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# Sovereign Wealth Funds as Tools of National Strategy: Singapore's Approach

Devadas Krishnadas

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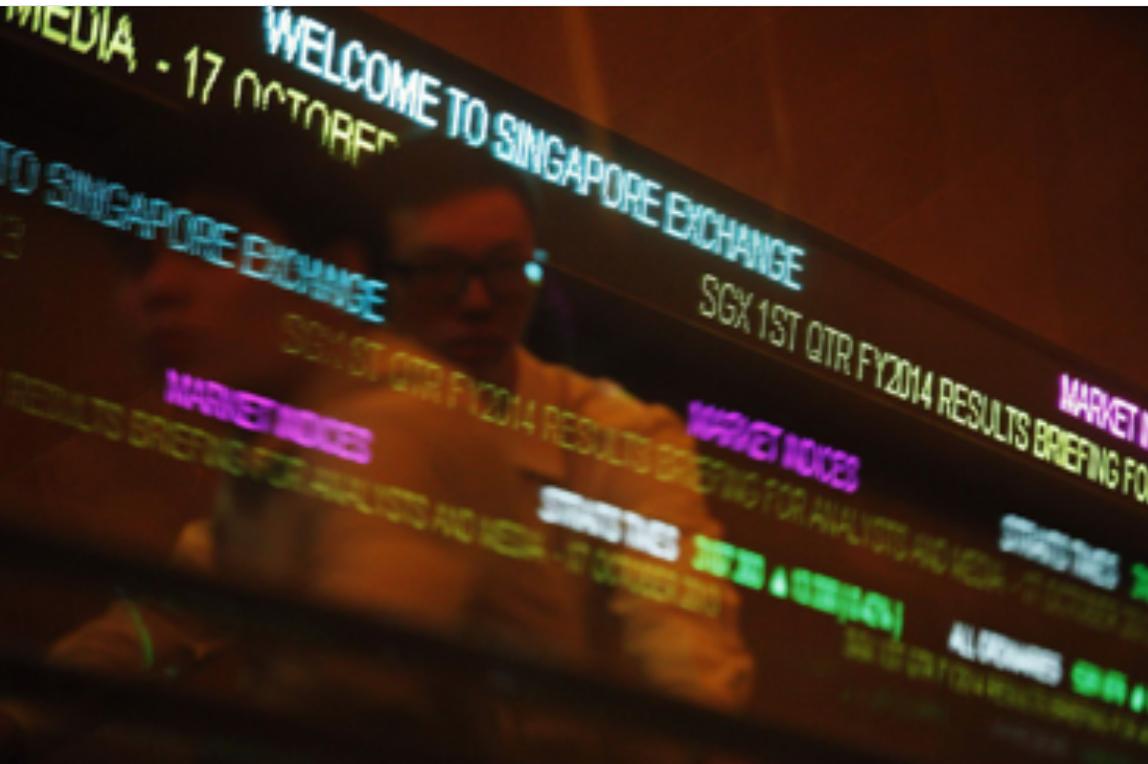
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# CENTER ON IRREGULAR WARFARE AND ARMED GROUPS



## Sovereign Wealth Funds as Tools of National Strategy: Singapore's Approach

Devadas Krishnadas

United States Naval War College  
Newport, Rhode Island



**Sovereign Wealth Funds as Tools of National  
Strategy:  
Singapore's Approach**

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Devadas Krishnadas

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*SOVEREIGN WEALTH FUNDS AS TOOLS OF NATIONAL STRATEGY*

Center on Irregular Warfare & Armed Groups (CIWAG)  
US Naval War College, Newport, RI  
CIWAG@usnwc.edu

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## **Message from the Editors**

In 2008, the Naval War College established the Center on Irregular Warfare & Armed Groups (CIWAG). CIWAG’s primary mission is twofold: first, to bring cutting-edge research on Irregular Warfare into the Joint Professional Military Educational (JPME) curricula; and second, to bring operators, practitioners, and scholars together to share their knowledge and experiences about a vast array of violent and non-violent irregular challenges. This case study is part of an ongoing effort at CIWAG that includes symposia, lectures by world-renowned academics, case studies, research papers, articles, and books.

This CIWAG case study on sovereign wealth funds (SWFs) is one in a new series examining the role of economics in national/international security and irregular warfare. In the globalized irregular warfare (IW) world of the twenty-first century, understanding the operating environment is paramount. In particular, it is vital to think about who wields power and influence in that environment, not only inside a state but also across state borders. Outside actors, such as private companies and sovereign wealth funds, can bring tremendous pressure and influence on the decisions of a government. This may in turn support and enhance, or frustrate and undermine, counterterrorism, foreign internal defense, or counterinsurgency efforts. The key to understanding, anticipating, and shaping these influences is a solid understanding of the strategic logic behind those interests, including what a sovereign wealth fund does and how they operate.

Sovereign wealth funds, as Mr. Krishnadas explains, are state-owned investment funds. They can help states “achieve economic growth, finance public policy, and underpin sovereign security.” This case study focuses on the Singaporean experience with SWFs and discusses its unique history, the strategic logic behind creating a SWF, how it can be used, and what a state can do with the income from SWFs. Mr. Krishnadas, an international expert on the topic, sets out some of the

terminology behind SWFs in order to open up this concept for non-specialist readers and show the tremendous benefits that a well-managed SWF can provide to their own state.

This holistic analysis of a single SWF example raises many broader issues that IW practitioners need to be aware of: across the globe—from the port of New Jersey to the copper mines in trans-Sahel Africa—governments are wrestling with the issue of foreign financial influence and national security. This becomes even more acute in states that are trying to transition from conflict to stability: When should states allow or encourage other countries to invest in them, and what industries should they allow foreign companies to own or build? Should states allow foreign investment funds to build infrastructure, extract rare minerals, and operate ports? How does this support or undermine the legitimacy and authority of that state? Successful IW practitioners need to understand and be able to account for third-party influence in its many varieties in order to be successful. The case study provides expert insight on a little-known but increasingly prevalent source of influence that is of growing consequence to IW efforts.

This case study is a place to begin the conversation about the linkage between economics and security, particularly in regions in the world where armed groups and irregular warfare are a daily reality. Singapore is not alone in its utilization of SWFs to bolster its domestic security and stability, and there is much more work to be done in exploring this issue. As a starting point, for example, the appendices show the distribution of the largest funds, including some of the newest—a \$5 billion fund set up by Angola, and a \$1 billion fund set up by Nigeria. In addition, the bibliography gives a snapshot of China’s SWF strategy in the U.S. and in conflict zones around the world. As we grapple with the role of economics and financial influence on conflicts, this case study provides a first look at the power that state-owned investment funds can wield at home and abroad.

It is important to note two critical caveats to this case study. First,

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the opinions found herein are solely those of the author and do not represent the views of the Department of Defense, the Naval War College, or CIWAG. Second, while every effort has been made to correct any factual errors in this work, the author is ultimately responsible for the content of this case study.

We hope you find it useful, and look forward to hearing your feedback and suggestions for how you can contribute to the Center on Irregular Warfare & Armed Group's mission here at the Naval War College.

## **Author Biography**

**Devadas Krishnadas**, the founder and managing director of Future-Moves, has extensive experience in both the public and the private sectors. He has an established reputation as a thought leader, and writes and speaks regularly across Asia on policy and political risk. As a Fulbright scholar, Mr. Krishnadas studied at the Fletcher School at Tufts University, and he also was an International Merit Scholar at the University of Sydney. He has completed executive training at the business schools of both the universities of Oxford and Cambridge.

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## I. Introduction

Singapore is a tiny,<sup>1</sup> affluent Southeast Asian city-state situated at the southern tip of the Peninsula Malaysia. It is the world's fourth-leading global financial center<sup>2</sup> and operates the world's best airport,<sup>3</sup> one of the world's top oil refineries,<sup>4</sup> and one of busiest ports in the world—all while providing a high standard of living for its people.<sup>5</sup> Its Gross Domestic Product (GDP) per capita income is the third highest in the world, ahead of its former colonial master, the United Kingdom, as well as the United States.<sup>6</sup>

A lesser known fact is that Singapore has been able to secure its sovereignty with one of the world's most technologically modern militaries. With a population of just over 5 million,<sup>7</sup> it is the fifth-largest arms importer in the world, accounting for 4 percent of the world's total spending on arms imports,<sup>8</sup> and its defense spending per head is in excess of every country except the United States and Saudi Arabia.

