Note on stabilization / wealth funds:

a case study analysis

April 2018

Prepared by the World Bank staff

WORLD BANK GROUP
Macroeconomics, Trade & Investment

Note on stabilization/wealth funds – a case study analysis[1]

I) Introduction

1. This note presents case study examples of sovereign wealth funds (SWF) in different countries. In that respect, this note provides information about the objectives of establishment of the SWF, their governance and ownership structure, the sources of funding and the rules of withdrawal of resources. The note focuses on sovereign wealth funds because they have gained importance since 2009 due to the Global Financial Crisis and increased fiscal and macro-volatility. This can also be relevant for the Southern African Customs Union (SACU) member countries because establishing a Regional Stabilization Fund can be an important factor for stabilizing the fiscal volatility to SACU receipts, especially for countries where they constitute substantial part of total government revenues. While the reviewed SWF experiences are not at regional level, however, there are valuable lessons that SACU Member States can draw while pursuing the establishment of a Stabilization Fund.

2. According to the International Group of Sovereign Wealth Funds, SWF can be defined as special purpose investment funds or arrangements that are owned by the government mainly for macroeconomic purposes. In that respect, SWF hold, manage, or administer assets to achieve financial objectives and employ a set of investment strategies. They have diverse legal, institutional, governance structure and have different rules for deposit and withdrawal of resources. Many SWF follow the voluntarily established general principles for SWF called Santiago Principles, presented in Box 1.

3. SWF represent a diversified group of funds that include fiscal stabilization funds, savings funds, reserve investment corporations and development funds. SWF are usually established to serve two main objectives. The first objective is usually a short-term and the aim is stabilization of government budget and ultimately the economy, by reducing the impact of the volatile government revenues. The second objective is a long-term, and the aim is to create a store of wealth for the future generations. The funds are created in order to put away some resources, to gradually build up a store of wealth so the future generations might benefit from part of the proceeds of the nonrenewable natural resources extracted, or any other sources of funding. In that direction, the wealth funds have an ancillary aim to reduce the reliance of the budget on a particularly volatile source of receipts.

[1] This note was prepared as part of the ongoing collaboration between the World Bank and the Southern African Customs Union (SACU) Secretariat, following an initial engagement between the two institutions on the Review of the SACU Revenue Sharing Arrangement in a workshop held in 19-20 October 2017 in Johannesburg, South Africa. This note was prepared by Jane Bogoev (Economist, Macroeconomics, Trade and Investment, World Bank). It benefited from comments and suggestions from Donald S. Ndwandwe (Deputy Director, Revenue Management, SACU Secretariat), Sebastien Dessus (Program Leader, Equitable Growth, Finance and Institutions, World Bank) and overall guidance from Mathew Verghis (Practice Manager, Macroeconomics, Trade and Investment, World Bank). Views reflected in this note do not necessarily reflect that of the Executive Directors of the World Bank Board, or of the countries they represent.

Box 1: The Santiago Principles for Sovereign Wealth Funds[2]

In 2008, the International Working Group of Sovereign Wealth Funds, facilitated and coordinated by the IMF, agreed on 24 voluntary "best practice" principles for managing the SWFs, known as the Santiago Principles. These Principles have been signed by 26 countries[3] on voluntary basis and reflect their investment practices and objectives.

The Santiago Principles provide a framework of generally accepted principles and practices that reflect both appropriate governance and accountability arrangements and prudent and sound investment practices. Their implementation is voluntary and subject to the laws of signatories being made compatible with the principles and the rationale guiding SWF activities is solely based on economic interest.

The Santiago Principles cover three main areas:

- Legal framework, objectives, and coordination with macroeconomic policies;
- Institutional framework and governance structure;
- Investment and risk management framework.

The principles have four guiding objectives:

- To help maintain a stable global financial system and free flow of capital and investment;
- To comply with all applicable regulatory and disclosure requirements in the countries in which they invest;
- To invest on the basis of economic and financial risk and return-related considerations;
- To have in place a transparent and sound governance structure that provides for adequate operational controls, risk management, and accountability.

4. The selection of the case study analysis of the SWF in this note is done according to their major sources of funding. In that respect, this note includes case study examples of SWF that are funded mostly from government revenues from non-renewable natural resources like oil and minerals. An example of this type of funds are described in: Botswana, Chile, Mongolia and Norway.

5. Another type of funds are those that are funded on sources that do not depend on exports or production on non-renewable natural resources. An example of this type of funds are described in Singapore and South Korea.

[2] Based on: IWG Sovereign Wealth Funds: Generally Accepted Principles and Practices "Santiago Principles", October 2008; and IMF Macroeconomic Policy Frameworks for Resource Rich Countries – Background Paper 1 – Supplement 1, August 2012.

