

# Investment Strategy of the Temasek Holding

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## **Abstract:**

Sovereign Wealth Funds (SWFs) are generally known as investment funds owned by national governments and financed by the country's foreign currency reserves (dollar, euro, yen), often through their central banks or via direct investments. Usually the funds are invested in the proceeds of non-renewable natural resources or a higher return alternative to holding foreign currency. SWFs are currently managing between USD 3 and 4 trillion. The Government of Singapore owns two independent SWFs. The first, Temasek Holdings, was founded in 1974 to manage part of the Government's revenues. This paper analyses the investment strategy of the Temasek Holding as one of the most successful SWF. Present turbulent times create a big pressure on healthy investment strategy of the SWFs. But total shareholder return of the Temasek Holding since its inception in 1974 has been a healthy 17% compounded annually. Temasek is managed on commercial principles to create and deliver sustainable long-term value for its stakeholders. It is an active shareholder and aims to achieve sustainable returns by engaging the boards and management of its portfolio companies to foster a culture of integrity, excellence and meritocracy, maintain a clear focus on core competence, customer fulfilment, consistent value creation, and cultivate high calibre board and management leadership. This paper will provide answers on a questions like: who is the Temasek Holding, what is its investment strategy and why is Temasek so successful story? Another part of this paper analyzes and compares investment strategy of the Temasek Holding with others SWFs.

## **Keywords:**

Sovereign wealth funds. Temasek. Strategy. Investment portfolio. Asset under management.

## **1. What is sovereign wealth fund?**

Sovereign Wealth Funds are generally known as investment funds owned by national governments and financed by the country's foreign currency reserves (dollar, euro, yen), often through their central banks or via direct investments. Usually the funds are invested in the proceeds of non-renewable natural resources or a higher return alternative to holding foreign currency. The term sovereign wealth fund was introduced in 2005, but the first SWF was introduced in 1953 by the government of Kuwait ('Kuwait Investment Authority,' a commodity SWF). Expansion of sovereign wealth funds in recent years has been driven by ballooning East Asian foreign exchange reserves and the need for oil rich countries to invest oil money to provide income to replace that from diminishing oil reserves. These funds are now major players in the world financial markets. The combined assets of the major SWFs (owned by 20 governments) have reached over three trillion dollars, and are expected to reach over 10 trillion dollars by 2012. Although the current total amount makes up only some 3 percent of the world's traded securities, the SWFs already have tremendous concentrated financial power. Over half of the SWF assets are owned by oil and gas exporting nations, and about one third by Australia, China, and Singapore. SWFs are aggressive investors and have bought into firms as diverse as Morgan Stanley, General Electric, and Sony. (1)

### **1.1. Definition of SWFs**

Although there exists no commonly accepted definition of SWFs, three elements can be identified that are common to such funds. First, SWFs are state-owned. Second, SWFs have no or only very limited

explicit liabilities and, third, SWFs are managed separately from official foreign exchange reserves. In addition, most SWFs share certain characteristics that originate in the specific nature of SWFs. For example, the lack of explicit liabilities (or the stretched out maturity of liabilities) favours the pursuit of long-term investment strategies, as implemented by most SWFs. In this respect, sovereign wealth funds differ from sovereign pension funds that operate subject to explicit liabilities and a continuous stream of fixed payments, making sovereign wealth funds more similar to private mutual funds. Second, the absence of explicit liabilities also has a bearing on the willingness to take risk, as standard portfolio theory predicts a higher share of fixed income securities for funds that are subject to recurring payments. Finally, most sovereign wealth funds appear to have substantial exposure to foreign investments or are even entirely invested in foreign assets. (4)

