

The Role of Sovereign Funds in Pacific Island Nations

Aaron Drew, Associate, NZIER





About NZIPR

The New Zealand Institute for Pacific Research (NZIPR) was launched in March 2016. Its primary role is to promote and support excellence in Pacific research. The NZIPR incorporates a wide network of researchers, research institutions and other sources of expertise in the Pacific Islands. The University of Auckland, Auckland University of Technology and Otago University lead the NZIPR. Its support partners include the New Zealand Institute of Economic Research, the University of the South Pacific, the Australian National University, Peking University, the University of Hawaii, the Secretariat for the Pacific Community, the Ministry of Foreign Affairs and Trade and the Pacific Cooperation Foundation.

About NZIER

NZIER is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice to clients in the public and private sectors, throughout New Zealand and Australia, and further afield.

Each year NZIER devotes resources to undertake and make freely available economic research and thinking aimed at promoting a better understanding of New Zealand's important economic challenges.

NZIER was established in 1958.

Authorship

This paper was prepared by Aaron Drew (NZIER) and reviewed by Andrew Coleman (Otago University, New Zealand Treasury) and Bart Frijns (Auckland University of Technology). It has also benefited from feedback from Damien Beddoes (Cook Islands National Superannuation Fund), Sam Robinson (Banco Central de Timor-Leste), Ekaterina Gratcheva (World Bank), staff from the New Zealand Superannuation Fund (Adrian Orr, Rishab Sethi, Roland Winn and Joe Cheung) and staff from the New Zealand Ministry of Foreign Affairs and Trade (Vinayak Nagaraj, Howard Markland and David Nicholson). The research assistance of Lizzie Hill (Stewart Group) is gratefully acknowledged.

It was quality approved by John Ballingall (NZIER).

ISBN 978-0-473-38381-7

Aaron Drew is an Associate of the NZIER. He has provided economic development assistance for the International Monetary Fund and was a staff and Investment Committee member of the New Zealand Superannuation Fund over 2008 to 2014. E-mail: aaron.drew@nzier.org.nz

While NZIER will use all reasonable endeavours in undertaking contract research and producing reports to ensure the information is as accurate as practicable, the Institute, its contributors, employees, and Board shall not be liable (whether in contract, tort (including negligence), equity or on any other basis) for any loss or damage sustained by any person relying on such work whatever the cause of such loss or damage.



Contents

1.	The NZIPR Sovereign Funds Research Program and I	Key Findings5
2.	The Case for Sovereign Funds in General	7
2.1 Wh	nat are Sovereign Funds?	7
2.2 As	set allocations of Sovereign Funds and multiple purpose	s12
2.3 Wh	nat is the rationale for Sovereign Funds?	16
3.	Features of Pacific Island economies and implications Funds	
3.1 Ec	onomic overview	22
3.2 Wh	nat economic purposes are most relevant for Pacific Islar	nd Funds? 27
3.3 Ho	w do these purposes compare with Sovereign Funds in t Islands?	
4.	External reviews of Pacific Island Sovereign Funds	33
5.	Summary and next steps	36
Refere	nces	37
Appen	dix A Pacific Island Sovereign Funds	46
Table	es	
	Features of Select Pacific Island Sovereign Funds	
	Economic Purposes of Current Pacific Island Sovereign Funds Typical investment choices across Sovereign Funds	
	Sovereign Funds with multiple economic purposes	
	Snapshot of Pacific Island Economies	
	Demographic profile of Pacific Island Economies	
	Assessed vs. actual purposes for Pacific Island Funds	
Table 8	Summary of Select Pacific Island Sovereign Funds	46



ACRONYMS AND ABREVIATONS

ADB Asian Development Bank

AUM Assets Under Management

AFF Australian Future Fund

ETF Exchange Traded Fund

FSM Federated States of Micronesia

IFSWF International Forum Sovereign Wealth Funds

IMF International Monetary Fund

NZIPR New Zealand Institute Pacific Research

NZSF New Zealand Superannuation Fund

MIRAB Migration (M), Remittances (R), Foreign Aid (A) and Public

Bureaucracy (B)

NPRT Nauru Phosphate Royalties Trust

OECD Organisation for Economic Co-operation and Development

PI Pacific Island

PNG Papua New Guinea

RERF Kiribati Revenue Equalization Reserve Fund

SWF Sovereign Wealth Fund

SF Sovereign Fund

TTF Tuvalu Trust Fund

UN United Nations

US United States

WB World Bank



1. The NZIPR Sovereign Funds Research Program and Key Findings

One of the five key first-year projects for the NZIPR is examining the roles of Sovereign Funds (SFs) in the Pacific Islands. This reflects the fact that SFs are often the largest single asset owner and investor in the Pacific Islands, and the income stream from these funds can also be a large part of fiscal revenues. They can be an important part of Pacific Island wealth, and may help promote economic development and buffer Pacific Island economies from shocks such as natural disasters. Particularly in the smaller Island nations, they are also seen as mechanisms to enable greater levels of self-determination, reducing the reliance on foreign and remittances.

This report is the first in a series of papers on the role of SFs in the Pacific. It is mainly concerned with documenting the different types of Pacific Island SFs and setting the broad context and economic case for these funds, given differing PI nation resources and constraints – not least the fact that many of the Islands have very small population bases scattered across vast oceanic distances. Our coverage of the Pacific Islands includes the very small Island nations in Polynesia and Micronesia, as well as the larger and more populous Melanesian Islands such as Papua New Guinea and the Solomon Islands.

We believe there are insights and lessons from the Pacific Islands experience that will be of interest to other small economies considering the role of SFs (for example in the Caribbean), and the wider SF research community. Despite this, research attention on Pacific Island SFs has been limited, and published cross-country studies tend to be dated and focussed upon Sovereign Trust Funds.

Our research provides an updated and comprehensive review of the role of the Pacific Island SFs, including Sovereign Provident (Pension) Funds which are often very significant investors in the Pacific Islands.

PI Funds are amongst the longest established SFs in the World (e.g. Kiribati's RERF was established in 1956), and Pacific Island SFs tend to have much more dispersed and innovative funding sources than Funds established by larger nations. While most PI Funds tend to be very small in terms of AUM compared to funds in more populous nations, they can be very large relative to gross national incomes.

We find that many Pacific Island funds serve multiple economic purposes (e.g. to provide short-term macro stabilisation and a source of inter-generational wealth) in practice if not in legislation. For example, we document that Pension Reserve Funds play an important role in domestic development and investment, even though it is not their primary purpose. In theory, this is not ideal given there is potential for these purposes to contradict each other, and in relation, the 'optimal' asset allocation to meet their economic purpose. But in practice factors such as the very small scale, limited resources, lack of domestic financial markets, and huge distances to markets in many Island nations mean that the establishment of multiple funds may not be feasible.



Table 1 Features of Select Pacific Island Sovereign Funds

Fund name and year established	Funding sources	Fund size \$M USD	Fund as % of GNI (indicative)
Cook Island National Superannuation Fund (2000)	Member contributions	\$75	67%
Fiji National Provident Fund (1966)	Member contributions	\$2,400	52%
Kiribati Revenue Equalization Reserve Fund (1956)	Mineral royalties (phosphate)	\$680	209%
Solomon Islands National Provident Fund (1976)	Member contributions	\$331	30%
Tokelau Trust Fund (2000)	Foreign donors	\$68	150%
Tuvalu Trust Fund (1987)	Foreign donors and internet domain licencing.	\$142	190%
Timor-Leste Petroleum Fund (2005)	Mineral royalties (oil and gas)	\$16,500	531%

Our high level review of current Funds against what economic purposes might be most beneficial for the Islands given their different economic circumstances suggests that more attention should be given to developing macro stabilisation and explicit economic development objectives than is currently the case.

The small number of published studies on SFs, which don't consider the role of Pension Funds, finds mixed outcomes with regards trust funds meeting their economic purposes. These studies show that the establishment of a Fund is not a panacea for Pacific Islands to meet their economic needs and development challenges. Success can only be assured when there is both good governance and a good investment process for the Fund, and that the Fund operates in an environment of broader responsible fiscal management and public awareness and support.

These findings highlight the importance of having clear alignment between legislation and a funds purpose, good governance and a good investment process. These are issues we will consider in follow up research, where we develop an assessment framework which is used to review several key SFs in the Pacific.

In the remainder of this report, Section 2 discusses what SFs are and their main economic purposes in general. In Section 3 we present key characteristic of PI economies as a basis for discussing what type of SFs might be most beneficial for PI nations. Section 4 summarises the (small) amount of external literature on these Funds. Finally, Appendix A provides snapshots of a broad range of SFs currently in the Pacific, including their purposes, AUM, funding sources, governance structures and investment approaches.



2. The Case for Sovereign Funds in General

2.1 What are Sovereign Funds?

Research into SFs has blossomed over the past decade, in part reflecting that they have become very significant asset managers and investors at the global level. Total assets under management (AUM) in Sovereign Wealth Funds (a subset of the SF universe) is now over US\$6.3 trillion, more than double the AUM that was estimated in 2008 (pre-GFC) and over 6% of estimated global financial assets (Preqin 2015).

This growth has occurred both through accumulation of assets in existing funds, and the establishment of many new SFs across the globe.

Around two-thirds of current SFs were established over the past ten years or so. In the Pacific examples include the establishment of Compact Trust Funds in Micronesia and the Marshall Islands in 2004, the Timor-Leste Petroleum Fund in 2005, the Niue Trust Fund in 2006, and the establishment (in law but not yet in practice) of a SF for Papua New Guinea over 2011-2015.

Figure 1 Sovereign Funds Assets Under Management



Sovereign Wealth Fund AUM USD trillion 2008 - 2015 6.31 6 5.38 5 3.95 4 3.59 3.07 3 2 1 n Dec-08 Dec-09 Dec-10 Dec-11 Dec-12 Dec-13 Mar-15

Source: Preqin 2015

A broad and fairly common definition of SFs is that they are a pool of assets (including listed and unlisted assets which may be domiciled both domestically and abroad), which

¹ The figure is closer to \$20 trillion if the very large North American funds that are managed at the US State and Canadian Provincial government level are included.



are held and managed by national governments to meet a defined economic purpose or purposes (Orr 2013, World Bank 2014).

There is no clear consensus, however, on how SFs should be classified according to these purposes, and nomenclature can be confusing (e.g. Sovereign Wealth Funds versus Sovereign Development Funds). For this paper, we use the term "Sovereign Funds" to refer to government managed asset pools regardless of their economic purpose.

When considering the role of SFs in the Pacific Islands, we use the taxonomy in Al-Hassan *et al.* 2013. This outlines five types of SFs in the world today:

- 1. Macro stabilisation funds, whose main economic purpose is to reduce the impact on an economy and a Government's budget from various "shocks", including commodity price volatility, external macroeconomic shocks, and natural disasters. They can (in part) be regarded as an additional policy tool to foreign exchange reserves for meeting government payments and foreign exchange commitments in times of stress. In relation, these types of funds are more prominent in countries with less developed capital markets and/or with pegged currencies.
- 2. Inter-generational wealth funds, whose main economic purpose is to spread and transform wealth from "windfall" or non-renewable assets across generations. These types of funds are found in both developed and less developed nations (e.g. Norway, Papua New Guinea, Kiribati and Timor-Leste). These and macro stabilisation funds are "traditionally" what is meant by a SWF.²
- 3. Pension reserve funds, whose main economic purpose is to spread and reduce the overall (net present value) cost of future pension-related liabilities on a government's balance sheet. The Australian Future Fund (AFF) and New Zealand Superannuation Fund (NZSF) are examples of this type of fund.
- 4. **Development funds**, whose main economic purpose is to help fund domestic economic development, in particular, through investment in infrastructure projects. Aside from the long-established Temasek Fund in Singapore, this is a relatively new, but rapidly spreading, type of SF (see Clark and Monk, 2015).
- 5. Foreign Exchange Reserve Investment Funds, whose main economic purpose is to reduce the opportunity cost of carrying excessive foreign exchange reserves on a central bank's balance sheet. These type of funds are also relatively new and are most prominent in East Asian nations (e.g. China, Hong Kong, South Korea and Singapore). These countries have accumulated very large foreign exchange reserves since the Asian economic crisis in 1997, to levels well in excess of what is generally assessed to be needed for exchange rate management purposes and insurance against currency crises.

In the Pacific Islands, SFs with the first four economic purposes can be found, as summarised in Table 2, and detailed further in the Appendix. In contrast, Foreign Exchange Reserve Investment Funds do not feature in the Pacific Islands funds landscape and are unlikely to do so. They have perhaps the weakest economic purpose

² Note that these type of Sovereign Funds are quite distinct from historic, generally unsuccessful commodity stabilisation schemes, which were set up with the purpose of trying to stabilise commodity prices and/or commodity producer incomes (see Newbery and Stiglitz, 1979).



- from an economic welfare perspective, the accumulation and holding of excessive foreign exchange reserves indicate a structural mis-allocation of resources at the expense of domestic consumption (Park and Estrada, 2009). For these reasons we do not discuss these types of funds further in this paper. Instead, our focus is on funds whose primary purposes include stabilisation, inter-generational wealth, pension reserves and economic development.

Table 2 Economic Purposes of Current Pacific Island Sovereign Funds

Nation	Macro stabilisation	Inter- generational wealth	Pension Reserves	Economic development
Cook Islands	No	No	Yes	No
Fiji	No	No	Yes	Via pension funds
Kiribati	Yes	Yes	Yes	No
Marshall Islands	Yes (from 2024)	No	No	No
Micronesia (FSM)	Yes (from 2024)	No	No	No
New Zealand	No	No	Yes	Via pension funds
Niue	Yes	Yes	No	Yes
Nauru	No	No longer	No	No
Papua New Guinea	Yes ¹	Yes¹	Yes	Via pension funds
Samoa	No	No	Yes	Via pension funds
Solomon Islands	No	No	Yes	Via pension funds
Timor-Leste ²	Yes	Yes	No	No for Petroleum fund
Tonga	No	No	Yes	Via pension funds
Tokelau	Yes	Yes	No	Yes
Tuvalu	Yes	Yes³	No	No
Vanuatu	No	No	Yes	Via pension funds

Source: Al-Hassan et al. 2013, various other

1. The newly minted SWF for Papua New Guinea has stabilisation and wealth objectives.

The most common economic purpose for the establishment of SFs in the Pacific Islands is Pensions Reserves. As discussed in Section 3, these funds have by established by PI governments, and are run by government entities, largely in response to the lack of

^{2.} Timor-Leste borders the Pacific and South-East Asia. It is included in the sample given its cultural, political, and institutional linkages to the Pacific, as well as the similarity of its economic challenges to the large Melanesian islands.³ While Timor-Leste's large Petroleum Fund does not have an economic development purpose, two other Sovereign funds have been established focussed on infrastructure and development.