[3] Australia, Azerbaijan, Bahrain, Botswana, Canada, Chile, China, Equatorial Guinea, Republic of Iran, Ireland, Korea, Kuwait, Libya, Mexico, New Zealand, Norway, Qatar, Russia, Singapore, Timor-Leste, Trinidad and Tobago, the United Arab Emirates, and the United States. Oman, Saudi Arabia, Vietnam, the OECD, and the World Bank are permanent observers.

6. A third stream of funds are those that are funded moistly by donors and their stream of revenues does not depend much on the country's own revenues generated from production or exports of renewable and non-renewable resources. An example where these types of funds are established are the small Pacific island states such as: Republic of Marshall Islands, Federal States of Micronesia and Tuvalu.

7. A fourth stream of SWF analyzed in this note, are the so-called development wealth funds. These types of funds are established with a main objective to boost the national or regional development of specific areas that are seen strategically important for the long-term development. An example of these types of funds is provided for the case of Singapore.

8. The remaining part of this note presents the country examples of the SWFs, grouped according to their sources of funding, described previously: *II)* funds that depend on revenues created by production and exports of non-renewable natural resources; *III)* funds that are funded from other sources than non-renewable natural resources; *IV)* funds that are funded from donor countries and *V)* development wealth funds. The final section of this note presents a summary of the main issues that need to be considered in establishing a stabilization/wealth fund.

II) Country examples: SWF based on incomes from non-renewable natural resources

Botswana – the Pula Fund[4]

- **Year of establishment**

9. The Pula Fund was established in 1994 by the 1975 Bank of Botswana (BoB) Act.

- **Objectives of the fund**

10. It serves as a savings and short-term stabilization fund. The main objective of the Fund is to preserve part of the income created by diamond exports for the benefit of the future generations. The second objective of the Fund is to provide short-term stabilization function to the government budget and the foreign reserves when the economy and/or mineral prices are facing downfalls.

- **Governance of the fund**

11. The Pula Fund does not have a separate legal status. It consists of two accounts: the first account is owned by the BoB and includes the excess foreign reserves above the reserve adequacy target. The second account is the Government Investment Account owned by the Ministry of Finance and Development Planning (MFDP), on which the transfers from the government are made.

12. The Pula Fund is managed by the Board of the BoB, with consultations with the MFDP that has a representative in the Board of BoB. The Board of the BoB determines the general policies, terms and conditions for any long-term investments, including the selection of appropriate investments and the dividends payable to the Government Investment Account. However, the Board of the BoB needs to consult

[4] Sources: IMF Macroeconomic Policy Frameworks for Resource Rich Countries – Background Paper 1 – Supplement 1, August 2012 and Case Study: Botswana's Management of the Pula Fund Observance of the Santiago Principles, Bank of Botswana.

the MFDP for those strategic decisions due to the mixed ownership of the Pula Fund between the two institutions.

- **Sources of funding and deposit rules**

13. There are two concurrent deposit rules for the Pula Fund. The first one is determined by the Bank of Botswana that transfers part of the foreign reserves that are in excess of what is needed for the reserves adequacy target, which is six months of imports coverage. For example, when the import coverage of foreign reserves exceeds the reserve adequacy target by more than three months, then the excess foreign reserves are transferred to the Pula Fund on the account owned by the BoB.

14. The second deposit rule is determined by the Government of Botswana that transfers assets to the Government Investment Account in the case when there is a budget surplus. The amount of transfer of funds from the budget surplus is determined at the discretion of the MFDP.

- **Withdrawal rules**

15. Similar as with the deposit rules, there are two concurrent withdrawal rules related with the BoB and the MFDP. The BoB may withdraw funds from the Pula Fund and transfer to the foreign reserves account in the case when the level of the foreign reserves coverage, excluding the Pula Fund, falls below the reserve adequacy target by more than three months of import coverage.

16. The Government can withdraw resources from the Pula Fund to finance the budget up to its ownership share of the Pula Fund, represented by the Government Investment Account. The Government applies a qualitative approach where any withdrawals from the Pula fund are discussed between the national authorities and should be agreed in the context of prevailing fiscal conditions, rather than predefined numerical trigger points for withdrawals or deposits. The Pula Fund cannot be used for any quasi fiscal/off-budget operations to finance investments, or to purchase goods and services outside the government budget framework. Furthermore, the Government may also withdraw resources from the Pula Fund for productive investments in the country in order to pursue agreed national development objectives.

Chile - the Economic and Social Stabilization Fund (ESSF)[5]

- **Year of establishment**

17. The ESSF was established with the Fiscal Responsibility Law of 2006. The ESSF is a successor of the former Copper Stabilization Fund created in 1985.

- **Objectives of the fund**

[5] Sources: Annual Report Sovereign Wealth Funds, Ministry of Finance Chile, 2016 and IMF Macroeconomic Policy Frameworks for Resource Rich Countries – Background Paper 1 – Supplement 1, August 2012.