What enables a small country to operate one of the most advanced weaponry systems in the world, including the F-15SG Eagle, the F-16D Block 52+ Fighting Falcon, and Formidable-class stealth frigates, and still run budget surplus while practicing one of the lowest tax systems in the world?

This paper will show that Singapore's sovereignty has been underpinned by the performance of its sovereign wealth funds (SWFs). It

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<sup>1</sup> 270 square miles, or less than a quarter of the size of Rhode Island.

<sup>2</sup> "The Global Financial Centres Index 13," Long Finance, March 2013.

<sup>3</sup> "The World's Top 100 Airports," World Airport Awards 2013, Skytrax, [http://www.worldairportawards.com/Awards\\_2013/top100.htm](http://www.worldairportawards.com/Awards_2013/top100.htm)

<sup>4</sup> *Oil & Gas Journal*

<sup>5</sup> "2012 Quality of Living Worldwide City Rankings," Mercer, 4 December 2012.

<sup>6</sup> Gross domestic product based on purchasing power parity (PPP) per capita, World Economic Database, April 2013, International Monetary Fund.

<sup>7</sup> Population and Land Area, Singapore Department of Statistics, 2012.

<sup>8</sup> "Trends in International Arms Transfers, 2012," Stockholm International Peace Research Institute (SIPRI) Fact Sheet, March 2013.

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is the successful performance of these funds that have provided the financial means for Singapore to defend itself without compromising its domestic programs, to buttress its open economy from economic shocks, and to augment its land-limited economic space with global investments. As such, its sovereign wealth funds play the role of national strategy tools that help to ensure national security and prosperity.

SWFs are state-owned investment funds. Since 2005, at least 30 SWFs have been created, and the assets managed by SWFs have grown, buoyed in part by the rise in commodities prices, from over \$3,000 billion in 2007 to over \$5,000 billion in 2013.<sup>9</sup> Sovereign wealth funds can be strategic instruments to achieve economic growth, finance public policy, and underpin sovereign security. The paper will use Singapore as a case study, as it has operated SWFs for over 40 years and has successfully integrated their function into fiscal policy to drive a remarkable economic transformation.

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<sup>9</sup>“Recent Sovereign Wealth Fund Market Size by Quarter,” Sovereign Wealth Fund Institute, June 2013.

## II. Sovereign Wealth Funds

The Sovereign Wealth Fund Institute defines a SWF as the following:

a state-owned investment fund or entity that is commonly established from balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, governmental transfer payments, fiscal surpluses, and/or receipts resulting from resource exports. The definition of sovereign wealth fund exclude, among other things, foreign currency reserve assets held by monetary authorities for the traditional balance of payments or monetary policy purposes, state-owned enterprises (SOEs) in the traditional sense, government-employee pension funds (funded by employee/employer contributions), or assets managed for the benefit of individuals.<sup>10</sup>

The concept of creating a savings fund or a stabilization fund on a sovereign level only started to gain traction after World War II. In 1953, Sheikh Abdullah Al-Salem Al-Sabah, the ruler of Kuwait, decided to use its oil revenue to create a fund called the Kuwait Investment Board<sup>11</sup> for the future and reduce its reliance on a single nonrenewable source.

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<sup>10</sup>“What Is a SWF?,” SWF Institute, <http://www.swfinstitute.org/sovereign-wealth-fund>. Interestingly, the first SWF has its origin back in the 19th-century United States. The state of Texas created the Texas Special School Fund (now known as the Permanent School Fund) in 1854 to assist in the funding of public education and easing the tax burden of the state’s citizens. The initial funding of \$2 million was part of a \$10 million payment from the U.S. government in exchange for relinquishing land claims on parts of western lands (parts of the current states of New Mexico, Colorado, and Oklahoma) by the former Republic of Texas. “The Handbook of Texas – Permanent School Fund,” Texas State Historical Association, Retrieved from website on 17 July 2013, <http://www.tshaonline.org/handbook/online/articles/khp01>

<sup>11</sup> Currently known as the Kuwait Investment Authority.

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Over the next couple of decades, more SWFs were established. To date, 69 known funds have been established, spanning varied sovereign origins and asset sizes. China (excluding Hong Kong) reigns at the top, with US\$1.2 trillion in assets with its four SWFs, followed by Abu Dhabi and Norway at a distant second and third, respectively, with about US\$0.7 trillion worth of assets each.

A powerful motivation to the formation of SWFs is the “Dutch disease,”<sup>12</sup> in which a resource boom eventually has a negative impact on a country’s economy due an overreliance on resources, to the neglect of the non-commodity export sector. Close to 70 percent of SWFs have commodity-based origins and more look to be on the way. Speaking about the recent approval by Israel’s cabinet to create a sovereign wealth fund with revenue from natural gas discoveries, head of Israel’s National Economic Council Eugene Kandel said, “The reason we are doing it now is because we want to manage the expectations of various currency markets, to show that we understand what ‘Dutch Disease’ is and [that] we are going to take care of its consequences.”<sup>13</sup>

It should be highlighted that the economic effect of an influx of foreign currency is not strictly confined to the space of natural resources but rather includes “any development that results in a large inflow of foreign currency, including a sharp surge in natural resource prices, foreign assistance, and foreign direct investment.”<sup>14</sup> Non-commodity-based countries that created SWFs for the purpose of savings for future generations have well understood the importance of deferring immediate gratification. Foremost amongst these countries is Singapore.

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<sup>12</sup>Coined by *The Economist* in 1977, when reporting on the discovery of a large natural gas deposits in the North Sea back in 1959 and the subsequent decline of Netherlands’s manufacturing sector.

<sup>13</sup>“Israel Gas-Fund Law Shows ‘Dutch Disease’ Awareness, Kandel Says,” Alisa Odenheimer and Calev Ben-David, Bloomberg News, 15 April 2013.

<sup>14</sup>Christine Ebrahim-zadeh, “Back to Basics – Dutch Disease: Too Much Wealth Managed Unwisely,” *Finance and Development*, Vol. 40, No 1, March 2003.

### III. The Singapore Security Challenge

Singapore is a tiny island nation situated at a geographically strategic point where the Johor Straits leads into the pathways to the South China Sea and the Indian Ocean. It is a secular country with a small but cosmopolitan population. It is prosperous and meritocratic. It has rule of law and civic order. Singapore is a close friend to Israel. It is a strategic ally to both the United States, and increasingly to China. It has no natural resources, yet is the most affluent country in Southeast Asia.

All of these things make it an exception in its neighborhood. It is surrounded by much larger countries, Indonesia and Malaysia. All of its fellow countries have large populations and are resource-rich. Malaysia, its closest neighbor,<sup>15</sup> practices a racially biased national policy that grants preferential treatment to Malays. Both Indonesia and Malaysia are predominantly Muslim. Both countries have antagonistic relationships with Israel and historically rocky relationships with the United States. And Singapore itself has a convoluted history with both its major neighbors that has conditioned its approach to national security. To fully understand this approach requires a brief familiarization with that colorful history.

The history of modern Singapore can be traced back to the early 19th century. Sir Thomas Stamford Raffles, the lieutenant governor of Bencoolen (now Bengkulu) in Sumatra, set out to look for a trading station at the tip of the Malay Peninsula to protect the British merchant fleet along the lucrative spice route and to forestall any potential advances by the Dutch in the Indonesian Archipelago, then called the East Indies. Attracted by the island's natural deep harbor and strategic location, Raffles signed a treaty with the Sultan of Johor in 1819 to establish Singapore as a trading post of the East India Company. It subsequently became one of British Straits Settlements in 1826.

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<sup>15</sup> Singapore and Malaysia are connected by a 0.6 mile bridge. At its narrowest, the straits of Johor is only half a mile wide.

The early years of peace and prosperity gave no hints to the tumultuous years that would follow the British surrender of the settlement to the Japanese in 1942. It was a rude awakening that Singapore, the “Impregnable Fortress,” could fall to the Japanese in just seven days—a debacle that British Prime Minister Winston Churchill described as “the worst disaster and largest capitulation in British history.”

The end of the war did not long see the end of troubles. The Malayan Communist Party (MCP), which had allied with the British to fight the Japanese, now turned its attention to insurrection. It initiated a terrorist campaign along the length of the Malayan peninsula. Singapore was subject to bombings, assassinations, and riots. This period, which the British referred to as the “Emergency,” was only brought under control after a decade of brutal counterinsurgent warfare.<sup>16</sup>

Just as the tempo of the Emergency began to slow, Singapore faced another existential threat—this time from Sukarno’s Indonesia. In 1959, Singapore was granted limited self-government, and it formed a federation with Malaya, Sarawak, and North Borneo in 1963, together becoming Malaysia. President Sukarno, the volatile Indonesian leader, was opposed to the formation of a federated Malaysia, however, and in 1962, he launched a violent campaign called *Konfrontasi*, or “Confrontation,” to disrupt and destabilize the nascent state.

