquire strategic stakes in key industries around the globe, whether it be:

- Telecommunications,
- Energy,
- The media
- The financial sector,
- Or even to secure intellectual property rights in other fields.

The difficulty is that many of the more strategic funds are not so transparent and thus it is hard to measure such stakes. Nonetheless, the economic rationale behind such strategic acquisitions is clear. Some countries may seen this as a way to move up the value curve quickly, as they acquire intellectual property and access to research, design and development that it may take years to develop at home. For instance, the expertise of emerging economies, such as China, in low cost manufacturing could quickly be added to by the acquisition of high tech firms overseas. Of course that raises questions, such as should China be able to secure intellectual property rights overseas, at a time when it cannot guarantee to safeguard such rights for foreign firms in their market? Buying into overseas financial firms (whether through SWFs or other arms of a government) makes long-term strategic sense for many emerging economies, particularly if it allows them to transfer such financial skills back home to help develop and deepen domestic financial markets.

Resource nationalism: This means an attempt to buy access to strategic commodities and resources around the world. This is linked into the fundamental shift in the demand for commodities. China stands out here given its insatiable appetite for all types of commodities, and not just energy. For instance between 2004 and 2006, China moved from accounting for 21% to 26% of total global demand for six industrial commodities (by last year accounting for 30% of zinc demand, 32% tin, 19% nickel, 27% lead, 23% copper and 26% of global demand for aluminium).

In softer commodities it also accounts for a significant proportion of demand (16% wheat, 19% maize, 21% soybean and 31% rice). There is also the buying of overseas strategic assets linked to energy. And here attention is sometimes focused on what happens in the home country from which a SWF originates as much as on what happens abroad. For instance, Russia, and other oil producers, are also in a powerful position as national oil companies become bigger and in the process edge out western multinationals from their oil reserves. And a wider concern linked in here is how will the owners of these stakes behave in the future.

<u>The role of SWFs in enhancing a country's strategic agenda should not be overlooked</u>, although in reality there are many ways that a country can seek to provide funds to another country. China's strategic ambitions should not be doubted, as its relationship with Africa highlights. This relationship has changed over the years. After initial enthusiasm a few years ago about Chinese investment in Africa there was then a backlash, as concerns were raised in Africa about both China's intentions and about whether its investment was in the Continent's best interests. Given China's strong incentive to purchase access now to future supplies, the Chinese responded by courting African policy makers. Nearly 50 African leaders were hosted in Beijing last autumn, whilst the annual African Development Bank took place this May in Shanghai, during which the Chinese announced the availability of further funds to be invested in African projects. This could yet evolve further. How will the market and trading companies cope with direct government to government deals on commodity flows, or even with buying of the mining companies themselves?

1f. Implications - protectionist stance

<u>Protectionist backlash:</u> There is a need to take seriously the likelihood of Western governments and SWFs being on a future collision course over what they can buy, and where. A protectionist backlash against strategic investments is very real and threatens global trade. As we have seen from recent years, not all countries that are on the receiving end of these flows like this idea. The Thai authorities did not like Temasek of Singapore's purchase of a telecommunications stake in their country, whilst Dubai Ports World had to abandon their attempt to buy P&O's US ports after it prompted a national security debate in the US Congress. China's CNOOC bid for Unocal was

also blocked in the US. Future political reactions could be far worse. It is not only governments that should be concerned; markets need to take note of the consequences.

The desire of some governments to protect their strategic assets from the clutches of SWFs is coinciding with a rising anti-globalisation sentiment in some countries. If governments attempted to protect strategic industries or important companies, this poses the question of how one defines a strategic industry? One linked to defence is understandable - hence in the UK the government has a golden share in British Aerospace that allows it to veto foreign control. But in other areas it is more difficult to say. Yet it is possible to conceive of a number of areas where there are legitimate reasons for a cautious or even protectionist stance on behalf of the recipient country. Such examples might be if the outcome would damage domestic competition; if the outcome was detrimental to national security - which is already a key issue in the US whether or not it is a SWF or any other investor that wishes to buy; and perhaps such a response is legitimate if a SWF is secretive and its intentions are strategic.

<u>Before we get to this situation there is a need for ground rules to be established on SWFs</u>. These could be imposed at the country or regional levels, but that is a second-best outcome. Far better for a credible global body to seek to establish some ground rules, providing the views of emerging countries were fully reflected. Of course, this risks an ineffective outcome.

Many factors have contributed to the recent economic boom, including the opening up of world trade and global financial flows. But the transition to a more global economy can be painful - whilst there are winners (especially in the emerging world), there are also losers (including low skilled workers in developed countries who may not receive large wage gains). It is in response to this that protectionist sentiment may gain a strong footing and the rest of the world is observing this situation in the US.

Yet the European stance is equally important - especially as European-Asian trade has now overtaken US-Asian trade.

In recent EU bilateral trade negotiations, they UK's desire to insert social or sustainability clauses in order to protect not just areas of national security but also areas of national sensitivity led to much confusion and highlighted how complex this area is and in my mind provided another example of the need for widely agreed ground rules in such trade negotiations.

In some respects it picks up the present mood in Western Europe, which appears to be leaning towards more protection. According to the Centre for European Reform, *"Several EU Governments have become alarmed about SWFs. Germany, for example, is thinking of preventing such funds from buying local companies in sensitive sectors. The European Commission is considering how it should respond: should it outlaw such defences or establish them at EU level?......the EU needs to ensure that any measures taken in response to SWFs do not threaten the openness of its single market."*

1g. Implications - market impact

<u>Money goes elsewhere</u>: For instance, if the US Congress becomes more protectionist, blocking state inflows from, say, China, would the money just go elsewhere? Indeed this already appears to be happening in terms of flows from the Middle East that in the past predominantly went to the US. Whilst the US is still the main recipient, a report earlier this year from the Institute of International Finance, using estimates from the United Nations, suggests that there has been a shift away from the US, and that between 2002-2006 20% of investment from Gulf States went to Europe, 11% to the Middle East/North African and 11% to Asia.

It is likely that SWFs could divert their attention from markets in the West to focus on nascent equity and bond markets in emerging economies. In fact such a strategy makes sense anyway, as whether one is cautious or optimistic about the global economy, emerging economies are likely to see stronger rates of growth than OECD countries, and offer better longer-term investment opportunities.

Financial markets: Government intervention through state funds could cause distortions particularly if the funds become active in regional markets across parts of Asia, Africa and Latin America that are smaller, less liquid and lacking maturity. There the impact of foreign state funds could be huge. In recent times there have sometimes been concerns in financial markets of what could happen to US Treasury yields if Asian central banks sold, but in this context for emerging markets the impact of SWFs is likely to be seen in a positive light - provided the markets are big enough and have the capacity to absorb such inflows.

Pro-cyclical market impact: The impact of larger SWFs on markets could be pro-cyclical, reinforcing trends that are coming into place. Indeed it is possible to see the impact of FX diversification away from the dollar and of SWF investment in smaller and faster growing emerging markets as resulting in a strong impact, adding to dollar weakness and emerging market equity strength. Furthermore, as the funds become bigger they could shift to more risk-seeking behaviour, feeding alternative investments such as hedge funds and private equity, as mentioned above, as well as enhancing the attraction of emerging markets. There is a risk that the presence of SWFs in riskier asset markets could lead to a moral hazard problem, especially if the SWFs have strategic and not just profit maximising objectives. The attraction of emerging markets could go hand in hand with a further shift in global FX reserves away from the dollar. Although the bulk of global reserves are in dollars, its share is declining, albeit slowly. It is not in Asian countries' interests to actively sell the dollar now, but we believe that passive diversification is already underway, as Asian central banks put less of new reserves into dollars. Of course, if they were to actively sell the dollar then the impact - both direct and more particularly indirect - would be significant. For instance, if Asian central banks were to switch reserves to match countries with whom they trade, they would need to offload $1.39 trillion, or a quarter of the world's total reserves.

Greater equity purchases in mature markets: Yet even in the mature established markets there could be consequences. The desire to increase returns could see greater equity purchases by state funds, raising the question of how they will behave if they are equity holders when hostile takeovers take place? Would one really want a fund run by the Russian authorities, say, deciding on the fate of a hostile banking takeover?

1h. Implications - need for ground rules

Level playing fields: This is often referred to in terms of reciprocity. Whilst the fear is a protectionist response the West should use the growth of state capitalism to force change for good. For instance, in the UK's financial sector, the aim will be to continue to embrace the Wimbledon effect - better to have the best financial market in London, even if most of the key players are foreign owned. But at Wimbledon the playing field is flat. Chinese banks may buy, own and exert full control over British banks, but could the reverse happen? If the West accepts that Chinese firms can buy freely overseas using state reserves then this should lead to pressure for China to open its domestic markets further. And the same pressure should be applied to other countries with large state funds that invest overseas.