18. The main objective of the Fund is to stabilize the fiscal spending across economic cycles when copper prices and production are low. The assets of the ESSF can also be used for regular contributions to the Pension Reserve Fund (PRF) and to finance payments of the public debt.

- **Governance of the fund**

19. The ESSF does not have a separate legal status and is a property of the General Treasury of Chile. The Finance Minister is authorized to make decisions about the management of the fund's resource and their investment. In particular, the Minister of Finance can specify the eligible assets for investment, strategic portfolio allocation and define the benchmarks for performance evaluation, investment limits and restrictions to control the risk exposure. The assets from the fund are invested exclusively abroad.

20. The Minister of Finance also has the authority to decide whether the operational management of the ESSF will be carried out by the Central Bank of Chile, the Treasury or other external managers. For example, the Central Bank of Chile can serve as a fiscal agent of the Ministry of Finance and can manage the portfolios of the ESSF by complying with the investment guidelines established by the Ministry of Finance. In addition, the Central Bank of Chile can also delegate part of the fund's investment portfolio to external portfolio managers under the established investment guidelines by the Ministry of Finance and under Bank's supervision.

21. In addition, there is also an external advisory board called Financial Committee composed of independent experts with objective to advise the Minister of Finance on the long-term investment policy of the sovereign wealth funds and on various other issues related to the sovereign wealth funds.

- **Sources of funding and deposit rules**

22. The ESSF is funded by receiving the remaining amount of the effective fiscal surplus. The effective fiscal surplus is the fiscal surplus, after subtracting the contributions to the PRF, amortization of the public debt and estimated advanced contributions to the ESSF (if any) that were done in the previous fiscal year and were not materialized yet.

- **Withdrawal rules**

23. The resources from the ESSF can be used at any time in order to finance authorized public expenditures when there is a fiscal deficit, but the magnitude of withdrawal is limited by the structural balance rule. The structural balance rule limits the maximum amount of withdrawal of resources from the ESSF up to the estimated structural balance deficit that is set as a medium-term objective by the government. The structural balance is based on the structural budget revenues that remove the volatility component of the GDP growth and copper prices by using their long-term trend values. For example, the structural balance was estimated as 1 percent fiscal surplus of GDP during the period 2001-2007 and there was no need for withdrawal of resources from the ESSF. For 2008 the structural balance was reduced to 0.5 percent fiscal surplus of GDP, and since 2010, it was set as a structural deficit of 1 percent of GDP, imposing the need for withdrawal of resources from the ESSF up to that amount.

24. Furthermore, the ESSF's resources can also be used for regular or extraordinary amortization of public debt and for additional financing of the annual contribution to the PRF when the Minister of Finance decides to do so.

25.

Mongolia - Fiscal stability fund[6]

- **Year of establishment**

26. The Fiscal Stability Fund was established in 2013 as part of the Fiscal Stability Law.

- **Objectives of the fund**

27. Main objective of the fund is to support the fiscal framework of the country by smoothing the public spending from mineral price and production fluctuations. The withdrawal and deposit rules of the fund are aimed to insulate government spending from variations in the mineral revenues (mainly from copper). Accordingly, the establishment of the stabilization fund will not only smoothen the government expenditures when mineral revenues and/or production decline, but it will also protect the fiscal policy from overspending when the mineral prices and/or production is high that may create inflationary pressures in the domestic economy.

- **Governance of the fund**

28. The fiscal stability fund does not have a separate legal status and is set as a treasury account at the Central Bank of Mongolia. The Bank of Mongolia is responsible for managing the fund's assets in order to ensure liquidity of the resources in the event of a withdrawal request, to mitigate risks, and to invest the balances efficiently on the international financial market.

- **Sources of funding and deposit rules**

29. The fund accumulates assets based on mining sector revenues. For example, when the mining sector revenues exceed the structural mining revenues, the surplus is transferred to the stabilization fund. The structural mineral revenues are calculated as moving average of actual mineral prices of the last 12 years, current mineral prices and the projected future prices for the next 3 years, i.e. 16-year backward and forward moving average. This rule has become effective in 2013, and is recalibrated every 4 years.

- **Withdrawal rules**

[6] Sources: IMF Article IV 2013; WB Republic of Angola, Improving Rules for Angolan Oil Fund, World Bank, May 2017.

30. The withdrawal rule works in the opposite direction from the deposit rule. For instance, if the structural mineral revenues are below the actual ones, then a transfer will be made from the stabilization fund. From 2018, the size of withdrawal of funds will be constrained by the minimum requirement rule of the size of the assets suggesting that the assets of the fund must not fall below 5 percent of the domestic nominal GDP. This rule is aimed to preserve the assets of the fund from complete depletion induced by sharp decline in mineral prices and/or production, and will also facilitate its function as a store of wealth for the future generations.