## **1.2. Who established SWFs?**

The main group of countries that have established SWFs are resource-rich economies which currently benefit from high oil and commodity prices. In these countries, SWFs partly also serve the purpose of stabilising government and export revenues which would otherwise mirror the volatility of oil and commodity prices. Another purpose of such funds in resource-rich countries is the accumulation of savings for future generations as natural resources are non-renewable and are hence anticipated to be exhausted after some time. Prominent examples of such SWFs include Norway's Government Pension Fund, investment agencies set up by member countries of the Gulf Cooperation Council, such as the Abu Dhabi Investment Authority which manages the foreign assets of the Emirate of Abu Dhabi in the United Arab Emirates, and the Russian oil stabilisation fund which has recently been partly transformed into a fund for future generations. A second group of countries, most notably in Asia, has established SWFs because reserves are being accumulated in excess of what may be needed for intervention or balance-of-payment purposes. The source of reserve accumulation for these countries is mostly not linked to primary commodities but rather related to the management of inflexible exchange rate regimes. As the authorities have become more comfortable with reserve levels, foreign assets have been moved to specialised agencies which often have explicit return objectives and may invest in more risky assets than central banks. Prominent examples include funds that have been operating for decades, such as the Singapore Government Investment Company, but also more recently established funds such as the Korea Investment Corporation, and the investment portfolio of the Exchange Fund managed by the Hong Kong Monetary Authority. Recently also China established a new investment agency, the China Investment Corporation, responsible for the management of a portion of Chinese foreign reserves.

## **2. Amount of asset under management of SWFs**

Based on a combination of private and official sources, SWFs are estimated to have accumulated between at least USD 3 trillion, compared with around USD 5 trillion in traditional foreign exchange reserves. Comparing the level of traditional foreign exchange reserves with assets managed in SWFs, two observations stand out (see Exhibit 1). Some countries have been accumulating foreign assets in SWFs for a long time and therefore hold relatively modest levels of foreign exchange reserves (e.g. members of the Gulf Cooperation Council like the UAE and Kuwait). In contrast, other countries have accumulated sizeable holdings of traditional foreign exchange reserves – most likely in excess of precautionary levels – but only recently created SWFs with relatively modest levels of assets under management (e.g. China and Russia). Therefore, many observers expect that these countries may in the future increasingly accumulate foreign assets in SWFs or even shift traditional reserve assets into such funds. Oil exporters, mostly from the Middle East, but also Norway's sizeable Government Pension Fund, are estimated to account for the largest part of total assets managed by SWFs. A smaller fraction, of around USD 700 billion, is accounted for by Asian emerging economies, most notably Singapore, which has been running SWFs since the 1970s. But also mature economies, other than Norway, have set up SWFs, mostly to save receipts from the

exploitation of natural resources. In sum, a plausible estimate of total assets managed by SWFs ranges from USD 3 to 4 trillion. (6)

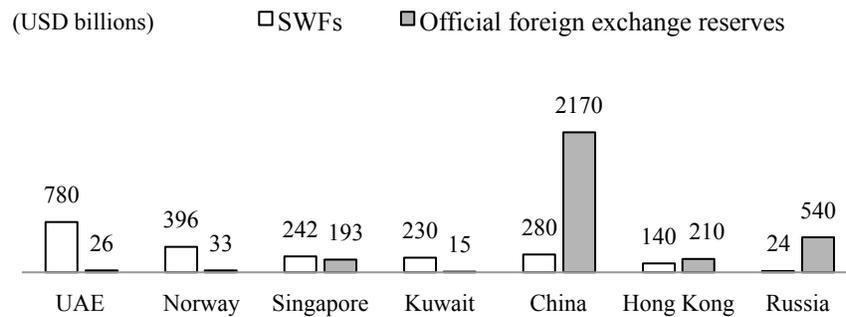


Exhibit 1; SWFs vs official foreign exchange reserves (as of 2010)  
Source: (5, 6)

### 3. Selected Sovereign wealth funds

#### 3.1. Singapore

The Government of Singapore owns two independent SWFs. The first, Temasek Holdings, was founded in 1974 to manage part of the Government’s revenues. To satisfy legal requirements in issuing bonds, Temasek first reported its accounts to the public in 2004. Total annualised returns have been 18% per annum since inception and currently the fund has a net asset value of around USD 133 billion. Although Temasek originally invested domestically, foreign investments now account for more than half of its total portfolio, concentrated in emerging Asia, especially China, Taiwan and Korea and, from a sectoral viewpoint, in the financial and telecommunications industries. Temasek claims not to direct the commercial or operational decisions of portfolio companies, except where shareholder approval is specifically required. In 1981 a second SWF, the Government Investment Company (GIC), was set up to manage part of Singapore’s foreign exchange reserves. Although its accounts are not published, GIC reports show that this fund manages a portfolio of more than USD 100 billion. The GIC’s investment target is to achieve a real return of above GDP-weighted inflation. GIC claims to have constantly exceeded the benchmark return.