Best practice: SWFs need to adopt the best practice of the open funds such as Norway. Appropriate regulation of all aspects of the financial sector is needed, and sovereign funds should not be immune, particularly as their importance grows. Whether it is possible to have a code of conduct for SWFs remains to be seen, the likelihood being that many countries will view it as their money, and they may not view it as relevant what Norway, or indeed other countries do. This is in all likelihood what would happen.

Avoiding collision: There are some crucial steps that need to be taken to prevent a collision between SWFs and host nations into which they invest. Yet the preconditions for such a collision seem to be already falling into place:

- SWFs are growing significantly and the need for resources, as well as a desire to acquire expertise is resulting in a significant strategic element in many SWFs.

- This growth mirrors structural shifts in the world economy, where emerging markets are outperforming and assets in these markets look set to exhibit steady and even rapid growth (albeit allowing for near-term cyclical challenges as the pace of global growth slows in the next two years).

- The challenges of globalisation, plus below trend growth in the US in 2008 and 2009, feed a protectionist stance in the US and in some Western European countries.

How this might play out is hard to say, but it is unlikely to be pleasant.

Non-voting stakes: In trying to establish workable ground rules for SWFs, one issue is that of non-voting shares. If SWFs behave as institutional investors that own minority stakes then there may be few grounds for objection, or cause for concern. But if the SWFs begin to acquire large stakes this may lead to valid questions being asked. In particular, one concern is that direct influence by government controlled stakes may lead to capital misallocation and inefficiency. Another is that fear of political interference in business decisions and strategies. One possible solution is to limit SWFs to non-voting shares, although the challenge here is the ability to discriminate between different types of investors.

As there is a strong case for more openness and best practice in terms of governance. The growth of newer SWFs has prompted much discussion about whether they will be able to attract the talent to manage such funds. But, in reality, this is no different to others in the rapidly growing financial sector across emerging markets. It may, of course, encourage such funds as they grow to allocate money to third party fund managers. Although that may ease concerns about their transparency it does not remove the need for more openness.

Code of conduct: Western countries may need to accept the rise of SWFs as a further sign of a shift in the world economy and should seize this as an opportunity to work with economies such as China, Russia, countries in the Middle East and others to find common ground rules and a code of practice. Although multilateral groups like the IMF and World Bank or even the World

Trade Organisation may be best placed to decide a code of practice the danger is that they will be ineffective.

State capitalism and resource nationalism are already a major economic phenomenon. Across Asia, Russia and the Middle East governments look set to use their country's currency reserves and savings to acquire overseas assets. Whether it is China, Korea, Qatar or Abu Dhabi or a host of others their funds appear intent on improving returns, building up long-term assets and acquiring strategic stakes around the globe. The shopping list is long!

Force for good: The mood towards SWFs in many emerging countries appears to be to view them as a potential force for good. I have either heard such views directly, or heard them relayed to me from colleagues. In some respects this is a reflection of the SWFs being seen as a further shift in the balance of economic and financial power, and also reflecting the increasing confidence seen in regions such as Asia and the Middle East. Furthermore, there is the expectation that such SWFs will be a source of liquidity and of investment flows into emerging markets.

Section 2: The largest sovereign wealth funds

2a. Selection Criteria

The following analysis has been carried out with the support of Oxford Analytica.

One of the many challenges with SWFs is how one defines them. In this analysis the SWFs that we have included fulfil the following criteria:

- Owned by a sovereign nation state, rather than a regional or local state entity. As exceptions to this rule, we have included five subnational-level funds that are financed by foreign exchange assets resulting from commodities exports, and that are large enough to rank within our top 22: ADIA (Abu Dhabi), Istithmar (Dubai), Dubai International Capital, Alberta Heritage Savings Trust Fund (Canada) and Alaska's Permanent Reserve Fund.

- Not national pension funds, unless these are financed directly by foreign exchange assets generated by commodity exports. This excludes, for example, Australia's Future Fund, Thailand's Government Pension Fund and Chile's Pension Guarantee Fund, while permitting the inclusion of Norway's Government Pension Fund - Global.

- Not central banks or authorities that perform roles typical of a central bank (eg supervision or currency issuance), even if these organisations also manage foreign exchange assets. This excludes organisations such as the Saudi Arabia Monetary Authority (SAMA), which has foreign reserves of 251 billion US dollars. In addition, SAMA acts as a conduit for the foreign investments of Saudi government funds, including the General Organization for Social Insurance and the Retirement Pensions Agency, which together have total assets of 116 billion US dollars. However, SAMA is the country's central bank, performing roles such as currency issuance, so we have not included it.

- Investment funds rather than producers of goods or services (although they may invest in productive companies). This excludes state-owned energy companies and state development banks.

2b. Methodology

The methodology for gathering data has centred on a search of publicly available data, particularly:

- SWF websites, if these exist.
- Media reports on the activities of SWFs.
- Research reports by other financial institutions on SWFs.

For several of the least transparent SWFs, information was also requested by e-mail.

The Appendix to this report provides data on some additional funds, which we analysed, but which did not make the top 22 by being excluded using the above criteria (funds i-iii in the appendix) or on grounds of size (funds iv-ix). Many other significant global funds do not meet the above criteria, so the appendix is not an exhaustive list. In addition, many other small funds are currently being launched or have existed for some time, for instance in Ecuador or Nigeria, but either their small size and/or a lack of clarity about their functions means that we did not gather sufficient data to warrant their inclusion in the appendix.

2c. Summary of Findings

The 22 SWFs identified by the study manage assets worth an estimated total of over two trillion dollars. The following analysis highlights the differences between the funds in seven main areas: age, source of funds, scale, aim, governance, investment activity, and growth rate.

Table 1: Estimated size of largest Sovereign Wealth Funds (Billion US Dollars)

Country	Fund Name	Launch year	US$ billion(1)	% of 2006 GDP
UAE (Abu Dhabi)	ADIA	1976	625.0	520.7%
Norway	Government Pension Fund - Global	1990	322.0	102.6%
Singapore	GIC	1981	215.0	169.0%
Kuwait	Kuwait Investment Authority	1953	213.0	268.7 %
China	China Investment Corporation	2007	200.0	8.0%
Russia	Stabilization Fund	2004	127.5	14.2%
Singapore	Temasek	1974	108.0	84.9%
Qatar	Qatar Investment Authority	2005	60.0	185.3%
Algeria	Revenue Regulation Fund	2000	44.4	49%
US (Alaska)	Permanent Reserve Fund	1976	40.2	0.3%
Libya	Libyan Investment Authority	2007	40	117%
Brunei	Brunei Investment Authority	1983	30.0	309.4%
Malaysia	Khazanah Nasional BHD	1993	26.1	12.3%
Korea	KIC (Korea Investment Corporation)	2005	20.0	2.2%
Venezuela	National Development Fund (Fonden)	2005	17.5	10.5%
Canada (Alberta)	Alberta Heritage Savings Trust Fund	1976	16.3	1.3%
Taiwan	National Stabilization Fund	2001	15.2	4.0%
Kazakhstan	National Fund	2000	14.9	15.6%
Chile	Economic and Social Stabilization Fund	2007	11.2	8.7%
UAE (Dubai)	Istithmar	2003	8.0	6.7%
UAE (Dubai)	DIC	2004	6.0	4.0%
Oman	State General RF	1980	6.0	16.0%
Total			2,158	

2d. Age

Sovereign wealth funds are far from being a new phenomenon. A number of oil exporters were among the earliest. This includes not only Gulf State funds such as the Kuwait Investment Authority (established in 1953) but also funds in the United States (Alaskan Permanent Reserve Fund, established 1976) and Canada (Alberta Heritage Savings Trust, 1976).

Table 2: Launch Year

Launch year	Top 22 SWFs
2000-2007	China, Russia, Qatar, South Korea, Kazakhstan, Chile, UAE (Dubai) - Istithmar, UAE (Dubai) - DIC, Taiwan, Libya, Algeria
1990-1999	Norway, Malaysia, Venezuela
Pre-1990	UAE (Abu Dhabi) - ADIA, Singapore (GIC and Temasek), Kuwait, United States (Alaska), Brunei, Canada, Oman

2e. Source of funds

The large majority of SWFs are financed by the export of commodities. Most non-commodity funds are recent, including China (2007), South Korea (2005) and Taiwan (2001). The two Singaporean funds (launched 1974 and 1981) are the only well-established, large non-commodity SWFs.

