

## Introduction

On March 8, 2014, the West Virginia Legislature approved the creation of a West Virginia "Future Fund," the latest in a series of North American sovereign wealth funds (SWFs) created in recent decades. Following a model used by other states and provinces, 3% of all funds received from severance taxes on coal, oil, natural gas, minerals and timber extracted in West Virginia will be diverted to a permanent trust fund 1. West Virginia's fund will almost certainly not be the last SWF: recent estimates by the U.S. Energy Information Administration place the amount of technically recoverable shale oil in the United States at 48 billion barrels, and technically recoverable shale gas at 1,161 trillion cubic feet, in deposits from New York to California, while Canada has technically recoverable shale oil deposits of 9 billion barrels, and technically recoverable shale gas at 573 trillion cubic feet<sup>2</sup>. Using revenues from some of the same natural resource reserves enjoyed by their U.S. neighbors, Saskatchewan and the Northwest Territories are preparing to launch wealth funds.

Meanwhile, some of the most important recent innovations in investment management of public funds are being developed north of the border. Large Canadian funds and managers, including the Canada Pension Plan Investment Board (CPPIB), Ontario Teachers' Pension Plan (OTTP), PSP Investments and the Ontario Municipal Employees Retirement System (OMERS), are developing strong in-house expertise and investing directly in private equity, infrastructure and property deals. Not only does this style of investing save billions in fees that would otherwise go to external asset managers, but the funds are also able to take advantage of their natural time horizon advantages over other large investors, exercise more control over their investments, and reap higher returns. OTTP, for example, reports the highest 10-year returns among global peer funds for the years 2010, 2011 and 2012.

The governance structures and investment policies employed by North American public funds vary from state to state and from province to province. With respect to structure and payouts, some jurisdictions retain the principal funds in a central account and use interest generated to supplement the state budget. Others create separate funds for specific social and economic programs. And Alaska, in an innovative model befitting its image as a frontier state, distributes income generated from its wealth fund directly to Alaska residents. With respect to investment policies, some funds have limitations on the types of assets in which they can invest, following the "legal list" methodology that has been a common feature of public pension fund investing for decades. Others simply hold their fiduciaries to a

This article will briefly discuss some of the innovations developed by North American public funds, with a particular focus on their distribution policies, governance and investment decision-making. This is a story decades in the making. Although the creation of new funds like West Virginia's Future Fund and North Dakota's Legacy Fund have received significant popular attention in recent years, many North American funds have existed for decades, and the legislative history of some funds dates back to two years prior to the adoption of the U.S. Constitution. And, with significant oil, natural gas and mineral wealth remaining to be tapped in the United States and Canada, West Virginia, the Northwest Territories and Saskatchewan's funds may just be the latest in a continuing wave of North American public funds.

## **A Short History of North American Public Funds**

Recently created wealth funds like Quebec's Generations Fund, North Dakota's Legacy Fund and West Virginia's Future Fund, as well as funds that are now a few decades old, such as the Alaska Permanent Fund and the Alberta Heritage Fund, typically have a common funding source: a percentage of the severance taxes paid on natural resource extraction<sup>3</sup>. However, as described in this section, many of these funds are not the result of newly-discovered petroleum wealth. Indeed, the oldest North American sovereign wealth funds trace their origins to the early days of the United States itself.

## **Permanent School Trust Funds**

The history of North American sovereign wealth begins with the Land Ordinance Act of 1785 and the Northwest Ordinance Act of 1787. Congress intended these two legislative acts to provide a funding mechanism for U.S. territories that would support public school systems and other vital governmental services. Indeed, the acts had a crucial political purpose; some members of the Continental Congress feared that as settlements expanded in the new territories under federal control, land speculation would quickly ensue, natural resources would deplete and, most worryingly, "the fragile new Union might fracture if settlements decided to secede or establish non-democratic governments" 4.

<sup>&</sup>quot;prudent person" standard without requiring or prohibiting specific investment or setting specific asset allocation targets, allowing the funds to operate at the cutting edge of investment policy and practice.

<sup>&</sup>lt;sup>1</sup> Under the provisions of the S. B. 461, the Future Fund will only receive its 3% when West Virginia's "Rainy Day" fund is equal to at least 13.5% of the general revenue. The state also may not draw from the fund until 2019. S. B. 461 (W. Va. 2014).

U.S. Energy Information Administration, Technically Recoverable Shale Oil and Shale Gas Resources: An Assessment of 137 Shale Formations in 41 Countries Outside the United States (June 2013), available at http://www.eia.gov/analysis/studies/worldshalegas/pdf/fullreport.pdf.

Quebec's funding is more diverse than other funds, however, as it includes "the revenue resulting from indexing the price of heritage electricity as of 2014; all mining royalties as of 2015-2016; the revenue of \$2215 million per year, as of 2017-2018, stemming from the increase in Hydro-Québec's net earnings resulting from the closure of the Gentilly-2 nuclear power plant; as of 2014-2015, \$100 million per year arising from the increase in the specific tax on alcoholic beverages." Québec, 2013 ECONOMIC AND FINANCIAL PROFILE OF QUÉBEC 19 (2013), available at http://www.finances.gouv.qc.ca/documents/Autres/en/AUTEN\_profile2013.pdf.

<sup>&</sup>lt;sup>4</sup> CTR. ON EDUC. POLICY, PUBLIC SCHOOLS AND THE ORIGINAL FEDERAL LAND GRANT PROGRAM: A BACKGROUND PAPER FROM THE CENTER ON EDUCATION POLICY 5 (2011), available at http://www.cep-dc.org/cfcontent\_file. cfm?Attachment=Usher Paper FederalLandGrants 041311.pdf.

# Table 1 Permanent School Trust Funds

Fund	Primary Income Source(s)	AUM (millions USD)	Inception
The Texas Permanent School Fund	Oil & gas	\$30,600	1854
The Texas Permanent University Fund	Oil & gas	\$15,300	1876
New Mexico Land Grant Permanent Fund	Oil & gas	\$5,932	1912
Wyoming Permanent Land Funds	Oil, gas, coal & minerals	\$2,696	1890
The Oklahoma Permanent Funds	Investments and oil & gas	\$2,000	1906
Utah Permanent State School & Institutional Trust Funds	Oil & Gas	\$1,600	1896
The Oregon Common School Funds	Investments	\$1,200	1859
Minnesota Permanent School Fund	Mineral lease	\$1,000	1849

Source: Funds' websites

Through the Land Ordinance Act, lot No. 16 of every township—physically located at the center of each township—was reserved for the maintenance of public schools within each township, thereby providing the critical funding mechanism for state public schools. The Northwest Ordinance of 1787 next provided more formal mechanisms by which states would apply for statehood to be achieved through the passage of an Enabling Act for each state, which would set out the specific land grant. The typical structure involved a land grant for the benefit of the state's schools.