^{3.} The Tuvalu Trust Fund is focussed on macro stabilisation but is broadly seen as also having an intergenerational wealth purpose.

³ Timor-Leste is a founding and active member of the Pacific Islands Regional Initiative, a member of South Pacific Central Bank Governors' Forum, and a donor partner of the Pacific Islands Development Forum. See Sousa-Santos (2015) for a discussion on Timor-Leste's role as a Pacific Island nation.



domestic capital market development and related private pension provider options. In line with this, and unlike the NZSF or AFF, it is important to note that PI Pension Reserve Funds are funded by individual members who have their own accounts, rather from general fiscal revenues or some other government revenue source.

It is notable, however, that most PI funds do not have an economic development purpose and there are few stabilisation funds despite very high macroeconomic volatility and exposure to natural disaster risks that PI nation's face. Given low to mid-levels of economic development, and very sparse capital markets, we find there is a case for broader explicit adoption of funds with macro stabilisation and development focussed purposes, the latter particularly for the larger PI nations that have rapidly growing populations.

Generally SFs are established in one of the three following forms: (i) as a separate legal entity with full capacity to act as that entity; (ii) as a state-owned corporation with distinct legal persona; and (iii) as a pool of assets owned by the state or the central bank, without a separate legal identity. Typically the third option is taken for fiscal stabilisation and foreign reserve funds given the close relationship of these funds to macro and exchange rate stabilisation objectives. In contrast, development funds are more likely to be structured as a state owned entity and pension and savings funds as a separate legal entity.

In the case of the Pacific Islands, a common structure under (i) is to establish a Sovereign Fund as a Trust, with contributors (trustors) to the fund from both local and foreign governments and supra national agencies (see Box 1).



Box 1 Pacific Island Trust Funds

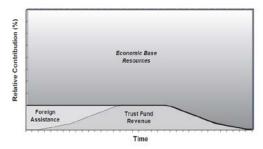
A trust fund is a fund whose assets are managed according to a legal trust arrangement. The basic legal arrangement has three main parties: (i) trustors (grantors, donors or settlors) who create the trust and usually transfers assets into it; (ii) trustees who have the legal responsibility to administer the assets on the behalf of (iii) beneficiaries, who are the benefactors of the trust and are entitled to income and/or principle according to the terms that the trust is established on.

In the case of Pacific Island Trust funds, trustors have included both domestic governments (e.g. from the phosphate resources developed in Tuvalu and Nauru) and foreign donors (e.g. the compact trust funds in Micronesia and the Tokelau and Niue Trust Funds in Polynesia). Trustees comprise of members of national governments and donors, while the beneficiaries are the domestic population base.

The chief aims of the PI Trust Funds that have largely been seeded by external donors is for them to reduce reliance on foreign aid and to grow the domestic economic resource base (see figure below). This is both through their potential to improve macro stability, enabling longer-term planning, and the potential to use the Fund for direct investment projects. As discussed in ADB (2005) and Section 4 some of these funds have reduced reliance on foreign donors, but there is little evidence to date they have been successful in expanding the broader economic base.

Angelo *et al.* (2016) focus on the legal aspects of a Trust and suggest that the best method for their establishment is via a treaty (c.f. a national statute or private deed) between the Trustors given the international treaty mechanism provides separation from the operation of any national legal system and hence potentially affords more comfort to international donors. The TTF is regarded as a model in this respect.

Ideal Life Cycle of a Trust Fund



Source: Asian Development Bank (2005)



2.2 Asset allocations of Sovereign Funds and multiple purposes

Given these different economic purposes, the asset allocation and investment choices that are appropriate to meet these purposes will also differ. In Table 3 we summarise these key differences. In brief, stabilisation funds will hold low risk, liquid international assets that can be drawn upon quickly in times of stress. In contrast, other funds will have a higher exposure to risky assets, which can include investments into illiquid private market domestic assets such as infrastructure. This is particularly the case for development funds.

Table 3 Typical investment choices across Sovereign Funds

Type of Fund	Risk and typical asset allocations	Illiquid or private market investments	Domestic Investment holdings
Macro Stabilisation Funds	Very low risk profile, holdings dominated by highly rated Sovereign bonds with small exposure to investment grade bonds and cash.	Minimal, funds may need to be sold at very short notice to meet stabilisation objectives in times of stress.	Usually minimal given offshore assets pay off when there is a fall or pressure on the domestic currency.
Inter- generational Wealth Funds	High risk profile, "growth" assets at least 70% of the portfolio. Equities will dominate holdings, but also significant exposure to "alternatives" such as real estate, private equity, infrastructure, etc.	Significant, at least +10% of the portfolio. Longer term horizon means these funds can tolerate higher levels of illiquidity.	Varies, can be significant unless prohibited by legislation.
Pension Reserve Funds	Balanced to high risk profile, broadly in line with Wealth Funds. Typically have a higher exposure to alternative assets than Wealth Funds.	Significant, +20% of the portfolio. Can be higher for funds that are in the accumulation phase.	Can be very large depending on size of local market c/f fund, domestic bonds and real assets seen as a good way to match pension liabilities.
Development Funds	Moderate to high. Much higher levels of "idiosyncratic" single asset concentration risks than other fund structures.	Moderate to very high. Development funds can be used to support listed markets as well as domestic infrastructure.	Very high, dominate portfolio holdings

Sources: Al-Hassan et al. 2013, Alsweilem et. al. 2015, various



In principle, it is desirable for a single fund to have a single economic purpose rather than multiple objectives. Multiple objectives for a single policy instrument is a violation of the Tinbergen Rule, which states that it is optimal to have (at least) one policy instrument for every policy goal.

External and internal governance, asset allocation choices, and performance evaluation are all arguably clearer when a Fund has a single economic purpose. For example, as above, investing in a portfolio of low risk, highly liquid, offshore assets is an appropriate asset allocation choice for a fiscal stabilisation fund. In contrast, a higher allocation to risky assets, including unlisted assets, is more desirable if the goal is to maximise savings and inter-generational wealth.

In contrast, in Table 4 below we see that a number of funds have multiple purposes, e.g. across both macro stabilisation and inter-generational wealth accumulation. There are both economic and practical considerations, however, as to why this might be preferable (welfare enhancing) than strict adherence to the Tinbergen Rule, some of which are particularly relevant for small PI nations. These include:

- The fact that PI nations face very difficult developmental challenges given their very small scale and distance to markets, as well as their very shallow local capital markets and vulnerability to "shocks" (see Sections 2.3 and 3). In these circumstances what might be regarded as conflicting objectives within a Fund might not be so problematic when the broader policy picture is considered. For example, the Pension Reserve Funds in the larger Melanesian PI nations all have implicit domestic development purposes, and are very significant investors in their economies. What looks like a sub-optimal level of diversification, and potentially return, from a pensions reserves economic purpose might still be desirable from a broader economic welfare perspective if the domestic investment undertaken overcomes market failures (e.g. those related to lack of capital market depth and breadth) and improves living standards.
- The "trade-off distances" between different purposes may not be large in all
 cases. As shown in Table 3, the basic level of risk that in principle is desirable
 for a Pensions Reserves, International Wealth, or Development Fund is similar.
 Only in a macro stabilisation fund is it desirable to have a meaningfully lower
 allocation to both risky and illiquid assets.
- While larger and/or wealthier nations may have the scope to set up distinctly
 different funds for different economic purposes, in many nations, including small
 PI nations, this may not be as feasible in practice given the small pools of
 human resources available with skills and experienced in funds management
 and investment governance.
- There are direct scale benefits from pooling AUM as it reduces the direct costs
 of custody and obtaining exposure to markets (e.g. by enabling lower cost
 single managed accounts or derivative exposures, rather than investing through
 a mutual fund or ETF).
- With scale also comes the scope to consider a broader range of exposures and investment strategies, including direct investing, which may provide portfolio



- diversification benefits and more scope for value-add over plain vanilla listed market exposures.
- A fund with multiple purposes reduces the risk that different Sovereign funds will expend resources chasing the same domestic assets, potentially bidding up prices and lowering investment returns. This risk is most material in small economies such as in the Pacific Islands where the domestic investment opportunity set is not large.

Table 4 Sovereign Funds with multiple economic purposes

Fund name	Nation	Purposes		
Pacific Island Funds				
Niue Trust Fund	Niue	Macro Stabilisation, Wealth, Development		
Timor-Leste Petroleum Fund	Timor-Leste	Macro Stabilisation, Wealth		
Tokelau Trust Fund	Tokelau	Macro Stabilisation, Wealth, Development		
Sovereign Wealth Fund	PNG	Macro Stabilisation, Wealth		
Revenue Equalisation Reserve Fund	Kiribati	Macro Stabilisation, Wealth		
Tuvalu Trust Fund	Tuvalu	Macro Stabilisation, Wealth		
Other Funds				
Fund Soberanu de Angola	Angola	Development, Macro Stabilisation, Wealth		
State Oil Fund	Azerbaijan	Macro Stabilisation, Wealth		
Future Generations Reserve Fund	Bahrain	Macro Stabilisation, Wealth		
National Development Fund	Iran	Development, Wealth		
Kazakhstan National Fund	Kazakhstan	Development, Macro Stabilisation, Wealth		
Kuwait Investment Authority	Kuwait	Macro Stabilisation, Wealth		
Fiscal Stability Fund	Mongolia	Development, Macro Stabilisation, Wealth		
Nigeria Sovereign Investment Authority	Nigeria	Development, Macro Stabilisation, Wealth		
Government Pension Fund- Global	Norway	Macro stabilisation, Wealth, Pension reserves		
Government of Singapore Investment Corporation	Singapore	Wealth, Reserve Investment		
Heritage and Stabilization Fund	Trinidad and Tobago	Macro Stabilisation, Wealth		
Stabilization Fund	Venezuela	Macro Stabilisation, Wealth		

Source: Alsweilem et. al. (2015), various



To realise these scale and scope benefits some nations, notably including Norway, have clearly elected to combine economic purposes within a single fund structure. As stressed in several cross-country reviews of SFs (IFSWF 2014, Alsweilem *et al.* 2015) the critical factor determining whether or not a Fund satisfactorily meets its purpose or purposes is governance. Good governance helps ensure there is a clear understanding by all stakeholders (internal management, Boards, and government) of how a Fund will be used to meet its different purposes, and how this interacts with other arms of macro policy, especially when the choices are most stark during times of economic stress. The devil is in the details.



2.3 What is the rationale for Sovereign Funds?

For a government, SFs are a mechanism to pool, grow and spread its revenue resources over time. In a normative sense, the core economic reason for establishing a SF should be that this revenue transformation enhances economic welfare (or living standards) over and above what would be achieved with alternative fiscal choices.

Establishing a fund and contributing fiscal revenues (whether they be from mineral royalties, general taxation, or other sources) towards it implies that there is less fiscal revenue available for other government spending and investment purposes (such as building social infrastructure) and/or less scope to reduce sovereign debt or tax levels, at least over the short to medium-term.

In turn, the establishment of a Fund is more likely to enhance overall economic welfare if there are "market failures", risk and equity issues that a Fund (or Funds) can help mitigate. The main candidates in this regard, which apply to the Pacific Islands to varying degrees, include:

1. To diversify government funding sources and the government balance sheet

A SF broadens the range of funding sources a government can use to partially or wholly meet an economic purpose or purposes. This may be particularly beneficial in times of economic and fiscal budgetary stress where raising debt can be expensive, and raising taxes or cutting spending deepens the cyclical downturn. In the case of PI nations, fiscal revenues from domestic sources are reliant on a very narrow economic base and generally subject to large volatility (as discussed in Section 3). A fund can be a very useful mechanism to dampen the economic impact of this volatility.

Investing in a fund, to the extent that it comprises offshore assets, also leads to a greater level of diversification across a government's balance sheet. This diversification is useful to the extent that it helps a government better manage its spending needs and liability streams, as discussed in several instances below. PI nations do not have large and diverse state sector (or even private sector) balance sheets, and hence the diversification benefit of a Fund may be particularly important in the Islands.

1. As a response to excessive macro and fiscal account volatility

Countries heavily reliant on natural resource incomes, and/or remittances and foreign aid as in most of the smaller PI economies, can face very large swings in their currencies, terms of trade, national income and fiscal balances given the volatility in these income sources.

This volatility ultimately impacts household incomes and employment. In addition, it can have a first order effect on living standards to the extent that the volatility makes long-term government and business planning difficult, hampering longer-term infrastructure development and productivity growth.

Channelling fiscal income into a Fund when commodities and other volatile income sources are booming, and drawing down on the Fund when they are soft (or when there are other significant shocks), can help reduce this volatility.



2. As a response to Dutch disease and the broader "resources curse"

Countries that have a commodities windfall can experience a large appreciation of their real exchange rate, retarding the development of export industries and aggregate productivity growth (Corden 1984). Channelling resource income into a Fund can help reduce pressure on the real exchange rate and hence allow these sectors to develop at a faster pace. In addition, to the extent that the Fund is well-governed, it can reduce the potential for wasteful public spending, corruption and rent-seeking behaviours, mitigating the so-called "resource curse" (see Box 2).

This argument for a Fund is more relevant today for the resource rich large Melanesian Islands than most of the smaller Micronesian and Polynesian nations (see Section 3), despite the historic establishment of resource Funds in Nauru and Kiribati.

Box 2 Resource Curse and the Pacific Islands

A well-established finding of the economic development literature is that countries with abundant non–renewable natural resources tend to experience relatively poor development outcomes (Sachs and Warner 1995). As discussed by Gould (2010) this 'resource curse' reflects that large resource based revenue flows:

- Weaken the imperative for governments to promote broader economic development and a broader tax base. In turn, when citizens are lightly taxed their incentive to hold governments accountable is diminished (OECD 2008, Ades and Di Tella 1999).
- Push up the real exchange rate to levels that make the non-resource based tradables sector uncompetitive in world markets, e.g. agriculture, manufacturing and tourism. These sectors also tend to be much larger employers than mineral and mining sectors.
- Are often very volatile, limiting the ability for government and the private sector to plan long term projects.
- Can lead to a very uneven distribution of wealth and regional conflicts, especially if the State is viewed to be exploiting the resources with little benefit or involvement of local communities where resources are concentrated.

A SF (with a Savings and/or Fiscal Stabilisation purpose) is often advocated as a mechanism to avoid these negative impacts, improve accountability, and spread wealth across generations.