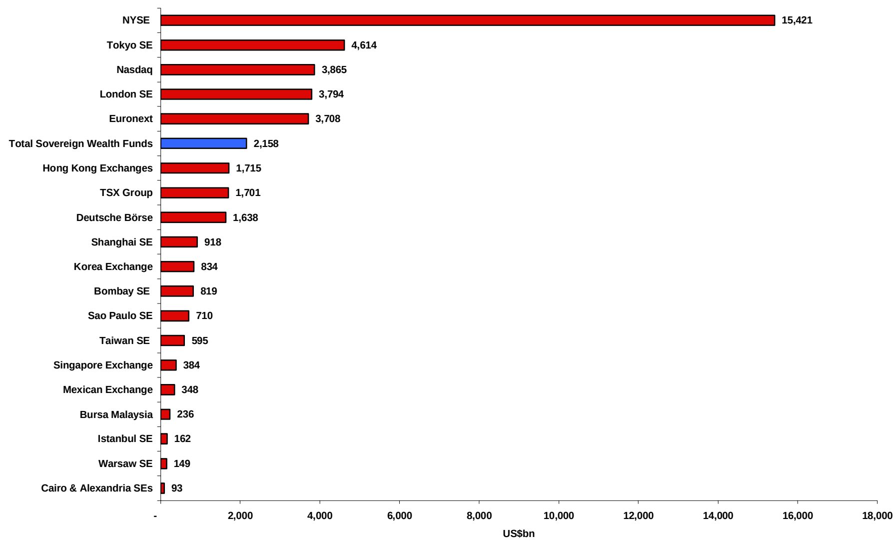
Table 3: Source of funds

Source of funds	Top 22 SWFs
Commodities	UAE (Abu Dhabi) - ADIA, Kuwait, US (Alaska), Brunei, Canada, Chile, Oman, Norway, Venezuela, Russia, Kazakhstan, UAE (Dubai) - Isithmar, UAE (Dubai) – DIC, Libya, Algeria
Non-commodities	Singapore (GIC and Temasek), China, Taiwan, South Korea, Malaysia

2f. Scale

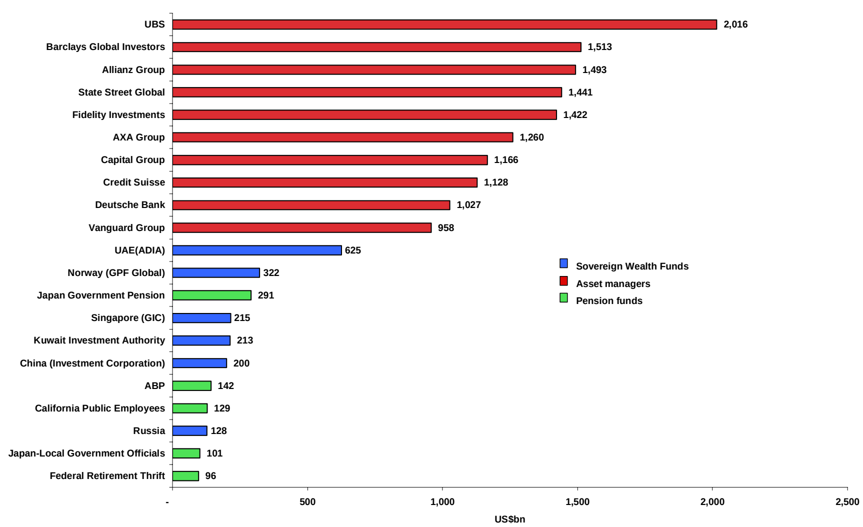
In section 1b I talked of the SWFs in terms of the Super Seven. Once can also try and gauge their scale in other ways. The two charts below illustrate the scale of SWFs, respectively, compared to the size of major stock exchanges, and compared to the sizes of leading asset managers and pension funds. These comparisons make it clear that SWFs have, and will continue to have, an extremely significant impact on global financial markets.

Chart 3. Size of Sovereign Wealth Funds compared to the market capitalisation of selected stock exchanges



Sources: Oxford Analytica, World Federation of Exchanges

Chart 4. AUM (US$BN) of selected Sovereign Wealth Funds, Asset Managers and Pension Funds



Sources: Oxford Analytica, Watson Wyatt. Figures for asset managers refer to end 2005

2g. Aim

Although the strategic investment component of the SWFs is now a concern, the tables below on the funds show that they were typically established with a primary focus on one or more of the following aims:

(i) *Macroeconomic stabilisation*. Countries that are highly dependent on commodity exports are exposed to swings in global prices. The primary aim of the fund in these cases can be to smooth short- and medium-term fluctuations.

(ii) *Higher returns*. Countries that have surplus funds are increasingly seeking to maximise returns. This is motivated by the opportunity cost associated with funds being invested in risk free assets.

(iii) *Future generations*. Several funds were created with the objective to create a reserve of wealth for the future, when natural resources will have been depleted.

(iv) *Domestic industries*. Some of the funds have also been used to restructure and encourage domestic industries.

2h. Governance

Management responsibility for SWFs varies widely, from Ministries of Finance and central banks through to separate entities that often have executive boards to make decisions. External money managers are typically contracted to manage funds on the basis of policies set by the board.

A limited number of funds, including the Norwegian fund, provide detailed information on their operations and performance. Among newer funds, there is a divergence between those that have sought to adopt best practice, and those where arrangements seem to have emerged on an almost ad hoc basis and where little is known of formal codes. Most obviously in the latter category is the new Chinese fund, and this is partly why China's SWF investments are raising most concern in recipient markets.

2i. Investment activity

The flurry of SWF activity in established stock markets this year has been striking. Investment policies vary, but tend to do so according to the SWF's primary aim and governance.

- 'Future generations' funds with high levels of transparency, such as the SWFs in Norway, Alberta and Alaska, have a high level of diversification and hold only small stakes. Norway's fund owns shares in about 3,500 companies, and it holds stakes that are typically below 1%.
- Stabilisation funds such as Russia's, for example, are tasked with delivering stable and low-risk returns, and so are limited to investment in AAA-rated sovereign bonds, with a given currency composition to manage currency risk.

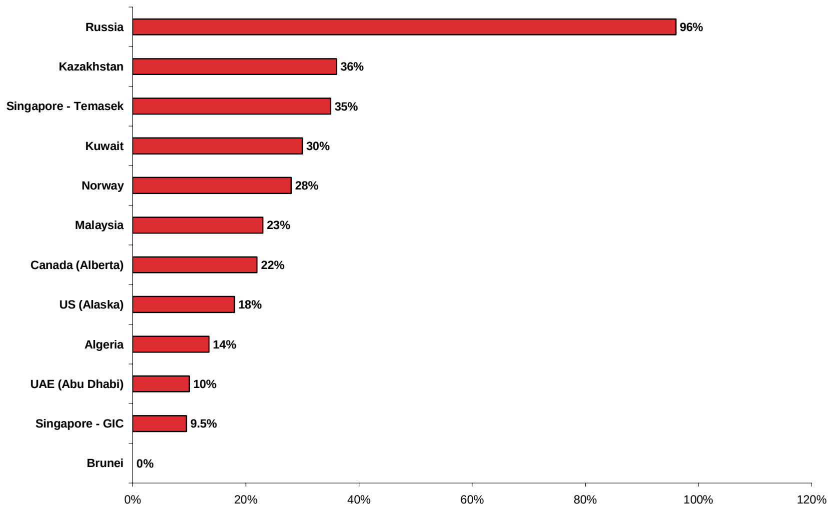
- Low-transparency funds such as the Abu Dhabi Investment Authority (ADIA) usually prefer investing in small stakes to avoid disclosure requirements.

- A number of funds have acquired significant stakes in foreign companies. These include the China Investment Corporation, GIC, Temasek, the Kuwait Investment Authority, the Qatar Investment Authority, and Dubai's Istithmar and DIC.

2j. Growth rates

Growth rates could be estimated for only twelve funds (see chart 5). For several funds direct information on growth rates in 2006 is not available, and the estimates are based on secondary sources or proxies for growth, such as returns over longer periods of time or estimates of returns or transfers to the fund.

Chart 5. Estimated growth rates of a selection of SWFs



Source: Oxford Analytica

Top 22 Sovereign Wealth Funds

1. Abu Dhabi Investment Authority (UAE)

Launch Year	1976
Fund Value (US dollars)	Estimates vary significantly -- from 250 billion to 1 trillion.[1] Our analysis says 625 billion.
Fund Value as % of GDP	521%
Growth Rate	10% p.a.[2]
Financing	Oil
Objective	Diversify investment of foreign currency reserves from oil exports.
Ownership	100% owned by Government of Abu Dhabi.
Management	Sheikh Khalifa, president of the UAE, is the Chairman.
Investment Policy and Asset Allocation	No investments in commodities and Middle East stock markets. Stakes in financial institutions in the region include Banque de Tunisie et des Emirats (39%), Arab Banking Corporation in Bahrain (27%), Arab International Bank in Egypt (25%), and the Joint Arab Investment Corporation (23%). Until 2006, investments only in foreign assets. ADIA's asset allocation: 50-60% in equities, 20-25% in fixed income, 5-8% in real estate, 5-10% in private equity and 5-10% in alternatives. Usually investments are limited to less than 4.5% to avoid disclosure. In 2006, a new institution was set up, the Abu Dhabi Investment Council, with the goal of investing both within and outside Abu Dhabi.
Outlook/Trends	The United Arab Emirates are expected to run annual current account surpluses of 35-40 billion US dollars over the medium term if oil prices remain at about the current level. ADIA could potentially be allocated a large part of these funds.
Transparency	Transparency is very low. In the 30 years since it was established, it has never publicly declared the value of assets it has under management. There is a lack of clarity about how much cooperation and competition there is between ADIA and ADIC.[3]
Recent investments	In May 2007 ADIA acquired 8% of EFG-Hermes, an Egyptian investment bank. In July 2007 purchased a small stake in Apollo Management, a US private equity company. In September 2007 ADIA announced a takeover of PrimeWest Energy Trust (Canada) for 5 billion dollars, according to press reports.