During the Emergency, Singapore—still a colony without any indigenous armed forces—was entirely reliant on the British for its security needs. Even as part of the Federation, Singapore remained almost totally dependent on the British to fight the Indonesian challenge. The *Konfrontasi* was successfully brought to a close in 1966, but not before some 37 bombs had been set off in Singapore and a pair of Indonesian marines were caught, convicted, and subsequently hung for sabotage

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<sup>16</sup> The MCP would not surrender until 1989 in the wake of the fall of communism. Its former leader, Chin Peng, resides today in a “peace village” in Southern Thailand. Despite his repeated requests to return to Singapore to spend his last years, he continues to be denied entry.

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activities by the government of Lee Kuan Yew, Singapore's tough-minded prime minister.<sup>17</sup>

Ideological conflicts between the leaders of Singapore and Malaya resulted in Singapore having to leave Malaysia in August 1965. These two and a half decades of violence, civic unrest, and political volatility has had a determinative effect on the thinking of Singapore leaders, both past and present. Acutely conscious of the island's vulnerability, Singapore's leadership committed to a strong national defense policy to protect the sovereignty of the young nation. To finance such a defense, the country had to do well economically and do so quickly.

In 1971, the financially weakened British withdrew its security umbrella from Singapore. Henceforth, the island nation would have to go it alone. It was economically crippled, financially weak, militarily inadequate, surrounded by recent enemies, and geographically significant in the middle of a Cold War. It would successfully overcome these limitations and challenges and it would do so in part with the aid of a "secret weapon"—its sovereign wealth funds.

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<sup>17</sup> The two marines were convicted on 20 October 1965, and hanged on 17 Oct 1968 after their appeals were dismissed. Singapore Infopedia, National Library Board, <http://infopedia.nl.sg/articles/ae11f1fee-53fe-4486-95fd-ebc2a85abcc1.html> and [http://infopedia.nl.sg/articles/SIP\\_62\\_2004-12-17.html](http://infopedia.nl.sg/articles/SIP_62_2004-12-17.html)

## **IV. An Economic Transformation**

At the time of the withdrawal of their security umbrella, British armed forces contributed over 20 percent to Singapore's gross national product, and the military bases provided employment to 1 in 10 people.<sup>18</sup> Their departure thus left not just a security deficit but an economic one.

In building the young nation, the Singapore leaders with Lee Kuan Yew at the helm began aggressive industrialization to develop the country's manufacturing and export sectors. These measures were helped along by the rapid expansion of the world economy, which gave Singapore an economic boom through the 1960s and 1970s.

It transitioned from a predominantly labor-intensive manufacturing economy in the 1960s and 1970s to including capital-intensive and high-value-adding industries in the 1980s, and subsequently to a skill- and knowledge-based economy in the 1990s. In the process, Singapore's GDP grew from a modest US\$704.5 million in 1960 to US\$276.5 billion in 2012.

The process of industrialization and the aggressive bid to develop the economy saw the Singapore government taking on stakes in various local companies, start-ups, and joint ventures. These included a bank, hotels, an iron and steel mill, an airline, and even the zoo and a bird park. In order to allow the government to focus on its core role of policy making and regulations, a move was made to establish a separate investment firm to manage such assets commercially. Singapore's economic success in its early days also saw a rapid accumulation of foreign reserves, and the government decided that its reserves would be better invested in longer-term and high-yielding assets. In 1981, this led to the formation of the Government Investment Corporation.

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<sup>18</sup> "British Withdrawal from Singapore," Singapore Infopedia, National Library Board Singapore 2009, [http://infopedia.nl.sg/articles/SIP\\_1001\\_2009-02-10.html](http://infopedia.nl.sg/articles/SIP_1001_2009-02-10.html)

## V. Singapore Sovereign Wealth Funds

The first SWF established by Singapore was Temasek Holdings, which was set up in 1974 with an initial asset base of about US\$150 million.<sup>19</sup> It was initially comprised of various equity stakes formerly held by the nation's Ministry of Finance. Temasek takes mainly active equity and often concentrates interest in identified firms of certain strategic industries, mainly in Asia (including Singapore).

Six years later, the Government of Singapore Investment Corporation (GIC) was launched. This SWF was tasked to manage Singapore's foreign reserves, with the aim of preserving and enhancing its purchasing power. Its mandate is to achieve a good, sustainable real rate of return over a 20-year time horizon. GIC adopts a highly diversified approach towards its investment, with footprints in more than 45 exchange-traded and over-the-counter markets globally dealing with stocks, futures and options, fixed income, natural resources, foreign exchange, cash, and derivatives. While most of its investments are in the public markets, it also has a smaller component in alternative investments such as private equity and real estate.<sup>20</sup>

While Temasek and GIC are widely recognized as the two "official" sovereign wealth funds of Singapore, the country's central bank, the Monetary Authority of Singapore (MAS), has a similar function. One of its functions is to manage the country's official foreign reserves.<sup>21</sup>

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<sup>19</sup> Temasek Holdings had an initial portfolio valued at S\$354 million, or about US\$150 million after conversion.

<sup>20</sup> "Our Business – Overview," GIC, <http://www.gic.com.sg/en/our-business/overview>; and "Investment Report by the Group Chief Investment Officer," Report on the Management of the Government's Portfolio for the Year 2011/12, GIC Pte Ltd.

<sup>21</sup> MAS's functions are (1) to act as the central bank of Singapore, including the conduct of monetary policy, the issuance of currency, the oversight of payment systems, and serving as banker to and financial agent of the Government; (2) to conduct integrated supervision of financial services and financial stability surveillance; (3) to manage the official foreign reserves of Singapore; and (4) to develop Singapore as an international financial center. Source: "Overview of MAS," <http://www.mas.gov.sg/>

While MAS is not technically a SWF, it does have some elements of one; for instance, it appoints external fund managers to manage funds across a range of investment mandates. As a central bank, MAS adopts a conservative approach in its investment, with a significant proportion of its portfolio invested in liquid financial market instruments.<sup>22</sup>

These three entities together form a portfolio model for the investment of sovereign reserves. Temasek, with its active approach to equities, takes the highest risk; GIC, with its focus on a highly diversified approach, assumes the middle risk profile; and MAS, preferring to stay mostly liquid, is the most conservative investor.

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<sup>22</sup> “Our Nation’s Reserves,” Government of Singapore, Ministry of Finance, <http://app.mof.gov.sg/index.aspx>

## VI. The Security of Singapore

The security of Singapore is not merely a military consideration; it is also a financial and economic one. As a young nation without a deep history, and one that is contained on a small island, its viability as a sovereign country is conditional on its economic success. This is what permits it to “punch above its weight” in the international political, financial, and economic arenas.

Surrounded by neighbors many times its size that were strikingly different in terms of population makeup, religions, and languages, laden with unpleasant memories from the days of confrontation with Indonesia and its rancorous split with Malaysia, Singapore was determined to arm itself to secure its sovereignty.

The island’s geographical limitation and limited population size led to the Singapore Armed Forces’ decision to build needed capabilities to fight swiftly and decisively in war. The stated mission of the Ministry of Defence and the Singapore Armed Forces is “to enhance Singapore’s peace and security through deterrence and diplomacy, and should these fail, to secure a swift and decisive victory over the aggressor.”<sup>23</sup> State-of-the-art military equipment as well as systems and networks are constantly being added to its arsenal through international arms purchases or are developed on-shore by the government-affiliated defense contractor. According to Stockholm International Peace Research Institute (SIPRI), between 2008-2012, Singapore was the fifth-largest arms importer in the world and accounts for 4 percent of the world’s total spending on arms imports.<sup>24</sup>

The nation’s defense spending has seen a steady increase over the years, reaching US\$10 billion in budgeted expenditure for FY2013. It is

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<sup>23</sup> “Mission,” MINDEF, [http://www.mindef.gov.sg/imindef/about\\_us/mission.html](http://www.mindef.gov.sg/imindef/about_us/mission.html)

<sup>24</sup> “The Main Importers and Exporters of Major Arms, 2008-2012,” in “International Arms Transfers,” chap. 5, *SIPRI Yearbook 2013*, Stockholm International Peace Research Institute, <http://www.sipri.org/yearbook/2013/05>

by far the largest single line item in the nation's budget and accounts for 3.3 percent of GDP.<sup>25</sup> In terms of military spending per capita, Singapore is dwarfed only by the United States and Saudi Arabia.