Norway - State Petroleum Fund (SPF)[7]

- **Year of establishment**

31. SPF was established in 1990 and was renamed to Government Pension Fund-Global (GPF-G) in 2006. The SPF has become effective in 1996 when the fiscal position switched to surplus and has continuously accumulated assets. In 2011 the Fund become the largest sovereign wealth fund in the world and currently it remains the largest.

- **Objectives of the fund**

32. GPF-G has twofold objectives. The main objective is to create long-term savings and a stream of revenues for the future generations. The creation of the fund aims to alleviate future financial challenges by phasing in the petroleum revenues into the Norwegian economy when oil reserves will be depleted. In addition, the GPF-G has also a short-term stabilization function on the fiscal policy whose stream of revenues may be used to cover government expenditures when the oil prices or production are on the downturn phase of the business cycle.

- **Governance of the fund**

33. GPF-G does not have a separate legal status and formally, it is a separate account kept by the Ministry of Finance at the Bank of Norway. The Bank of Norway manages the fund's resources by investing on international financial markets through the Bank's own assets management division. The asset management objective is to maximize returns, subject to compliance with the investment strategy and guidelines determined by the Ministry of Finance. The Bank of Norway may advise the Ministry of Finance for the investment strategies, at the request by the Ministry of Finance. Any major proposed changes to the

[7] Sources: "Economic Commentaries: The Petroleum Fund Mechanism and Movements in the Petroleum Buffer Portfolio (PBP)", Lund K. and Stainsen K., Norges Bank, No. 2, 2017; Legislative Council Secretariat Fact Sheet, Government of Norway, FSC50/13-14 and "Fiscal Management in Resource Rich Countries", Ossowski R and Halland H, The World Bank Group, 2016, Washington D.C.

investment strategy are presented to parliament to ensure political support for strategic decisions of importance to future generations.

- **Sources of funding and deposit rules**

34. Net transfers are made to the Fund if the oil revenues collected by the government are higher than the non-oil central government deficit. The central government non-oil deficit is determined by a fiscal rule that states that over time, the structural non-oil deficit should not exceed the expected real annual return of the invested assets of the GPF-G. Additional significant source of income for the GPF-G is the annual return of the fund that, if it is not transferred to the Treasury, it is added to the fund's capital on ongoing basis.

- **Withdrawal rules**

35. The government may only withdraw the annual real return from the invested assets by the GPF-G, capped to a maximum of 4 percent of the fund's value. The withdrawal of resources from the GPF-G may be done in order to finance the non-oil central government fiscal deficit, if the oil revenues collected over the fiscal year are insufficient to cover it.

36. Over time, as the oil and gas reserves are being depleted in Norway, the oil revenues will decline and the fiscal deficit will be partially covered by the annual real returns from the GPF-G. For example, since the establishment of the GPF-G, the first withdrawal from the fund's annual return was done in 2016 when the oil revenues were insufficient to cover the non-oil budget deficit.

III) Country examples: SWF based on incomes not from non-renewable natural resources

Singapore - Government of Singapore Investment Corporation (GIC)[8]

- **Year of establishment**

37. GIC was established in 1981 by the Government of Singapore, with initial allocation of foreign exchange reserves in the amount of US$ 5 billion.

- **Objectives of the fund.**

[8] Sources: Alsweilem,K., Cummine A., Rietveld M. and Tweedie,K (2015). A comparative study of sovereign investor models: Sovereign fund profiles. Harvard College 2015 and http://www.gic.com.sg/

38. The main long-term objective of the GIC is to manage and preserve foreign reserves of Singapore. In addition, the revenues created by the GIC can also serve as a short-run stabilization buffer for the fiscal policy and foreign exchange rate in the case when the economy is facing downfalls.

- **Governance of the fund**

39. GIC is established as an independent entity with its own governance structure. The GIC is governed by a 14-member Board of Directors chaired by the Prime Minister of Singapore. The Board members are appointed by the Ministry of Finance, with approval from the President. The GIC Board is responsible for long-term asset allocation strategy and overall performance of the investment portfolio, following the investment objectives, risk parameters and investment horizon set by the Ministry of Finance.

40. Within the GIC, there are different committees that serve various functions. For example, the investment and risk decisions of the portfolio are made by the Group Executive Committee. Other board committees such as the Risk Committee, Investment Strategy Committee and International Advisory Board, assist the GIC Board of Directors in evaluating asset allocation, oversee the investment process, provide information on developments on international financial markets etc.

- **Sources of funding and deposit rules**

41. The main sources of funding are transfers made by the Government of Singapore when there is a fiscal surplus and/or a surplus in the current account balance. The amount of these transfers is determined upon Government's discretion. The other significant source of funding is part of the annual real investment earnings, determined by the rule called Net Investment Returns Contribution (NIRC).