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1 250 billion (2005, State Street); 250-500 billion (2007, Financial Times); 600-1,000 billion (2007, Financial News); 875 billion (2007, Morgan Stanley).

2 Euromoney.

3 Abu Dhabi has another state-owned diversified investment company, Mubadala Development Company, which recently purchased 7.5% of Carlyle Group. Its links to ADIA and ADIC are unclear. Although its international investments are listed on its website, transparency about the size of this fund is extremely low. Oxford Analytica's estimate, based on comparing Mubadala's number of staff (250) with the staff-fund value ratios at ADIA and the Qatar Investment Authority, is that Mubadala's fund value could be 120 billion US dollars.

2. Government Pension Fund - Global (Norway)

Launch Year	1990
Fund Value (US dollars)	322 billion (March 2007).[4]
Fund Value as % of GDP	93%
Growth Rate	28% (2006)[5]
Financing	Receipts from oil licenses, oil taxes. About 80% of the government's oil-related revenues are transferred into the GPF.
Objective	The assets are to be used to meet the country's growing pensions bill after 2015.
Ownership	Norwegian Government (Ministry of Finance).
Management	Operational activities are delegated to Norges Bank Investment Management (NBIM), which is part of the Norwegian Central Bank. Most of the GPF is managed internally by the Norwegian central bank, but there are 50 external bond and equity managers running about 28% of the total.
Investment Policy and Asset Allocation	- Bonds represent 60% (over half of them AAA-rated) of the portfolio and equities 40%. - Asset allocation broadly reflects the structure of Norway's imports but with over-emphasis given to the liquid US markets. - The benchmark is for over 50% to be placed in European currencies and 35% in North American. - Asia accounts for less than 10% of asset allocation. The GPF's investments in emerging markets is growing. - It has an ethical screening process to exclude companies with "unacceptable violations of fundamental ethical norms".
Outlook/Trends	NBIM forecasts the fund will reach 500 billion US dollars by 2009.
Transparency	High. Annual and quarterly reports publicly available.
Recent Investments	The fund owns shares in about 3,500 companies, and it holds small stakes, typically below 1%.

[4] Norges Bank http://www.norges-bank.no/Pages/Article____42084.aspx

[5] Oxford Analytica calculations from Norges Bank data. http://www.norges-bank.no/Pages/Article____41397.aspx

3. Government of Singapore Investment Corporation

Launch Year	1981. A restructuring in 1999 led to the creation of three operating units: the Public Markets Group, investing in equities, fixed income, and money market instruments; Government of Singapore Investment Corporation (GIC) Real Estate, investing in real estate-related assets; and GIC Special Investments, investing in venture capital and private equity funds, as well as direct investments in private companies.
Fund Value (US dollars)	100-330 billion (2007).[6] Our analysis says 215 billion.
Fund Value as % of GDP	169%
Growth Rate	GIC's annual return has averaged 9.5% in US dollar terms over the 25 years to March 2006, since its launch in 1981. In real terms, the annual rate of return averaged 5.3%.
Financing	Financed by reserves from high savings rate.
Objective	To preserve and enhance the international purchasing power of Singapore's reserves, by achieving a real rate of return above the G3 inflation rate by a specified amount over a specified long-term horizon. For medium-term performance monitoring, to outperform an appropriate composite of recognised market indices, through optimal allocation among and within asset classes.
Ownership	Private company wholly owned by the Government of Singapore.
Management	Lee Kuan Yew, Chairman; Dr Tony Tan, Deputy Chairman & Executive Director. Lim Siong Guan Group Managing Director (as of September 22, 2007).
Investment Policy and Asset Allocation	Invests in 40 markets, with a long-term focus through systematic diversification across equities, fixed income, foreign exchange, commodities, money markets, alternative investments, real estate and private equity.
Outlook/Trends	Increased holdings in emerging markets are likely.
Transparency	Medium. Information about structure and investments, but no detailed financial reports on website.
Recent Investments	July 2007: Part of consortium in 895 million US dollar acquisition of Myer Melbourne site for redevelopment. July 2007: Acquisition of a 50% in WestQuay Shopping Centre, UK, for 600 million US dollars. June 2007: Purchase of Chapterhouse Holdings Ltd., whose primary asset is the Merrill Lynch Financial Centre, for 960 million US dollars. May 2007: Formation of joint venture with Sumitomo Corporation to invest 1.3 billion US dollars over two years in Japanese retail properties. April 2007: Acquisition of 50% of for Westfield Parramatta (Australian real estate company) for 584 million US dollars.

[6] 'Well over 100 billion' (GIC website: http://www.gic.com.sg/aboutus.htm, 2007) to 330 billion (Morgan Stanley, 2007).

4. Kuwait Investment Authority

Launch Year	1953
Fund Value (US dollars)	213 billion (March 2007), of which 174 billion invested in the Future Generations Fund and 39 billion in the Public Reserve Fund.[7]
Fund Value as % of GDP	265%
Growth Rate	30% (2006)[8]
Financing	Oil. Each year, 10% of state revenues are transferred to the Kuwait Investment Authority's (KIA's) Future Generations Fund (FGF). Assets cannot be withdrawn from the FGF. The KIA also manages the Public Reserve Fund, the main treasurer for the government.
Objective	To achieve a long term return in order to provide an alternative to oil reserves for Kuwait's future generations.
Ownership	Ministry of Finance
Management	Its board includes the oil minister, a representative of the central bank and of the finance ministry. Management of the FGF is outsourced to third-party managers.
Investment Policy and Asset Allocation	The FGF invests outside Kuwait. Its portfolio includes investments in private equity, hedge funds and real estate.
Outlook/Trends	The FGF is shifting from a very conservative strategy, aimed at preserving capital, towards a more risk-taking approach, focused on growth.
Transparency	Low. Disclosure to the public of any information related to KIA's work is prohibited by law.
Recent Investments	The KIA holds significant stakes in Daimler Benz and in the engineering group GEA.

[7] Arab Times (based on a statement by the Minister of Finance) http://www.mafhoum.com/press10/304E20.htm.

[8] Arab Times http://www.mafhoum.com/press10/304E20.htm.

5. China Investment Corporation

Launch Year	2007. Official launch in September, although investment activities started earlier.
Fund Value (US dollars)	200 billion of foreign exchange reserves is currently being transferred to China Investment Corporation (CIC). An additional 200 billion may be added if Central Huijin Company, a People's Bank of China-dominated investment entity that controls three of China's 'big four' state banks, is folded into CIC as expected. At current market value, Huijin's shareholdings of the Bank of China, China Construction Bank and Commercial Bank of China are worth over 200 billion US dollars.[9]
Fund Value as % of GDP	8%
Growth Rate	The fund's initial capital is still being transferred.
Financing	Transfers from foreign exchange reserves.
Objective	To increase the return on assets. Chinese officials have suggested that the objective will include social and political returns.
Ownership	Chinese government.
Management	Deputy Secretary-General of the State Council Lou Jiwei, is likely to be appointed as the president of the new company. This will make it a ministerial-level organisation answering directly to the State Council. The names of the core management team have yet to be announced. The general manager will possibly come from the central bank or State Administration of Foreign Exchange. CIC is likely to delegate a substantial portion of management to foreign portfolio managers; however, there is likely to be a long selection process.
Investment Policy and Asset Allocation	Intended to manage a wide array of assets, not just shares from a few major financial institutions (as had been the case with Central Huijin Company).
Outlook/Trends	The fund may be required to aim for annual returns above 10%, in order to cover management costs and probable renminbi appreciation.
Transparency	Low.
Recent Investments	CIC in May this year invested three billion US dollars to acquire almost 10% of the initial public stock offering of US investment fund Blackstone Group LP. The People's Bank of China bought a 0.46% stake in BG Group plc in June and July this year for 250 million US dollars. This purchase is rumoured to have been on behalf of the CIC.

[9] Oxford Analytica Daily Brief.