During these early years, when many states were created and subsequently joined the Union, no state set aside income from the lands in a permanent trust fund. Many states sold off the land and immediately used the money for the benefit of the local schools. It was not until 1835 that the first permanent fund was created by the territory of Michigan, coincident with its entry into the Union in 1837. Other states followed Michigan's model, although it was not until the Colorado Enabling Act of 1875, when the U.S. Congress itself specifically placed restrictions on the sale of lands set aside for public schools, that the sales of such lands would constitute a "permanent school fund."

Many of the original grant lands have been sold, with most states taking the view that the pressing needs of fledgling school systems required substantial and immediate funding through sales, rather than a trickle of funding through leasing of the trust lands. In Oregon, for example, the state engaged in a systematic liquidation of state trust lands "based on the theory that once this property was in private hands, the lands would generate more revenue for the state in property taxes than it would in public ownership" 5. Most of the states formed prior to 1850 have sold the majority of their

## **Severance Tax Funds**

In 1973, New Mexico was the first state to use severance tax revenues on natural resources to establish a permanent fund. A number of other states followed. As states created these funds, one of the primary arguments for the creation of the funds was not only (or perhaps even predominantly) to generate revenue, but rather to offset costs associated with resource extraction, such as damage to water systems, air quality, or loss of arable land or natural habitats. Not all states with natural resource wealth have used severance taxes to create permanent funds, however, and many resource extractors and other beneficiaries of the resources have argued that severance taxes are merely a form of rent extraction by politicians of resource-rich states. Notwithstanding these complaints, however, many severance tax funds have reached or are approaching 40 years of continued operation, and form an important part of many states' budget systems. The largest severance tax funds—with assets greater than \$2 billion—are shown in Table 2. With the exception of the Alaska Permanent fund, most severance tax funds are relatively small.

holdings. California, for example, retains only about 10% of its original grant. A few other states, however, hold a majority of their grant lands, including Nevada (87%) and Arizona (75%). For those states with significant trust lands, revenue generated from the lands can provide a significant portion of the state's overall budget. As an example, in New Mexico, state funds make up approximately 67% of the revenue for public schools, and trust lands provide approximately 14% of this funding. Although there are many state land grant funds in operation, only the funds in Table 1 have assets under management of a billion dollars or more.

PETER W. CUP ET AL., LINCOIN INST OF LAND POLICY & SONORAN INST. JOINT VENTURE ON STATE LAND TRUSTS, TRUST LAND IN THE AMERICAN WEST: A LEGAL OVERVIEW AND POLICY ASSESSMENT (2005), available at https://www.lincolninst.edu/subcenters/managing-state-trust-lands/publications/trustlands-report.pdf.

Fund	Primary Income Source(s)	AUM (millions USD)	Inception
The Alaska Permanent Fund	Oil	\$46,800	1976
Permanent Wyoming Mineral Trust Fund	Oil & Gas	\$5,889	1974
The North Dakota Legacy Fund (Trust Lands Permanent Fund)	Oil & Gas	\$2,600	2011
The Alabama Trust Fund	Oil & Gas	\$2,500	1985
New Mexico Severance Tax Permanent Fund	Oil & Gas	\$2,194	1973

Source: Funds' websites.

Fund	Primary Income Source(s)	AUM (millions USD)	Inception
The Generations Fund	Mining royalties	\$4,700	2006
Alberta Heritage Savings Trust Fund	Oil	\$15,170	1976

Source: Funds' websites.

# **Public Pension Funds**

The origins of the giant Canadian public pensions are much more recent than the U.S. land grant funds. For example, the Ontario Municipal Employees Retirement System Act, passed in 1962, created OMERS. The nationwide Canadian Pension Plan, which is managed by the CPPIB, was created in 1964. The CPP operates in every province except Quebec, which has its own Quebec Pension Plan operating in much the same way as the CPP.

Notwithstanding their relatively recent creation, many of the Canadian pension funds are giants compared to most state land grant funds. Many U.S. public pension funds are equally large (and some, like CalPERS, among the largest funds in the world). However, the governance and investment policies of most of the U.S. funds tend to resemble U.S. wealth funds much more than Canadian public pension funds because they are built on the same statutory structures as state-wealth funds, with similar types of asset class restrictions and fiduciary standards. As a result, only the Canadian pension funds will be described in this report to highlight important differences from U.S. funds with respect to legal and regulatory structures and investment policies.

Fund	AUM (millones de USD)
The Canada Pension Plan Investment Board (CPPIB)	\$201,500
The Caisse de dépôt et placement du Québec (Caisse)	\$200,100
The Ontario Teachers' Pension Plan Board (OTPP)	\$140,800
The British Columbia Investment Management Corporation (bcIMC)	\$110,000
The Public Sector Pension Investment Board (PSP Investments)	\$76,100
The Alberta Investment Management Corp. (AIMCo) <sup>7</sup>	\$74,700
The Ontario Municipal Employees Retirement System (OMERS)	\$65,100
The Healthcare of Ontario Pension Plan (HOOPP)	\$51,600
The Ontario Pension Board (OPB)	\$21,000
The OPSEU Pension Trust (OPTrust)	\$16,000
Source: Funds' websites.	

<sup>&</sup>lt;sup>6</sup> In each case, this article makes use of the most recently available data on asset management size

from annual reports or press releases of the funds.

7 AlMco manages assets for many Alberta government funds and pension plans, including the Alberta Heritage Savings Trust and the Public Service Pension Plan.

# **Innovation in Distribution Policy: the Alaska Permanent Fund**

For public pension funds, distribution goals are relatively simple in theory (but often difficult to implement in practice); public pensions must be able to pay liabilities of pensioners as they become due. By contrast, sovereign wealth funds typically do not have specific liabilities 8. What, then, are SWFs designed to do? Much of the writing on SWFs explains them in terms of political risk or the potential use of SWFs as political tools. The use of a SWF as a political tool is but one among many explanations for the existence of SWFs, and while it may be true that some SWFs are used for political purposes on occasion though there exists scant evidence of this—less nefarious purposes drive the creation of most SWFs, whether at the national or state level. Although the specific reasons justifying the existence of a SWF are expressed in unique ways, the various justifications may be grouped together under several general categories, including revenue smoothing, protecting against Dutch Disease, or providing intergenerational welfare. Because these policy goals have been discussed at length elsewhere, this article will address only one innovative means of achieving an essential fund goal: the Alaska Permanent Fund's unique distribution policy 9.