Singapore today possesses the most technologically advanced military in Southeast Asia.<sup>26</sup> Weaponry includes platforms such as the McDonnell Douglas F-15SG jet fighter, the F-16 Block 52+ Fighting Falcon, modernized Leopard A4 main battle tanks, Swedish-built diesel submarines, French-built frigates equipped with modern weapon systems such as the AIM-120C Advanced Medium-Range Air-to-Air Missile, the AGM-154 Joint Standoff Weapon, and the AGM-84 Harpoon anti-ship missile.

As well as ensuring it has the most up-to-date arms, Singapore practices conscription. It requires every male citizen to spend two years in compulsory military service, commencing at the age of 18. Upon completion of this period of national service, men continue to serve in the reserves for at least 10 years. Collectively, the active and reserve force constitute some 200,000 men. These forces are well-equipped and exercised regularly.

These forces are not only modern, they are also expensively trained and deployed. Singapore has training arrangements with Australia, India, Thailand, Taiwan, Brunei, and France. It regularly participates in rigorous and complicated training exercises such as Red Flag in the United States and Maple Flag in Canada, while itself hosting multilateral training events by the participants in the Five Power Defence Arrangement.<sup>27</sup>

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<sup>25</sup>“Budget Highlights – Financial Year 2013,” Singapore Budget 2013, Singapore Government, 25 February 2013, p. 19.

<sup>26</sup>Jesse Vreeken, “Singapore’s Burgeoning Armed Forces, a Steadying Force,” *International Political Review*, 2 February 2012, <http://www.theinternationalpoliticalreview.com/singapores-burgeoning-armed-forces-a-steadying-force/>

<sup>27</sup> The Five Power Defence Arrangement is a mutual security pact between Singapore, Malaysia, Australia, the United Kingdom, and New Zealand.

Due to the limitations of its airspace, Singapore maintains overseas training and operational conversion units for several of its frontline types. These include a flying training school located at RAAF Base Pearce in western Australia; a AS532 Cougar helicopter support squadron at Oakey Army Aviation Centre in Queensland, Australia; a lead-in fighter training squadron based in Cazaux, France; a F-16 operational conversion unit at Luke Air Force Base in Arizona;<sup>28</sup> an AH-64D Apache helicopter operational conversion unit at Silverbell Army Heliport, also in Arizona;<sup>29</sup> a F-15SG Eagle operational conversion unit at Mountain Home Air Force Base in Idaho;<sup>30</sup> and a CH-47D Chinook helicopter operational conversion unit at Grand Prairie, Texas.<sup>31</sup> These forces in effect also represent a dispersal of air forces, theoretically permitting a second-strike capability for home defense.

Singapore also constructed a purpose-built naval base that can berth the largest aircraft carriers in the U.S. Navy. It is now a de facto operating base for the U.S. Seventh Fleet. In 2012, the U.S. Navy deployed its latest littoral combat ship, the USS *Freedom* (LCS-1), to Singapore as part of a long-term commitment to forward deploy this capability. These security arrangements with the United States are both manifestations and anchors of the strategic partnership that Singapore enjoys with the world's reigning superpower. Such a relationship augments its own capabilities to provide a continuing unassailable self-defense position.

Despite heavy spending on defense, Singapore still enjoys a healthy fiscal position, and the government's coffers continue to grow. As Table 2 in Annex A shows, the nation's book has been mainly positive over the years, save for a dip experienced in FY2009 in the aftermath of the worldwide financial crisis.

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<sup>28</sup> Flying badged as 425<sup>th</sup> Fighter Squadron in the U.S. Air Force.

<sup>29</sup> Flying badged as 1-285<sup>th</sup> Army Aviation Unit in the U.S. Army.

<sup>30</sup> Flying badged as the 428<sup>th</sup> Fighter Squadron in the U.S. Air Force.

<sup>31</sup> Flying badged as the 149<sup>th</sup> Aviation Unit in the U.S. Army.

## VII. National Strategy

Singapore has managed to keep its defense spending at such high levels without compromising its fiscal soundness or resorting to punishing taxation. Indeed, quite the reverse: In 2012, Singapore was ranked the best country for doing business for the seventh year in a row.<sup>32</sup> One of the strategies adopted by the government is to maintain a competitive tax environment for both companies and individuals. According to KPMG's Individual Income Tax and Social Security Rate Survey 2012,<sup>33</sup> Singapore has one of the lowest personal income taxes in the world: the effective income tax rate for someone earning \$100,000 annually is less than 7 percent (Figure 7). Similarly, the corporate tax rate it levies is also among the most competitive, at 17 percent (Figure 8). Its Goods and Services Tax or Value-Added Tax, another important component of the tax system, is also among the lowest at 7 percent (Figure 9).

That leaves the question: What is the balancing factor in the equation? The answer: sovereign wealth funds. Examining the national accounts, one might be intrigued by a special revenue line item labeled "Net Investment Income (NII) / Net Investment Return (NIR) Contribution." This line item refers to financial returns generated by the SWFs.

Under Article 142(1A)(b) of the Constitution of the Republic of Singapore, the government is able to use up to 50 percent of the net investment return—the sum of: (1) the long-term expected real rate of return on the reserves invested by GIC and MAS, and (2) the net

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<sup>32</sup> "Doing Business 2013 – Smarter Regulations for Small and Medium-Size Enterprises," World Bank and the International Finance Corporation, 23 Oct 2012, <http://www.doingbusiness.org/reports/global-reports/doing-business-2013>

<sup>33</sup> KPMG International, "KPMG's Individual Income Tax and Social Security Rate Survey 2012," October 2012, [www.kpmg.com](http://www.kpmg.com).

investment income on the remaining assets, comprising primarily Temasek—to supplement its spending in the annual budget.<sup>34</sup>

The contribution of this item is nontrivial. Between FY2007 and 2012, it helped cover 7–17 percent of combined operating and development expenditure (Figure 10). In fact, without the contributions by the three stewards, the nation’s budget would have slipped into the red zone starting in FY2008 (Table 3). Further, without NIR contributions, the government would find it difficult to finance its social programs to share the benefits of economic growth with residents, especially for those in the lower income brackets.

Fully 75 percent of Singapore’s GDP is derived from exports, leaving the country acutely sensitive to global macroeconomic events. The global financial crisis of 2008–2009 threatened to undermine the health of the entire world’s economy. Singapore, as both a financial center and a small, open-export-oriented economy, quickly registered negative effects. However, during the peak of the crisis in late 2008 when the lending market froze and Lehman Brothers failed, the Singapore government announced that it would guarantee all Singapore dollar and foreign currency deposits of individual and non-bank customers in licensed banks, finance companies, and merchant banks. This was backed by US\$120 billion in reserves.<sup>35</sup> Signs of economic slowdown were still apparent, with the economy contracting 10 percent in the first quarter of FY2009 alone. In light of the severe strain on the economy, the government also introduced a US\$12 billion “resilience package” as a countermeasure. Key points included a jobs credit program to assist businesses with wages and a special risk-sharing initiative aimed at stimulating bank lending. The availability of the reserves allowed the government to take prompt and decisive action in a time of extreme crisis. This was not the first time that reserves had come in handy. One reason that Singapore was able to

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<sup>34</sup> *Constitution of the Republic of Singapore*, <http://app.agc.gov.sg/>.

<sup>35</sup> Joint Press Statement by Singapore’s Ministry of Finance and Monetary Authority of Singapore, 16 October 2008.

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weather the Asian financial crisis of 1997–1998 better than its neighbors was the existence of its significant reserves. This deterred the kind of speculative attacks on its currency that bedeviled its neighbors in ASEAN, the Association of Southeast Asian Nations, including Thailand and Malaysia.<sup>36</sup>

Singapore’s financial and economic strength is enhanced by the agency of its sovereign wealth funds. The investments made through them permit Singapore to extend its economic footprint beyond its limited land space. In doing so, it not only increases its financial and economic performance but also uses the SWF investments as a hedge against asynchronous performance at regional or sectoral levels. This helps to dampen the sensitivity of such an open economy to macroeconomic events such as the Asian and global financial crises.

Singapore’s political, economic, and financial performance has also underwritten its participation in leading international forums. Singapore was one of the key participants that helped developed the Santiago Principles, a set of voluntary principles and practices governing SWFs. In 2011, Singapore’s Deputy Prime Minister and Minister for Finance Tharman Shanmugaratnam was appointed the first Asian chair of the International Monetary and Financial Committee. Singapore has enjoyed observer status in the G-20 for several years. It continues to play a leading role in ASEAN and in the Asia-Pacific Economic Cooperation. It has also had the distinction of serving a term as president of the Security Council of the United Nations. In 2012, Singapore, unusually for an equatorial country, was granted permanent observer status in the Arctic Council.