#### 3.2. Hong Kong

Reserve management in Hong Kong is centralised in the Hong Kong Monetary Authority’s Exchange Fund. The fund is split into a “backing portfolio” consisting of traditionally managed foreign exchange reserves, which fully back the Hong Kong dollar monetary base, and an actively managed “investment portfolio”. Management of the investment portfolio is partly carried out by Hong Kong Monetary Authority staff and external fund managers. The latter are responsible for the management of all equity investments, which account for around a third of the investment portfolio.

### **3.3. Russia**

Russia introduced a formal Oil Stabilisation Fund in January 2004 with the aim of saving the fiscal windfall gains from high oil prices. Prior to that, Russia used to operate a less formal framework aimed at smoothing the macroeconomic impact of oil price fluctuations (“special reserve”). The Oil Stabilisation Fund is mainly financed from two sources: oil export custom duties in excess of a reference price and the mineral extraction tax. In addition, the unspent fiscal surplus of the previous fiscal year is added to the Oil Stabilisation Fund. Accumulated funds may be used to finance the federal budget deficit if the oil price falls below the reference price. If the Oil Stabilisation Fund’s balance exceeds RUB 500 billion, these funds can be used to prepay external debt. Since February 2008 the fund is split into a “Reserve Fund” and a “Future Generations Fund”. The Future Generations Fund can invest in sticky assets but has so far maintained a prudent asset allocation. At the same time, the Reserve Fund continues to invest in low-yielding, low-risk government bonds.

### **3.4. Norway**

Norway’s Government Pension Fund was established in 1990. Since January 2006, this fund includes the Government Pension Fund–Global (formerly Government Petroleum Fund, established in 1990) and the Government Pension Fund–Norway (formerly National Insurance Scheme Fund). The fund receives central government revenues from petroleum activities. As regards its objectives, the fund is used primarily as a savings fund for future generations. Only the expected real return of the fund can normally be transferred to the central government budget and used for general budgetary purposes. The Government Pension Fund–Global attained a portfolio value of around USD 423 billion at end-2009. The day-to-day management is delegated to Norges Bank but the ultimate responsibility lies with the Ministry of Finance, which issues guidelines for the investment of the fund’s capital in shares and other securities abroad. Its institutional set-up is often quoted as a benchmark in terms of transparency and accountability. The fund publishes quarterly and annual reports which include a detailed disclosure of assets under management, the currency and asset class composition of the portfolio down to company level and a standardised reporting of its performance against a benchmark.

## **4. Temasek Holdings**

Temasek is an investment holding company with characteristic of SWFs and with a portfolio of investments covering a wide range of countries and industry sectors. Temasek was established to create and maximize long-term shareholder value as an active investor and shareholder of successful enterprises. Headquartered in Singapore, Temasek was formed by the Government in 1974 to separately hold and manage its investments in companies and joint ventures (Temasek is wholly-owned by the Government through the Minister for Finance – MOF, under the Singapore Companies Act). This move freed the Government to focus on the economy as a whole and provided an opportunity for a commercially disciplined and independent company to achieve sustainable long-term returns. In addition to managing its inherited portfolio, Temasek also actively invested in other local companies in Singapore for growth and diversification. As Singapore’s economy evolved and became increasingly globalized, Temasek began to invest actively outside of Singapore. Temasek has been assigned an overall corporate credit rating of “Aaa” by Moody’s and “AAA” by Standard & Poor’s. From an initial portfolio of S\$350 million in 1974 made up of various Singapore start-ups, Temasek’s investment exposure has grown over the last 30 years into a globally diversified portfolio of about US\$ 133 billion (as at March 31, 2010), covering a range of industries, including financial services, transport and logistics, telecommunications and other infrastructure and engineering services. Total shareholder return of the Temasek Holding since its

inception has been 17% compounded annually. Singapore and Asia account for nearly 80 percent of Temasek's investments, while developed markets such as the United States and Europe are a long-standing and growing part of Temasek portfolio.