Alaska's SWF, like many others, was designed to be a mechanism for ensuring intergenerational equity. The term intergenerational equity is somewhat ambiguous, as it can refer both to an imperative to save present capital in order to use it to satisfy future commitments, such as pension benefits, or to an imperative to save it specifically for the benefit of future generations, irrespective of commitments to present generations. In ageing populations, intergenerational equity suggests a fairness concern that if a citizen has paid taxes and social security or equivalent public pension payments, they have a proper claim against the government for a reasonable income in their retirement. Intergenerational equity can also refer to a principle of distributive justice. The primary concern in this sense of the term is not that present generations may enjoy some of the fruits of their life's work through government benefits in retirement, but that future generations should be able to enjoy the fruits of the nation's resources just as present generations. Thus, a natural resource fund is not created so that (or merely that) it may provide a present generation with an acceptable standard of retirement benefits, but also that future generations should also benefit from the sale of a finite store of resources taken from the land that they are to inherit.

The decision to set up a fund for future generations is a crucial economic decision because it may well be the case that economic

development initiatives could pay greater dividends than the benefits offered by a SWF that merely pays its interest back into state coffers. Alternatively, a state may decide that it will instead pay out a dividend, as Alaska does, rather than leave the determination of how funds should be spent to the government. The debate in Alaska over the issue of how best to serve future generations is instructive. Proponents of the Alaska Permanent Fund offered several rationales for the creation of the Alaska Permanent Fund: first, the Fund would "help to create an investment base from which to generate future income. Then, when oil revenues ran out, there would still be a major source of state revenues to pay out the costs of government services"; second, the APF would "remove a significant portion of the oil revenues from the legislative spending stream, thus reducing the opportunities for excessive spending by the Legislature"; and third, the fund would prudently "transform" oil wealth into a "renewable source of wealth for future generations" 10.

Although the APF had several clear purposes for its existence, the particular means of achieving these general goals had not yet crystallized by the time the APF began receiving funds. The debate focused on generational issues: should the APF be managed as an investment fund that would distribute income over the long-term, or should it be managed as a development bank and used to "forcefeed" Alaska's economy in the short-term? 11. This second possibility is not necessarily inconsistent with the third rationale, intergenerational wealth transfer, justifying the creation of the APF. By using the APF as a development bank that provides loans and grants to Alaskan businesses, the fund could increase the number of small businesses in Alaska, which would serve to increase the number of jobs and broaden the economy, thereby ultimately decreasing the dependence of the state on oil and other natural resource revenues. On the other hand, a development bank would increase the possibility of political mischief as the Fund could be used as a mechanism for political patronage.

Those arguing in favor of the investment fund model were motivated by the protection of the principal managed by the APF. They believed the APF should manage the funds in accordance with the prudent investor rule and only make investments that were of "trust-grade quality" at market rates. Ultimately, the proponents of the investment fund model prevailed, although the state allocated some funds that were not part of the 25% of revenues dedicated to the APF to create several state agencies <sup>12</sup> charged with achieving some of the short-term goals envisioned by the proponents of the development bank model.

<sup>8</sup> Admittedly, this is not a universally accepted statement. See Javier Capapé & Tomas Guerrero Blanco, More Layers than an Onion: Looking for a Definition of Sovereign Wealth Funds (ESADE Bus. Sch Research Paper No. 21, 2013), available at http://ssr. nom/abstract=2931165.

Research Paper No. 21, 2013), available at http://ssrn.com/abstract=2391165.

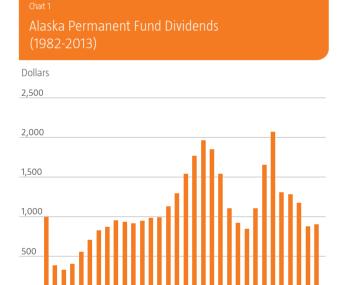
Some of the following observations were first developed in Paul Rose, Managing Public Natural Resource Wealth, Revista Brasileira De Politicas Publicas (2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2220218.

<sup>&</sup>lt;sup>10</sup> Gordon L. Clark & Eric R. W. Knight, *Temptation and the Virtues of Long-Term Commitment: The Governance of Sovereign Wealth Fund Investment*, 1 Asian J. Inτ'ι L. 321, 335 (2011).

These agencies include the Alaska Housing Finance Corporation, the Alaska Industrial Development and Export Authority and the Alaska Renewable Resources Corporation.

The APF dividend, the distinctive feature of Alaska's SWF model, is paid out to every resident <sup>13</sup> according to a specific formula as set out by statute <sup>14</sup>. After the formula's calculation, a determination is made as to whether there are sufficient funds in the earnings reserve account to pay the dividend. The dividend may not be paid out of the principal.

Since its creation, the APF has paid out nearly \$20 billion in dividends. Last year the APF paid a dividend of \$900 to 631,470 applicants, or approximately 86% of the total population of 736,399. For many Alaskans, particularly native Alaskans and those in rural Alaska, the dividend is a major source of income.



2000

2005

2010

Source: Alaska Permanent Fund (2014).

1990

Alaska's model is the only one of its kind in North America, although it does have proponents in other jurisdictions. In Alberta, for example, the Canada West Foundation has argued that over a suitable period, the principal of the Alberta Heritage Fund could be built up; after sufficient income is produced to enable the fund to pay out a significant dividend, the fund could adopt the Alaska dividend model <sup>15</sup>. As in Alaska, the argument has both economic and governance rationales:

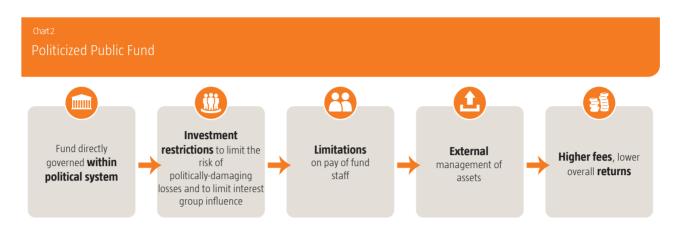
In contrast to the Alaska model, a mixed-objective model has prevailed in most other states and provinces. In these jurisdictions, legislators retain a large part of the funds in a permanent trust for future generations, while also spending a portion of the severance tax revenues on development projects designed to create a broader economic base. A mixed-objective model indicates political compromise (with some wanting the funds spent on pressing current needs, while others wanting to save the funds), but also complicates the goal of using a natural resource fund to promote intergenerational equity. The mixedobjective model requires a jurisdiction to make bets on present funding opportunities in the hope these will pay out for both present and future generations. Or, in the case of some government agency recipients of natural resource fund dollars, there may in fact be no particular goal of providing for future generations or for the general economic welfare of the jurisdiction; in these cases, short-term regional or local needs may control.