6. Stabilization Fund (Russia)

Launch Year	2004
Fund Value (US dollars)	127.5 billion US dollars (March 2007).[10]
Fund Value as % GDP	14%
Growth Rate	96% (September 2006 to August 2007).
Financing	Export duty on oil and petroleum products and taxes on mineral resources. The base price of oil is set at 20 US dollars per barrel, above which revenues start accumulating in the fund. The government has the right to withdraw money if oil prices fall below the base level.
Objective	Absorb volatility of commodity prices. The fund is currently used to finance the pension fund and to repay foreign debt. The government can tap amounts above the base threshold of 500 billion roubles (18 billion US dollars) for expenditures outside the official budget.
Ownership	Ministry of Finance.
Management	The fund is managed by the Ministry of Finance. Some asset management functions are delegated to the central bank.
Investment Policy and Asset Allocation	Securities must be issued by governments of US and selected EU countries. Further restrictions on minimum amount and structure of the issue (eg AAA rated, no options, fixed coupon).Current currency composition: US dollars - 45 %; euros - 45 %; pounds sterling - 10 %.
Outlook/Trends	In 2008, the fund will be divided into a reserve fund, which will continue to be invested conservatively and used when oil and gas incomes fall; a more aggressive fund, which will invest in higher risk assets; and federal budgetary spending. The more aggressive fund may be allocated only 19 billion dollars initially.[11]
Transparency	The Ministry of Finance publishes a monthly public report on the fund's accumulation, spending and balance. Details on investments are reported quarterly to the Russian Parliament.
Recent Investments	The fund has not yet started to invest in global equities.

[10] Stabilization Fund of the Russian Federation, http://www1.minfin.ru/stabfond_eng/sobj_eng.htm

[11] Financial Times, September 18, 2007: http://www.ft.com/cms/s/0/187ba59a-657f-11dc-bf89-0000779fd2ac.html

7. Temasek Holdings (Singapore)

Launch Year	1974
Fund Value (US dollars)	108 billion (March 2007).[12]
Fund Value as % of GDP	85%
Growth Rate	The value of Temasek's portfolio grew 35% over the year ending on March 31, 2007. Total shareholder return for the year was 27%.[13]
Financing	Reserves from high savings rate and reinvested profits.
Objective	Active shareholder and investor. Aims to create and maximise sustainable value for owner.
Ownership	An 'exempt private company' with Minister of Finance as shareholder.
Management	S Dhanabalan, Chairman. Ho Ching, CEO. Operates as an autonomous and professional investment house, guided by an independent board.
Investment Policy and Asset Allocation	Operates under commercial principles to maximise long-term returns. Temasek's geographical asset mix in March 2007 was: Singapore (38%); rest of Asia (excluding Japan) 40%; OECD economies (excluding South Korea): 20%; others 2%.
Outlook/Trends	Since 2002, Temasek has raised its focus on Asia (except Singapore and Japan). Over the 12 months to March 2007, exposure to Singapore declined from 44% to 38% and exposure to the rest of Asia (excluding Japan) rose from 34% to 40%. 61% of the portfolio is in the financial services, telecoms and media sectors.
Transparency	High. Audited annual financial reports, as well as periodic updates, are provided to the Ministry of Finance. While not required to release financials publicly, group financial highlights have been published since 2004 in the annual Temasek Review.
Recent Investments	Temasek confirmed on July 23 this year that it is investing almost 2 billion US dollars in Barclays plc. Temasek will invest a further 3 billion US dollars in Barclays conditional upon completion of the merger with ABN AMRO. Temasek also holds 17.22% in Standard Chartered Bank[14]. Other overseas investments during the year to March 2007 included new holdings in ABC Learning Centres (Australia, Temasek holds 12%), Intercell AG (Austria, 8.1%), Country Garden and Yingli Green energy (both China), INX Media (India, less than 25%), Mitsui Life (Japan, 4.6%), PIK Group and VTB Bank (both Russia). Temasek in May 2007 increased its stake in STATS ChipPAC to 83%. In late September 2007 press reports noted that Temasek and Singapore Airlines together acquired 24% of China Eastern Airlines Corporation.

[12] Temasek Holdings website: http://www.temasekholdings.com.sg/

[13] Temasek Holdings website: http://www.temasekholdings.com.sg/

8. Qatar Investment Authority

Launch Year	June 2005
Fund Value (US dollars)	Estimated value 50 billion to 70 billion (March 2007).[15] Our analysis says 60 billion.
Fund Value as % of GDP	185%
Growth Rate	--
Financing	Gas.
Objective	Involved in the investment of Qatar's surplus financial resources in local and international markets; establishment of companies and projects; economic and energy affairs.
Ownership	Qatar government.
Management	Sheikh Tamim Bin Hamad Al Thani, son of the Emir of Qatar, is the Chairman of the authority.
Investment Policy and Asset Allocation	--
Outlook/Trends	Fund size expected to double by 2010. Qatar Investment Authority (QIA) plans to expand its investments in Asia up to 40% of its portfolio (with the rest in the Americas and Europe), particularly financial institutions and consumer-oriented export industries.
Transparency	Low. No reports provided.
Recent investments	UK care homes provider Four Seasons Healthcare (100%). Other holdings include 20% (now 24% according to some press reports in late September) of London Stock Exchange Group, 9.98% in Nordic Exchange OMX (Sweden), 5.1% in Lagardere (France), 97.3% of BLC Bank (Lebanon), 20% in the Housing Bank for Trade and Finance (Jordan) and 5% in Raffles Medical Group (Singapore). QIA was a co-investor in Dubai International Capital's July 2007 purchase of a 3.12% stake in European Aeronautic, Defence & Space Co (EADS). QIA is currently bidding to buy UK retailer Sainsbury, through its Delta Two Fund, which already holds 25% of Sainsbury.

[14] London Stock Exchange, September 13, 2007.

[15] Financial News.

9. Revenue Regulation Fund (Algeria)

Launch Year	2000
Fund Value (US dollars)	44.4 billion (June 2007)[16]
Fund Value as % of GDP	49%
Growth Rate	9% rise in Algerian dinar terms between October 2006 and June 2007.[17]
Financing	Oil revenue recorded in excess of budget law projections. The Fund resources may be supplemented by advances from the Banque d'Algérie.[18]
Objective	1) Offset the shortfalls resulting from oil tax revenue below budget law projections. 2) Reduce the external public debt.
Ownership	Algerian government
Management	Bank of Algeria
Investment Policy and Asset Allocation	n.a.
Outlook/Trends	n.a.
Transparency	Low. No reports available, no information on investment policy.
Recent Investments	n.a.

[16] El Watan (based on draft budget law for 2008) .
http://www.elwatan.com/spip.php?page=article&id_article=77485

[17] http://www.algerie-dz.com/article6788.html

[18] IMF (2005), 'Algeria: Report on the Observance of Standards and Codes—Fiscal Transparency Module'
http://www.imf.org/external/pubs/ft/scr/2005/cr0568.pdf

10. Permanent Reserve Fund (Alaska)

Launch Year	1976
Fund Value (US dollars)	40.2 billion[19] (2006).
Fund Value as % of GDP	0.3%
Growth Rate	17% July 2006 to June 2007; 18% July 2005 to June 2006.
Financing	Oil. Each year, the fund's realised earnings are split between inflation-proofing, operating expenses, and the annual Permanent Fund Dividend.
Objective	Benefit future generations of Alaskans once oil reserves are depleted. Only investment income can be spent by the State legislature. Principal cannot be spent without a vote. Target return: 5% over 10-year period.
Ownership	State of Alaska.
Management	Managed by the Alaska Permanent Fund Corporation (APFC). Part of the portfolio is allocated to several dozen external managers.
Investment Policy and Asset Allocation	Target asset allocation: 34% domestic equities, 19% international equities; 25% domestic fixed income; 4% international fixed income; 10% real estate; 4% private equity; 4% absolute return. Historical return over 10 years is 8.4%.
Outlook/Trends	Expected to reach 46 billion US dollars by 2012.
Transparency	High - public reports.
Recent Investments	The fund invests in several dozen sectors and countries. Top five stockholdings are GE, Exxon, Microsoft, Google and Procter & Gamble.

[19] Alaska Permanent Fund Corporation (2006), annual report. http://www.apfc.org/

11. Libyan Investment Authority

Launch Year	2007
Fund Value (US dollars)	40 billion (target)[20]
Fund Value as % of GDP	117%
Growth Rate	--
Financing	Initial funds transferred from central bank. The Libyan Investment Authority will receive an annual portion of the oil revenue surplus.
Objective	Diversify oil revenues into financial assets
Ownership	Libyan government
Management	Libyan Investment Authority. Chairman is Mohamed Layas.
Investment Policy and Asset Allocation	Portfolio investments managed through Western banks and institutions.
Outlook/Trends	The fund plans to purchase real estate worldwide and, when it is more established, also engage in private equity transactions.
Transparency	Low/medium. Data on size and investments made available through the media.
Recent Investments	Set-up an investment fund (total 2 billion US dollar) with the Qatar Investment Authority to invest in Libya, Qatar and Western markets. Other assets: Lafico (real estate, 3 billion US dollars), Libyan African investment portfolio (5 billion US dollars), portfolio investments in capital markets (8 billion US dollars).