This presumes, of course, that a Fund is well governed and the build-up of assets isn't raided by a future government, or that fiscal discipline is loosened in response to the fund's establishment. The contrasting historic experiences of the Pacific Islands with resource-based Sovereign Funds indicate, however, that a Fund is no panacea. As discussed in more detail in Section 4, outcomes have been broadly positive for Kiribati's REFR Fund, but very poor for Nauru's NRPT Fund.



As a response to concerns for inter-generational equity and risk concentration

It is a long established accepted public policy principle that governments do not just have a responsibility for today's citizens. Future generations matter too (Pigou 1932). A Fund whose main inflows derives from an (ultimately) finite commodity resource can help spread the benefit of this across generations. In doing so it can also reduce risk concentration on a nation's balance sheet – a location-specific commodity resource can be transformed to a broadly diversified and liquid pool of financial assets.

A broader conception of the inter-generational equity and risk concentration argument, that is particularly relevant for Pacific Islands, is that a Fund offer the opportunity to transform their very narrow economic resource base to a financial resource that offers a more sustainable and certain source of revenue. This is in line with the discussion of (1) and (2) above, and also number (8) below.

4. As a response to shallow and incomplete capital markets

In a world where capital and information flows freely it would not matter that some countries had less developed capital markets than others. Local investors and savers could tap foreign markets for their financing, investing and risk sharing needs.

But this is clearly not the case; frictions and information gaps and asymmetries remain very real. As a consequence, the literature suggests economic development depends upon local capital market development. Increasing the breadth, depth and liquidity of financial markets, as well as the sophistication of the banking system, helps promote long run economic growth (see Rosborough *et al.* 2015 and references therein). In general, it does this by ensuring that competitively-priced financing and risk sharing instruments are available for private and public sector investors.

A Fund can help address some of these challenges through two main channels. First, it can help kick-start local capital market development through, for example, seeding local private equity and venture capital firms. Second, it can invest directly into local markets, potentially bringing on board offshore investors at the same time.

As discussed in Section 3, PI economies suffer from very low levels of capital market development, and their very small size and distance means that they are simply not on the radar for most capital providers. Except for perhaps the largest PI economies (such as PNG and Fiji), the direct investment channel is the more realistic option for overcoming local capital market deficiencies.

While the historic experience with development-oriented Pacific Island trust funds has quite mixed in Pacific Island nations (ADB 2005, Le Borgne and Medas 2007, Gould 2010, Australian Treasury 2011), these studies suggest the problem is more due to governance and poor execution rather than necessarily a lack of sound commercial investment opportunity (as discussed in more detail in Section 4). A recent review of development-focussed SFs, in contrast to the broad Pacific Islands experience, finds that they have in general earned both high social and investment returns (Clark and Monk, 2015).



5. As a response to individual myopia around saving needs and risk concentration

It is well established from the behavioural economics and finance literature that many individuals and households do not adequately save for their retirement, even when they have the means. For this reason governments around the world provide policy interventions that broadly incentivise contributions to individual savings accounts, and/or establish government pensions and retirement income safety nets.

In the context of a broad state retirement income (such as New Zealand Superannuation), research suggests that inter-generational welfare can be maximised if this is pre-funded through a save-as-you go system (i.e. in partial or whole through a fund) rather than as a pay-as-you-go system (Diamond 1965, Coleman 2010).

Ageing population demographics, as will develop in many emerging, OECD and PI nations, enhance the welfare benefit, but this is a second order impact. The key reason a save-as-you go system is preferable is because a long-term savings or pensions fund, which normally has high exposure to equities and other growth or "risky" assets, can earn a materially higher return than growth in taxation revenue. Over time this should imply that a Fund will be a much more cost effective source of funding a state pension or retirement income than taxation.

In addition to cost effectiveness, to the extent that the Fund is invested in global markets, its income sources will be much more diversified than the income generated within a domestic economy, reducing country concentration risks. The diversification benefit may be particularly important for PI economies, which tend to have very narrow production bases and volatile fiscal revenues.

6. As a response to incomplete insurance markets

It may not be possible (or prohibitively expensive) for the private sector to insure itself against the spectrum of risks that it faces. This is particularly the case for countries that face large and costly natural disasters (relative to the size of their economies) that private insurers are unwilling or unable to fully underwrite. A Fund can help buffer these costs.

A direct example is the Natural Disaster Fund in New Zealand; and while not its primary purpose, the Chilean Economic and Social Stabilisation Fund was also heavily drawn down in 2010 to meet the cost of a very large earthquake that occurred off the coast of Chile in February 2010. As discussed in Section 3, most Pacific Islands periodically suffer large scale damage from hurricanes, and some are also subject to significant earthquake and volcanic risks, along with climate change risks.

7. As a response to the political desire to reduce reliance on external donors and remittances

In addition to the largely economic reasons outlined above for a Fund, there is a strong political economy argument. That is, a Fund may enable a nation to more independently manage its affairs. This may be in pursuit of any single or combination of the economic purposes outlined above.



The desire for greater self-reliance may be a particularly important reason for the establishment of a fund in small PI nations that have very small economic bases, undeveloped export industries, and are heavily reliant on foreign aid and remittances. In these types of economies the MIRAB model and its variants, which emphasise the role of foreign aid, remittances, and government employment, are considered a fair description if the elements needed to sustain Pacific Island economies (see Section 3 for further discussion).⁴

Reducing reliance on aid and remittances is an explicit goal of the Sovereign Trust Funds that have been established in Tuvalu in 1987 and Tokelau, Niue, The Marshall Islands and Micronesia over the 2000s. For example, the TTF proposal states:

"A government which must regularly go cap-in-hand to donors cannot hope to achieve financial self-reliance of plan effectively for the long-term future of its people" (ADB, 2005)

A fund can effectively expand the economic revenue base governments can draw upon to meet their expenditure needs, hence reducing reliance on foreign aid to "fill the gap" between what governments can raise with the domestic resource base and resource requirements. A fund can also, as discussed above, diversify the revenue base that governments have at their disposal.

Importantly, this desire for greater self-reliance is not a one-way street – long-term donors in the Pacific such as the ADB, World Bank, and the US, New Zealand and Australian governments are also clearly interested in seeing PI nations achieve higher levels of development and self-determination, and have helped establish trust funds with some Island nations as a tool to help meet this purpose. From their perspective, the key questions are:

- 1. Whether the up-front payment of resources into a fund results in a lower future stream of required aid?; and
- 2. Is channelling aid into a Fund preferable (welfare enhancing) compared to the alternative of supporting health, education and other fiscal expenditures?

In summary, there are many reasons why a SF could be considered as a tool for governments to meet their objectives. The fact that over time more countries are establishing Sovereign Funds, for a broader range of economic purposes, highlights that (at least implicitly) government are increasingly seeing them as mechanism to improve economic welfare and living standards.

The trend towards a greater usage of SFs is also clearly the case in the Pacific. In the following section we discuss what type of funds might have the largest benefit given the specific features of PI nations.

-

⁴ MIRAB is an acronym for Migration (MI) Remittances (R), Foreign Aid (A) and the Public Bureaucracy (B); the essential components of the MIRAB model. It has been claimed that many small economies in the Pacific Islands rely on these four elements to sustain the economic welfare of their population (see, for example, Bertram and Watters, 1985; 1986; Bertram, 2006).



3. Features of Pacific Island economies and implications for Sovereign Funds

The Pacific Ocean covers around one-third of the world's surface and nearly half of the world's oceans. For small PI nations in the heart of the Pacific Ocean their defining cultural and economic feature is surely their small size relative to the vast oceanic distances in the Pacific. For example, Kiribati is one of the most remote and dispersed countries in the world – its 33 coral atolls are spread over 3.5 million square kilometres of ocean, an area larger than India (Van Trotsenburg, 2015).

Pacific Island nations usually refer to the three main cultural clusters in the South Pacific Ocean through to the Northern Tropic oceanic region, i.e. Melanesia, Micronesia and Polynesia. This includes independent nation states such as Fiji, Papua New Guinea and Samoa; associated states such as Niue, the Cook Islands, and the Marshall Islands; and territories or fully-integrated parts of larger nation states. The latter includes Tokelau (New Zealand); Guam, American Samoa and Hawaii (USA); the French territories of New Caledonia and Wallis and Fatuna, French Polynesia (France), and Rapanui (Chile).

Pacific Islands region

Three main sub-areas of Micronesia, Melanesia Polynesia.
22 member countries (15) and. territories (7)
9,1 million people over 34 million square kilometers of ocean

CNM
Guam
Morshall Islands
Palau
Federated Stafes of Micronesia

Nauru Kiribati
Vanuatu
Vanuatu
New
Caleidonia
Tovalu
Tokelau
Vanuatu
Vanuatu
New
Caleidonia
Tovalu
Tokelau
Vanuatu
Niue
French
Polynesia
Pitcairm
Islands

Figure 2 Pacific Islands

Source: United Nations, Statistics and Demography/Population Programme Secretariat of the Pacific Community



Our coverage of PI nations is more focussed upon the low to upper middle-income independent and associated states, rather than the territories of larger economies, given that the latter nations tend to enjoy high levels of fiscal support. That said, we include in our coverage Tokelau, Niue, Micronesia FSM and the Marshall Islands where Funds have been established that have an aim of reducing reliance on foreign aid in the annual budgeting process.

3.1 Economic overview

A snapshot of the PI economies is contained in Tables 5 and 6. Some of the key common elements include:

- They are small to very small in land area and population size (excepting for PNG which has a large land area and a rapidly growing moderate-sized population).
- Distances to major markets, and often distances between Islands, are very large. In combination with their small size this means that air and sea transport linkages are infrequent and costly compared to what is enjoyed in larger, and/or more geographically proximate nations.
- Their export base tends to be relatively narrow and focussed on tourism and/or select natural resources (including fishing). Given small population sizes and distance to markets the manufacturing sector, in particular, tends to be small relative to what is seen in larger low to middle-income countries.
- They tend to have very large public sectors (as a share of the economy), and
 in relation, high levels of public sector employment. For some Islands,
 particularly the smaller nations in Polynesia and Micronesia, this foreign aid is
 heavily used to fund government bureaucracies and employment, in line with
 the MIRAB and related models for small island economies (Bertram, 2006).
- Capital market development is very low owing to a lack of depth and breadth of
 financial institutions (see Cihák et. al. 2012). In reflection of this, most PI
 nations either rely on foreign currencies (e.g. NZDs, AUDs, USDs and Euros)
 or have pegged arrangements to these currencies.
- They are some of the most vulnerable countries in the world to the effects of climate change and natural disasters. Eight PI countries are among the 20 countries in the world with the highest average annual disaster losses scaled by gross domestic product according to WB estimates⁵. The United Nations World Risk Index, which scores countries' exposure to natural hazards (e.g. floods, hurricanes and earthquakes) places Vanuatu as the most exposed country in the world, and most of the PI countries it covers also have very high risk rankings. Nations such as Tokelau, Tuvalu and Kiribati face extreme risks from climate change as sea level rises threaten scarce agricultural and ground water resources, as well as the viability of costal settlements.

⁵ These countries include: Vanuatu, Niue, Tonga, the Federated States of Micronesia, the Solomon Islands, Fiji, the Marshall Islands, and the Cook Islands. See http://www.worldbank.org/en/news/feature/2012/06/04/acting-today-fortomorrow-a-policy-and-practice-note-for-climate-and-disaster-resilient-development-in-the-pacific-islands-region



 Customary (or collective) land title covers the large majority of land ownership across most PI Nations (around 80-90% of total land area). In contrast, the amount of land held through Government, individual or corporate (fee simple) title is very low.⁶

The economic, environmental and social trade-offs that arise from this form of land ownership are complex, and as such one of the key projects for the NZIPR is to explore the challenges and opportunities that arise from customary title. We simply note here that collective ownership can complicate commercialisation of land and the provision of infrastructure, not least because it is often more difficult to secure development financing across a collective title than an individual title because a lender is less sure of the recourse to collateral.

⁶ A notable exception is Tonga where the majority of land is heredity titles owned by the Royal and noble families.



Table 5 Snapshot of Pacific Island Economies

Country or territory	Pop.	GDP per- capita (USD)	Exports-to- GDP	Area (land only)	Inhabited Islands	UN HDI score	UN disaster risk rank
Cook Islands	20,114 (2016)	\$12,300 (2010)	+60%	240 km ²	10	n.a.	n.a.
Fiji*	886,500 (2014)	\$5,112 (2014)	54.8% (2014)	18,274 km ²	110	0.73 High	16
Kiribati*	110,400 (2014)	\$2,950 (2014)	10.8% (2014)	810 km ²	21	0.59 Medium	165
Marshall Islands*	52,900 (2014)	\$4,390 (2014)	10.8% (2014)	180 km²	24	n.a	n.a.
Micronesia* (FSM)	104,000 (2014)	\$3,200 (2014)	n.a	702 km²	+100	0.64 Medium	n.a.
Nauru	11,000	\$10,277 (2011)	n.a.	21 km ²	1	n.a	n.a.
Niue	1,190 (2014)	\$15,066 (2011)	n.a	260 km ²	1	n.a	n.a.
Palau*	21,100 (2014)	\$11,110 (2014)	63.1% (2014)	460 km ²	10	0.78 High	n.a.
Papua New Guinea*	7.6 million	\$2,240	n.a.	462,840 km²	4 island regions	0.51 Low	10
Samoa*	191,800 (2014)	\$4,060 (2014)	28.2% (2014)	2,840 km ²	9	0.70 High	n.a
Solomon Islands*	572,171 (2014)	\$1,830 (2014)	56.4% (2013)	28,900 km ²	+300	0.51 Low	6
Timor- Leste*	1,212,000 (2014)	\$2,680 (2014)	7.7% (2013)	14,870 km ²	2	0.60 Medium	11
Tonga*	105,586 (2014)	\$4,260 (2014)	17.8% (2014)	750 km ²	36	0.72 High	3
Tokelau	1, 383 (2013)	n.a.	n.a.	10 km ²	3	n.a.	n.a.
Tuvalu*	9,893 (2014)	\$5,720 (2014)	n.a.	30 km ²	~11	n.a	n.a.
Vanuatu*	258,883 (2014)	\$3,160 (2014)	48%	12,190 km ²	~83	0.59 Medium	1

^{*} World Bank Member Countries.