While physically a small nation, Singapore is treated as a heavyweight by the international community. This reflects the nation’s

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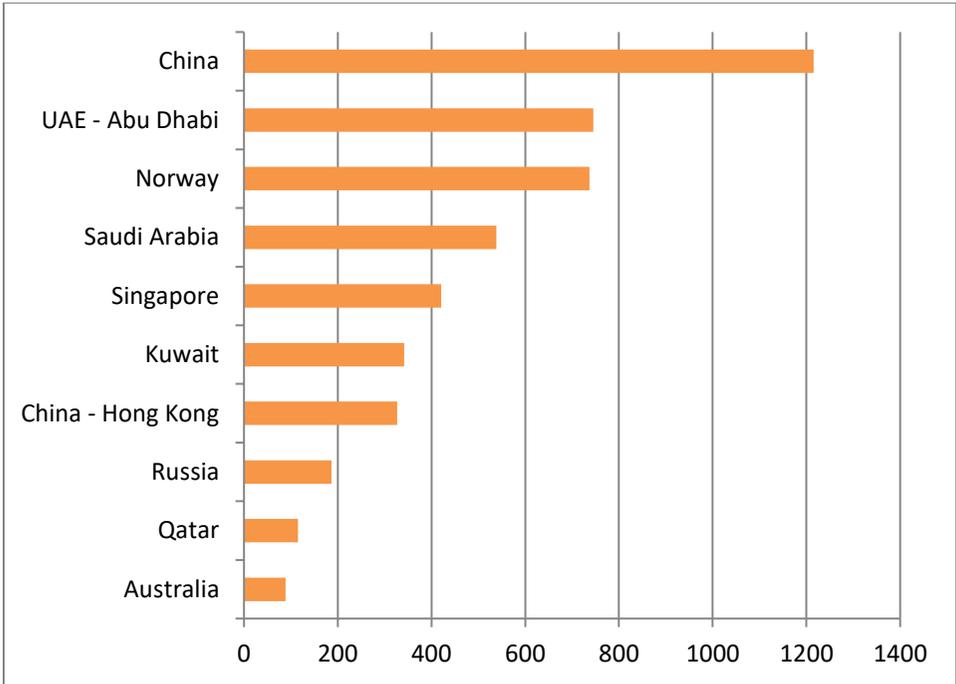
<sup>36</sup> Maria Delfina Alcaide Garrido, “Government and External Risk Mitigation: Why Was Singapore Less Affected by the Asian Financial Crisis than its Southeast Asian Neighbours?” Working Paper Series, No. 05-54, Development Studies Institute, London School of Economic and Political Science, Feb 2005.

systemic approach to national strategy. It takes a multidimensional model—political, economic, financial, and military—with each dimension having reinforcing consequences on all others. Singapore has used its SWFs strategically to make up for its natural limitations in size and population, to complement its economic and financial performance, to supplement its fiscal policy needs, and by extension to permit the nation to afford a technologically superior military and forge politically strong ties with strategic allies.

Many lessons about the operation of SWFs are to be drawn from the Singapore experience, especially the need to clearly orient SWFs toward serving national interests, the advantages of taking a long-term approach to investing, and the benefits of adopting a portfolio of risk management. Ultimately, however, SWFs can be no more than tools of national strategy. The strategy itself and the national interests they serve remain the preserve and the responsibility of political leadership. Only a confident, responsible, and competent political leadership can adequately define national interests and have the discipline to steward national resources in their service.

## **Annex A: Figures and Tables**

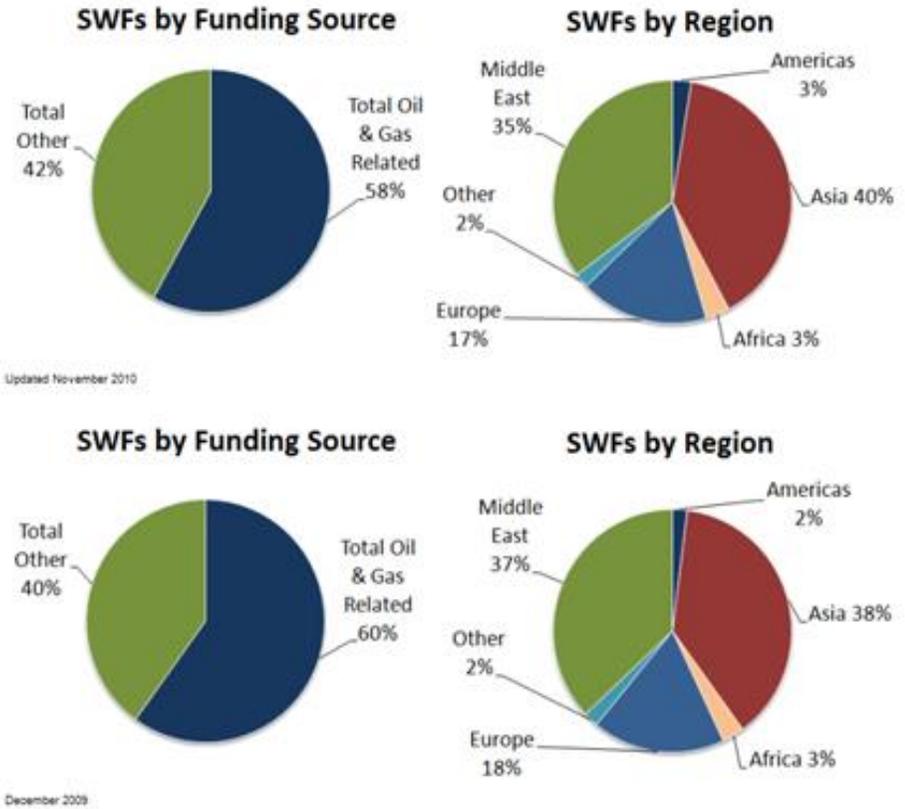
**Figure 1: Top 10 Sovereign Wealth Funds (in US\$ Billion)**<sup>37</sup>



<sup>37</sup> Source: SWF Institute, July 2013



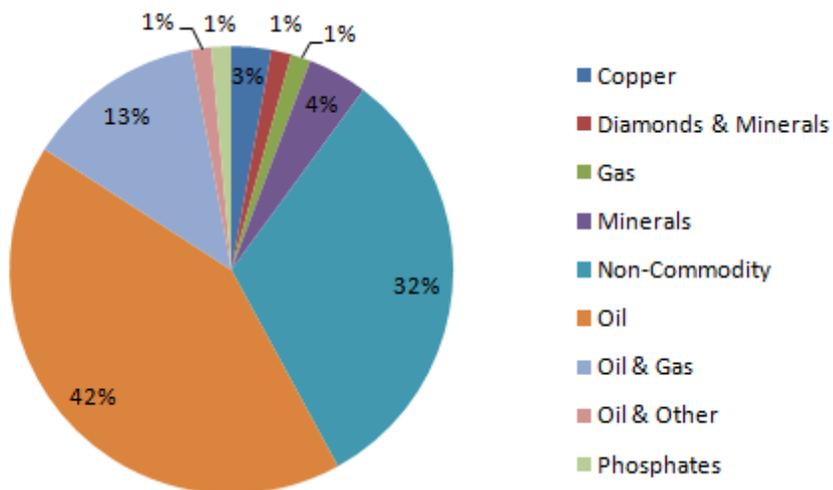
**Figure 3: Sovereign Wealth Funds by Funding Source and Region<sup>39</sup>**



<sup>39</sup> Source: SWF Institute

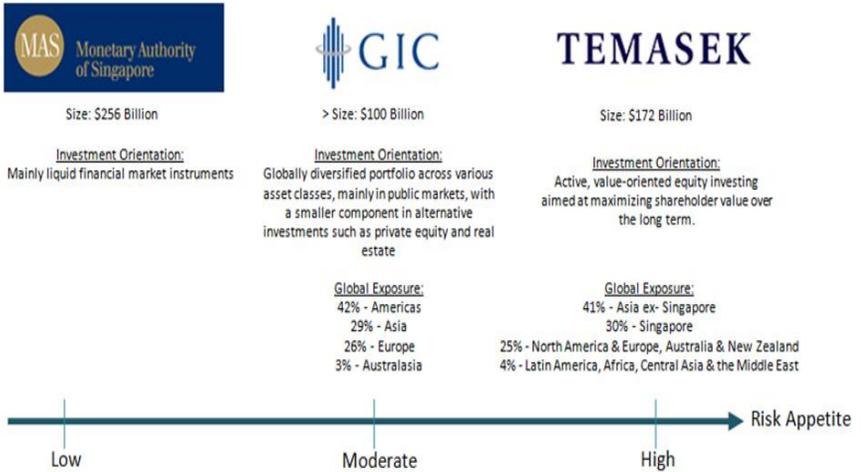
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Based on data updated July 2013:



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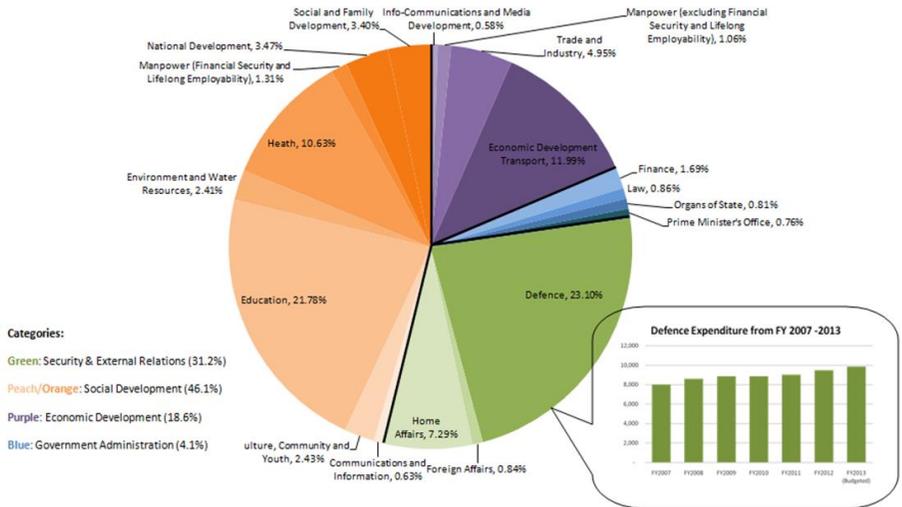
**Figure 4: Stewards of Singapore’s Reserves<sup>40</sup>**



<sup>40</sup> Source: Ministry of Finance (Our Nation’s Reserves), Temasek Holdings, and Government of Singapore Investment Corporation Pte Ltd websites

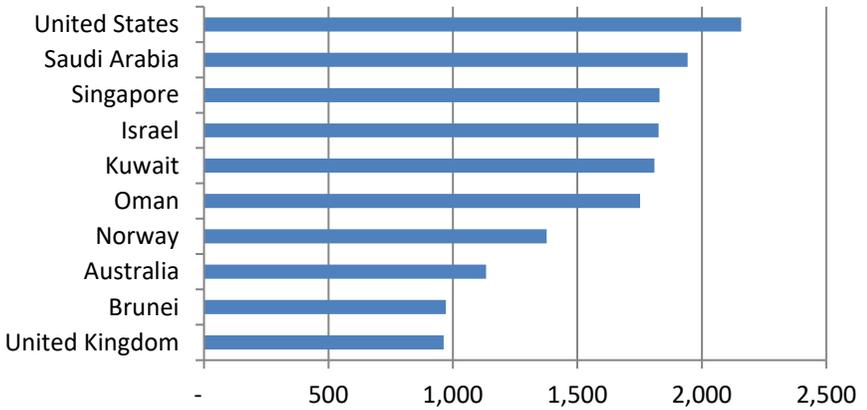
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**Figure 5: Expenditure by the Government of Singapore for FY2013 (by Sector)<sup>41</sup>**



<sup>41</sup>“Budget Highlights: Financial Year 2013,” Singapore Budget 2013, Singapore Government, 25 February 2013, p. 18.

**Figure 6: Military Expenditure Per Capita by Country, 2012, in US\$<sup>42</sup>**

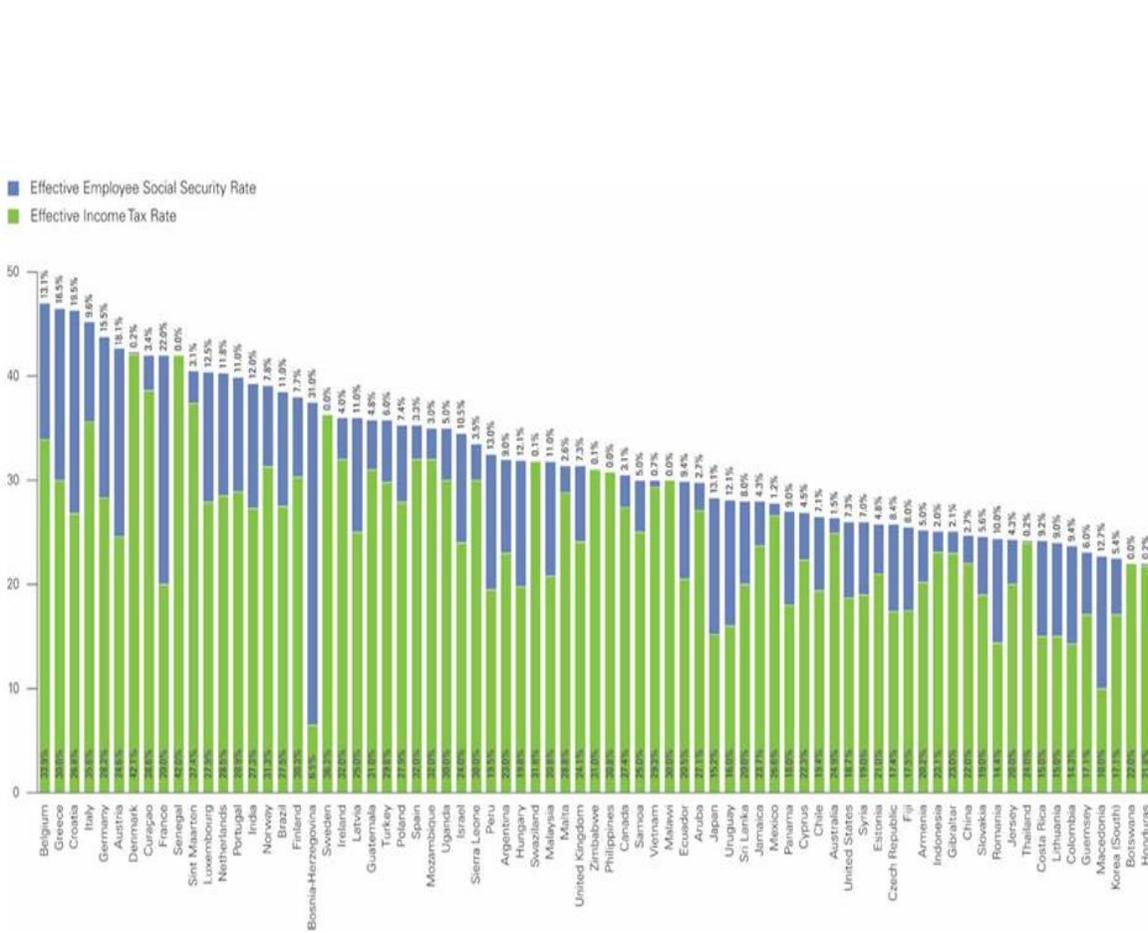


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<sup>42</sup> Sources: (1) Military expenditure numbers from Military Expenditure Database, Stockholm International Peace Research Institute (SIPRI); (2) Country population figures from respective countries' official census or estimates.

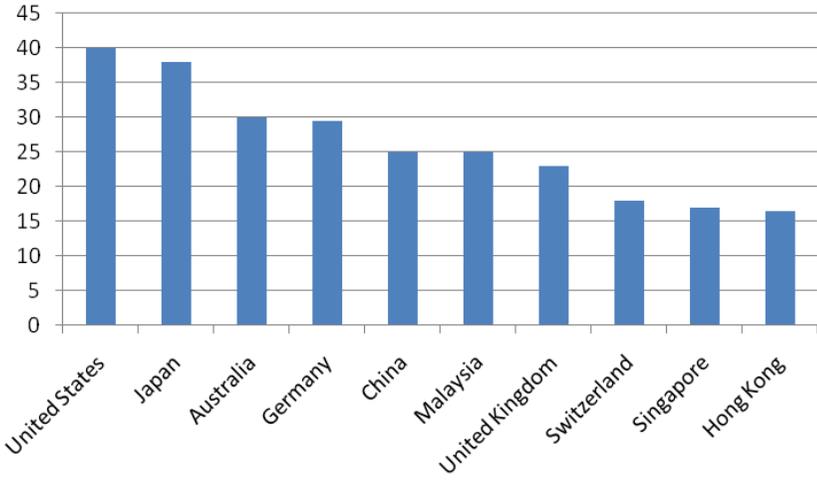
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**Figure 7: Effective Income Tax and Social Security Rates on US\$100,000 of Gross Income<sup>43</sup>**



<sup>43</sup> “KPMG’s Individual Income Tax and Social Security Rate Survey 2012,” KPMG International, www.kpmg.com.