#### **4.1. Financial background**

The Temasek had total assets of US\$203.4 billion as at March 31, 2010. The Temasek generated revenue of US\$54.8 billion and profit attributable to equity holder of Temasek of US\$3.3 billion for the year ended March 31, 2010. Temasek's Net Portfolio Value amounted to US\$133 billion as at March 31, 2010, compared to S\$130 billion as at March 31, 2009. As at March 31, 2010, approximately 32% of Net Portfolio Value was in Singapore, 46% in Asia (excluding Singapore and Japan), 20% in the Organization for Economic Cooperation and Development ("OECD") economies (excluding Korea, Mexico and Chile) and 2% in other markets. As at March 31, 2010, the top three sectors (based on contribution of each sector to Temasek's Net Portfolio Value) were financial services, telecommunications, media and technology, and transportation and industrials which comprised 37%, 24% and 18%, respectively. Temasek has delivered a total shareholder return of 17% by market value and 16% by shareholder funds compounded annually since its inception to March 31, 2010. (8, 9, 10)

#### **4.2. Strategy of the Temasek**

Temasek is an SWF which is managed on commercial principles to create and deliver sustainable long-term value for its stakeholders. Temasek is an active value-oriented shareholder and investor, which seeks to manage its investments to create and maximize shareholder value, balancing risks and opportunities across industries and geographies. Temasek is an active shareholder and aims to achieve sustainable returns by engaging the boards and management of its portfolio companies to foster a culture of integrity, excellence and meritocracy, maintain a clear focus on core competence, customer fulfilment, consistent value creation, and cultivate high calibre board and management leadership. In engaging the boards and management of its portfolio companies, Temasek also aims to institutionalize superior business leadership and sound corporate governance and create strategic options to build significant international or regional brands or businesses.

As a shareholder, Temasek does not participate in the day-to-day management of its portfolio companies. Companies in its portfolio are managed by their respective management, and guided by their respective boards of directors to deliver sustainable shareholder value. Temasek's decisions are guided by business tenets and commercial discipline. As the owner of its portfolio, Temasek has flexible investment horizons and the option of taking concentrated risks or remaining in cash. As an active value-oriented investor, Temasek may increase, reduce or hold its investments in companies or other assets, based on its value tests and market opportunities. Temasek may also pioneer innovative products or businesses in order to increase and improve growth and diversification of its portfolio.

Temasek to centre its investment strategies on these four investment themes:

- a) Transforming Economies - Tapping the potential of transforming economies like China, India, South East Asia and Latin America, through investments in sectors such as financial services, infrastructure and logistics.
- b) Growing Middle Income Populations - Leveraging growing consumer demands through investments in sectors such as telecommunications, media and technology, and consumer and real estate.
- c) Deepening Comparative Advantages - Seeking out economies, businesses and companies with distinctive intellectual property and other competitive advantages.
- d) Emerging Champions - Investing in companies with a strong home base, as well as companies at inflection points, with potential to be regional or global champions.

In terms of its overall portfolio, Temasek is guided by a directional portfolio mix of 40:30:20:10. This means an exposure to Asia of about 40%, keeping Singapore at about 30%, maintaining OECD exposure at about 20%, and adding exposure of up to 10% to other geographies such as Latin America, the Middle East and Africa. Temasek believes this portfolio mix provides an approximate 50:50 exposure between mature economies and growth regions. (8, 9, 10)

## 5. Temasek investment portfolio by sectors

Temasek invests across sectors including financial services; telecommunications, media and technology; transportation and industrials; consumer and real estate; energy and resources; and life sciences. The text below sets forth Temasek’s top three investments by market value (in the case of listed securities) or book value (in the case of unlisted securities) in these sectors, as well as their contribution to Temasek’s Net Portfolio Value (see Exhibit 2), in each case as at March 31, 2010.