Sources: World Bank, United Nations Development Program, Nauru Statistics, Commonwealth Statistics



Table 6 Demographic profile of Pacific Island Economies

Rapidly growing young populations	Moderately growing, relatively young populations	Relatively static, ageing populations	Declining populations, typically rapid ageing
Papua New Guinea Solomon Islands Kiribati Vanuatu Timor-Leste	Fiji Samoa Palau	Niue Nauru Tonga Tuvalu Marshall Islands	Cook Islands Tokelau Micronesia (FSM)

Source: United Nations Population Statistics

Despite the common elements outlined above it is important to recognise that there are also very large geographic, economic and social differences. As discussed in the following section these will influence the development challenges and type of Sovereign Funds that may have the largest welfare benefits. Differences include:

- The number of inhabited islands. Some countries such as Nauru and Niue, consist of just one coral island. In contrast, PNG, The Solomon Islands and the FSM comprise hundreds of islands, many of which are inhabited.
- **Differences in cultural homogeneity** and the amount of spoken languages. The smaller Micronesian and Polynesian states tend to be relatively homogenous with one or two common languages. In contrast, a much wider range of languages is spoken in Melanesia. Papua New Guinea stands out as being one of the most linguistically diverse places on earth, with over 840 separate languages estimated being spoken today. Over 100 languages are estimated to be in use in the Solomon Islands.
- Large differences in natural resource bases. In the larger land masses of Melanesia, soils tend to be rich and there are significant mineral resources. Papua New Guinea has a very large and diverse natural resource base across minerals, hydrocarbons, forestry, land and fishing. The Solomon Islands and Fiji also have a broad range of natural resources. Some Islands have (or have had) a significant mineral resource (e.g. phosphates in Nauru and Kiribati). Most islands in Polynesia and Micronesia, however, have few land-based natural resources. Soils tend to be poor in the low lying atolls (e.g. Kiribati, Tokelau and Tuvalu) but can be rich in islands of volcanic origin (e.g. the main habited islands of Samoa, Tonga and the Cook Islands)
- Large differences in current per-capita income and "human development"
 levels. Per-capita incomes range from relatively low in the Solomon Island and
 Papua New Guinea to middle-income in most other Island states. The range of
 scores on the United Nations Human Development Index is even wider, from
 low in the Solomon Islands and Papua New Guinea, to high in the middle
 income countries of Fiji, Palau, Samoa and Tonga

⁷ See http://www.ethnologue.com/country/PG



Starkly different demographic profiles, as shown in Table 4 above. Some
Pl nations are relatively young and are rapidly growing (e.g. Papua New Guinea
and the Solomon Islands). Hence, on average, more than half of Pacific
Islanders are under the age of 24 and the number of working-age youth is
expected to grow substantially over the coming decade. The World Bank's view
is that meeting this growing demand for employment will be a critical challenge
(Van Trotsenberg, 2015).

But other, typically smaller Islands, are moderately growing and ageing (e.g. Samoa and Tonga), whilst at the opposite end of the spectrum in some nations populations have been shrinking following years of outward migration to countries such as New Zealand (e.g. Cook Islands, Tokelau and Niue).

We note that in the case of the Cook Islands, Tokelau and Niue, Islanders have full access to New Zealand employment and its education and health systems. This results in fairly fluid movement of people between the Islands and New Zealand – it is not uncommon for families to have some members in New Zealand whilst others are in the Islands. As discussed below, the strong ties with New Zealand and access to its resources influence the purposes that might be most beneficial for SFs in these Islands.

As discussed in Haberkorn (2008), most PI communities have had and continue to have relatively high natural fertility rates – net migration is hence the key variable which influences overall population sizes and dynamics within PI nations. In the case of New Zealand, this has resulted in a very large increase in the absolute and relative size of its population of Pacific peoples – from under 2,500 people pre-WW2, to close to 300,000 people today, or around 7.5% of the population.⁸

Large differences in urbanisation rates. While rates have been increasing
in PI nations as a whole, the level remains very low in Papua New Guinea and
in many Polynesian nations (Samoa, Tonga, Niue, etc.) the rate of increase has
been tempered by urbanisation of their populations effectively taking place
offshore in New Zealand and other nations. In addition, for nations with very
small populations such as Niue any level of urbanisation will still mean a very
small urban centre.

In contrast, urbanisation rates and growth have been highest in Micronesia, in some cases leading to some of the highest population densities and attendant over-crowding issues in the world (see Hakerborn *ibid*).

• Large differences in the importance of foreign aid and remittances. These income streams are crucial to sustain living standards for the foreseeable future in many of the smaller states of Micronesia and Polynesia. As above, foreign aid is crucial to sustain the government sector, whilst overseas remittances (often family members living in New Zealand, Australia and the United States) is crucial for sustaining household incomes. Estimates suggest that the latter is a larger source of income inflow than foreign aid for most "MIRAB economies" in the Pacific. For example, in Tonga it is estimated that 90% of households receive remittances. (see Jimenez-Soto and Brown 2012 and Brown et al. 2013). However, they are less important in the more economically diverse,

⁸http://www.stats.govt.nz/browse_for_stats/people_and_communities/pacific_p eoples/pacific-progress-demography/summary.aspx



larger PI nations (such as PNG and Fiji) and in some cases remittances remain very small as populations have remained largely domestic (e.g. the Solomon Islands).⁹

3.2 What economic purposes are most relevant for Pacific Island Funds?

In this section we step through the economic purposes for SFs that would appear to be most beneficial for PI countries given both their common economic features and differences.

We stress that this a very high level, initial assessment. A much more in depth study would be required to form a definitive conclusion, for example as in the study by Papua New Guinea Treasury and Central Bank Staff that outlines the case for PNG's Sovereign Wealth Fund and its purposes.¹⁰

Economic stabilisation purpose

The narrow economic base, reliance on foreign aid and remittances (in many cases), large distances to major markets, and vulnerability to natural disasters have often led to a high degree of economic volatility in PI nations, with attendant pressure on fiscal policy and external account funding (see Asian development Bank 2005, Le Borgne and Medas, 2007, Utz and Sundararaman 2016). This suggests that across most, if not all, of the PI nations, funds with a broad economic stabilisation and/or disaster relief purpose may provide a positive welfare benefit.

The key to success of meeting this purpose, which is especially the case for a fund that has multiple purposes, is that there are an explicit set of rules governing how the fund is drawn upon for stabilisation and key event risks.

Inter-generational wealth purpose

PI nations with the most abundant natural resources are the obvious candidates for a Fund that has an inter-general wealth creation and distribution objective. These nations include: Papua New Guinea, the Solomon Islands, Timor-Leste, and to a lesser extent given the relative size of its resource base, Fiji.

Unless significant future resource finds are made, the "classic case" for further intergenerational wealth funds is much less apparent in Micronesian and Polynesian nations. However, as discussed in Section 2.3, concerns for inter-generational equity and risk

_

⁹ As discussed in Tisdell (2016) there are also differences in the stability of remittances between Island nations. Those received by Tonga and Samoa, for example, are largely from family members who are permanent migrants with relatively secure employment. In contrast, remittances in nations like Tuvalu, Kiribati and Vanuatu are more dependent on short-term employment abroad secured through, for example, temporary working visas in Australia and New Zealand.

 $^{^{10}}$ See Department of Treasury and Bank of Papua New Guinea Joint Sovereign Wealth Fund Working Group (2010)



concentration, and the desire for greater autonomy (particularly in countries with MIRAB characteristics) also suggest that a fund with an intergenerational wealth purpose might be welfare enhancing.

Pension reserve funds purpose

In principle, pension reserve funds would appear to have the largest welfare benefit in nations that are growing and ageing (Fiji, Samoa, Palau) or rapidly growing (PNG, Timor-Leste and the Solomon Islands). In contrast, the welfare benefit would be smallest, and possibly negative, in nations with ageing and declining populations (Niue, Tokelau, Micronesia FSM) because the burden of increasing savings to build a Fund would be placed on an elderly declining population. This could also be the case for the nations that have relatively static populations in other parts of Micronesia and Polynesia.

In practice, low levels of capital market development in PI nations imply that domestic populations generally do not have access to the type of savings products (e.g. asset class mutual funds and ETFs) retail investors enjoy in more developed capital markets. Low levels of financial capability and communication challenges that occur when populations are scattered across large oceanic distances (or isolated valleys in the case of Papua New Guinea) compound the problem. These practical considerations are probably the main reason why, as shown in Table 1 at the beginning of this report, many PI nations have in fact established Pension Reserve Funds despite the mixed welfare benefit rationales.

Unlike, however, the NZSF or AFF it is important to note that the Pacific Island Pension Reserve Funds are on an individualised account basis rather than as a general pool of savings (i.e. they are more akin to government sponsored KiwiSaver schemes). This re-enforces the view that their establishment has been more as a response to incomplete markets than arguments around inter-generational cost effectiveness and diversification.

Development economic purpose

In principle, the case for funds with an explicit development economic objective would be highest in countries with growing populations and poor to average capital markets and infrastructure. As discussed in Clark and Monk 2015, investment in infrastructure projects can have both high investment and social returns so long as a robust investment process is followed and external expertise and investment partnerships are brought in when local capabilities are under-developed.

Countries with such situations include all of the large Melanesian countries (Papua New Guinea, Solomon Islands, Fiji and Timor-Leste) as well as several other smaller nations where growing populations and rapid urbanisation is placing pressure on infrastructure (e.g. Palau). In the larger Melanesian islands the prospective investment opportunity set would also be larger and more diverse (Tisdell 2016).

The general economic case for development focussed funds, particularly if focussed on infrastructure, in other nations appears mixed, both because, as discussed in Bertram 2006, the number of investment opportunities may be quite limited given small population sizes and narrow economic bases and endowments, and because the social return is potentially much riskier given flat to declining population bases.



Migration from Micronesian and Polynesian countries and territories to developed nations is likely to continue in the future – perceptions "of a better life overseas" and remaining a powerful motivator (Haberkorn 2008). Investing in domestic development projects has the potential to turn this picture around, but the risk is that a country gets saddled with expensive "white elephant" projects, potentially hastening economic decline (or boom-bust scenarios).

Countries where populations are static or mildly growing, but have established tourism bases and potential for further growth, are less risky propositions for domestic investment (Tonga, Samoa, and the Cook Islands). In these nations the demand for infrastructure and related investments (e.g. hotels) is not just a function of the domestic population base.¹¹

For outer islands across the region and resource-poor atoll countries in general, such as the Marshall Islands, Tuvalu and Kiribati, Nauru, and small micro-states such as Tokelau and Niue, the case for funds with an explicit development focus appears weakest. We hasten to add, however, that this does not necessarily mean that there is no case for domestic investment in these funds. Direct investment opportunities (e.g. in property and infrastructure) may still arise that offer attractive risk-adjusted returns, and these funds have a "local advantage" that could be put to use in an investment partnering relationship. In addition, "domestic investment" might also take the form of supporting education (at home and abroad) in order to facilitate the ability of Islanders to secure well-paying jobs offshore and hence the level of remittances (Poirine 1997).

.

¹¹Mc Elroy (2006) argues that these economies are not subject to the same sever limitations as Bertram's MIRAB economies and proposes the SITE (Small Island Tourist Economies) model. Bertram (2006) accepts the existence of this diversity and uses it to provide a global taxonomy of island microstates. He classifies economies according to the extent to which they satisfy MIRAB, SITE or PROFIT characteristics.



3.3 How do these purposes compare with Sovereign Funds in the Pacific Islands?

In the table below we contrast our high level assessment of what economic purposes for SFs would appear most beneficial (i.e. have a positive welfare benefit) for PI countries against the current situation in the Islands. To aid interpretation:

- A double tick occurs when a Fund with the economic purpose is assessed to be beneficial and is established.
- A double cross occurs when a Fund with the economic purpose is not assessed to be beneficial and there is no such Fund established
- A tick and cross occurs when a Fund with the economic purpose is assessed to be beneficial, but no such Fund is established.
- A cross and tick occurs when a Fund with the economic purpose is not assessed to be beneficial, but a Fund is established.
- Finally, we put a box around the tick when a Fund partially meets the economic purpose through its investment choices, even though this is not something that is part of the mandate for the Fund.

The main point to take from the table are that there is a fair degree of alignment between what would appear to be a good economic purpose for a Fund in the Islands based on our high level assessment, and what is actually in place.

Alignment is complete in the case of the pension reserve purpose. It is also very high for the inter-generational wealth purpose, the exceptions being the Solomon Islands and Fiji where we assess that there could be a case to develop a Fund with an intergenerational wealth objective given their natural resource endowments.

There is less alignment, however, in the macro stabilisation and economic development objectives. We assess there is a role for using a Fund (or Funds) for macro stabilisation across all of the Pacific Islands, but only around half of the Islands have Funds with this purpose.

In the case of the development purpose, alignment is high if we take the view that the Pension Reserve Funds are effectively fulfilling a development objective, even though it is not their legislated purpose. As presented in Appendix A, the National Provident (Pension) Funds in Samoa, Tonga, Fiji, Papua New Guinea, Solomon Islands and Vanuatu all have large (often dominant) domestic exposures. This includes direct equity investments in commercial office building, hotels and resorts; investing in Government and State Owned Enterprise issued bonds; and loans both to business and households. In some cases (Fiji, Samoa, Solomon Islands, and Vanuatu) these loans comprise a significant fraction of total loans outstanding – they can as such be regarded as an important part of the banking system.



Table 7 Assessed vs. actual purposes for Pacific Island Funds

Nation	Macro stabilisation	Inter- generational wealth	Pension Reserves	Economic development
Cook Islands	√×	××	*	√x
Fiji	√x	√x	11	√ ☑
Kiribati	//	√ √	11	××
Marshall Islands	//	xx	11	××
Micronesia (FSM)	11	xx	11	××
Niue	*	√, not yet²	×׳	≭ , not yet
Nauru	√x	××	//	××
Papua New Guinea	√√1	√√1	//	√ ☑
Samoa	√x	xx	11	√ ☑
Solomon Islands	√x	√x	11	√ ☑
Timor-Leste	11	√√	✓, not yet	√√4
Tonga	√x	xx	11	√ ☑
Tokelau	*	✓, not yet	**3	≭ , not yet
Tuvalu	*	✓, not yet	11	××
Vanuatu	√x	xx	11	√ ☑

Source: NZIER

1. The newly minted SWF for Papua New Guinea has stabilisation and wealth objectives. 2. These objectives are not yet being met, but are under development or part of a fund's official objective. 3. Tokelau and Niue residents can be granted access to New Zealand Super and KiwiSaver if they meet eligibility criteria. Otherwise pension entitlements are administered by the Governments of Niue and Tokelau. These arrangements weaken the case to establish a fund for pension purposes. Cook Islanders can also access New Zealand Super. 4. Timor-Leste has established two development funds besides the Petroleum Fund. The Infrastructure Development Fund, established in 2011, has funded projects totalling around \$2 billion and complements the Petroleum Fund which is prohibited from domestic investment.