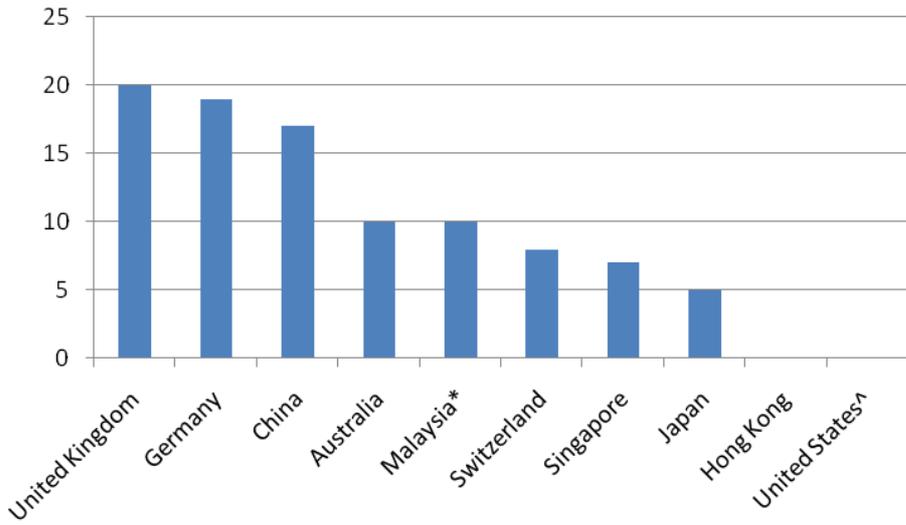
**Figure 8: Corporate Tax Rates of Selected Countries 2013<sup>44</sup>**



Location	2006	2007	2008	2009	2010	2011
Hong Kong	17.5	17.5	16.5	16.5	16.5	16.5
Singapore	20	20	18	18	17	17
Switzerland	21.23	20.63	19.21	18.96	18.75	18.31
United Kingdom	30	30	30	28	28	26
China	33	33	25	25	25	25
Malaysia	28	27	26	25	25	25
Germany	38.34	38.36	29.51	29.44	29.41	29.37
Australia	30	30	30	30	30	30
Japan	40.69	40.69	40.69	40.69	40.69	40.69
United States	40	40	40	40	40	40

<sup>44</sup>Corporate Tax Rates Table, KPMG International, 2013

**Figure 9: Indirect Tax Rates of Selected Countries, 2013<sup>45</sup>**



\* VAT or GST has been proposed but the implementation has been postponed. In its place, Malaysia has sales tax and service tax. Sales tax is imposed on taxable goods manufactured locally/imported, unless exempted. The standard rate of sales tax is 10 percent.... Service tax is charged on specific types of services (taxable services) provided by taxable persons. The rate of service tax is 6 percent.<sup>46</sup>

^ While the U.S. does not impose a national VAT, most states, and some local governments impose transactional based taxes commonly referred to as sales and use taxes. ... The state and local tax sales tax rate in the US may range from 4 percent to 11 percent.<sup>47</sup>

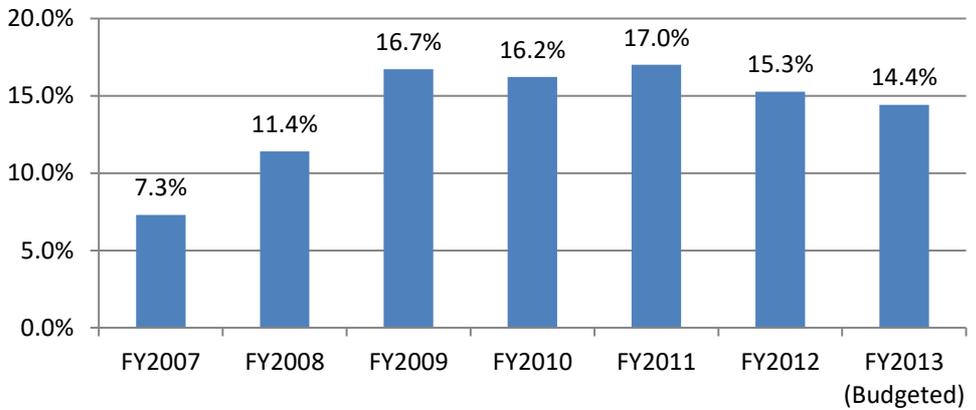
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<sup>45</sup> Indirect Tax Rates Table, KPMG International, 2013, <http://www.kpmg.com/global/en/services/tax/tax-tools-and-resources/pages/indirect-tax-rates-table.aspx>

<sup>46</sup> Ibid.

<sup>47</sup> Ibid.

**Figure 10: Percentage of Net Investment Returns Contribution (NIRC) Over Total Expenditure (Excludes Special Transfers)<sup>48</sup>**



<sup>48</sup> Source: “Budget Highlights, Financial Year 2013,” Singapore Government, 25 February 2013, <http://www.news.gov.sg/public/sgpc/en>

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**Table 1: The 5 Largest Importers of Major Conventional Weapons and Their Major Suppliers, 2008-2012<sup>49</sup>**

Importer	Share of international arms imports (%)		Main suppliers (share of importer's total imports), 2008–12		
	2008–12	2003–2007	1st	2nd	3rd
India	12	9	Russia (79%)	United Kingdom (6%)	Uzbekistan (4%)
China	6	12	Russia (69%)	France (13%)	Ukraine (10%)
Pakistan	5	2	China (50%)	United States (27%)	Sweden (5%)
South Korea	5	5	United States (77%)	Germany (15%)	France (5%)
Singapore	4	1	United States (44%)	France (30%)	Germany (11%)

<sup>49</sup> Source: “Trends in International Arms Transfers, 2012,” Stockholm International Peace Research Institute (SIPRI) Fact Sheet, March 2013.

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**Table 2: Singapore's Overall Fiscal Position for FY2007 to FY2013 (\$ million)<sup>44</sup>**

	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>	<b>FY2010</b>	<b>FY2011</b>
<b>Operating Revenue</b>	<b>32,300</b>	<b>32,869</b>	<b>31,638</b>	<b>36,848</b>	<b>40,862</b>
Tax Revenue	29,304	30,167	29,294	33,478	36,861
Fees and Charges	2,904	2,570	2,212	3,189	3,759
Others	92	132	132	181	242
<b>Total Expenditure</b>	<b>26,386</b>	<b>30,473</b>	<b>33,513</b>	<b>36,270</b>	<b>37,250</b>
Operating Expenditure	20,762	22,987	24,727	26,616	28,120
Development Expenditure <sup>1</sup>	5,624	7,486	8,786	9,654	9,130
<b>Primary Surplus / Deficit</b>	<b>5,914</b>	<b>2,397</b>	<b>-1,875</b>	<b>578</b>	<b>3,611</b>
<b>Special Transfers <sup>2</sup></b>	<b>1,714</b>	<b>5,679</b>	<b>4,385</b>	<b>5,676</b>	<b>6,742</b>
Special Transfers Excluding Top-ups to Endowment and Trust Funds	1,074	3,271	3,257	1,204	2,327
<b>Basic Surplus / Deficit <sup>3</sup></b>	<b>4,841</b>	<b>-874</b>	<b>-5,133</b>	<b>-626</b>	<b>1,284</b>
Top-ups to Endowment and Trust Funds	640	2,408	1,128	4,472	4,414
<b>Net Investment Income (NII) / Net Investment Return (NIR) Contribution <sup>4</sup></b>	<b>1,924</b>	<b>3,474</b>	<b>5,605</b>	<b>5,882</b>	<b>6,333</b>
<b>Overall Budget Surplus / Deficit</b>	<b>6,125</b>	<b>191</b>	<b>-655</b>	<b>784</b>	<b>3,202</b>

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**Table 2, cont'd.**

*Note: Figures have been converted to USD using the exchange rate US\$1 = S\$1.25.*