Aside from jurisdiction-level concerns about the appropriate means of providing for future generations—whether to use a natural resource fund as a development fund or an investment vehicle, for example—significant federal concerns come into play. When combined with a fiscal federalism in which states and provinces receive increasingly large federal subsidies, the issue of intergenerational equity includes not merely whether and how present citizens of natural resource fund sponsor-states should subsidize future citizens, but also whether other jurisdictions' citizens should subsidize present and future sponsor-state citizens despite the existence of a state or provincial SWF.

<sup>&</sup>lt;sup>13</sup> Parents are also able to claim a dividend for each of the unemancipated children. For the 2014 dividend, for example, residents may establish eligibility for the dividend by showing they were residents of Alaska during all of calendar year 2013; that they intend to remain an Alaska resident indefinitely; that they have not claimed residency in any other state or country or obtained a benefit as a result of a claim of residency in another state or country at any time since December 31, 2012; and that they were not sentenced or incarcerated as a result of a felony conviction during 2013, or incarcerated at any time during 2013 as the result of a misdemeanor conviction in Alaska if convicted of a prior felony or two or more prior misdemeanors since January 1, 1997. If the resident was absent from Alaska for more than 180 days, the absence must have been an "allowable" absence (such as attending college or in military service). Finally, the resident must have been physically present in Alaska for at least 72 consecutive hours at some time during 2012 or 2013. Alaska Permanent fund Corporation, Basic eligibility Requirements, available at http://pfd.alaska.gov/Eligibility/EligibilityRequirements.

The dividend is calculated by averaging the net income of the APF over the past five years, multiplied by 21 percent, divided by 2, then divided by the number of eligible applicants. In 2010, for example, the amount was calculated as follows (amounts in thousands, except individual dividend amount): Net income from previous five years, \$8,171; multiplied by 21% = 51,716, divided in half = \$858, then after various minor adjustment are made, the total is divided by the estimated number of dividend applicants: \$822,100,000/641,595 = \$1281.00 (rounded to nearest whole dollar). See Alaska Permanent Fund Corporation, The Permanent Fund Dividend, available at http://www.apfc.org/home/Content/dividend/dividend.cfm.

<sup>&</sup>lt;sup>15</sup> CAN. W. FOUND., ALBERTA'S ENERCY LECACY: IDEAS FOR THE FUTURE 79 (2007), available at http://cwf.ca/pdf-docs/projects/ael-chapt-dyedlin.pdf. As in Alaska, the argument has both economic and governance rationales: "There is a governance rationale that sees citizens instead of government making decisions about their "piece of the pie." Instead of politicians and bureaucrats deciding what is best, why not individuals and families? There are both right-leaning and left-leaning rationales favouring public dividends being available such that individual residents and their families can make their own spending decisions. Thus a broad-based public consensus likely is feasible." Id.



Source: Author's elaboration

# Innovation in Investment Policy: The Canadian Public Pension Funds

Of critical importance to the success of a public fund is the legal and governance framework in which it operates; without the proper framework, the fund is less likely to achieve its stated goals, and, of even more concern, is at risk of becoming a tool for corruption. A large part of the governance structure is written into the investment policies of the funds, but the policies themselves depend on the political framework in which the fund operates. Transferring high-level justifications for public funds into sound fund investment decision-making is exceedingly difficult, and state and provincial funds differ significantly in their governance and investment philosophies.

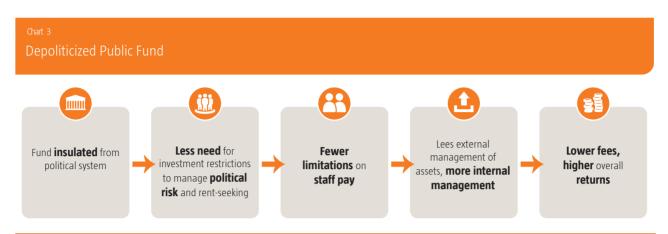
The management and investment policies of the Canadian funds differ significantly from the U.S. state wealth funds in several crucial ways. First, the Canadian funds tend to be much larger than the U.S. funds. Economies of scale play a significant role in determining whether a fund will be able to justify and support a large in-house management team. Second (and in part a function of their comparatively large size), Canadian funds tend to invest very differently from their American counterparts. As others have noted (and the Canadian funds themselves have pointed out), Canadian funds tend not to have explicit statutory restrictions on their investments. The size and flexibility of Canadian funds allows them to make direct alternative investments in infrastructure, venture capital, or private equity that many other public funds, including U.S. state wealth funds, could not make.

Finally, Canadian funds differ in the way in which they are governed. Canadian funds are well-insulated from political pressure, and tend to have independent, professional boards rather than, as The

Economist bluntly stated, boards "stuffed with politicians, cronies and union hacks" <sup>16</sup>. Also, compared to their U.S. counterparts, Canadian funds tend to pay much closer to the compensation rates of external asset managers.

Although economies of scale explain much of the differences in investment policy between large Canadian funds and smaller pension funds, political independence also appears to play a significant role. U.S. funds—wealth funds, to some extent, but particularly public pension funds—suffer from a lack of political independence, and this lack of independence has serious consequences for investment policies. This is certainly not to say that funds are corrupt, but that public fund managers must regularly contend with political pressures from legislatures and interest groups; this is particularly true for funds that are tightly controlled by state legislatures. How investment policies are connected to political forces is best understood by considering the incentives of the elected government officials that create and supervise the fund. Politicians are faced with difficult choices about how the government will ensure that the public fund remains accountable. There may also be political gamesmanship that occurs as the various constituencies with an interest in the fund's performance (such as public employee union officials or elected officials such as state treasurers) vie for a seat at the board table. Thus, boards are staffed with politicians or their appointees, rather than professional managers. The incentives of appointed or elected policy-makers can reasonably be expected to differ from professional managers along several dimensions. First, they may be concerned with representing their political constituency, such as unionized employees or a particular political party, in addition to (or in egregious cases, rather than) the beneficiaries of the fund. Politicians may also be concerned that the fund could serve as a vehicle to advance the interests of rival political parties or interest groups. And, because

<sup>&</sup>lt;sup>16</sup> Canada's Pension Funds: Maple Revolutionaries, Econ. (Mar. 3, 2012), http://www.economist.com/node/21548970.