- **Withdrawal rules**

42. According to the NIRC rule, the Government may withdraw up to 50 percent of the annual real investment earnings of the GIC for financing of any type of budget expenditures. From the historical practice, the withdrawals from the GIC have been used mostly for financing development expenditures in education, healthcare, environment, research and development.

43. Furthermore, the NIRC rule specifies that, under exceptional circumstances, the Government may withdraw part of GIC's reserves and this is restricted to the amount accumulated only during the current term of the government. In the case when the government needs to withdraw part of the GIC's reserves, it needs to get concurrence from the President of Singapore. Accordingly, the NIRC rule preserves the fund from depletion by prohibiting the government to withdraw the accumulated reserves from the previous terms of government.

South Korea - Korea Investment Corporation (KIC)[9]

- **Year of establishment**

44. KIC was established in 2005 with the Korea Investment Corporation Act. The creation of the KIC followed the Asian financial crisis that urged the need for building stronger buffers and better management of the foreign reserves.

- **Objectives of the fund**

45. The main objective of the KIC is to preserve and manage the foreign exchange reserves of the country by generating higher annual returns than the inflation rate.

- **Governance of the fund**

46. KIC is established as an independent entity with its own governance structure. The operations of the fund are financed through its annual investment return which has always been positive since its establishment. It is governed by a Steering Committee, which is the highest governing body of the KIC. The Steering Committee is chaired by the Chief Executive Office that is appointed by the President of the country. The Steering Committee consists of nine members among which are the Minister of Finance, the Governor of the Bank of Korea, the Chief Executive Officer and six other members from the private sector that are appointed by the President of South Korea. The main function of the Steering Committee is to supervise the strategic directions of the KIC and determines the ultimate investment strategy.

47. The second highest governing body within the KIC is the Board of Directors, responsible for day-to-day operations of the KIC, including the management of the assets by following the investment strategy of the Steering Committee. The Board of Directors consists of four members represented by the Chief Executive Officer, and three other from the KIC senior management such as: Chief Operating Officer, Chief Investment Officer and Chief Rick Officer.

- **Sources of funding and deposit rules**

48. The KIC got initial capital seed from the Ministry of Strategy and Finance and the Bank of Korea in the total amount of US$ 30 billion. In addition, both institutions can provide subsequent capital transfers upon their discretion. Another significant source of funding of the KIC is the annual income generated from the investment returns.

- **Withdrawal rules**

[9] Sources: Alsweilem,K., Cummine A., Rietveld M. and Tweedie,K (2015). A comparative study of sovereign investor models: Sovereign fund profiles. Harvard College 2015, 2016 Annual Report Sovereign Wealth Fund of Korea; Korea Investment and Corporation Act, 2005 and http://www.kic.kr/en/

49. There is not any explicitly defined withdrawal rule. The Bank of Korea and the Ministry of Strategy and Finance can withdraw any or all of their entrusted assets to the KIC, including the net profit gained from the entrusted assets during the financial year, after subtracting the amount needed to cover the annual operational costs of the fund. Nevertheless, since the KIC was established, a withdrawal has never occurred.

IV) Country examples: donor funded trust funds

Federated States of Micronesia (FSM) and Republic of the Marshall Islands (RMI)[10]

- **Year of establishment**

50. A compact trust fund for each of the two countries has been established in 2003 on the basis on the Compact of Free Association Between the Government of the United States of America (USA) and the respective governments of the FSM and RMI. The signed agreements determine the basic principles of operation, administration and governance of the trust funds.

- **Objectives of the fund**

51. The trust funds of both countries have the same objective. Their aim is to contribute for the long-term budgetary self-reliance by providing a regular annual source of revenue for each country after 2023. Accordingly, the trust funds are in accumulation stage since their establishment till end of 2023, upon which the revenues from the accumulated assets may be used.

- **Governance of the fund**

52. The compact trust funds are established as independent entities and are governed by respective trust fund committees. The function of the trust fund committee is to operate, supervise and manage the fund, as well as to define the general investment strategy and policy. Majority of the members of the trust fund committees are appointed by the government of the US, while the rest of the members are appointed by the respective governments of the FSM and RMI.

53. The trust fund committee appoints a trustee for the fund that must follow the written directions of the trust fund committee in operating the fund. The trust fund committee can contract investment advisers to advise the trust fund committee about the investment decisions and strategy of the fund's resources. The trust fund committee can also hire asset managers to invest fund's resources according to the investment policy established by the trust fund committee.

[10] Sources: "The Role of Sovereign Funds in Pacific Island Nations", Drew, A, New Zealand Institute for Pacific Research, 2016; Marshal Islands Trust Fund Agreement 2003; Federated States of Micronesia Trust Fund Agreement 2003.

- **Sources of funding and deposit rules**

54. The resources of the compact trust funds consist of contributions (grants) from the US government and other interested donors, plus the income generated from the accumulated resources into the funds. The major contributor to both funds is the US government whose annual contributions are set to decline over time till 2023, and will be gradually replaced by the self-generated income from their accumulated resources.