	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>
<b>Operating Revenue</b>	<b>14.8%</b>	<b>15.6%</b>	<b>14.0%</b>	<b>14.5%</b>	<b>15.5%</b>	<b>16.1%</b>
Tax Revenue	13.4%	14.3%	13.0%	13.2%	14.0%	14.4%
Fees and Charges	1.3%	1.2%	1.0%	1.3%	1.4%	1.6%
Others	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Total Expenditure</b>	<b>12.1%</b>	<b>14.5%</b>	<b>14.9%</b>	<b>14.3%</b>	<b>14.1%</b>	<b>14.6%</b>
Operating Expenditure	9.5%	10.9%	11.0%	10.5%	10.7%	10.8%
Development Expenditure <sup>1</sup>	2.6%	3.6%	3.9%	3.8%	3.5%	3.8%
<b>Primary Surplus / Deficit</b>	<b>2.7%</b>	<b>1.1%</b>	<b>-0.8%</b>	<b>0.2%</b>	<b>1.4%</b>	<b>1.5%</b>
<b>Special Transfers <sup>2</sup></b>	<b>0.8%</b>	<b>2.7%</b>	<b>1.9%</b>	<b>2.2%</b>	<b>2.6%</b>	<b>2.6%</b>
Special Transfers Excluding Top-ups to Endowment and Trust Funds	0.5%	1.6%	1.4%	0.5%	0.9%	0.4%
<b>Basic Surplus / Deficit <sup>3</sup></b>	<b>2.2%</b>	<b>-0.4%</b>	<b>-2.3%</b>	<b>-0.2%</b>	<b>0.5%</b>	<b>1.1%</b>
Top-ups to Endowment and Trust Funds	0.3%	1.1%	0.5%	1.8%	1.7%	2.2%
<b>Net Investment Income (NII) / Net Investment Return (NIR) Contribution <sup>4</sup></b>	<b>0.9%</b>	<b>1.6%</b>	<b>2.5%</b>	<b>2.3%</b>	<b>2.4%</b>	<b>2.2%</b>
<b>Overall Budget Surplus / Deficit</b>	<b>2.8%</b>	<b>0.1%</b>	<b>-0.3%</b>	<b>0.3%</b>	<b>1.2%</b>	<b>1.1%</b>

<sup>1</sup> Development Expenditure excludes land-related expenditure.

<sup>2</sup> Special Transfers include Top-ups to Endowment and Trust Funds.

<sup>3</sup> Surplus/Deficit before Top-ups to Endowment and Trust Funds and Net Investment Income>Returns Contribution.

<sup>4</sup> Prior to FY2009, up to 50 percent of Net Investment Income (NII) could be taken into the annual budget for spending. In effect from FY2009, under the Net

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Investment Returns (NIR) framework, up to 50 percent of the expected long-term real rate of returns on the relevant assets specified in the constitution can be taken in for spending. For the other assets, up to 50 percent of the net investment income can continue to be used for spending in the annual budget.

<sup>49</sup> Source: "Budget Highlights, Financial Year 2013," Singapore Government, 25 February 2013.

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**Table 3: Singapore's Overall Fiscal Position for FY2007 to FY2013 (\$ million) (Items Rearranged)**

	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013 (Budgeted)
Operating Revenue	32,300	32,869	31,638	36,848	40,862	44,142	44,022
Less: Total Expenditure	26,386	30,473	33,513	36,270	37,250	40,084	42,728
Primary Surplus / Deficit	5,914	2,397	-1,875	578	3,611	4,058	1,294
Less: Special Transfers	1,714	5,679	4,385	5,676	6,742	7,094	5,517
<b>Overall Budget Surplus / Deficit (before NII/ NIR Contribution)</b>	<b>4,201</b>	<b>-3,282</b>	<b>-6,260</b>	<b>-5,098</b>	<b>-3,130</b>	<b>-3,035</b>	<b>-4,222</b>
<b>Net Investment Income (NII) / Net Investment Return (NIR) Contribution</b>	<b>1,924</b>	<b>3,474</b>	<b>5,605</b>	<b>5,882</b>	<b>6,333</b>	<b>6,122</b>	<b>6,162</b>
<b>Overall Budget Surplus / Deficit</b>	<b>6,125</b>	<b>191</b>	<b>-655</b>	<b>784</b>	<b>3,202</b>	<b>3,086</b>	<b>1,940</b>

## **Annex B: Bibliography**

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Abstract: Singapore fell to Japan on 15 February 1942 ... The Occupation would last three and a half years, until the return of the British in September 1945. How is this period remembered? And how have individuals, communities, and states shaped and reshaped memories in the postwar era? ... This volume provides a forum for previously marginalized and self-censored voices, using the stories they relate to reflect on the nature of conflict and memory.

Farrell, Brian P. *The Defence and Fall of Singapore 1940-1942*. Tempus Pub Ltd, 2005.

Abstract: Shortly after midnight on December 8, 1941, two divisions of troops of the Imperial Japanese Army began a seaborne invasion of southern Thailand and northern Malaya ... Based on the most extensive use yet of primary documents in Britain, Japan, Australia, and Singapore, Brian Farrell provides the fullest picture of how and why Singapore fell and its real significance to the outcome of the Second World War.

Nagl, John A. *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam*. University of Chicago Press, 2005.

Abstract: John A. Nagl—a veteran of both Operation Desert Storm and the conflict in Iraq—considers the now-crucial question of how armies adapt to changing circumstances during the course of conflicts for which they are initially unprepared. Through the use of archival sources and interviews with participants in both engagements, Nagl compares the development of counterinsurgency doctrine and practice in the Malayan Emergency from 1948 to 1960 with what developed in the Vietnam War from 1950 to 1975.

Turnbull, C. M. *A History of Modern Singapore*. NUS Press, 2010.

Abstract: When C.M. Turnbull's *A History of Singapore, 1819-1975* appeared in 1977, it quickly achieved recognition as the definitive history of Singapore. A second edition published in 1989 brought the story up to the elections held in 1988. In this fully revised edition, rewritten to take into account recent scholarship on Singapore, the author has added a chapter on Goh Chok Tong's premiership (1990-2004) and the transition to a government headed by Lee Hsien Loong. The book now ends in 2005, when the Republic of Singapore celebrated its 40th anniversary as an independent nation.

## General Reading on Sovereign Wealth Funds

Bernstein, Shai, Josh Lerner and Antoinette Schoar. "The Investment Strategies of Sovereign Wealth Funds." *The Journal of Economic Perspectives*, Vol. 27, No. 2 (Spring 2013), pp. 219-237.

Abstract: Sovereign wealth funds have emerged as major investors in corporate and real resources worldwide. After an overview of their magnitude, we consider the institutional arrangements under which many of the sovereign wealth funds operate.

Clark, Gordon L, Adam D. Dixon, and Ashby Monk. *Sovereign Wealth Funds: Legitimacy, Governance, and Global Power*. Princeton University Press, 2013.

Cohen, Benjamin J. "Sovereign Wealth Funds and National Security: The Great Tradeoff." *International Affairs (Royal Institute of International Affairs 1944-)*, Vol. 85, No. 4 (Jul. 2009), pp. 713-731.

Abstract: One of the most striking financial developments in recent years is the emergence of sovereign wealth funds (SWFs)—large publicly owned investment portfolios, which are growing rapidly in both number and size. In a global environment already roiled by a prolonged credit crisis, SWFs raise tricky and potentially controversial new questions for international financial regulation. One issue of concern to many in host countries is the possibility that some SWFs might be used for overt or tacit political purposes, posing a

challenge for global monetary governance: a Great Tradeoff between the world community's collective interest in sustaining the openness of capital markets and the legitimate national security concerns of individual host countries. Can some balance between the two be found that will be both stable and acceptable to all concerned?

Baghat, Gawdat. "Sovereign Wealth Funds: Dangers and Opportunities." *International Affairs (Royal Institute of International Affairs 1944-)*, Vol. 84, No. 6 (Nov. 2008), pp. 1189-1204.

Abstract: Soaring oil prices since the early 2000s have led to a historic transformation of wealth from consuming regions to major oil exporters. In recent years many of these exporters have set up oil funds to utilize their massive and growing oil revenues. These funds are divided into two categories—stabilizing and saving. Their large investments in western markets have raised concerns that they might be driven by political and strategic interests rather than commercial ones. This article examines oil funds in the Persian Gulf, Norway, and Russia. It discusses U.S. and European proposals to regulate oil funds' investments. The article examines the International Monetary Fund's efforts to forge a consensus on a "code of conduct" that would guide the relationship between oil funds and the recipient markets. The analysis argues against excessive regulation.

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