Source: Author's elaboration.

The compromise that has often resulted from these incentives is a politically-connected board that is restricted by statute in its investment activities. The staff of the funds are typically paid salaries commensurate with public employee status, and as a result the fund may not be able to hire qualified staff with the capability to manage many of the fund's assets in-house. Thus, some assets, and particularly alternative investments, must be managed externally. Unfortunately, investment restrictions have not served to eliminate corruption, as several high-profile pay-to-play scandals in the U.S. attest. On the other hand, the restrictions have resulted in a decreased universe of investment opportunities and large fees for external managers. The process of how politicization ultimately leads to less innovation and higher costs for public funds can be summarized in Chart 2.

Politicized public funds can buy innovative strategies, of course, but those strategies come at a price: traditionally, a management fee of 2% and 20% of the profits. U.S. public funds have increasingly invested in alternative investments in recent years, but they typically pay dearly for the privilege.

By contrast, the Canadian giants tend to operate under a more politically-insulated model. By changing the level of political involvement in the fund, politicians reduce the availability of the fund for their own political purposes, but they also reduce the availability of the fund's use for political rivals. They are also less directly accountable for the fund's performance. As a result, they have less need to restrict the scope of investments available to the fund. Because the board that manages the fund is well insulated from political pressures, they are able to ask their managers to do more and to pay them more. The net result is higher internal fees, but much lower overall fees, which, all other things equal, leads to higher returns, as summarized in Chart 3.

What makes the Canadian funds innovative is not so much the fact that they are investing in alternative investments, but *how* they are investing. As shown in the case studies in the next section, Canadian pensions' innovation is in their ability—owing to their political independence—to disintermediate the investment process. And, even more impressively, at least one fund is now serving as an intermediary for other institutional investors.

# Case Studies: U. S State Wealth Funds and Canadian Pension Funds

The following case studies show how U.S. state wealth funds and Canadian pension funds differ in the ways in which they are regulated by statute, how they are governed and how their investments are managed. Although U.S. funds do not in each case suffer lower returns than their Canadian counterparts, they are hampered by regulatory and policy structures that make achieving high returns more difficult.

## **U.S. State Wealth Funds**

This section first looks at several of the largest state SWFs—the Alaska Permanent Fund (APF), the New Mexico Severance Tax Permanent Fund (NMSTPF), the Texas Permanent School Fund (TPSF) and the Wyoming Permanent Mineral Trust Fund (WPMTF)—and describes the investment policies of the funds. Most state natural resource funds use outside investment managers to help invest some or all of their funds, and fiduciary standards and asset allocation requirements serve to constrain the behavior of the funds and their investment managers. Aside from these similarities, the funds discussed in these case studies have considerably different investment goals, ranging from an aggressive, total return-focused management style that produces a large annual cash dividend for Alaskans, to mixed total

return and social investment strategies in Wyoming and New Mexico. A large percentage of assets are managed by external managers.

Some states may have more than one fund in operation. For example, a state may have both a land grant SWF and a severance tax SWF. State trust lands are typically invested through an investment division operating within the state's land management department or the state's education department, or, in the case of states with a severance tax fund, both of the state's natural resource funds are managed by a single investment entity that may operate as a stand-alone entity. In Texas, for example, the Permanent School Fund (PSF) is managed by the State Board of Education, while the administrative activities for the PSF are handled by an investment division of the Texas Education Agency. In New Mexico, on the other hand, both the Land Grant Permanent Fund and the Severance Tax Permanent Fund investments are managed by the State Investment Council (SIC).

Because the income generated by the funds is typically dedicated to various public entity beneficiaries, land grant funds traditionally do not invest funds in social programs. Texas is an exception to this rule, however, as legislation passed in 2007 allows the State Land Commissioner to designate some funds that would have been deposited in the PSF to be redirected to a "real estate special fund account," and also expanded the PSF's investment authority, allowing the PSF to invest in "land; interests in real property for biological, commercial, geological, cultural or recreational purposes... [to make investments to protect, maintain, or enhance the value of public school lands; [or, to make investments to] acquire... an investment or interest in public infrastructure, or other interests" <sup>17</sup>.

# The New Mexico Severance Tax Permanent Fund

Broad U.S. Equity	31%
Broad International Equity	15%
Fixed Income	16%
Real Return	10%
Core Real Estate	10%
Absolute Return	8%
Private Equity	10%

New Mexico's State Investment Council (SIC) is tasked with management of the NMSTPF. As is generally true for state and provincial SWFs, the SIC and its external managers are obligated by statute to apply a "prudent investor" standard of care. The SIC "seeks to manage the Funds to ensure that future generations receive the same or greater benefits as current beneficiaries, while maximizing current distributions through time to provide current revenue sources to the state's General Fund. Total return, which includes realized and unrealized gains, plus income, less expenses, is the primary goal of the Funds" 19.

Notwithstanding this basic total return focus, the investment activities of the SIC from STPF funds are complicated by numerous statutory imperatives. When the STPF was formed, New Mexico's legislature created a patchwork of investment targets for the STPF, with a specific social policy associated with each type of investment target. While most investments are designed to maximize a riskadjusted rate of return, these economically targeted investments are designed to "first obtain a risk-adjusted rate of return under the Prudent Investor Rule, and second, to enhance the economy of New Mexico" 20. To make sure these objectives are achieved while minimizing the risk of wasteful or corrupt investments, the fund managers are required, among other things, to ensure that the investments will stimulate the economy of New Mexico on a continuing basis, expand business activity in the state, and promote the creation and preservation of jobs.

The investment criteria for the NMSTPF's other investments are relatively standard and similar to those employed by other large institutional investors. The investment policies set out a list of "permitted investments," for example, and set asset allocation targets. The investment policies place limitations on the type of equity securities that may be owned, for instance, and restrict the percentage of ownership of any given company. On the other hand, the list of economically-targeted investments over the course of the life of the fund reveals a remarkable effort at social engineering on the state level, with some of the investments paralleling federal efforts. Among other things, the SIC has invested in mortgage passthrough securities (stimulating the mortgage market and increasing home ownership levels), New Mexico small businesses and the New Mexico film industry (which one clever observer has dubbed "Tamalewood").