[20] Financial Times, http://www.ft.com/cms/s/0/c4bd32be-7cd2-11dc-aee2-0000779fd2ac.html?nclick_check=1

12. Brunei Investment Agency

Launch Year	1983
Fund Value (US dollars)	30 billion US dollars (March 2007).[21]
Fund Value as % of GDP	309%
Growth Rate	At its peak during the 1990s, it is estimated that the value of the Brunei Investment Agency (BIA) was at least 100 billion US dollars. The value of the fund then declined and seems to have stabilised at about 30 billion US dollars over the last several years.
Financing	BIA manages the country's foreign exchange reserves.
Objective	To increase the real value of Brunei's foreign exchange reserves.
Ownership	Part of the Ministry of Finance.
Management	Chairman is Pehin Dato Seri Setia Awe Hj Yahya bin Begawan Mudim Dato Paduka Hj Baker. Awang Haji Ali bin Haji Apong was appointed Acting Managing Director in May 2003.
Investment Guidelines	Holdings in the United States, Japan, ASEAN countries and Western Europe.
Outlook/Trends	An ongoing dispute over billions of US dollars, which it is claimed were channelled from the BIA to private bank accounts during the 1990s, now appears close to being resolved. Former Chairman of BIA Prince Jefri Bolkiah has been accused by the Sultan of Brunei (his brother) of misdirecting BIA funds. A ruling is expected before the end of this year. The conclusion of that case will help the BIA to continue to rebuild.
Transparency	Very low.
Recent Investments	BIA last year purchased a stake in Jordan Phosphate Mines Company Ltd.

[21] Morgan Stanley estimate.

13. Khazanah Nasional (Malaysia)

Launch Year	1993
Fund Value (US dollars)	26.1 billion (May 31, 2007).[22]
Fund Value as % of GDP	12%
Growth Rate	23% (annual average May 2004-May 2007)[23]
Financing	Non-commodity fund partly financed by debt.
Objective	Part of Khazanah Nasional's (KN's) mandate is to make strategic investments abroad, under the overarching objective of 'nation building' for Malaysia. Other key themes of the strategic investment mandate include: Creating sustainable value; raising national competitiveness; and cultivating a culture of high performance. Through its investments in Malaysian legacy companies, KN seeks to achieve these aims by promoting restructuring and reorganisation.
Ownership	Ministry of Finance. KN is the investment-holding arm of the government of Malaysia.
Management	The Prime Minister of Malaysia is the Chairman of the Board. The Management team is headed by Managing Director Dato' Azman b. Hj Mokhtar.
Investment Policy and Asset Allocation	KN has investments in over 50 companies, in Malaysia and abroad, within over a dozen different sectors. The major sectors are utilities (23.5% of portfolio in May 2007), media and communications (22.3%), and infrastructure and construction (18.2%).
Outlook/Trends	KN is a leader in innovative Islamic finance. It issued the world's first exchangeable Sukuk (Sharia-compliant bond) in October 2006, for 750 million US dollars. The proportion of KN's total portfolio held in foreign investments has risen from 0.2% in May 2004 to 9.2% in May 2007. Over the next three years, KN aims to increase synergies across its investments and to continue to broaden the base of its investments.
Transparency	High. Annual report provides good data.
Recent Investments	KN has investments in 12 Asian countries, Saudi Arabia, the UAE, New Zealand and the UK (Proton, the Malaysian national carmaker). The main destinations of KN's investment abroad are Indonesia (4.3% of total portfolio), India (1.8%), China (1.6%) and Singapore (1.4%).

[22] Khazanah Nasional annual review of June 1, 2007 (using exchange rate of May 31, 2007. Net worth, using the same exchange rate, is 18.3 billion US dollars):
http://www.khazanah.com.my/docs/2007%20Annual%20Review%20June%20007.pdf

[23] Growth between May 2004 to May 2007 was 87%. Khazanah Nasional annual report:
http://www.khazanah.com.my/docs/2007%20Annual%20Review%20June%202007.pdf

14. Korea Investment Corporation

Launch Year	2005
Fund Value	Initial capital of 20 billion dollars (2007).[24]
Fund Value as % of GDP	2.2%
Growth Rate	Initial capital is still being invested.
Financing	Of the Korea Investment Corporation's (KIC's) initial capital, 17 billion US dollars was transferred from the Bank of Korea's foreign exchange reserves, and 3 billion dollars from the Ministry of Economy and Finance's Foreign Exchange Stabilization Fund.[25]
Objective	To achieve a stable and continuous return exceeding the benchmark within an appropriate level of risk, and to foster development of local financial industry and of local talent pool.[26]
Ownership	Government of Korea.
Management	The KIC is designed to be run commercially and independently. It has engaged external fund managers but has not provided further details. The Korean government expects KIC's external fund managers to transfer global best practices to local Korean managers over time. Serck-Joo Hong was appointed president and CEO in September 2006.
Investment Policy and Asset Allocation	KIC's asset classes may include securities (including stocks and bonds defined under the KIC Act), foreign currencies and derivatives.
Outlook/Trends	It is the government's intention to invest the full initial 20 billion US dollars by the beginning of next year, and to begin covering its costs by 2010. A further 90 billion US dollars of existing official reserves could soon be transferred to the KIC.
Transparency	Medium. KIC plans to disclose its financial statements and accounting standards; audit report for financial statements; mid- and long-term investment policies; total value of assets under management and rate of return; composition ratio and rate of return for each asset class. The Steering Committee exercises supervision over KIC's business, and may, as prescribed under the KIC Act, entrust a private accounting firm to inspect the business.
Recent Investments	KIC's first investment was made in November 2006. KIC has not provided further details.

[24] http://www.kic.go.kr/en/?mid=in01

[25] Dow Jones.

[26] http://www.kic.go.kr/en/?mid=in01

15. National Development Fund (Venezuela)

Launch Year	2005
Fund Value (US dollars)	17.5 billion (end 2006).[27]
Fund Value as % of GDP	11%
Growth Rate	The value of the fund increased from zero to 17.5 billion US dollars in just over two years.
Financing	Transfers from the international reserves of the Central Bank of Venezuela and from the national oil company Petroleos de Venezuela SA (PDVSA).
Objective	The National Development Fund's (Fonden's) official role is to manage and disburse funds for purchasing foreign debt, goods and services in foreign currency, and to maintain a reserve in case of disasters.
Ownership	Government of Venezuela
Management	--
Investment Policy and Asset Allocation	Fonden's portfolio is unclear.
Outlook	The Fonden appears to have become a major vehicle for funding domestic investments in infrastructure and social projects. This is likely to continue and so will limit the proportion of the fund that is available for investment abroad. In the event of a decline in the oil price, there is a risk that the size of the fund may decline rapidly as it is used to fund current domestic public expenditure.
Transparency	Very low. There is no auditing, accountability or parliamentary oversight of the funds, a significant proportion of which are believed to be held outside Venezuela.
Recent Investments	--

[27] Unofficial quote by senior member of Central Bank of Venezuela.

16. Alberta Heritage Savings Trust Fund (Canada)

Launch Year	1976
Fund Value (US dollars)	16.4 billion [28]
Fund Value as % of GDP	1.1%
Growth Rate	22% (January to December 2006).
Financing	Oil
Objective	To manage savings from Alberta's non-renewable resources. The investment income earned by the Heritage Fund is transferred to the province's budget.
Ownership	Ministry of Finance.
Management	Investment Management Division, within the Ministry of Finance.
Investment Policy and Asset Allocation	Target investment allocation: 29% fixed income; 15% US equity; 15% non- North American equities; 15% Canadian equities; 10% real estate; 4% private equity; 12% other.
Outlook/Trends	Forecasted to reach 16.5 billion US dollars in 2009/10.
Transparency	High. Quarterly and annual reports and business plans are publicly available.

[28] Alberta Heritage Savings Trust Fund: http://www.finance.gov.ab.ca/business/ahstf/index.html

17. National Stabilization Fund (Taiwan)

Launch Year	2001
Fund Value (US dollars)	15.2 billion (August 2007).[29]
Fund Value as % of GDP	4%
Growth Rate	The value of the National Stabilization Fund (NSF) appears to have declined slightly from 16.1 billion US dollars at its launch.[30]
Financing	The sources of the NSF are a 6.3 billion US dollar collateral-backed loan from local financial institutions and 9.46 billion US dollars in cash from postal savings, postal insurance savings, and pension funds for public sector workers.
Objective	'Crisis management' for Taiwan's capital markets, which tend to be dominated by individual investors. The fund's draft regulations stipulate that it can be used on three conditions: 1) When share prices on the stock market fall significantly over an extended period of time. 2) When massive movements of international capital occur or when foreign speculators attempt to manipulate fluctuations in local financial markets. 3) When major domestic or overseas events threaten market order or national security. However, the draft regulations state that the fund will not be used to intervene in the foreign exchange market.
Ownership	Ministry of Finance
Management	A committee chaired by the finance minister is responsible for the fund's management. It consists of seven to nine members, including the governor of the central bank; the minister of transportation and communications; the director-general of the budget, accounting and statistics; the chairman of the Council of Labour Affairs; the director-general of the Central Personnel Administration; and up to three scholars invited by the Ministry of Finance.
Investment Policy and Asset Allocation	--
Outlook/Trends	The NSF has come under considerable media pressure to intervene in order to support Taiwan's stock market during periods of turbulence this year. It is unclear whether/how much the NSF may have intervened so far.
Transparency	Very low. Managers and others associated with the NSF are subject to imprisonment and fines if found guilty of leaking information about the committee's investment plans.[31]
Recent Investments	--