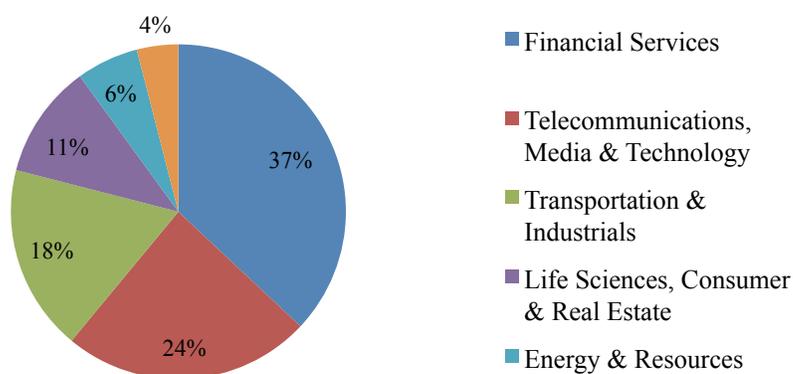


Exhibit 2; Temasek’s investments exposure by industry sectors as at March 31, 2010  
Source: (8, 9, 10)

### 5.1. Financial services

Temasek’s top three investments in the financial services sector were its minority interest in each of China Construction Bank Corporation (“CCB”), Standard Chartered PLC (“Standard Chartered”) and DBS Group. Temasek’s investments in the financial services sector comprised 37% of Temasek’s Net Portfolio Value.

### 5.2. Telecommunications, media and technology

Temasek’s top three investments in the telecommunications, media and technology sector were its majority interest in each of SingTel, ST Telemedia and STATS ChipPAC Ltd. Temasek’s investments in the telecommunications, media and technology sector comprised 24% of Temasek’s Net Portfolio Value.

### 5.3. Transportation and industrials

Temasek’s top three investments in the transportation and industrials sector were its majority interest in each of SIA, Singapore Technologies Engineering Ltd (“ST Engineering”) and PSA. Temasek’s investments in the transportation and industrials sector comprised 18% of Temasek’s Net Portfolio Value.

#### 5.4. Consumer and real estate

Temasek's top three investments in the consumer and real estate sector were its majority interest in Mapletree and its minority interest in each of CapitaLand and Singapore Airport Terminal Services Ltd. Temasek's investments in the consumer and real estate sector comprised 11% of Temasek's Net Portfolio Value.

#### 5.5. Energy and resources & Life sciences

Temasek's top three investments in the energy and resources sector were its majority interest in Singapore Power and its minority interest in each of MEG Energy Corporation and Niko Resources Ltd. Temasek's investments in the energy and resources sector comprised 6% of Temasek's Net Portfolio Value. Temasek's top three investments in the life sciences sector were its minority interests in each of Amyris Biotechnologies Inc., Bumrungrad Hospital PCL and Interpharma Investments Limited. Temasek's investments in the life sciences sector comprised less than 1% of Temasek's Net Portfolio Value.

### 6. Temasek investment portfolio by major portfolio companies

Table 1; Temasek investment portfolio by major portfolio companies as at March 31, 2010

Company name:	(S\$ million)
Singapore Telecommunications Limited	27,273
China Construction Bank Corporation	16,088
Standard Chartered PLC	13,965
Singapore Airlines Limited	9,780
DBS Group Holdings Ltd	9,117
Company name:	(S\$ million)
PSA International Pte Ltd	7,985
Bank of China Limited	7,584
CapitaLand Limited	6,591
PT Bank Danamon Indonesia Tbk	4,962
Singapore Technologies Engineering Ltd	4,824
Sembcorp Industries Ltd	3,609

Source: (8, 9, 10)

The upper table (see Table 1) sets forth the market value (in the case of listed securities) or book value (in the case of unlisted securities) of Temasek's major portfolio companies as of March 31, 2010. These companies accounted for approximately 60% of Temasek's Net Portfolio Value as at March 31, 2010.