- **Withdrawal rules**

55. The trust fund resources can be used from 2024. The use of the resources is limited only to the generated income from the investment returns during the previous year. The fund's resources in both countries can be used for budget support for the priority areas identified in the Trust Fund Agreements which are: health, education, environment, public sector capacity building, private sector development. The trust fund resources can also be used for budget support for other areas that need to be additionally identified by a mutual agreement between the signed parties of the Trust Fund agreements.

Tuvalu - Tuvalu Trust Fund (TTF)[11]

- **Year of establishment**

56. TTF is a multi-donor fund established in 1987 by the International Trust Fund Agreement signed between the governments of Tuvalu, UK, Australia and New Zealand.

- **Objectives of the fund**

57. The TTF has a long-term objective which is to create a stream of income for the future generations that will help in stabilizing the fiscal situation in the country. Accordingly, the main purpose of the fund is to provide additional budget support in order to reduce the uncertainty related to the revenues volatility from fishing and royalties from TV licensing and internet domains. Historically, the fund on average, has contributed around one fifth of total budget revenues.

- **Governance of the fund**

58. The TTF is governed by the Board of Directors. The members of the Board are representatives from each of the donor countries with a voting power. The Board of Directors is chaired by the Minister of Finance of Tuvalu.

59. Fund's resources are managed by professional assets managers selected by the Board that invest the Fund's assets according to the set of objectives and guidelines established by the Board. The Board may

[11] Sources: UNDP, "Case Study Report: Tuvalu Trust Fund", UNDP 2012; and "The Role of Sovereign Funds in Pacific Island Nations", Drew, A, New Zealand Institute for Pacific Research, 2016.

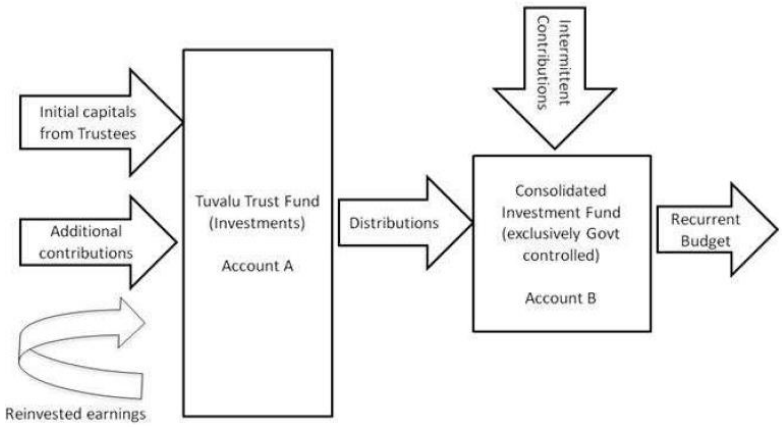
also hire professional investment consultants to monitor and evaluate investment performance. In addition, there is an Advisory Committee that regularly evaluates and monitors the impact of the TTF on Tuvalu's economy and fiscal policy by providing economic reports to the Government and the Board. The members of the advisory Committee consist of one member of each of the donor countries.

- **Sources of funding and deposit rules**

60. The creation of the TTF was based on initial grants by the governments that signed the TTF agreement in the total amount of AUD 27.1 million. Over time, other countries also contributed with grant donations to the fund including Japan, South Korea and Turkey. The main revenues to the fund are the grant contributions from the donor countries as a continuous support plus the annual stream of income from the investment returns.

61. The Fund has two-fold structure. An account "A" that is the repository of the capital of the TTF and includes the initial and subsequent grant contributions. The second account is called Consolidated Investment Account (CIA), which is like a sub-fund and serves as a buffer account on which the income distributions from the annual investment returns are transferred from account A. The CIA belongs to the Government and was established to smooth trust fund contributions for the recurrent budget. Accordingly, the Government may use the whole amount of the annual contributions from account A to the budget, or may leave part of it on the CIA as a buffer to smooth the future fluctuations in the contributions from account A. The desired target by the Government is to keep enough resources on the CIA to cover up to four years of expected transfers from account A. A simple scheme of the structure of the model of the TTF is presented below:

Figure 1 The model of the Tuvalu Trust Fund



Source: UNDP, "Case Study Report: Tuvalu Trust Fund", UNDP 2012, p. 5.

62. The main principal of operation of the Fund is to maintain its real purchasing power of account A, called Maintained Value. The Maintained Value of the Fund is calculated each year by the Advisory Committee of the Fund by factoring the impact of inflation. Therefore, the real market value of the Fund is maintained by adjusting its last year market value for the current inflation. As a refence inflation rate is taken the annual inflation of Australia.