TEX. NAT. RES. CODE ANN. § 51.402 (West 2007).
 N. M. STATE INV. COUNCIL, JANUARY 2014-JUNE 2015 ANNUAL INVESTMENT PLAN (2014), available at http://www.sic.state.nm.us/uploads/files/2014%20Annual%20Plan%20Public.pd

<sup>&</sup>lt;sup>19</sup> N. M. State Inv. Council, Investment Policy Statement (2012), available at http://www.sic.state.nm.us/ uploads/FileLinks/47799e8b33064817a9838767216d86af/2012\_07\_24\_NM\_SIC\_Investment\_Policy.

# The Wyoming Permanent Mineral Trust Fund

# Target Asset Allocation<sup>21</sup>

Large Cap U.S. Equity	15.0%
Small Cap U.S. Equity	3.0%
International Equity	13.0%
Private Equity	4.0%
Real Estate	7.5%
Absolute Return	7.5%
Convertibles	2.0%
Fixed Income	45.0%
Cash Equivalents	3.0%

Wyoming also has multiple objectives for its severance tax fund investment program. The general policy for Wyoming trust funds requires the State Loan and Investment Board and its external managers to invest public funds "in a manner that strives for maximum safety, provides adequate liquidity to meet all operating requirements, and achieves the highest possible investment return consistent with the primary objectives of safety and liquidity" <sup>22</sup>.

Wyoming has set out by statute a set of permissible investments and investment allocations, but the statutes contain only two minor restrictions on investments. First, only up to 55% of the fund may be invested in common stocks. Second, prior board approval must be obtained before the state is allowed to invest in "alternative investments." The Board's investment policy adds to these restrictions by prohibiting self-dealing transactions, floating rate securities, individual certificates of deposit, letter stock and other unregistered equity, commodities (if not part of an alternative investment), most real estate transactions, natural resource properties, and short sales and margin transactions. Derivatives may be used to manage risk, but "managers must review their use of derivatives with the Board prior to employing derivative tactics" <sup>23</sup>.

Like New Mexico, Wyoming's statutes also expressly permit state natural resource funds to invest in various investments that further targeted social policies. Among other things, the state treasurer is permitted to invest (or in some cases, pledge) up to \$25 million in non-delinquent federally guaranteed or insured higher education

loans from any nonprofit Wyoming corporation organized to acquire such loans; up to \$300 million from the common school account in the permanent land fund to guarantee school district bonds; up to \$100 million to guarantee local government bonds; and, "to promote economic development," the state treasurer may invest up to \$100 million in industrial development bonds issued by joint powers boards, municipalities or counties. The state treasurer may not invest more than \$50 million "for a specific public purpose authorized or directed by the legislature" <sup>24</sup>, although the amount may be adjusted by recommendation of the state treasurer and approval by a Board subcommittee on capital financing and investments.

The state investment policy also sets out various portfolio guidelines. For example, the state may only own 1% or less of the common stock of any corporation, and only up to 1.5% of the total book value of the funds may be invested in the common stock of any corporation. Like many funds—and particularly state-owned funds—Wyoming also faces the challenge of matching its investment policy to its fiduciary duties when a higher return may be generated with investments that are at odds with other social, ethical and political goals. In a somewhat convoluted provision, the state investment policy states that "while the Board cannot make investments based on social or political objectives, it does consider the economic effects of social and humanitarian issues in the analysis of investments. The Board seeks to avoid investments that support terrorism or the violation of human rights."

## The Alaska Permanent Fund

The Alaska Permanent Fund is directly overseen by the Alaska Permanent Fund Corporation (APFC), a state-owned entity that operates as a "quasi-independent state entity, designed to be insulated from political decisions yet accountable to the people as a whole" 25. The APFC retains direct political accountability through an annual APFC report to the Legislative Budget and Audit Committee, and through approval of the APFC budget by the Alaska Legislature. As discussed above, the distinguishing feature of Alaska's fund is that a significant portion of the income generated by the fund is paid out to Alaskan citizens in the form of an annual dividend. The dividend is paid out according to a specific formula set out by statute <sup>26</sup>. After this calculation, a determination is made as to whether there are sufficient funds in the earnings reserve account to pay the dividend. The dividend may not be paid out of the principal. For many Alaskans, particularly native Alaskans and those in rural Alaska, the dividend is a major source of income.

 $<sup>^{21}</sup>$  STATE LOAN & INV. BD., WYO., MASTER INVESTMENT POLICY AND SUB-POLICIES 23 (2012), available at http://treasurer.state.wy.us/pdf/investmentpolicy120612.pdf

<sup>&</sup>lt;sup>22</sup> *Id.* at 1. <sup>23</sup> *Id.* at 9.

<sup>&</sup>lt;sup>24</sup> Wyo. Stat. Ann. § 9-4-715(n) (West 1977).

Aussa Perament Funo Core, An Aussan's Guide to the Perament Funo 31 (2009), available at http://www.apfc.org/home/Media/publications/2009AlaskansGuide.pdf.

Roughly speaking, the dividend is calculated by averaging the net income of the APF over the past 5 years, multiplied by 21%, divided by 2, then divided by the number of eligible applicants.

# Target Asset Allocation (APF) 27

Risk Class	Asset Class	Risk Class Target	Asset Class Target
Cash and Interest Rates		6%	
	Cash		1.2%
	U.S. Government Bonds and International Developed Government Bonds (currency hedged)		4.8%
Company Exposure		55%	
	Global Credit		11%
	Public/Private Credit		2%
	Global Equity		36%
	Private Equity		6%
Real Assets		19%	
	Real Estate		12%
	Infrastructure		4%
	U.S. Treasury Inflation Protected Securities		3%
Special Opportunities		20%	
	Absolute Return Mandate		6%
	Real Return Mandate		7%
	Emerging Markets Multi-Asset		2%
	Fixed-income Domestic Aggregate		2%
	Other (debt opportunities and true special opportunities)		2%

In the early years of the APF, the fund's investment policy was based on traditional asset allocation techniques, and was heavily invested in bonds. However, in 2009, the Board of Trustees "recognized that some investments might have more in common with investments from other asset classes with regard to their expected levels of risk and return." For example, corporate bonds may not act like U.S. Treasuries as much as they act like stock; "this makes sense when you consider that the companies that issue these corporate bonds are the same companies traded in the stock markets." Under its new strategy, the Board thus determined to group assets by risk characteristics, rather than by asset class. So rather than grouping assets as stocks, bonds, cash, etc., the APF now classifies investments as "Cash," "Interest Rates," "Company Exposure," "Real Assets," and "Special Opportunities." "Cash" includes liquid instruments with durations of less than twelve months. "Interest rates" includes low credit-risk securities such as U.S. Treasury bonds and non-U.S. government bonds. "Company Exposure" includes investment grade and high-yield bonds, U.S. and foreign stocks,

bank loans and private equity investments. "Real Assets" includes real estate, infrastructure and Treasury inflation protected securities (TIPS). The "Special Opportunities" category includes, among other things, absolute return assets, distressed debt and commercial mortgage-backed securities.