### 7. Temasek Portfolio Performance

Temasek's Net Portfolio Value amounted to S\$186 billion as at March 31, 2010, compared to S\$130 billion as at March 31, 2009 (see Exhibit 3). As at March 31, 2010, about 77% of Temasek's Net Portfolio

Value comprised listed and liquid assets. One-year total shareholder return for the year ended March 31, 2010 was approximately 42% by market value and 26% by shareholder funds. Total shareholder return by market value takes into account changes in the market value of Temasek portfolio, dividends paid, and nets off any new capital Temasek received. For unlisted investments, the movements in shareholder funds are tracked in lieu of market price changes. Over the medium term, five-year total shareholder return for the year ended March 31, 2010 was 11% by market value and 14% by shareholder funds. Since inception, 36-year total shareholder return for the year ended March 31, 2010 was 17% by market value and 16% by shareholder funds (see Exhibit 4). The last 10 years Temasek in particular have seen much volatility, starting with the crash of the dotcom bubble in 2000, and ending with the pull-back from the brink of a deep global depression in 2009, punctuated in between by 9/11, SARS and the H1N1 flu pandemic scare. (2, 8, 9, 10)

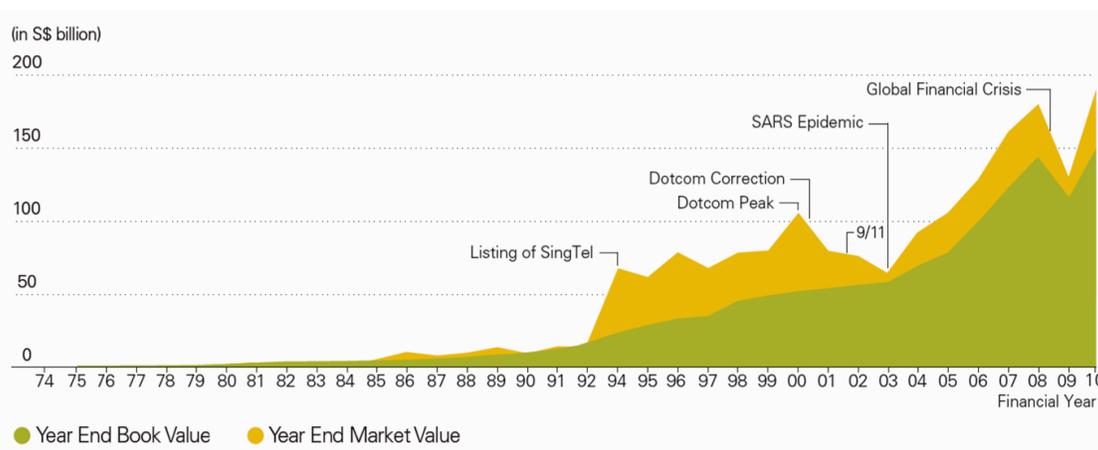


Exhibit 3; Development of the Temasek portfolio value over time

Source: (8, 9, 10)

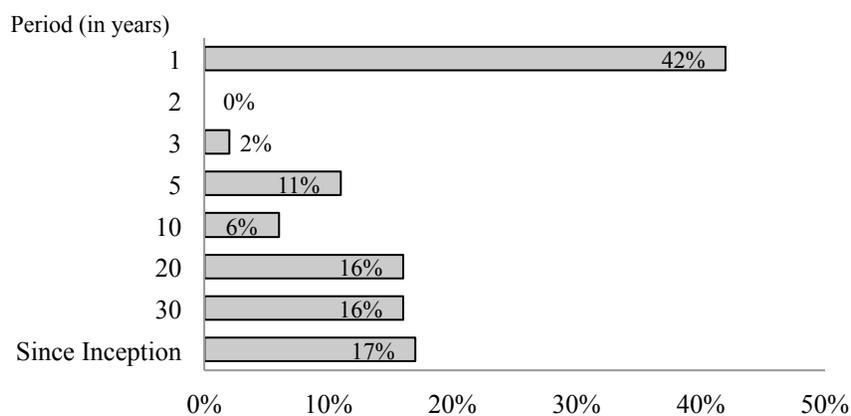


Exhibit 4; Temasek total shareholder return by market value

Source: (8, 9, 10)