- **Withdrawal rules**

63. Contributions from the TTF to the budget are made only if the annual income from the investment returns is higher than the rate of return required to preserve the Maintained Value of the Fund. When this occurs, then the excess amount of the annual return is automatically transferred to the CIA and can be used for budget purposes. The government of Tuvalu may use Fund's transfers for any type of expenditures and in full amount.

64. In the case when the rate of return of the invested assets of the TTF is lower than rate of inflation, then the real purchasing power of the Fund has declined and no transfer is made to the budget. This rule preserves the TTF from depletion and secures long-term savings. In this case the Government may use the accumulated resources from the CIA.

V) Country examples: development funds

Singapore - Temasek[12]

- **Year of establishment**

65. Temasek is a development and investment fund owned by the Government of Singapore. It was created in 1974 under the Singapore Companies Act, with aim to manage the assets and the investments done by the Government of Singapore.

66. Since Singapore has become an independent republic in 1965, the Government inherited ownership in already established companies under the British control and has also engaged actively in developing the industrial sector by establishing start-up companies in strategic areas. As the government ownership was expanding, it faced difficulties in managing the portfolio of companies and shares it owned. As a solution, the government created the Temasek development fund in 1974.

- **Objectives of the fund**

67. The objective of the Temasek fund is mostly development. Its initial aim of creation was to manage government owned portfolio and to continue investing in strategically important areas for development of the Singaporean economy that can facilitate the state-led industrialization.

[12] Sources: Alsweilem,K., Cummine A., Rietveld M. and Tweedie,K (2015). A comparative study of sovereign investor models: Sovereign fund profiles. Harvard College 2015 and https://www.temasek.com
.

68. From 2002, following the Asian currency crisis, Temasek started to invest globally in specific areas such as: aviation, financial services, healthcare and telecommunications. As the investment portfolio of Temasek became international, in 2005 Temasek gained a credit rating and started to issue bonds on the international financial markets as an additional source of financing.

- **Governance of the fund**

69. The Temasek fund is established as an independent legal entity. It is governed by a 13-member Board of Directors that determines the long-term objectives of the fund, the annual budget, major funding and investment proposals above certain threshold level etc. The Board members are appointed by the Government of Singapore, with approval from the President. The Board members are usually well-established businessmen from the country or previous high ranked public policy officials. The Board also appoints the chief executive officer that is subject of approval by the President of Singapore.

70. There are three committees that assist the Board: a) Executive committee that approves different investment decisions up till certain threshold level; b) audit committee that oversees internal control on the operation of the Fund including financial reporting, monitoring and audit; c) Leadership and Development and Compensation Committee that establishes the guidelines and policies on performance measurement and compensation plans.

- **Sources of funding and deposit rules**

71. The initial capital of the Fund was created by a transfer of the ownership from the Government of Singapore of a portfolio of 35 government owned companies and other minority shares. In 1990's, the Fund got additional significant capital injection by the Government from privatization proceeds of the telecommunication sector, power and port services. From 2005, the Fund also gets additional financial resources through issuance of bonds on the financial markets and occasional capital transfers by the Government from residual privatization proceeds.

72. The Fund is self-financed and operates independently from the Government. The major sources or regular income to the Fund are the investment earnings during the financial year, including the dividends earned from the portfolio of companies it owns or has shares in. The Fund can only retain half of the annual investment earnings for building its reserves, determined by the Net Investment Return Contribution (NIRC) rule.

- **Withdrawal rules**

73. The withdrawal rule of the annual investment earnings of the Fund is determined by the NIRC rule, according to which half of the investment income from the past reserves can be used for budget spending and the other half must be retained as reserves at the Fund for the future generations.

74. In addition, the Government may draw down the accumulated reserves from the Fund only during the current term of the government. In exceptional circumstances, the government may withdraw past reserves accumulated from the previous terms of government, only by approval from the President of the

country. The exceptional circumstances under which the past reserves can be withdrawn are defined as exceptional budget needs or specific policy proposals.

VI) Summary and main issues to be addressed in establishing a stabilization fund

75. This note has presented various case study examples of SWFs and their operational framework. There are currently no regional Stabilization Funds or SWF but there are lessons that SACU can use from these experiences. The general conclusion from the note is that SWF have country specific features and are established according to country's specific characteristics. SWF have different objectives, heterogenous ownership and governance structure, different investment strategies and heterogenous deposit and withdrawal rules. The assessment of various stabilization/wealth funds, although on national basis, brings the following issues for discussion in establishment of a Regional Stabilization/Wealth Fund in the SACU region:

76. Main objective(s) of the fund – should it be mainly short-term or long-term focused? The short-term objectives of the funds are usually related to fiscal and macro stabilization of the country. In the case of the SACU region, the short-term objective could be focused on reducing countries' fiscal revenue volatility from SACU receipts. This could be of importance to countries where SACU receipts constitute a significant share of total government revenues. The long-term objective of the fund could be directed towards securing a long-term financial stability and development of the region by creating a store of wealth for the future generations. For example, part of the annual returns generated from the fund's invested assets could be used as a regular supplement to fund's capital for some future disbursements, or be invested into regional development projects.