[29] Taipei Times archive: http://www.taipeitimes.com/News/biz/archives/2007/08/18/2003374790

[30] Taiwan Journal: http://taiwanjournal.nat.gov.tw/ct.asp?xItem=17763&CtNode=122

[31] Taiwan Journal: http://taiwanjournal.nat.gov.tw/ct.asp?xItem=17763&CtNode=122

18. National Fund (Kazakhstan)

Launch Year	2000
Fund Value (US dollars)	14.9 billion US dollars (August 2007).[32]
Fund Value as % of GDP	16%
Growth Rate	The value of the National fund (NF) increased by 36% between August 2006 and August 2007.[33]
Financing	The NF was integrated into the budgetary system in July 2006: receipts from all extractive companies are now channelled to the NF.
Objective	Dual function of saving for future generations and stabilising government budget. The NF is also drawn upon to fund public investment.
Ownership	Government of Kazakhstan
Management	ABN AMRO Mellon Global Securities Services provides custody and income collection; portfolio accounting, including daily valuation; monthly reconciliation; performance measurement; compliance monitoring; and securities lending. Investment management is allocated via a bidding process. External managers for global fixed income are ABN AMRO Asset Management; BNP Paribas Asset Management/FFTW; Deutsche Asset Management; State Street Global Advisors; and Union Bank Privée. External Managers for global indexed equities are Credit Suisse Asset Management and HSBC Asset Management.
Investment Policy and Asset Allocation	The NF has two portfolios: a stabilisation portfolio (minimum 20% of the NF) -- to ensure lower volatility of returns; and a savings portfolio -- to ensure higher long-term returns. Benchmarks: Stabilisation portfolio: Merrill Lynch 6-month US Treasury Bill Index. Savings portfolio: 75% Salomon World Government Bonds Index 80% US dollar hedged (SWGB Index 80% hedged); 25% Morgan Stanley Capital International (MSCI) World excluding Energy sector. Investment categories: Government Bonds included in SWGB; corporate bonds with A- credit rating or higher; mortgage backed securities and asset backed securities with credit rating above AA-; stocks included in MSCI World Index; derivatives for tactical asset allocation and hedging.
Outlook/Trends	--
Transparency	Medium. The NF website provides up-to-date data on revenues and expenditure. However, specific explanations of how the NF's resources are being used are lacking.
Recent Investments	The NF is fully invested in foreign markets.

[32] National Fund website: http://www.nationalfund.kz

[33] Asian Development Bank/National Bank of Kazakhstan: http://www.adb.org/Documents/Books/ADO/2007/KAZ.asp

19. Economic and Social Stabilization Fund (Chile)

Launch Year	March 2007. The Economic and Social Stabilization Fund (ESSF) absorbed the Copper Stabilization Fund, which was launched in 1985.
Fund Value (US dollars)	11.2 billion, including funds of Copper Stabilization Fund (September 30, 2007).[34]
Fund Value as % of GDP	8.7%
Growth Rate	Annualised internal rate of return of 2.6%.[35]
Financing	Copper-related revenues. Revenues in excess of the 1% structural surplus will be paid into the ESSF, which is designed to finance any fiscal deficits that may occur in periods of economic downturn.
Objective	To smooth government expenditure in social areas (eg education, housing and health).
Ownership	Government of Chile
Management	Managed by the Central Bank. Custodial services provided by JP Morgan Worldwide Securities Services.
Investment Policy and Asset Allocation	The fund can invest domestically and abroad. As of September 2007, the portfolio allocation was as follows: 67.5% sovereign; 2.2% agency; 30.3% bank. Quarterly and monthly reports provide further detail on the currency breakdown (between US dollars, euros and yen) and the terms of the investments.
Outlook/Trends	Currently formulating investment strategy to include new asset classes.
Transparency	High. Monthly and quarterly reports are available on the Ministry of Finance website.
Recent Investments	See above for current portfolio allocation.

[34] Ministry of Finance of Chile: http://www.hacienda.cl

[35] Ministry of Finance of Chile: http://www.hacienda.cl

20. Istithmar (Dubai/UAE)

Launch Year	2003
Fund Value (US dollars)	No reported value. Estimated value 8 billion.[36]
Fund Value as % of GDP	7%
Growth Rate	--
Financing	Oil
Objective	Focus on financial returns, but also support Dubai's status as an international commercial hub.
Ownership	Part of holding company Dubai World, founded by Sheikh Mohammed, Prime Minister of the UAE and Ruler of Dubai.
Management	Sultan Ahmed Bin Sulayem, Chairman of Dubai World, is also Istithmar's Chairman. CEO is David Jackson, former investment banker at Lehman Brothers.
Investment Policy and Asset Allocation	Focus on consumer, financial, real estate and industrial sectors. Detailed asset allocation not available. Appears to invest mainly in equities and real estate.
Outlook/Trends	Expected to invest 3-4 billion US dollars annually.
Transparency	Low -- no reports provided. List of investments available.
Recent investments	1.2 billion US dollars in Standard Chartered Bank. 3% stake in hedge fund GLG. Agreement to buy fashion chain Barneys in August 2007 for 942 million US dollars. In September 2007 Istithmar joined MGM Mirage's joint venture with Kerzner International to build a multi-billion dollar resort in Las Vegas, according to press reports.

[36] Euromoney, Financial News.

21. Dubai International Capital (UAE)

Launch Year	2004
Fund Value (US dollars)	No reported value. Estimated value 6 billion.[37]
Fund Value as % of GDP	4%
Growth Rate	--
Financing	Oil
Objective	The purpose of DIC is to create a return for its shareholder, Dubai Holding and its ultimate shareholders, the Ruling Family of the Emirate of Dubai.
Ownership	Part of Dubai Holding, which also includes a number of large-scale infrastructure and investment projects in Dubai. It is not, as commonly thought, an investment arm of the Government of Dubai.
Management	Sameer Al Ansari, Executive Chairman and CEO, former Group Chief Financial Officer for The Executive Office of Sheikh Mohammed.
Investment Policy and Asset Allocation	Focus on private equity investments. Operates through three divisions: global buyouts, Middle East/North Africa investments, and public equities (leveraged stakes in large public companies).
Outlook/Trends	Expected to invest 3-4 billion dollars annually.
Transparency	Low. No public reports available, but list of selected investments.
Recent investments	800 million pound sterling acquisition of Tussauds Group. 700 million pound sterling acquisition of Doncasters. 675 million pound sterling secondary buyout of Travelodge. One billion US dollar investment in DaimlerChrysler. DIC purchased 'substantial stakes' in HSBC Holdings (May 2007) and in Indian bank ICICI Bank Ltd. (July 2007). It has also invested in EADS (July 2007).

[37] Euromoney, Financial News.

22. State General Reserve Fund (Oman)

Launch Year	1980
Fund Value	Not disclosed. Estimates range form 2-10 billion US dollars.[38] Our analysis says 6 billion.
Fund Value as % of GDP	16%
Growth Rate	--
Financing	Oil and gas.
Objective	Fund budget shortfalls.
Ownership	--
Management	--
Investment Policy and Asset Allocation	--
Outlook/Trends	--
Transparency	Very low
Recent investments	Wave Seafront Resort in Oman. Reported to be involved in the development of Heron Tower in London.

[38] Euromoney, Morgan Stanley.

Appendix

i. The Future Fund (Australia)

Launch Year	2006
Fund Value (US dollars)	42 billion (May 2007).[39]
Fund Value as % of GDP	6%
Growth Rate	The fund has a target return of 4.5-5.5% above Consumer Price Index inflation (CPI) over the long term. The Board has interpreted this as an objective to provide a return of at least 5% above CPI over rolling 10-year periods.
Financing	Government surpluses. The fund's value also includes the value of approximately 2.1 billion shares in Telstra Corporation, most of which are held under escrow until mid-2008.
Objective	Established to fully fund the future superannuation payments of public servants, which currently come from the federal budget. The fund aims to fully underwrite the unfunded superannuation liability by 2020.
Ownership	Government of Australia.
Management	In May 2007 a competitive tender to manage the Future Fund was won by US fund management company Northern Trust Corporation. The fund is overseen by an independent Board of Guardians, selected on the basis of expertise in investment management and corporate governance. The Chairman of the Board of Guardians and CEO of the Future Fund Management Agency is David Murray. Paul Costello is the General Manager of the Future Fund Management Agency.
Investment Policy and Asset Allocation	Invest in a broad, diversified range of assets. The Future Fund does not intend to publish details of its investment programme.
Outlook/Trends	The size of the Future Fund in 2020 may be about 103 billion US dollars [40].
Transparency	Medium. The first annual report is due to be published in September.
Recent Investments	The initial cash contributions to the Fund -- about 33 billion US dollars, have been invested with the Reserve Bank of Australia before being transitioned into a broad range of asset classes. This strategic asset allocation process has started and is likely to take several years to complete. Most of the Telstra shares cannot be traded until November 2008.