## The Texas Permanent School Fund

The investment policies of the TPSF, the largest North American fund next to the Alaska Permanent Fund, are limited by what seems to be a fairly restrictive statutory framework. Under the Texas Administrative Code, the TPSF may only invest in certain "permissible investments." However, the definition lists fairly standard, modern and broad categories of investments, including stocks on national or well-known exchanges, fixed income, private equity, "absolute return" investments, "real return" investments, "risk parity" investments and cash equivalents. The State Board of Education, which has fiduciary responsibility for the management of the TPSF, may allow for other investments, provided the investment is consistent with TPSF goals and objectives. The target asset allocation in 2013 reflected a high number of alternative investments.

<sup>&</sup>lt;sup>27</sup> ALASKA PERMANENT FUND CORP., ALASKA PERMANENT FUND CORPORATION INVESTMENT POLICY 8-9 (2014), available at http://www.apfc.org/home/Media/investments/20140521InvestmentPolicy.pdf.

# Target Asset Allocation (TPSF) <sup>2</sup>

EQUITY		
	Domestic Small/Mid Cap	7%
	Domestic Large Cap	18%
Total Domestic Equity		25%
	International Developed and Emerging Large Cap	18%
	International Small/Mid Cap	0%
	Emerging International Equities	3%
Total International Equity		21%
Total Public Market Equity		46%
FIXED INCOME		
	Core Fixed Income	12%
	Emerging Market Debt	5%
Total Fixed Income		17%
ALTERNATIVE INVESTMENTS		
	Absolute Return	10%
	Real Estate	8%
	Private Equity Investments	6%
	Risk Parity	7%
	Real Return	6%
Total Alternative Investments		37%

The statute also sets out a list of prohibited investments, including, among other things, short sales, restricted stock, buying or selling on margin, options, commodities futures, precious metals, or buying common stock or fixed income securities in a single corporation in an amount exceeding 2.5% of the TPSF total market value or 5.0% of the manager's total portfolio market value.

While the TPSF statutory framework seems firmly entrenched in the legal list era of public fund investing, it is important to note that the TPSF does not have a statutorily mandated asset allocation, which allows it more freedom in selecting investments. In the pension fund statutes of many jurisdictions, on the other hand, legal lists of permitted and prohibited investments were coupled with strict asset allocation standards in an effort to reduce the risk of mismanagement and loss. This risk reduction comes at a price, however, as managers are constrained in their investment choices and may actually have more difficulty in meeting their

fiduciary duties to prudently manage the fund. Managers cannot easily alter poorly performing investment strategies particularly when investment restrictions are enshrined in statutes. This inflexibility costs many funds dearly during the Financial Crisis, as traditional asset allocation strategies, often mandated by statute, proved disastrously inappropriate. CalPERS, for example, lost an astounding \$100 billion in eighteen months when its asset allocation strategy failed <sup>29</sup>.

# **Canadian Public Pensions**

Although the Canadian giants have fewer explicit restrictions than the U.S. wealth funds described above, the pension funds employ asset allocations targets as a part of good fund governance practice. The striking difference is, of course, in the Canadian funds' direct (rather than intermediated) use of alternative investments and direct investments, as described below.

<sup>&</sup>lt;sup>28</sup> TEXAS PERMANENT SCHOOL FUND, COMPREHENSIVE ANNUAL FINANCIAL REPORT 20 (2013), available at http://www.tea.state.tx.us/index4.aspx?id=2147489178&.

<sup>&</sup>lt;sup>29</sup> Ashby Monk, Factor Based Allocation Strategies (Feb. 10, 2011), http://www.investmentreview.com/expert-opinion/factor-based-allocation-strategies-5128.

## Ontario Teachers' Pension Plan

The OTPP diversifies its investments across four broad asset classes: equities, fixed income, natural resources (including commodity derivatives and physical assets such as timber and oil) and real assets (including real estate and infrastructure). As a pension fund, OTPP must maintain adequate liquidity to ensure that it is able to meet its current liabilities. However, it also maintains liquidity and to "opportunistically acquire assets in a cost-effective manner 30."

# Target Asset Allocation (OTPP)<sup>3</sup>

Asset Class	Minimum	Goal	Maximum
Equities	39%	44%	49%
Fixed income	36%	48%	56%
Natural resources	3%	8%	13%
Real assets	18%	23%	28%
Money market*	(26)%	(23)%	(16)%

<sup>\*</sup> Money-market activity provides funding for investments in all asset classes, and is comparable to a treasury department in a corporation.

The OTPP is also one of the best-known "responsible" investors in the world. It is a signatory to the UN Principles for Responsible Investment and objectively evaluates investments against "financial and non-financial factors, including risks associated with environmental, social and governance (ESG) issues, because we believe they can materially impact the value of our investments <sup>32</sup>." One of the most surprising investments by OTPP in recent years—and yet, completely consistent with its commitment to corporate governance issues—is its acquisition of proxy advisor Glass Lewis, the number two competitor in the corporate governance industry behind market leader Institutional Shareholder Services. And unsurprisingly, when OTPP looked to diversify the ownership base of Glass Lewis in 2013 by selling a 20% stake in the firm, it looked to a like-minded, Canadian public fund investor: AIMCo.

## PSP Investments

PSP's statutory mandate is to "manage the amounts transferred to it in the best interests of contributors and beneficiaries under the Plans; and to maximize returns without undue risk of loss, having regard to the funding, policies and requirements of the Plans and the ability of those Plans to meet their financial obligations <sup>33</sup>." PSP's guiding philosophy consists of two pillars: the Policy Portfolio, which sets the strategic asset allocation for the fund, and active management activities. The Policy Portfolio sets out the following target allocations.

PSP defines active management as those activities that deviate from the approved Policy Portfolio, and that are used to supplement the returns of the Policy Portfolio within an active risk budget. The active management program can be thought of as an internal hedging strategy, because PSP "seeks to minimize over time the correlation of returns between the Active Portfolio and the Policy Portfolio <sup>34</sup>." Reviewing the Policy Portfolio allocations, it is clear that PSP does not engage in alternative investments as a sideshow to a larger, standardized asset allocation strategy. Instead, alternative investments are baked in to the Policy Portfolio itself, and PSP then uses active management strategies to further diversify its investments and risk allocation.