In investing a significant fraction of pension assets locally, however, portfolio diversification will almost certainly be compromised compared to what is best-practice for a pension fund, and this could also negatively impact risk-adjusted returns and the success of the Fund meeting its stated purpose.

Because a development objective is not the primary purpose of the Pension Funds, pressure could build from members to invest more conventionally in liquid, broadly diversified offshore exposures, particularly if returns are poor or there are high profile specific cases of poor investment management. Pressure could also arise from investment staff at these Funds themselves to the extent that they asses the domestic investment opportunity set to be relatively poor.

In principle, a funds with an explicit development objective, including potential specification of the social versus investment return trade-off as in Gelb et al. 2014, would likely better meet the domestic development purpose, and reduce the reliance



implicitly placed by governments on the current pension funds to provide capital for development. In practice, the scale arguments discussed in Section 2 might limit the desirability of creating different funds. As such, one approach to manage the different objectives it to more explicitly "carve out" in legislation and in the fund's investment mandate these different purposes.

Alternatively, PI governments could consider the approach that the New Zealand government has taken with the NZSF. In brief, the NZSF must demonstrate that it "actively seeks and considers" New Zealand investment opportunities. The NZSF is not obliged by legislation to invest domestically, but the requirement does mean that the NZSF will both continually monitor (and in cases develop) the investment opportunity set in New Zealand, and be ready to invest domestically when New Zealand opportunities stack up (i.e. when the opportunity offers an attractive return that is expected to compensate the fund for market "beta" risk, illiquidity risks, and single asset and NZ country concentration risks).

In practice, the NZSF has made a number of large direct New Zealand investments, and very few comparable offshore investments, given the in-depth knowledge it has been able to develop of the investment environment in New Zealand, and the higher level of associated confidence it has investing directly domestically.

As well as the large Pension Reserve Funds that appear to have implicit domestic development objectives, this approach could in principle be applied to other PI funds, including funds in the micro nations. As discussed in World Economic Forum (2014), the key practical issue is to ensure that a fund has the capabilities required for direct investing, and a governance framework that is robust enough to manage potential downside risks, e.g. around investment performance and reputation management. Full in-house direct investment is likely to be prohibitively expensive for smaller PI funds (given the specific investment, legal and operational resources required), but less demanding partnership models, including potentially co-investment with larger PI and supra-national funds, are likely to be feasible



4. External reviews of Pacific Island Sovereign Funds

Background

There are only a handful of published cross-country studies on Pacific Island SFs. This includes a study by New Zealand consulting firm Nimmo-Bell in 2001, a study by the ADB in 2005, an IMF staff study in 2007 by Le Borgne and Medas, a study by Australian Treasury official Martin Gould in 2010, a 2014 presentation on Sovereign Trust Funds in the Pacific by WB official Ekaterina Gratcheva and most recently an academic study of the sub-set of intergenerational Trust Funds in the Pacific by Angelo *et. al* 2016.

The studies that have been published have tended to focus on PI Trust Funds (which have wealth and/or stabilisation objectives) rather than Pension Funds, despite the latter being an important part of the domestic investment landscape as discussed above – some of these Funds have AUM of over USD \$1billion (in particular Fijian and PNG pension funds), a figure that is far larger than the Trust Funds. As such, the literature reviewed below can only be regarded as a partial view of Sovereign Funds management in the Pacific Islands.

Studies

As presented in Section 3, PI Nations with SFs that have (or have had) stabilisation objectives include Kiribati, Marshall Islands, Micronesia FRM, Palau, Papua New Guinea, Timor-Leste, Tonga and Tuvalu.

The Asian Development Bank (ADB) study focusses on PI Sovereign Trust Funds (in particular Trust Funds in Kiribati, Marshall Islands, Micronesia FSM, Nauru, Palau, Tonga and Tuvalu). The key finding is that *subject to* sound policy and governance structures being in place, Trust funds have been generally effective in reducing reliance on foreign aid and smoothing budgetary pressures (e.g. in Kiribati and Tuvalu).

The establishment by the Tuvalu government of a second "buffer fund" into which earnings are deposited from the main Tuvalu Trust Fund (TTF) is seen as a successful mechanism to ensure that governments can rely on a regular income source from the Fund (via the buffer fund), without comprising the longer-run real per-capita value of the main fund (see Annex A for further details). The Compact Trust Funds in the Marshall Islands and Micronesia also feature separable accounts to be used for different economic purposes.

The PI Trust Funds are not, however, assessed to have been successful in lifting broader economic development and questions are raised in the 2005 ADB study whether this has been because there has been excessively prudent funds management. There are also cases where outcomes were assessed to be very poor (e.g. in Nauru and Tonga), owing to chronic governance failures and funds mis-management.

The case of the Nauru Phosphates and Royalties Trust (NPRT) is particularly illustrative. As shown in Appendix A, the initial legal structure established four separate funds within the NPRT to be used for different economic purposes, indicating that its establishment recognised the importance of provisioning separate accounts to meet the



different purposes. However, this legal structure proved to be no panacea to poor governance and management:

"Nauru broke almost every rule in the book; its trust fund governance was weak and not transparent, it made poor trust investments, it raided its funds and used them as collateral, and it maintained an unwarranted fiscal position." ADB, 2005.

The 2007 review covering most of these funds by Le Borgne and Medas assesses that the Trust funds have not, in general, been particularly successful in dampening fiscal and economic volatility. ¹² The general problem was attributed to:

"a lack of integration within the budget process, institutional weaknesses, and inadequate controls".

The key conclusion reached was that while funds could be used as a tool to support a sound fiscal framework, design and good governance are crucial and the Funds should not be seen as a substitute for fiscal reforms.

Gould (2010) has a similar finding – some SFs are found to have aided macro stability and improved inter-generational wealth and equity, but some results have been very poor. Like Le Borgne and Medas, Gould does not see the Funds' purposes as deficient. Instead he stresses that a Fund is unlikely to fulfil its purpose unless it integrates well with the national budget, enjoys good public support, is professionally managed, and there is a high level of transparency around this management and the link to the national budget process (including contribution and withdrawal rules).

These principles, in essence, are similar to what is advocated as necessary for success of a SF by Lipksy (2008), and the more formalised set of Santiago Principles for Sovereign Funds developed by IWG (2008). For an idea of how this translates to practices, IFSWF (2014) provides a cross-country study of how select IFSWF countries have implemented these principles.

Gratcheva (2014) considers in more depth the investment practices at the Sovereign Trust Funds than their efficacy in meeting their economic purpose. The two main concerns her review raises are:

- (i) That there may be too much focus on external managers and skill-based strategies at the expense of higher level asset allocation considerations, which are normally a much more important determinant of longer-term returns (and attendant match to fund purposes).
- (ii) That funds staff may place too much importance on external manager relations, rather than performance and costs. In some cases this has resulted in a much more costly implementation than what could be achieved if staff were to more regularly monitor and challenge supplier costs (including manager fees, custody and administration).

Gratcheva recommends that more regular reviews of external managers and costs are built into the investment process, as well as an increasing of the range of managers

¹² For two Funds, this is purely due to the fact that they are not able to be used for stabilisation at the current time (the Compact Trust Funds of the Marshall Islands and Micronesia). They are in an accumulation phase from US grants and cannot be drawn down until 2024.



monitored by fund staff. Perhaps the broader issue that this study raises is that investment principles in themselves may also not sufficient to ensure a successful outcome for a Sovereign Fund – investment practices and internal fund competencies matter too.

Angelo et al. focus their review on the legal aspects of PI intergenerational trust funds in the smaller Pacific Island nations with British legal traditions. They note that trust funds (as opposed to other legal structures) tend to have a special attraction in the Pacific context because of the PI resource limitations and the view of some donor countries that development of a trust fund can be a vehicle to reduce long term aid dependency.

The legal form recommended for the establishment of a trusty fund is an international treaty as opposed to national legislation or private deed, despite this structure being potentially less flexible to changing circumstances. This recommendation is made because it is regarded as offering donor nations more certainty of arms-length management from national governments, and hence more security that that the purpose of the trust and its capital or distributions won't be circumvented by national short-term political interests. The TTF is regarded as a model by Angelo et al. in this regard.

Angelo et al. also raise the concern that even where Trust deeds or treaties provide appropriate governance mechanisms and external audits that are complied with:

..the degree of publicity about the funds is low, and therefore accountability is also low. For instance, the mere tabling of the report on the affairs of a trust in a parliament may not attract an appropriate level of interest or scrutiny."

This concern highlights the importance of regular communication between a fund and the public (e.g. annual reports, more regular performance reporting, and educational efforts) to raise broader public awareness of the purpose of a fund. This helps ensure public buy-in and support, as well as safeguards against poor management or government interference. These issues are an integral part of the assessment framework for SFs we provide in a follow up paper to this report (Drew et al. 2016).



5. Summary and next steps

This study has provided a high level overview of the purposes of SFs, the landscape of funds in the Pacific, and the roles that SFs could play given the differing economic structures, natural resources, and challenges in Pacific Island economies.

Our high level review of current Funds against what economic purposes might be most beneficial for the Islands suggests that more attention should be given to developing macro stabilisation and economic development objectives than is currently the case.

We also document that **Pension Reserve Funds play an important role in domestic development and investment**, even though it is not their primary purpose, than has been considered in the literature to date.

The small number of published studies on SFs, which don't consider the role of Pension Funds, finds mixed outcomes with regards trust funds meeting their economic purposes. These studies show that the establishment of a Fund is not a panacea for Pacific Islands to meet their economic needs and development challenges. Success can only be assured when there is both good governance and a good investment process for the Fund, and that the Fund operates in an environment of broader responsible fiscal management and public awareness and support. These are issues we will consider in follow up research where we will provide in-depth reviews of several key SFs in the Pacific.

For our reviews we will use an assessment framework that considers, in line with the IFSWF's Santiago Principles, the following broad areas:

- Integration within the budgeting process
- Enabling legislation
- External and internal fund governance
- A funds investment process

A particular challenge of this work will be to consider and **assess how a fund can meet multiple economic purposes**. In theory, it is not ideal for a fund to have multiple objectives, given the potential for them to contradict each other, but our initial research clearly suggests that Pacific Island's already have funds meeting multiple needs, and the small scale and limited resources mean that the establishment of multiple funds may not be feasible. For some of the Trust Funds clearly separable accounts have been established in order to meet the different purposes, however, for the larger Pension Funds currently no such separation has been formalised.



References

Aizenman, J and Glick, R (2008). Sovereign Wealth Funds: Stylized Facts about their Determinants and Governance. Federal Reserve Bank of San Francisco, Working Paper Series.

Alaska Permanent fund Corporation (2008). Sovereign and Permanent funds around the world. Wealth Management Trustees' Papers.

Al-Hassan, A and Papaioannou, M and Skancke, M and Sung, CC (2013). Sovereign Wealth Funds: Aspects of governance structures and investment management. IMF Working Paper (WP/13/231).

Alsweilem,K and Cummine,A and Rietveld,M and Tweedie,K (2015). *A comparative study of sovereign investor models: Sovereign fund profiles.* Harvard College.

Angelo, T and Bell, B and Roylance B. (2016). *Intergenerational Trust Funds in the Pacific*. The Journal of Pacific History, 51:2, 186-204

Asian Development Bank (2016). *Asia's Potential Growth.* Asian Development Outlook 2016.

Backer, L (2009). Sovereign Investing in Times of Crisis: Global Regulations of Sovereign Wealth Funds, State Owned Enterprises and the Chinese Experience. http://ssrn.com/abstract=1444190

Baric, M (2015). *Do sovereign wealth funds change a company's HR policies?* World Economic Forum. https://www.weforum.org/agenda/2015/05/do-sovereign-wealth-funds-change-a-companys-hr-policies/

BBC News (2004). *Tonga Court jester 'to pay \$1m'*. http://news.bbc.co.uk/2/hi/business/3502535.stm

Beck, R and Fidora, M (2008). *The impact of sovereign wealth funds on global financial markets*. Occasional Paper Series, European Central Bank.



Bell, B (2001). Trust funds for improved governance and economic performance in developing countries. Nimmo-Bell & Company Ltd, AARES Conference Contributed Paper.

Bertram, G. (1986). Sustainable Development in Pacific Micro-economies. World Development, 14 (7), 497-519.

Bertram, G. (2006). *Introduction: The MIRAB economy in the twenty-first century*, Asia Pacific Viewpoint, 47 (1), 1-13.

Bertram, G. and R.F. Watters (1985) *The MIRAB economy in South Pacific microstates*, Pacific Viewpoint, 26 (2), 497-519.

Brown, R.P.C., J. Connell and E.V. Jimenez-Soto (2013). *Migrants' remittances, poverty and social protection in the South Pacific: Fiji and Tonga*, Population, Space and Place [Online] Wiley January 21, psp1765.

Coleman,A (2010). *PAYGO v SAYGO: Prefunding Government-provided Pensions*. Savings Working Group. http://www.treasury.govt.nz/publications/reviews-consultation/savingsworkinggroup/pdfs/swg-b-ac-pvs-26oct10.pdf

Corden, W (1984). Booming Sector and Dutch Disease Economics: Survey and Consolidation. Oxford Economic Papers, Vol 36, No. 3.

Cihák, Martin, Asli Demirgüç-Kunt, Erik Feyen, and Ross Levine. 2012. *Benchmarking Financial Systems around the World.* Policy Research Working Paper 6175, World Bank, Washington, DC.

Clark,P and Monk,A (2015). Sovereign Development Funds: Designing High-Performance, Strategic Investment Institutions.

Department of Treasury and Bank of Papua New Guinea Joint Sovereign Wealth Fund Working Group (2010). *Possible creation of Sovereign Wealth Fund*. Discussion paper.

Diamond, P (1965). *National Debt in a Neoclassical Growth Model*. American Economic Review, Vol. 55, Issue 5.



Drew, A. Fowler, R and Frijns B (2016). Assessment Framework for Sovereign Funds in Pacific Islands, NZIPR Research Paper.

Dwyer,M (2013). Social protections in Vanuatu and the Solomon Islands. Policy Quarterly, Volume 9, Issue 2.

Emery, D (2012). Recommendations on the Design of a Sovereign Wealth Fund and a Loan Repayment Fund. International Monetary Fund, Pacific Financial Technical Assistance Centre.

Epstein, R and Rose, A (2009). *The Regulation of Sovereign Wealth Funds: The Virtues of Going Slow.* http://ssrn.com/abstract=1394370

Gelb,A and Tordo,S and Halland,H (2014). Sovereign Wealth Funds and Domestic Investment in Resource-Rich Countries: Love Me, or Love Me Not? The World Bank. Economic Premise. Number 133.

Gelb, A and Tordo, S and Halland, H (2014). Sovereign Wealth Funds and Long-Term Development Finance, Risk and Opportunities. Policy Research Working Paper. 6776.