## 8. Risk Management

Financial risks of Temasek include market risk due to changes in equity prices, foreign exchange rates and interest rates. To assess its market risk, Temasek uses a VaR statistical model that estimates the

potential loss on a portfolio at a given confidence level. Temasek uses an 84% confidence interval, and Monte Carlo simulation based on three years of price data to compute its VaR for a 12-month holding period. As at March 31, 2010, Temasek's VaR was about S\$25 billion. This implies a 16% probability of incurring marked-to-market losses in excess of S\$25 billion, on a Net Portfolio Value of S\$186 billion for a 12-month holding period following that date. The diversified VaR of the top 10 companies contributed over 70% of the total diversified VaR as at March 31, 2010 (2009: 70%; 2008: 67%; see Table 2). Apart from tracking VaR, Temasek also conducts monthly stress tests and scenario analyses to gauge monthly the effect of low probability but high impact events. In addition, Temasek reviews its overall risk position on a monthly basis and provides additional analyses of specific event, industry or country risks. In terms of credit risk management, Temasek conducts periodic reviews of its exposures relating to counterparties, custodians, issuers and countries. Temasek's investment portfolios are typically denominated in the local currency of the countries in which the investments are made. Accordingly, Temasek's returns on these investments, including any dividends received from these investments, are usually subject to foreign exchange rate risks.

Table 2; Temasek VaR development by sector and risk factors

Temasek VaR by Sector	2010	2009	2008
Financial Services	43%	41%	34%
Transportation and Industrials	21%	19%	18%
Life Sciences, Consumer and Real Estate	14%	13%	12%
Telecommunications, Media and Technology	14%	19%	28%
Energy and Resources	7%	7%	7%
Others	1%	1%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Temasek VaR by Risk Factors	2010	2009	2008
Equity Risk	98%	99%	101%
Foreign Exchange Risk	6%	8%	7%
Interest Rate Risk	3%	5%	0%
Total Diversification Effects*	-7%	-12%	-8%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\* Diversification Benefits resulting from the interactions between the equity, FX and interest rate risk factors.

Source: (8, 9, 10)

### 8.1. Other sources of risk

As at March 31, 2010, approximately 32% of Temasek's Net Portfolio Value was in Singapore. Any economic recession or other deterioration in one economy - Singapore's economy could materially and adversely affect the Temasek Group's results of operations, financial position and cash flows what creates significant risk for the whole investment portfolio. The Government, as a 100% shareholder of Temasek, through MOF, can exercise control over Temasek's corporate objectives, strategies and actions. While the Government has not taken any actions in the past to influence the corporate objectives, strategies or actions of Temasek, there can be no assurance that the Government will not take any actions in the future to influence the corporate objectives.

## 9. Temasek financial condition

The Temasek Group had total assets of S\$284.8 billion as at March 31, 2010. The Temasek Group generated revenue of S\$76.7 billion and profit attributable to equity holder of Temasek of S\$4.6 billion for the year ended March 31, 2010. The Temasek's results of operations are materially affected by conditions in the global capital markets and the economy generally, both in the U.S. and elsewhere around the world. Negative trends in these factors led to declines in Temasek Group's revenue and profit. In the event of extreme prolonged market events, such as the global credit crisis, the Temasek Group could incur significant losses. The following tables (see Table 3 and Table 4) sets forth selected income statement & balance sheet data for the Temasek for the years indicated.

Table 3; Temasek selected income statement data

(S\$ million)	2010	2009	2008
Revenue	76 658	79 615	83 284
Net operating expenses	-72 570	-72 448	-63 125
Share of profit, net of tax of associated companies and joint ventures	4 387	3 202	5 370
Profit before income tax	8 475	10 369	25 529
Income tax expense	-1 682	-1 280	-3 056
Profit for the year	6 792	9 089	22 474
Attributable to:			
Equity holder of Temasek	4 593	6 183	18 240
Minority interests	2 199	2 906	4 234
Profit for the year	6 792	9 089	22 474

Source: (8, 9, 10)

Table 4; Temasek selected balance sheet data

(S\$ million)	2010	2009	2008	(S\$ million)	2010	2009	2008
<u>Assets</u>				<u>Liabilities and Total Equity</u>			
Property, plant and equipment	67 974	68 206	75 302	Equity attributable to equity holder of Temasek	149 743	118 398	144 058
Investments	44 610	41 105	39 513	Minority interests	23 409	22 555	25 786
Non-current financial assets and derivative financial instruments	64 181	40 234	73 850	Non-current liabilities	69 610	64 438	59 220
Other assets	37 918	37 445	38 285	Current liabilities	42 031	42 558	66 454
Current assets	70 109	60 958	68 568				
Total assets	284	247	295	Total equity and	284	247	295