# Target Asset Allocation (PSP)<sup>35</sup>

	Asset Class	Target Weight
World Equity		
	Public Market Equity	40%
	Private Equity	14%
Real Return Assets		
	Real Estate	13%
	Infrastructure	13%
	World Inflation-Linked Bonds	5%
	Renewable Resources	2%
Nominal Fixed Income		
	Fixed Income	11%
	Cash & Cash Equivalents	2%

Ontario Teachers' Pension Plan, 2013 Annual Report 20 (2013).

<sup>&</sup>lt;sup>31</sup> Ontrato Teachers' Pension Pun, Statement of Investment Policies and Procedures For Ontario Teachers' Pension Pun, Statement of Investment Policies and Procedures For Ontario Teachers' Pension Pun 6 (2014), Available at http://www.otpp.com/documents/10179/20940/-/72Ae966f-7Aa9-40Ae-88fa-3642E76597df/Statement%200f%20Investment%20Policies%20E%20Procedures%202013.pdf.

<sup>32</sup> Id at 21. OTPP notes that "[w]hile responsible investing does not preclude ownership of assets that some plan members may find objectionable, it does mean Teachers' considers all material ESG risks and opportunities in selecting and managing assets." Id.

<sup>&</sup>lt;sup>33</sup> Pub. Sector Pension Inv. Bd., 2013 Annual Report 12 (2013).

<sup>&</sup>lt;sup>34</sup> Id at 6.

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SPUB. SECTOR PENSION INVS., STATEMENT OF INVESTMENT POLICIES, STANDARDS AND PROCEDURES FOR ASSETS MANAGED BY THE PUBLIC SECTOR PENSION INVESTMENT BOARD 14 (2013).

An example of how PSP differs from its Southern neighbors can be seen in the recent co-investment by PSP with CPPIB and private equity firm Apax Partners in Kinetic Concepts, a U.S.-based medical device company. The deal was valued at approximately \$6.3 billion, and PSP and its partners intend to "work actively in partnership with the management of KCI to further invest in the global medical products sector to expand the company's core business, develop innovative products and extend into new geographies where significant opportunities exist 36." Taken together, three things make the deal possible in Canada and nearly impossible for most U.S. wealth funds: the type of deal (private equity investment), the size of the deal (\$6.3 billion) and an ongoing management relationship with the portfolio company (disintermediated investment). While U.S. funds can and do invest in private equity, they do so indirectly, through external managers, and thus pay external managers fees. PSP and other large Canadian funds, by contrast, are competing with private equity firms directly. Gordon Fyfe, PSP's CEO, recently stated that "We're competing against every other investor in the world... there's a limited amount of returns and if you're going to win and you're going to earn returns, you're taking them from someone else 37."

# Ontario Municipal Employee Retirement System

Finally, the OMERS has a simple asset allocation strategy that belies a sophisticated and innovative investment policy. For its Primary Plan, OMERS breaks its asset allocation strategy into two basic categories: a Public Investment asset group and a Non-Public Investment asset group, as shown in the table below.

# Target Asset Allocation (OMERS) 38

Asset Group	Minimum	Target	Maximum
Public Investments	41.0%	53.0%	65.0%
Non-Public Investments	35.0%	47.0%	59.0%

OMERS defines public investments as "securities that are generally traded on a recognized public exchange or on an over-the-counter basis <sup>39</sup>." Non-public investments include private equity, infrastructure, real estate and other strategic investments. OMERS' commitment to innovative investment is evident in its creation of investment arms to manage various asset classes, including OMERS Capital Markets, Oxford Properties, Borealis Infrastructure, OMERS Strategic Investments (with a VC arm, OMERS Venture Capital) and OMERS Private Equity. And as evidence that large Canadian pensions are willing to compete toe-to-toe with Wall Street, in 2009 OMERS was granted legislative authority to provide third-party investment offerings and services to Canadian public and private sector pension plans, governments and their agencies, colleges, universities and their endowments, and Canadian registered charities. Amazingly, then, OMERS is not only competing with Wall Street for investment opportunities, but for clients.

Press Release, Pub. Sector Pension Invs., Apax Partners, CPPIB and PSP Investments to Acquire
 Kinetic Concepts, Inc. for 568.250 Per Share (July 31, 2011), available at http://www.investpsp.ca/pdf/prpsp.kci-acquisition-en.pdf.
 Katia Dmitrieva & Matthew Campbell, Bloomberg News, How Canada's Pension Funds Changed

<sup>&</sup>lt;sup>37</sup> Katia Dmitrieva & Matthew Campbell, Bloomberg News, How Canada's Pension Funds Changed Their Conservative Ways to Become Global Buyout Kings, Fin. Post (Nov. 28, 2013, 7:32 AM), http:// business.financialpost.com/2013/11/28/how-canadas-pension-funds-changed-their-conservative-ways to-become-global-buyout-kings/.

<sup>38</sup> ONTARIO MUN. EMP'T RET. SYS., ENTERPRISE STATEMENT OF INVESTMENT POLICIES AND PROCEDURES – SUPPLEMENTAL PLAN 3 (2013), available at http://www.omers.com/pdf/Supplemental\_Plan\_SIPP.pdf.

# Conclusion

While North American public funds share a common goal of maximizing risk-adjusted returns, they show a remarkable diversity in how they are regulated, how they invest and—at least in the case of Alaska—how they pay out their earnings. In a well-known corporate law text, Yale law professor Roberta Romano argued that the "genius of American corporate law is in its federalist organization <sup>40</sup>." A central point of her argument was that the diversity of approaches from state to state—the experimentation in governance and legal frameworks—provides a useful benefit to society. States and citizens can evaluate the effects of other jurisdictions' regulatory systems. Efficient and fair approaches can be adopted, and wasteful and unsuccessful approaches abandoned.

The same can be said for North American public funds. Provinces and states use a variety of governance and investment approaches, and by examining and discussing the performance of these approaches, the legislators and fund fiduciaries can learn from one another how to best serve their current and future citizens. This knowledge will be essential as states and provinces struggle to pay retirement and healthcare benefits, and more states and provinces consider the creation of SWFs to smooth revenues, stimulate local economies and provide for future generations.

<sup>&</sup>lt;sup>40</sup> ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW 1 (1993).