Gibson, J and Macmillan Brown Centre for Pacific Studies, Visiting Research Fellow (2006). *Are the Pacific Island Economies Growth Failures*. Working Paper 3. Pasifika Interactions Project.

Gould,M (2010). Managing manna from below: sovereign wealth funds and extractive industries in the Pacific. Economic Roundup Issue 1, 2010. Australian Government, The Treasury.

Gratcheva,E (2014). Lessons in the Existing Trust Fund Management in Pacific. Financial Advisory and Banking Department World Bank Treasury. FEMM Seminar, July 2014.

Guardian, The (2014). *Niue, the Pacific island struggling to cope as its population plummets*. https://www.theguardian.com/world/2014/jul/13/niue-pacific-island-struggling-population-new-zealand

Hakerborn, G (2008). *Pacific Island Population and Development: Fact, Follies and Fictions*. New Zealand Population Review, 33/34, 95-127.



Hitt,J (2000). The Billion-Dollar Shack. The New York Times Magazine.

Hobbs,M (2005). *NZ contributions to Niue and Tokelau trust funds announced.* Beehive NZ. https://www.beehive.govt.nz/release/nz-contributions-niue-and-tokelau-trust-funds-announced

Hughes,H (2004). From Riches to Rags – What are Nauru's options and how can Australia help? Issue Analysis for The Centre for Independent Studies.

IFSWF (2014). Santiago Principles: 15 Case Studies. International Forum of Sovereign Wealth Funds, published at the 6th Annual Meeting in Doha.

International Monetary Fund (2015). *Vanuatu – IMF Country Report, 2015 Article IV consultation.*

International Monetary Fund (2015). *Tonga – IMF Country Report, 2015 Article IV consultation.*

International Monetary Fund (2015). *Kiribati – IMF Country Report, 2015 Article IV consultation.*

International Monetary Fund (2015). Samoa – IMF Country Report, 2015 Article IV consultation.

International Monetary Fund (2016). Fiji – IMF Country Report, 2015 Article IV consultation.

International Monetary Fund (2014). *Tuvalu – IMF Country Report, 2015 Article IV consultation*.

IMF (2014). Sovereign Asset-Liability Management – Guidance for Resource-Rich Economies. MNRW. http://www.imf.org/external/np/pp/eng/2014/061014.pdf

Infrastructure Dialogue (2012). Sovereign Wealth Fund Discussion Paper. http://www.infrastructuredialogue.co.za/wp-content/uploads/2012/10/Sovereign-Wealth-Fund-discussion-paper.pdf



IWG (2008). Sovereign Wealth Funds – Generally Accepted Principles and Practices, "Santiago Principles". International Working Group of Sovereign Wealth Funds.

Jimenez-Soto, E.V. and R.P.C. Brown (2012). Assessing the Poverty Impacts of Migrants' Remittances Using Propensity Score Matching: The Case of Tonga. The Economic Record, 88, 425-439

Le Borgne, E and P. Medas (2007). Sovereign Wealth Funds in the Pacific Island Countries: Macro-Fiscal Linkages. IMF Working Paper 07/297

Lipsky, J (2008). Sovereign Wealth Funds: Their Role and Significance. Speech at seminar 'Sovereign Fund: Responsibility with Our Future'. https://www.imf.org/external/np/speeches/2008/090308.htm

Lyons, G. A growing role for Sovereign Wealth Funds. Financing Social Change, Voices. http://voices.mckinseyonsociety.com/sovereign-wealth-funds/

MFAT (2014). Evaluation of Pacific Taxation Reform. https://mfat.govt.nz/assets/_securedfiles/Aid-Prog-docs/Evaluations/Evaluation-of-Pacific-Taxation-Reform_0-March-2014.pdf

McElroy, J.L. (2006). *Small Island Economies Across the Life Cycle*, Asia Pacific Viewpoint, 47 (1), 61-77.

Meert,M (2015). 2015 Preqin Sovereign Wealth Fund Review: Exclusive Extract. Preqin & PWC.

Newberry, D and Stiglitz, J (1979) *The Theory of Commodity Price Stabilization Rules: Welfare Impacts and Supply Responses* Columbia University Academic Commons, http://hdl.handle.net/10022/AC:P:20126.

Orr, A (2013). *The Rise and Rise of Sovereign Wealth Funds: Long-term investing.* Speech to the Trans-Tasman Business Circle.

Park, Donghyun (2008). *Developing Asia's New Sovereign Wealth Funds and Global Financial Stability*. ADB Briefs, No 1.



Park, D and Estrada, G (2009). *Are developing Asia's Foreign Exchange Reserves Excessive? An Empirical Examination.* Asian Development Bank, Economics Working Paper Series.

Peaucelle, I (2009). Sovereign Wealth Funds, BRIC and Sustainable Development. Paris School of Economics. http://www.parisschoolofeconomics.com/peaucelle-irina/textes/SWF-BRIC-10.pdf

Petrini,K et al. (2012). Case Study Report: Tuvalu Trust Fund. A United Nations Development Programme working paper.

Pigou, A (1932) The Economics of Welfare. London, Macmillan and co.

Poirine, B. (1997). A Theory of Remittances as an Implicit Family Loan Arrangement, World Development, 25, 589-611.

Prasad, B and Kausimae, P (2012). *Social Policies in Solomon Islands and Vanuatu.* United Nations Research Institute for Social Development.

Rosborough, L, G. Reid and C. Hunt (2015) *A primer on New Zealand's Capital Markets* RBNZ Bulletin Vol 78., No. 3.

Riera-Crichton, D (2014). *A key benefit of sovereign wealth funds*. World Economic Forum https://www.weforum.org/agenda/2014/11/a-key-benefit-of-sovereign-wealth-funds/

RNZ (2010). *Trust fund to pay for Niue property in NZ.* http://www.radionz.co.nz/international/pacific-news/193998/trust-fund-to-pay-for-niue-property-in-nz

Santiso, J (2014). Sovereign Wealth Funds. Produced by ESADEgeo, JPMG and ICEX-Invest.

Seward, James (2008). Should there be common standards for Sovereign Wealth Funds in Asia? The World Bank. http://blogs.worldbank.org/eastasiapacific/should-there-be-common-standards-for-sovereign-wealth-funds-in-asia



Sousa-Santos, J (2015). *Acting West, Looking East: Timor Leste's Growing Engagement with the Pacific Islands Region.* Chapter 8, Regionalism, Security & Cooperation in Oceania, Asia Pacific Centre for Security Studies.

Tisdell, C. A. (2016). *The MIRAB Model of Small Island Economics in the Pacific and their Security Issues*. Working Papers on Social Economics, Policy and Development 58, School of Economics, The University of Queensland.

Utz, R and Sundararaman, V (2015). Long-term opportunities and challenges for small pacific island countries. Draft concept note, Pacific Possible.

Van Trotsenburg, A (2015). *A regional approach to challenges facing island nations.* World Economic Forum. https://www.weforum.org/agenda/2015/02/a-regional-approach-to-challenges-facing-island-nations/

Vinstar Ltd (2011). *Tuvalu Trust Fund – Investment Review.* Final report submitted to Ministry of Foreign Affairs and Trade and Tuvalu Trust Fund.

World Bank Group (2014). Sovereign Wealth Funds and Long-Term Development Finance: Risks and Opportunities. Overcoming constraints to the financing of infrastructure. Prepared for the G20 Investment and Infrastructure Working Group.

World Bank Group (2016). Systematic Country Diagnostic for Eight Small Pacific Island Countries: Priorities for Ending Poverty and Boosting Shared Prosperity. (CC BY-NC-ND 3.0 IGO)

World Economic Forum (2014). *Direct Investing by Institutional Investors: implications for investors and policy makers.* World Economic Forum, November 2014 http://www3.weforum.org/docs/WEFUSA_DirectInvestingInstitutionalInvestors.pdf

Other Information Sources:

Asian Development Bank (2016). *Economy and country overviews*. Used pages; Tuvalu, Tonga, Kiribati, Tokelau, Vanuatu, Samoa, Fiji, Cook Islands.



Central Intelligence Agency. World Factbook.

Commonwealth Data

http://thecommonwealth.org/member-countries

Cook Islands CINSF National Superannuation Fund Website. http://www.cinsf.com/

Ministry of Finance & Economic Management. *Key economic indicators*. http://mfem.gov.ck/statistics/economic-statistics/key-economic-indicators

Fiji FNPF, National Superannuation Fund Website. http://www.myfnpf.com.fj/about-fnpf

SWFI. Strategic Development Sovereign Wealth Fund (SDSWF). http://www.swfinstitute.org/statistics-research/strategic-development-sovereign-wealth-fund/

New Zealand Foreign Affairs and Trade.

https://www.mfat.govt.nz/en/countries-and-regions/pacific/

Tokealau Trust Fund, Board of (2014). Report of the Tokelau International Trust Fund, for the year ended 30 June 2014.

Timor Leste Ministry of Finance. *Petroleum Fund of Timor-Leste*. http://www.mof.gov.tl/budget-spending/petroleum-fund/.

United Nations Human Development Index

http://hdr.undp.org/en/composite/HDI

National Retirement Benefits Fund and Social Welfare Scheme Website for Tonga. http://www.nrbf.to/index.php/annual-report/category/12-financial-year-2014

Samoa National Provident Fund website, including the annual reports.

http://npf.ws/newsletters

http://www.palemene.ws/new/wp-

content/uploads//05.Annual%20Reports/SNPF/SNPF-Annual-Report-2015-eng.pdf

Micronesia Social Security Administration Website, including the Annual Report 2014. http://www.fm/fsmss/

Marshall Islands Social Security Administration website.

http://www.rmimissa.org/





Appendix A Pacific Island Sovereign Funds

In this Appendix we provide an overview of most of the Sovereign Funds in the Pacific Islands, including their official mandates, investment style, and source of funding ¹³. The table below provides a summary of key features.

The key distinguishing features of these funds compared to most of the world's Sovereign Funds are (i) their relatively small size; (ii) the heterogeneity of their funding sources (including mineral royalties, employer and employee contributions, donor aid, and internet licensing fees) and (iii) the fact that while small they can be very significant relative to gross national incomes.

Table 8 Summary of Select Pacific Island Sovereign Funds

Fund name and year established	Purposes	Funding sources	Risk profile and investment implementation
Cook Island National Superannuation Fund (2000 -)	Pension funding	Member contributio ns	Balanced risk profile A single manager has been appointed to implement through global listed equity and fixed income exposures. Mix of passive active strategies.
Fiji National Provident Fund (1966 -)	Pension Funding Domestic development (indirectly)	Member contributio ns	Balanced risk profile Target 25% of portfolio in global listed markets. 75% of portfolio invested locally in Government bonds, direct and bank originated loans and direct property and company equity holdings (often as majority shareholder).
Kiribati Revenue Equalization Reserve Fund (1956 -)	Savings, macro stabilisation	Mineral royalties (phosphate)	Under review
Nauru phosphate royalties trust (1968-2006)	Savings, macro stabilisation	Mineral royalties (phosphate)	Main investments were direct offshore property holdings. Fund placed in receivership in 2006 as losses mounted on these leveraged investments in the 1990s.
Solomon Islands National Provident Fund (1976 -)	Pension Funding Domestic development (indirectly)	Member contributio ns	Balanced risk profile Invested locally in Government bonds and direct property holdings (often as majority shareholder) and in offshore markets via managers.
Tokelau Trust Fund (2000 -)	Macro stabilisation, IG Wealth,	Foreign donors	Currently Fund all invested in low risk NZ bank deposits, asset allocation more suited to its purposes yet to be

¹³ Our coverage of SFs is focussed by the four main economic purposes in this paper. It is not an exhaustive list of SFs in the Pacific, there are a number of funds that have been set up with environmental or education purposes, for example, which we do not cover.



	Domestic development		developed.
Tonga Trust Fund (1989 - ?)	Domestic Development	Passport sales	Not known, fund value may be zero
Tuvalu Trust Fund (1987 -)	Macro stabilisation, IG wealth	Donor aid and internet domain licencing.	Balanced risk profile on average, but significant departures from this allowed for given dynamic asset allocation approach followed. Implemented in offshore markets via external managers.
Timor-Leste Petroleum Fund (2005 -)	Macro stabilisation, Savings	Mineral royalties (oil and gas)	Moderate-Balanced risk profile comprising developed market equities (40%) and DM sovereign bonds (60%). No domestic investments, but note two separate development funds have also been established in Timor-Leste.
Vanuatu National Provident Fund	Pension funding and domestic development	Member contributio ns	Balanced risk profile, most investments onshore, significant owner of the banking system.



VANUATU NATIONAL PROVIDENT FUND (VNPF)

Key Features

- The Fund is a compulsory savings scheme to both employers and employers to benefit the employees.
- VNPF was involved in the housing loan controversy during the 1992-1995 period where money was lent to people not capable of making repayments and without the correct assessment.
- The VNPF's coverage is very small given that it only covers people in formal employment and the current working age population is very small; 114,000 as of 2008 (Hughes and Sodhi)
- The fund represents 20% of the total banking system assets as of 2014 and provides liquidity for commercial banks

Official mandate

- The objective is to maximise and protect the funds benefits to all its members whilst providing them with a level of service to which they are entitled.
- The Fund may improve the living standards of all members without putting the fund at risk

Governance Structure

- There is a Board of Trustees which three divisions feed into; a Director Member Services and Compliance; Director Investment division; Director Corporate Services.
- There is an Investment Committee which consists of 5 members
- The Board also appoints Fund Managers who have a limit of managing 15% of the Fund

Investment Style

- The investment strategy, from the official investment policy guidelines set in 2007, requires the fund to pursue a balanced risk profile
- The preferred split should be 60% defensive assets and 15% growth assets. The board can move up or down by 25% in either income or growth assets.

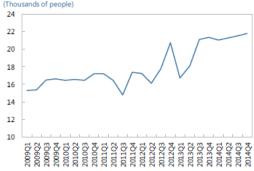
Fund Snapshot	
Year Established	1987
Assets under management (as of 2013)	\$124 million (USD)
Source of funds	Contributions from employees

- The asset class allocation is around Cash – 5%,
Equities - 5%
Fixed Interest – 45%,
Property – 25%
Loans – 10%
Offshore assets – 10%

Source of funding

-The provident fund gathers contributions from the employees and employers.

Contributors to Vanuatu National Provident Fund





COOK ISLANDS NATIONAL SUPERANNUATION FUND (NSF)

Key Features

- The NSF was established by an Act of the Cook Islands Parliament to address the ability of future governments to fund, not just superannuation benefits, but other key areas such as health, law enforcement and education.