77. Could stabilization objectives also be met through the revision of the current SACU sharing formula? Some investigations conducted by the Word Bank Group indicate that forecasting errors and the t+2 correction mechanism strongly increase volatility.[13]

78. What should be the accumulated capital buffer of the fund in order to address regional and country specific risks? This issue should be considered in establishing the minimum capital base to serve as a buffer against unexpected shocks. For example, the fund could receive initial seed capital through contributions from each SACU member country, and/or a proportion of countries' annual allocation from SACU pool could be deducted, in order to reach the minimum needed capital threshold. Another option could be to define a minimum period of accumulation, during which members would contribute without having a right to withdraw fund's resources.

79. Legal status of the fund and the governance structure – should the fund be established as a separate regional legal entity or be a part of the government institutions of SACU member countries, without having a separate legal status? (a) In the case of the latter, the fund will have lower operational costs because it won't have its own governance structure. Nevertheless, one of the problems that may arise is that the fund

[13] For more details see: World Bank 2016, "SACU Receipts and Fiscal Policy in Southern Africa", World Bank Report Number: AUS13682.

may be more easily influenced by political decisions in managing and withdrawing its resources, unless there is a strict regulation that describes those rules. (b) If the fund is established as a regional independent entity, then the fund should have its own governance structure, although this incurs higher operational costs. However, in some countries where SWF have been established as independent entities (South Korea, Singapore, Marshall Islands and Federal States of Micronesia), their operational costs are financed from the annual investment returns.

80. Management of the fund's assets – who should manage the fund's assets? In many countries, fund's assets are managed by the central bank and this is typically the case when the fund is not established as a separate legal entity. In cases when the fund is established as a separate entity, it can contract the central bank as asset manager, or can hire independent asset managers, which nonetheless may be costlier.

81. Investment of the assets – where should the assets be invested: abroad or in the SACU region? In almost all cases reviewed, except for Singapore's Temasek Fund, SWF assets are invested abroad. On the one hand, investing assets abroad could build a buffer of foreign reserves, protect such assets from regional shocks, and ensure that SWF investments do not amplify the regional economic cycle (i.e., are a-cyclical). On the other hand, investing the assets in the region could help SACU countries achieving their development needs, promote regional integration, and reduce shocks asymmetry (which itself reduces the need for stabilization funds).

82. Sources of funding and deposit rules – best practice is when these are regulated by a law or a certain regulation that reduces politically motivated ad hoc decisions. Deposit rules could consider receiving contributions from SACU countries conditional on fiscal surpluses achieved at the country level. Another option is that of receiving regular transfers from the SACU revenue pool (a proportion of it), and/or exceptional transfers if pool receipts exceed a predetermined threshold. Additional important source of income for the fund is the annual return they gain from the invested assets.

83. Should deposit rules (contributions) be equal for each SACU member country or differentiated? If the rules of contributions are general for each SACU member country, then they can be tied to specific target such as proportion of budget surplus or proportional to the SACU transfers that country receives. Depending on the target, this may raise moral hazard issues. For instance, a country may not enforce fiscal discipline and perhaps, run budget deficits in order to contribute less to the fund. The alternative option is to make the deposit rules differentiated among the member countries. For example, countries that are less dependent on SACU receipts could contribute proportionately more to the fund, compared to the countries that are more dependent on SACU receipts.

84. Withdrawal rules – it is also desirable that withdrawal rules be regulated by a specific agreement among the SACU countries. For example, the withdrawal rules could be limited to the annual return that the fund gets, or a certain proportion of it (bird in hand rule). The withdrawal rule could also be tied to the overall amount of fund's assets in the fund, with or without limitations of the size of the withdrawal or resources. Having a limitation on the extent to which the fund's assets can be depleted, may be important to protect the fund from complete depletion and its function as a store of wealth for the future generations. The withdrawal rule could be tied to certain fiscal rules like budget deficit or structural budget deficit, or

to development expenditures. In addition, the withdrawal rules could be tied to certain development targets in strategically important areas for regional development.

85. Should the withdrawal rules be differentiated across SACU member countries? If the main objective of the fund is short-term stabilization function, countries that are more dependent on SACU receipts, could have differentiated withdrawal rules compared to the rest. This would help them in mitigating the impact of the high volatility of the SACU receipts on their own budgets.

86. How to address moral hazard issues among SACU countries of excessive withdrawal of resources? In designing the withdrawal rules, the moral hazard issues should be addressed. For instance, there might be countries that will systematically withdraw more resources from the fund compared to the rest, especially if they are tied to budget deficit or other fiscal target. In that direction, there should be county specific limitation to what extent it can withdraw resources from the fund.