[39] http://www.futurefund.gov.au/

[40] Parliament of Australia, Research Note no. 43 2004–05

ii. Government Pension Fund (Thailand)

Launch Year	1997
Fund Value (US dollars)	10.9 billion.[41]
Fund Value as % of GDP	
Growth Rate	The net rate of return to members was 3.44% in 2006 and 6.83% in 2005.[42]
Financing	No less than 20% of annual budget, plus monthly member and employer (government) contributions.
Objective	Management of retirement savings.
Ownership	Government of Thailand
Management	The GPF is supervised and managed by the Government Pension Fund Board. It uses seven fund managers to manage about one-fifth of its portfolio.
Investment Policy and Asset Allocation	Emphasises the safety of the principal fund, coupled with good returns that outperform long-term inflation. As of June 2007, the GPF's asset allocation was: Thai fixed income 67.77%; Thai equity 11.57%; global equity 12.64%; Alternative investment 4.02%; Property 4.00%.
Outlook/Trends	The GPF has stated this month that it is positioning itself as a global fund manager.[43] Next year it plans to explore investing in global bonds rather than just local bonds.
Transparency	Medium-high. Quarterly financial statements available on website, but little detail about specific investments.
Recent Investments	--

[41] GPF website: http://www.gpf.or.th/GeneralServlet

[42] GPF website: http://www.gpf.or.th/GeneralServlet

[43] http://www.thailandoutlook.com/thailandoutlook1/top%20menu/investor%20news/Daily%20News%20Summary?DATEDAILY=Friday,%20August%2010,%202007

iii. Pension Guarantee Fund (Chile)

Launch Year	December 2006
Fund Value (US dollars)	1.42 billion (September 30, 2007).[44]
Fund Value as % of GDP	1.1%
Growth Rate	Annualised internal rate of return of 2.47%.[45]
Financing	Funded through part of the annual structural surplus.
Objective	Designed to guard against the fiscal impact of an ageing population. Cannot be drawn upon until 2016.
Ownership	Government of Chile.
Management	Managed by the Central Bank. Custodial services provided by JP Morgan Worldwide Securities Services.
Investment Policy and Asset Allocation	The fund can invest domestically and abroad. As of September 2007, the portfolio allocation was as follows: 66.2% sovereign; 2.5% agency; 31.3% bank. Quarterly and monthly reports provide further detail on the currency breakdown (between US dollars, euros and yen) and the terms of the investments.
Outlook/Trends	Currently formulating investment strategy to include new asset classes.
Transparency	High. Monthly and quarterly reports are available on the Ministry of Finance website.
Recent Investments	See above for current portfolio allocation.

[44] Ministry of Finance of Chile: http://www.hacienda.cl

[45] Ministry of Finance of Chile: http://www.hacienda.cl

iv. Botswana Pula Fund

Launch Year	1966
Fund Value (US dollars)	4.7 billion (March 2007)[46]
Fund Value as % of GDP	38%
Growth Rate	--
Financing	Diamonds
Objective	--
Ownership	--
Management	--
Investment Policy and Asset Allocation	--
Outlook/Trends	--
Transparency	--

[46] Morgan Stanley

v. State Oil Fund (Azerbaijan)

Launch Year	1999
Fund Value (US dollars)	1.5 billion[47]
Fund Value as % of GDP	8%
Growth Rate	5% (December 2005 to February 2007)
Financing	Oil
Objective	Assets are used to finance the state budget, new infrastructure projects and social projects.
Ownership	Government of Azerbaijan.
Management	The executive director (Shahmar Movsumov) is appointed directly by the president of Kazakhstan. The Supervisory Board includes several members of the Cabinet. About 8% of the fund's assets are administered by external managers.
Investment Policy and Asset Allocation	About 60% of the fund is invested in cash, the remainder mostly in bonds. Only a marginal portion (0.3%) is invested in equities.
Outlook	--
Transparency	High. Annual reports publicly available.
Recent Investments	--

[47] State Oil Fund http://www.oilfund.az/

vi. Heritage and Stabilization Fund (Trinidad & Tobago)

Launch Year	2006
Fund Value (US dollars)	1.4 billion (2006).[48]
Fund Value as % of GDP	9%
Growth Rate	500 million US dollars were transferred to the HSF in 2006.[49]
Financing	60% of excess revenues will be allocated to the Heritage and Stabilization Fund (HSF).[50]
Objective	To insulate fiscal policy and the economy from swings in international oil and gas prices and to accumulate savings from the country's oil and gas assets for future generations. The main aim is to be able to maintain public expenditure over the long term when oil and gas revenues decline.
Ownership	Government of Trinidad & Tobago
Management	The Central Bank is responsible for the day-to-day management of the HSF, in order to meet investment objectives set by the Board. However, most of this management is being outsourced to external fund managers. The Board is appointed by the President of Trinidad & Tobago, following advice from the Ministry of Finance.
Investment Policy and Asset Allocation	The HSF invests in foreign assets. It has a long-term focus on maximising expected returns within a set of risk constraints. The Board determines the level of risk tolerance (within a range of medium to high) of the HSF and the target portfolio return.
Outlook/Trends	Transfers out of the fund for the purpose of economic stabilisation will be resisted if the value of the HSF declines to one billion US dollars.
Transparency	Legislation stipulates quarterly reports by the Central Bank to the Board, and annual reports by the Minister of Finance to parliament. Some or all of these will be made public.
Recent Investments	--

48 Ministry of Finance: http://www.finance.gov.tt/documentlibrary/downloads/10/Enill%20Media%20Briefing%20on%20the%20Economy%20current%201.pdf

49 Ministry of Finance: http://www.finance.gov.tt/documentlibrary/downloads/10/Enill%20Media%20Briefing%20on%20the%20Economy%20current%201.pdf

50 Bank for International Settlements: http://www.bis.org/review/r070522d.pdf

vii. Fund for Macroeconomic Stabilisation (Venezuela)

Launch Year	2003 (previously the FIEM -- Investment Fund for Macroeconomic Stabilisation). Legislation governing the Fund for Macroeconomic Stabilisation (FEM) was revised in 2005.
Fund Value (US dollars)	793 million (March 2007).[51]
Fund Value as % of GDP	0.5 %
Growth Rate	13% growth over the last four years. 3.3% annual growth to August 2007.[52]
Financing	Transfers of state funds resulting from fiscal surpluses, privatisations and other ad hoc transfers.
Objective	To provide for stability of public expenditure at national, state and municipal levels.
Ownership	Ministry of Finance.
Management	The Treasury Bank (a state institution). The president of the FEM and its four board members are nominated by the president of Venezuela.
Investment Policy and Asset Allocation	--
Outlook/Trends	The relative importance of the FEM has decreased sharply over the last two to three years as the government has established alternative off-budget funds such as Fonden (see above), which have far larger resources. There is no sign of this trend changing.
Transparency	Basic data on the fund is available on the website of the Central Bank of Venezuela. However, there is no transparency about where the fund is being invested.

[51] Central Bank of Venezuela

[52] Central Bank of Venezuela

viii. Revenue Equalization Fund (Kiribati)

Launch Year	1956
Fund Value	400 million dollars[53]
Fund Value as % of GDP	526%
Growth Rate	--
Financing	Phosphates
Objective	Possible financing for domestic enterprises.
Ownership	--
Management	Possible financing for domestic enterprises.
Investment Policy and Asset Allocation	Prudent management. Was entirely invested in offshore funds in 2001. Designed to maintain real per capita value over time.
Outlook/Trends	Financing of budget shortfalls means slower fund growth.
Transparency	--
Recent Investments	--

[53] Morgan Stanley.

ix) Foreign Exchange Reserve Fund (Iran)

Launch Year	1999
Fund Value (Us dollars)	Press reports from earlier this year suggest that as of January 2007, the Foreign Exchange Reserve Fund (FERF) was empty or even overdrawn.[54]
Fund Value as % of GDP	Zero
Growth Rate	The Iranian Central Bank suggested in January 2006 that the value of the FERF would rise to 14-15 billion US dollars by March 2006.[55] Since then, the resources of the FERF appear to have been used up by the government.
Financing	Revenues related to hydrocarbons exports.
Objective	Provide support to domestic industry and cover fiscal deficits.
Ownership	Government of Iran.
Management	Government of Iran.
Investment Guidelines	--
Outlook	The FERF appears no longer to be relevant. However, there is a chance that it may be replenished from future privatisation revenues or further hydrocarbons windfalls.
Transparency	Very low.
Recent Investments	In 2004 the FERF committed to disbursing over 8.5 billion US dollars for domestic industrial projects.[56]

[54] http://www.rferl.org/featuresarticle/2007/02/12a0ffc6-05c1-4265-a73f-a512fb376c12.html

[55] http://www.payvand.com/news/06/jan/1027.html

[56] http://www.payvand.com/news/04/nov/1062.html