Official mandate

- The fund is designed to provide members with a means to save for their retirement.
- Membership is compulsory for all people working in the Cook Islands.

Governance Structure

- The National Superannuation Board's role is to ensure that the fund is run in accordance with the Act.
- The members of the board are; financial secretary; representative of the Cook Islands Workers Association; representative of the Cook Island Chamber of Commerce; representative of private sector employers; member nominated by contributors to the fund.
- The fund abides by the laws of the Cook Islands and is internally audited by the Financial Intelligence Unit.

Investment style

- Members have a choice across three risk profiles: conservative, balanced and growth.
- Investments are currently managed by Russell Investment Group Limited in New Zealand. All exposures are in offshore markets and a blend of active and passive management is employed.
- A Reference Portfolio for the NSF is currently under development, in part to be able to benchmark against domestic development opportunities.

Fund Snapshot	
Year Established	2000
Assets under management (as of 2014)	\$74million USD (based on exchange rate 1USD=1.2793NZD as of 31/12/2014)
Source of funds	Member contributions

Market Exposure - Regional Allocations			
North America	47.6%		
Europe (excl UK)	17.0%		
Australasia	12.4%		
Japan	4.3%		
UK	4.6%		
Other	14.1%		



FIJI NATIONAL PROVIDENT FUND (FNPF)

Key Features

- Defined benefit fund that provides superannuation services to its members.
- FNPF is a major investor in Fiji and one of the country's largest property owners.
- The fund attempts to achieve returns, after fees and in excess of inflation increase, of a minimum 1% per year over a three year rolling period.

Official mandate

 Mandated by law to collect compulsory contributions from employees and employers towards the retirement savings of all workers in Fiji.

Source of funding

- Contributions from the members investing their savings ready for retirement
- Return from investment properties.

Governance Structure

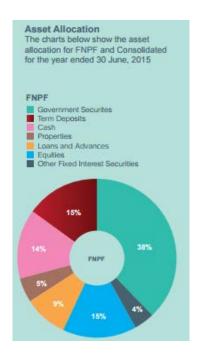
- The FNPF board is responsible for the provision of strategic advice to the management team, ensuring the sound management of the members' funds.
- There are special committee which report into the board, these consist of; audit & risk committee, investment committee, human resources committee and information technology.
- The fund safeguards itself through the Enterprise-wide Risk Management (ERM) framework based on international standards and best practices.

Investment style

- The asset allocation is as per the pie chart over page
- The Fund owns the majority of shares in a number of Fiji companies, including: Amalgamated Telecom Holdings Limited; Vodafone Fiji Limited; Home Finance Company Bank and fully owns a number of hotels and resorts.
- Currently the Fund is diversifying into growth assets and offshore investments to restrict its exposure to government debt.

Fund Snapshot	
Year Established	1966
Assets under management (as of June 2015)	\$2.4billion (USD) (based on an exchange rate of 1USD = 2.0768FJD as of 30/06/2015)
Source of funds	Members contributions

- The RBF approved a total of \$35million for offshore investment by the fund in the 2015 financial year.





KIRIBATI REVENUE EQUALISATION RESERVE FUND (RERF)

Key Features

- Kiribati's RERF is one of the World's oldest Sovereign Funds, and was established from phosphate mining proceeds. Its purposes are fiscal stabilisation and inter-generational wealth.
- It is relied upon heavily by the Kiribati government to buffer against shocks to the main other highly volatile revenue sources (fishing licence fees and remittances). Seen as a long-term success story, despite wobbles in the 2000s (ADB 2008)

Background

- Up until the mid-2000s the Fund was seen as a textbook "success story", being generally well managed and integrated into the governments budgeting process.
- A key indicator of the long-term success of the Fund is that Kiribati's GNI (which includes non-capital distributions from the Fund) is around double GDP per-capita.
- Excessive capital withdrawals and poor market returns in the mid to late 2000s depleted the per-capita value of the Fund and threatened longer term sustainability (see chart).
- The current focus is to steadily improve the fiscal sustainability of the fund, as well as transparency around the accumulation and spending rules.

Official mandate

- A substantial part of any surpluses should be saved to allow for sustainable drawdowns. A cash buffer equivalent to around two months of budget expenditures should be maintained.

Governance Structure

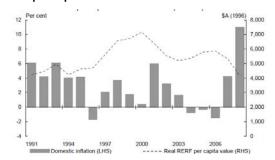
- The government of Kiribati has complete control over the RERF as both the trustee and beneficiary. It is a Special Fund under the Public Finance Act.
- The management responsibility for the fund is the Reserve Fund Committee, chaired by the Minister of Finance and staffed by public servants

Fund Snapsho	<u>t</u>
Year Established	1956
Source of funds	Phosphate royalties from the now-closed mine on Banaba island.
Closing balance as at 2015	\$590million USD (according to Article IV IMF Report)

Investment style

- Exchange rate risk is reduced by holding investments in more than 20 currencies
- During periods of solid economic growth the fiscal position improves and the excess revenue is saved.
- Portfolio at a glance (as of 2010) was 70% bonds and 30% equities
- There is a current focus on the appointment of a new asset manager to reform the fund's investment mandate.

Real per capital value of the RERF and inflation



Source: Gould (2010)



MARSHALL ISLANDS COMPACT TRUST FUND (MICT)

Key Features

- The United States set up this Fund as part of the Compact of Free Association agreement for the countries it formerly administered.
- The Fund will need to have significant fiscal efforts to achieve the goal of a long-term self-sufficient budget once the grants stop in 2023.

Official mandate

- To act as a stabilisation mechanism for the government budget.

Source of funding

- Initial grants from the US will decline over time with them being replaced by annual contributions from the funds by 2023.
- Additional grants from Taiwan.

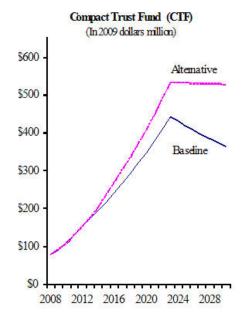
Governance Structure

- Independent, internationally reputable auditors are required.
- The fund is majority controlled by the donor country with 5 out of the 7 board seats being US representatives, the other 2 are domestic members.
- Quarterly reporting is in place.

Investment style

- Until 2023 disbursements are not allowed from the fund.
- Investment strategy has been kept prudent and matched closely to how a foreign exchange reserve might be run. This only created a nominal return in the first few years so the strategy has now moved to a diversified portfolio.
- The diversified portfolio consist of US and international equities, US bonds, US real estates and cash. Performance is assessed against commonly accepted benchmarks.

Fund Snapshot	
Year Established	2004
Assets under management (as of 2014)	\$218million USD
Source of funds	US government grants



(http://www.imf.org/external/np/ms/2011/100711.htm#top)



MARSHALL ISLANDS SOCIAL SECURITY ADMINISTRATION (MISSA)

Official Mandate

- To establish a financially sound security system for the people of the Republic of the Marshall Islands to aid them through retirement, disabilities and life after a spouse has died.

Source of Funding

- All employees working with the Marshall Islands or citizens working outside are required to contribute.

Governance Structure

- There is a board of directors which has within that an investment advisor, fund custodian, legal counsel and an internal auditor. There primary role is to oversee the fund and ensure it manages the interest of the majority of the beneficiaries and their families.
- The board acknowledges the benefits of transparency so uses a local newspaper to introduce public awareness of updates to the fund.

Investment Style

- A fund custodian can be appointed to manage the assets for the fund but there are strict parameters that the custodian has to meet before they are elected. This is the same for the investment advisor or manager.
- No more than 25% of the market value of the fund can be invested in one industry group and no more than 15% in the stock of one company.

Fund Snapshot	
Year Established	1967
Assets under management (as of 2013)	Approximately \$75million USD
Source of funds	Member contributions



MICRONESIA COMPACT TRUST FUND (MCTF)

Key Features

- United States set up this fund as part of the Compact of Free Association agreement for the countries it formerly administered.
- The fund will need to have significant fiscal efforts to achieve the goal of a long-term self-sufficient budget once the grants stop in 2023.

Official mandate

- To act as a stabilisation mechanism for the government budget.
- The purpose of the fund is to 'contribute to the economic advancement and long-term budgetary self-reliance of the Federate States of Micronesia by providing an annual source of revenue'.

Source of funding

- Initial grants from the US will decline over time with them being replaced by annual contributions to the budget from the funds by 2023.

Governance Structure

- Independent, internationally reputable auditors are required.
- The fund is majority controlled by the donor country with 3 of the 5 board seats being US representatives as well as the chair.
- Quarterly reporting is in place.

Investment style

- Until 2023 disbursements to the budget are not allowed from the fund.
- Investment strategy was matched closely to how a foreign exchange reserve might be run. This only created a nominal return in the first few years so now a diversified portfolio is in place.
- Mercer Investment Management serve as a money manager as well as a fund investment adviser.
- The diversified portfolio (over-page) has a broadly balanced risk profile and consists of

US and international equities, US bonds, hedge funds and cash. Performance is

Fund Snapshot	
Year Established	2004
Assets under management (as of 2015)	\$397million USD
Source of funds	US government grants

assessed against commonly accepted benchmarks.

Asset Class	Strategic Target Allocation & Permitted Range 9/30/14	Strategic Target Allocation & Permitted Range 9/30/15	Allocation as of 9/30/14	Allocation as of 9/30/15	Actual % Difference
Managed Assets					
Domestic Equity	25.5% 20.%5 - 30.5%			26.5%	-1.8%
U.S. Large Cap Equity	18%	18%	20.6%	19.1%	-1.5%
U.S. Small/Med Cap Equity	7.5%	7.5%	7.7%	7.4%	-0.3%
Non-U.S. Equity	25.5% 20.5% - 30.5%			25.3%	-1.3%
Fixed Income	19% 14%-24%			18.3%	-1.5%
Core Fixed Income	2.50%	2.5%	2.7%	2.7%	0.0%
Opportunistic Fixed Income	16.50%	16.5%	17.1%	15.6%	-1.5%
Hedge Fund (Managed)	5.5 3%-8%	5.5 3%-8%		6.0%	1.2%

(https://www.doi.gov/sites/doi.gov/files/uploads/FSM-TF-FY15-Annual-Report-03222016.pdf)



MICRONESIA SOCIAL SECURITY SYSTEM (FSMSSA)

Key Features

 The FSMSSA is a social security system that is a successor system of the former Trust Territory Social Security System.

Official Mandate

- To provide retirement, disability and survivor benefits to the citizens of the Federated States of Micronesia.

Source of Funding

- The system is funded by the contributions from the employee/employer which amounts to 7% each.
- Other income is sourced from interest and penalties on late payments.

Governance Structure

- The board of trustees is the governing body with the members nominated by the President and confirmed by the congress.
- The board nominations take into account the geographical location of each potential board member to adequately represent each area.

Investment Style

- Morgan Stanley Smith Barney is the investment advisor and custodial trustee. There are seven other companies that act as money managers.
- As of 2014 there are no deposits at local banks. No more than 10% of the market value (MV) of the fund can be invested in mortgage-backed securities. Regarding stocks; no more than 5% of the MV of the fund can be invested in the stock of one corporation and no more than 10% in one industry group.

Fund Snapshot	
Year Established	1988
Assets under management (as of 2014)	\$45million USD
Source of funds	Employer and employee contributions



NAURU PHOSPHATE ROYALTIES TRUST (NPRT)

Key Features

- Like Kiribati's RERF, the Trust was established from phosphate receipts.
- The value of the Trust was estimated to have been over \$1.3billion Australian in 1990 (around \$130,000 per capita).
- Today it is worthless due to a toxic combination of poor governance and investment management (Hitt 2000 and Huges 2004)

Historical Overview

- Phosphate mining in Nauru peaked in the 1970s, but the industry was still a very significant source of revenues in the 1990s. Today the resource is largely depleted.
- At peak the industry brought in around AUD\$100-120million annually.
- The Trust was estimated to have been worth \$1.3billion in 1990, but was rapidly run down over the 1990s to cover government spending.
- The Trust was also used as collateral to borrow against public expenditures at high interest rates.

Official mandate

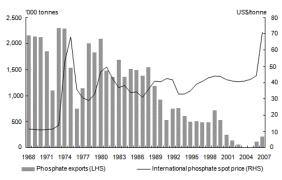
- The Trust was established to hold revenue from phosphate mining and comprised of four funds with differing purposes: Long-Term Investment Fund, Land Owners' Royalty Trust Fund, Housing Fund and Rehabilitation Fund.

Governance Structure

- Formally the NRPT and state budget were separate but in practice there wasn't a lot of distinction
- The Trust is now managed by the Nauruan Minister of Telecommunications after he took over from the Ministry for the Nauru Phosphate Royalties Trust.

- and concentrated in offshore commercial property, including international hotels and resort complexes.
- Significant losses experienced in the late 1990s and early 2000s could not be offset and the property portfolio went into receivership in 2006.

Chart 3: Nauru phosphate exports and the world phosphate price



Investment style

- The Trust's asset allocation was high risk



NIUE TRUST FUND

Key Features

- The purpose of the Fund is to contribute to the long-term financial viability of Niue and to improve the quality of life of the people living there.
- The Fund was established by the governments of New Zealand and Niue.

Official mandate

- To build up a strong resource base which can contribute through interest revenues to Niue's annual budget.
- To provide the government with an additional source of revenue to cushion the effects of economic shocks.

Source of funding

- Mainly New Zealand and Australian Donor Aid

Governance Structure

- Created under the Niue Trust Fund Act 2004.

Fund Snapshot	
Year Established	2004
Assets under management (as of 2007)	Approximately \$20 million USD
Source of funds	Donor contributions



PAPUA NEW GUINEA MINERAL RESOURCES STABILISATION FUND (MRSF)

Key Features

- The MRSF was created after the production at the Panguna copper mine on Bougainville.
- The fund was effectively closed in 1999 as it was used to reduce the country's debt. The net balance was zero so the MRSF remained open.

Official mandate

- The aim of the fund was to limit the impact on the budget of the mining revenue volatility.
- A formula was specified to decide the maximum yearly withdrawal.

Source of funding

- Revenue into the fund came from the mining and oil enterprises which were volatile
- The fund was supplemented by support from Australia.

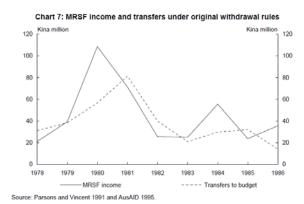
Investment Style

- The MRSF was held in the Bank of PNG but not invested and selected department secretaries managed it. This was then used to

finance the budget.

- The amendments to the MRSF Act reduced the utility of the fund as it allowed the government to drawdown as much as it wished.