	793	949	518	liabilities		793	949	518
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Source: (8, 9, 10)

The global economy has experienced stress since the second half of 2007. Since then, concerns over inflation, energy costs, geopolitical issues, the availability and cost of credit, declining business and consumer confidence, and increased unemployment have slowed global economic growth and have resulted in recessions in numerous countries, including the U.S. and many countries in Asia. Global capital markets have also been experiencing heightened volatility and turmoil, and in the second half of 2008, the volatility reached unprecedented levels. The weak global economic conditions continued in 2009. While showing signs of improvement, the macroeconomic environment in 2010 remained for the Temasek difficult. In 2011 economic environment remain challenging with significant uncertainty regarding the outcome of the debt crisis in Europe, unemployment levels, and the impact of the unwinding of stimulus measures by the U.S. and other governments. The following chart (see Exhibit 5) describes mid-term decreasing profitability of the Temasek investment portfolio for the years indicated as an impact of the economic recession and worsened economic condition described above in the text.

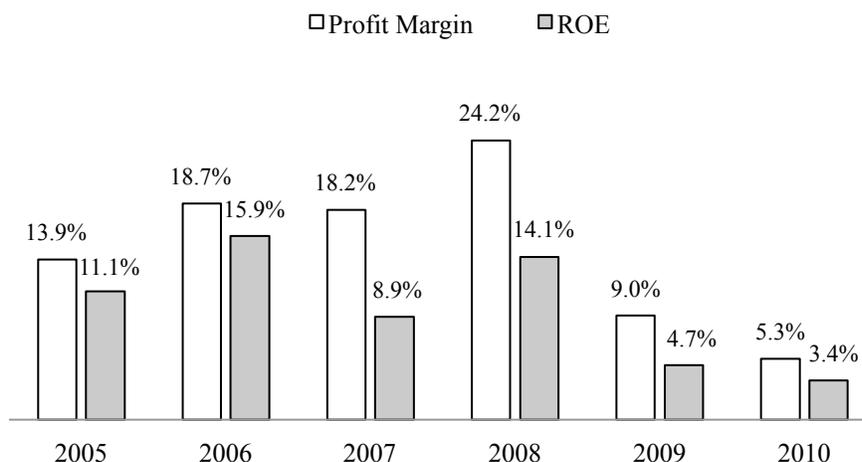


Exhibit 5; Temasek profit margin and ROE development over time

Source: (3, 8, 9, 10)

## 10. Conclusion

This paper presents information about investment strategy one of the most successful SWFs on the world – Temasek Holding. The paper also analyzes the main investments holdings in the Temasek portfolio. Also we examined historical financial performance and described main risk tools what is used by Temasek. We find that sovereign wealth fund can provide significant performance over long term period and SWF can be significant part of the economy.

Main factor behind the growth of SWFs is the effort by many emerging market countries to accumulate large stockpiles of international reserves by running persistent current account surpluses. Many of these countries, particularly in Asia, now hold more reserves than needed for prudential reasons. As we see in this paper, attempts to diversify these reserves into potentially higher-yielding assets entail transferring them from the control of the central bank to quasi-public entities, such as SWFs, with the mandate to pursue financial strategies aiming at higher long-run returns.

SWFs are fundamentally different from monetary authorities holding official foreign reserves, where liquidity and security issues necessitate a short investment horizon and low risk tolerance. As we see, SWFs typically seek to diversify foreign exchange assets and earn a higher return by investing in a broader range of asset classes.

By definition, the global sum of all current accounts adds up to zero. Hence, the still growing current account surpluses of commodity exporters and Asian countries will be the mirror image of the growing current account deficits of other countries, primarily the U.S. and the EMU. Excess saving and accumulation of foreign assets by surplus countries will be the counterpart to the excess demand and issuance of foreign liabilities by deficit countries. The result, growing international wealth transfer from debtors in one country to creditors in others will foster the growth of SWFs in to the future.

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