Fund Snapshot	
Year Established	1974
Assets under management (as of 2000)	\$0
Source of funds	Tax, royalty and dividend payments from mining and oil enterprises.





PAPUA NEW GUINEA NATIONAL SUPERANNUATION FUND (NAS FUND)

Key Features

- The fund is an accumulation fund and is one of the four superfunds approved in Papua New Guinea.
- It funds its members by paying their super entitlement in the event of death, migration or for housing purposes as well as retirement.
- In 2015 NASFUND invested over 270million NZD in property, fixed income and shares.

Official mandate

- To safeguard the retirement income of all members in Papua New Guinea.

Source of funding

 Contributions from the private sector workforce, employees from SOEs and voluntary contributions from the informal sector

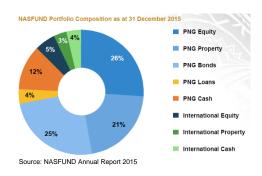
Governance Structure

- The regulator of the NASFund is the Bank of Papua New Guinea.
- One legislation covers the fund which is the Superannuation General Provisions Act 2000.
- The appointment of the board and executives are free from influence from politics or the government.

Investment style

- The fund has a balanced portfolio approach
- The objective is to deliver a return rate of CPI plus 2% over a rolling 5 year period.
- Split of assets are 65% domestic investment and 35% offshore

Fund Snapshot	
Year Established	1980
Assets under management (as of 2015)	\$1.25billion (USD)
Source of funds	Member and employer contributions





SAMOA NATIONAL PROVIDENT FUND (SNPF)

Key Features

- The SNPF is compulsory for all employees in Samoa.
- It is enhancing Samoan's lives by providing a loan facility and education fund. This education fund allows regular contributions to be earmarked for the tertiary education of the member's children with the first withdrawal allowed when the child reaches university level.

Official Mandate

- The fund is a compulsory savings scheme for the purposes of retirement for all employees employed in Samoa or by a company or organisation registered in Samoa.
- The mission statement:
- (i) to extend coverage to all workers
- (ii) provide efficient and effective services through best practices
- (iii) maximise benefits to members

Source of Funding

- Contributions from employees and employers.
- In 2015 coverage increased by 6%, following an awareness campaign, which means the active members are 31,744.

Governance Structure

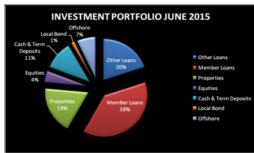
- The SNPF mandatory role, responsibilities and authority are clearly stipulated under the NPF Act 1972, which was amended in 2010.
- There is a board of directors and an executive management board too.

Investment Style

- The investment portfolio adheres to the Strategic Investment Framework (SIF) as approved by the board, give or take 5%.
- The graph, over page, shows the breakdown of the investment portfolio into asset classes.
- In 2015 there was a further injection of money into Offshore Investment (Global Bonds) and an improvement in the existing



loan process. Loans are the main revenue for the fund.





Source: Samoa NPF Annual Report 2015



SOLOMON ISLANDS NATIONAL PROVIDENT FUND

Key Features

- Compulsory savings scheme for all waged and salaried workers.
- The fund has become a source of lending to the government and quasi-governments as its role in the economy has become more prominent.
- The increased contribution from members has increased the fund's profitability which has allowed the board to invest in commercial opportunities.

Official mandate

- Principle objective is to preserve, deliver reasonable returns and sustain growth to members' contribution for retirement.
- The operations department is fully committed to providing quality, reliable customer serviced and ensuring the facilitation of members' benefit payments.

Source of funding

- Contributions from members investing for their retirement.
- Rental return from properties held by the fund.

Governance Structure

- There is a Board set up for the fund which consists of a chairman and deputy plus four members and a secretary.
- There is a separate National Provident Fund Board Management Team.
- -The responsibilities of the fund are defined in the Fund's Act.

Investment style

- Balanced risk profile guided by Strategic Asset Allocation. Current (2014) portfolio comprises 50% in equities; 40% in fixed income and the remainder in property
- Equity and property exposures consist of large direct property and equity holdings, fixed income exposure includes Solomon Island government and quasi-government paper.

Fund Snapshot	
Year Established	1976
Assets under management (as of 2014)	Approximately \$331million USD (based on 1USD=7.9162SBD as at 30/06/2015)
Source of funds	member contributions

Chart 24: Portfolio by Major Investments Assets for all Markets

Offshore Equities 8% Domestic Equities 18% Properties 15% Private Sector Loans & Bonds 99% Members and Staff Loans 1% SIG Securities 7% Offshore Cash & Fixed Term Deposit 10% Domestic Cash & Fixed Term Deposit 32%

Source: SINPF (2012) Annual Report



TOKELAU TRUST FUND

Key Features

- The purpose of the Fund is to contribute to the long-term financial viability of Tokelau and to make long0termn provision for intergenerational wellbeing.
- The Fund was established by the governments of New Zealand and Tokelau.

Official mandate

- Other than the contributing to the long term financial viability of Tokelau there is additional source of revenue for the Government of Tokelau stipulated for; (i) assisting the aim of greater financial autonomy in the management of its budget (ii) enabling the possible improvement of existing levels of social infrastructure and services
- (iii) enhancing the capacity to receive and effectively utilise external assistance (iv) meeting long term maintenance and operating costs of socio-economic infrastructure
- (v) development of the economy

Source of funding

- As of 2010 New Zealand's contributions had been \$36million. Contributions, including government grants, are made to the fund to build up the capital

Governance Structure

- The Board of Trustees consists a trustee from New Zealand, trustee from Tokelau and a chairperson jointly appointed by both parties
- Originally administered by New Zealand but in 1994 these powers were delegated locally with Tokelau assuming full responsibility for managing its budget and fund in 2003

Investment style

- For the first five financial years the resources of the fund must be invested in term deposits in New Zealand registered banks and government bonds.

Fund Snapshot	
Year Established	2000
Assets under management (as of 2014)	Approximately \$68million USD (based on 1USD=1.1414NZD as at 30/06/2014)
Source of funds	Donor contributions

- After the fifth financial year a fund manager must be appointed if they would like to hold assets other than term deposits.
- As at 2014 there term deposits were as follows:
- 22.89% with maturities up to 6 months 20.70% with maturities greater than 6 months, less than 12 months 56.41% with maturities greater than 12 months



TONGA TRUST FUND

Key Features

- The Tonga Trust Fund was formed to stimulate economic growth using the funds from non-national passports
- As of 2007 it is unclear whether the Tonga Trust Fund exists due to the speculation that it was victim to a scam by a Bank of America employee in 2000

Official mandate

- Stimulate economic development

Source of funding

- Revenue was established from the sale of Tongan passports to non-nationals between 1984 and 1988 but this was later abolished. In consultation with the King's Privy Council these trustees establish fund policies.

Governance Structure

- The Trust Fund is controlled by the King of Tonga and is managed by three trustees consisting of the Prime Minister, Minister of Finance and the Minister of Justice

Investment style

- In 1994 an employee of the Bank of America moved to Tonga and became the TTF advisor. He insisted that the money be moved from a non-interest-bearing account at Bank of America to be invested in Millennium Asset Management Services. This company later become insolvent and the TTF likely lost all of its assets.

Fund Snapshot	
Year Established	1989
Assets under management (as of 2000)	\$37.6million (USD)
Source of funds	Passport sales



TONGA NATIONAL PROVIDENT FUND (TNPF)

Key Features

- -The vision for the fund is 'securing your retirement'.
- -The TNPF is an accumulation contribution fund and is ran in accordance to numerous National Retirement Benefits Scheme acts and regulations.

Official Mandate

- The purpose of the fund is to provide benefits to the members in respect of retirement, permanent total disablement or early release and to provide benefits to the member's in the result of death.

Source of funding

- This is built up by contributions from employers and working members, as well as voluntary contributions. In the 2013/2014 financial year these contributions have increased by 48.92% from the previous year.

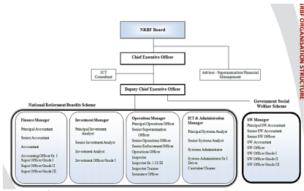
Governance Structure

-There is a board of directors that consists of seven members. Three of these are elected by contributing employers, three by contributing employees and the last one will have no voting rights but will hold the relevant experience and qualifications.

Investment Style

- The main aim is to ensure the security of the member's funds so maximising returns with the minimum amount of risk.
- As of 2014 all fund are currently invested on term investment in the domestic market.
- The return on investment in 2013-2014 was 3.25% and this was credited back to the members' accounts.

Fund Snapshot	
Year Established	2012
Assets under management (as of 2014)	\$6.5million USD (based on 1USD=1.847TC as of 30/06/2014)
Source of funds	Member contributions



Source: 2012/2013 Annual report - National Retirement Benefits Fund



TUVALU TRUST FUND

Key Features

- The TTF is aimed at macro stabilisation, but it is also understood by the people as a source of inter-generational wealth
- An innovative source of funding has been the formation and selling of the rights to the highly marketable internet domain 'Dot TV'.
- Distributions have historically been made when the market value of the Fund exceeded its maintained real (i.e. CPI adjusted) value
- A Consolidated Investment Fund (CIF) was later established from the TTF to better smooth the funding available for the government budget (set at around 15% of fiscal revenues). More recently a survival fund has been established.
- The establishment of these explicit subsidiary funds helps the TTF meet its multiple economic purposes.

Official mandate

- Main purpose of the TTF is to contribute to the long term financial viability of Tuvalu, through providing a regular stream of income from the investment returns to the budgeting process, while maintaining the real value of the fund.

Source of funding

- Initial capital of \$28.1 million AUDs from Tuvalu, Australia, New Zealand and the UK. Japan, Turkey and South Korea have also contributed to the TTF since establishment.
- Rights to the .tv internet domain has created funding of around \$50m USD.
- Excess capacity under Tuvalu's telecommunications country code of 688 has been leased, funding more than \$2million p.a. in recent years.

Tuvalu Trust Fund Contributions (at October 2015)

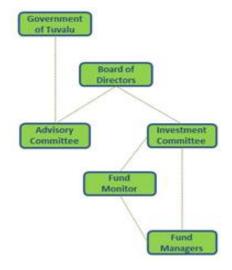
Contributor	Contribution (AU\$)	% of total
Tuvalu*	34.9m	39%
Australia*	31.6m	36%
New Zealand*	12.9m	15%
United Kingdom	8.5m	10%
Japan	0.7m	1%
South Korea	0.1m	0.1%
Turkey	<0.1m	<0.1%

^{*} Trustees represented on TTF's Board

Fund Snapshot			
Year Established	1987		
Assets under	Approximately		
management (as at March 2016)	TTF \$142m (USD)		
	(including CIF and Survival funds, based		
	on exchange rate 1AUD=0.77USD)		
Source of funds	Donor aid, internet		
	licensing fees		

Governance Structure

- Administered by a <u>Board of Directors</u>, chaired by the Minister of Finance of Tuvalu, with representatives from the Governments of Australia and New Zealand. Their primary responsibility is to manage the fund.
- An <u>Advisory Committee</u> undertakes broader social and economic assessments to inform policy decisions by the Board and Government of Tuvalu.
- -An <u>Investment Committee</u> undertakes regular management of the Fund, providing oversight of the Fund Monitor and two Fund Managers.
- An independent <u>Fund Monitor</u> conducts an annual audit of Fund accounts and reports to the Board.





Investment style

- As of 2012 the investment approach is termed "objective based asset allocation"; a variant of the more commonly known dynamic asset allocation (DAA) process.
- On average, the risk profile is expected to be balanced (60:40), but substantial differences can occur given the assessment of expected risk-adjusted returns and the DAA process.
- The investment policy sets out the objectives of the fund, the risk profile, benchmarks and asset allocations.
- Funds are mainly in developed market equities and bonds and externally managed by two Australian-based managers.

Other Sovereign Tuvalu Funds

In addition to the TTF and CIF, several other funds have been established:

- 1) The Government of Tuvalu and ABD established the Falekaupule Trust Fund to provide for outer island development.
- 2) A Survival Fund was established to provide quick access to funds required in response to a natural disaster such as cyclone or tsunami. Establishment funding came from a TTF distribution.



TIMOR-LESTE PETROLEUM FUND (TLPF)

Key Features

- The Fund was established to manage the revenues from large scale oil and gas sector exploitation.
- All direct and indirect royalties and taxes accruing to the State from the oil and gas sector are deposited automatically into the Fund.
- Timor-Leste has implemented the Santiago principles and discloses compliance in the annual report of the Fund.
- Over 90% of the Government's budget has been funded by transfers from the Fund.

Official mandate

The TLPF is established by the Petroleum Fund law to:

- i. Provide a mechanism to manage its petroleum revenue
- ii. Invest in authorised assets to maximise the risk-adjusted returns at a prudent level of risk
- iii. Govern the collection of petroleum revenues and regulate transfers to the State budget
- iv. Provide transparency for the government's management of petroleum wealth

Source of funding

- Revenue from royalties and tax revenue generated by the oil and gas sector in Timor-Leste.

Governance Structure

- The overall management of the Fund is the responsibility of the Minister of Finance.
- The Minister is advised by the Investment Advisory Board, which determines the investment benchmarks and monitors the performance of the Fund.
- The Central Bank of Timor-Leste implements the operational management of the Fund.

Fund Snapshot	
Year Established	2005
Assets under management (as at June 2016)	\$16.5billion (USD)
Source of funds	Royalties and tax revenues from the oil and gas sector

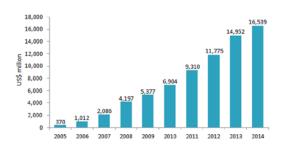
- The Fund has a legislated commitment to transparency including amongst other things through published quarterly reports, publication of the minutes of the Investment Advisory Board and all its advice to the Minister in full.
- All drawings from the Fund (apart from asset management fees) are appropriated by parliament. An Estimated Sustainable Income calculation determines how much the Government is able to withdraw from the Fund. Additional drawings are permitted subject to additional safeguards.

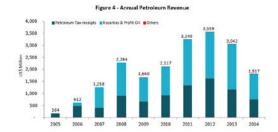
Investment Style

- The investment style is largely passive and investments are largely in offshore bonds and equities.
- Not more than 50% of the Fund may be invested in listed equities. No less than 50% may be invested in investment grade fixed interest securities. Up to 5% of the fund may be invested in other investments.
- Current allocation is 40% developed market equities, 60% developed market bonds.



Market Value of Petroleum Fund since Inception and annual Petroleum revenue





Source: Petroleum Fund Annual Report 2014

New Zealand Institute of Pacific Research T +64 9 123 4567 W nzipr.ac.nz

