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# Understanding the Promise and Peril of Sovereign Patent Funds

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## Key Points

- Sovereign patent funds (SPFs) are one of several policy mechanisms that can be used to support innovation capacity.
- There is a lack of externally verifiable economic data or legal analysis to indicate whether SPFs are achieving their objectives in supporting critical national economic interests.
- Further economic, legal and policy research is needed to evaluate whether some or all of the objectives of the SPF would be compatible with an integrated Canadian intellectual property (IP) and innovation strategy and what combination of public and private mechanisms to achieve such objectives might be best suited to the Canadian innovation ecosystem.
- In this regard, it would be particularly useful to study which objectives might be integrated into one or more of Canada's strategic sectoral innovation clusters and how this could be accomplished. A further area of potential research is into whether there is an emerging need for multilateral discussions to counter the impact of SPFs and non-practising entities (NPEs) in global innovation markets.

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## Introduction

As part of the broader innovation agenda, it is often asserted that IP rights play a central role in driving economic growth and enhancing innovation, although it must be acknowledged this proposition is not without controversy. Questions have been raised as to whether SPFs could be adapted in Canada as a next-generation policy response to contribute to the national or provincial innovation and economic development strategy. This policy brief introduces this new and under-researched topic and identifies areas of potential future research and analysis to support policy development for Canada's IP and innovation strategy.

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## How the Issue Arose

As innovation becomes more competitive and transnational, governments and private enterprises have started to look for new IP mechanisms to increase their performance and protect their domestic interests. The SPF emerged in recent years as a new strategy for leveraging IP to help build and strengthen the national innovation economy. A small number of countries (France, South Korea, Taiwan and

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Oonagh has taught at the University of Ottawa, as well as Carleton University, l'Institut international du droit de l'homme in Strasbourg and the International Institute of Humanitarian Law in San Remo. She has a B.F.A. (Honours) from York University, an LL.B. from Osgoode Hall Law School and was called to the Bar of Ontario in 1983. She holds an LL.M. from the University of Ottawa, an S.J.D. (Doctor of Juridical Science) from the University of Toronto and an M.B.A. from Queen's University.

Japan) have established SPFs, each with some involvement of private entrepreneurs. The concept of an SPF is of a large state-funded and state-controlled entity (with a value of \$100 million or more) established to acquire and license IP assets in the service of the national economic interest.

An SPF is an IP-wealth fund, sharing some features and economic objectives of sovereign wealth funds and state-owned enterprises. It is a vehicle for large-scale public investment and tends to be an element in a broader government-managed national industrial policy. The benefits of such an investment might not be expected to be immediate and might be measured and assessed in a variety of ways, depending on the policy objectives underlying the decision to create the particular fund.

Being state funded and state controlled, an SPF would be expected to act in the public interest as pursued by the government. Thus, it would likely be subject to laws that bind the state, such as domestic requirements for public finance, accounting and transparency, and international trade and investment rules.

The structures and operations of these funds vary significantly from one country to another. For example, the fund could concentrate on one or more targeted sectors of national strategic importance, or it could be a more diverse accumulation of patents that, over time, could be refined as the objectives of the fund evolve. The patents might come from government-funded investments, from university research, from open market purchase of distressed companies' patents and from private sector participants. It is not uncommon for at least one major industrial leader (for example, Samsung in South Korea and HTC in Taiwan) to participate in the SPF.

SPFs can be designed and used to achieve a variety of purposes. Whether they are successful in achieving these purposes and whether the SPF is the best mechanism to achieve the various purposes cannot be determined without much more research. An SPF might be used to protect a national patent giant from foreign takeover by ensuring that IP created within the country and considered of strategic national economic importance remains within the country. An SPF might target strategic industries

to gain or maintain specific advantages.<sup>1</sup> By aggregating such strategic IP and building on the rights of specific patent industries, the SPF might help cultivate a domestic innovation ecosystem of the needed critical mass, in particular at the small and medium-sized enterprises level, to prevent patent leakage and brain drain to other jurisdictions and to create and regenerate innovation and production cycles. The SPF might help domestic innovators to leverage a broader patent portfolio to generate new innovations and to increase commercial viability and defensibility of innovative products in the global marketplace.

In addition, by accumulating a portfolio of valuable IP rights, an SPF might raise revenue for both state and private sector investors from licensing of its patents, perhaps on terms favourable to domestic entrepreneurs so they can develop and commercialize innovative products for the global marketplace. It might also raise revenue by providing strategic IP services to domestic companies and research institutions.

An SPF might play a kind of litigation insurance role (for example, as a third party litigation funding mechanism) for domestic innovators at risk in the competitive global marketplace. Domestic enterprises could then obtain licenses from the SPF to use that IP defensively to protect themselves from litigation or offensively to launch patent lawsuits against foreign competitor industries. In support of domestic industries, some SPFs have engaged in litigation directly or through agents in foreign jurisdictions against foreign companies for infringing on the SPF patents.

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## Discussion and Considerations

Because the existing SPF models are so new and still evolving, it is unclear yet to what extent these funds are supporting the domestic innovation ecosystem. The analysis of those funds has been anecdotal and impressionistic,

without firm economic data or legal analysis. It is too early to say conclusively that the large sovereign investment in patents is producing the desired impact on the domestic innovation ecosystem and desired economic results in each case. Each SPF appears to have been designed to serve different national objectives, employs different strategies for that purpose and functions within its national IP and innovation ecosystem. It appears that there may be a trend to adjust from being mainly state funded and controlled to having more private sector contribution and to narrowing the focus on strategic industries.

With no certainty about the costs and benefits of building a Canadian SPF, it would be useful to do more policy, legal and economic analysis of the potential objectives to be served by an SPF. There are several questions warranting further analysis. Is an SPF a viable and necessary policy response to the growth of NPEs to support local industry trying to survive and prosper in the Hobbesian global IP market? Are SPFs an experiment whose future is uncertain, or are they a growing trend that will lead to patent wars at the sovereign level? What is the risk that China, with its one million new patents per year, will establish one or more SPFs? Do World Trade Organization rules on national treatment and subsidies offer any kind of defence against SPF proliferation, or are new instruments needed? Even if Canada were to create an SPF, how effective would it be in protecting Canadian industry in a world of massive NPEs and state-funded patent trolls? Is there a comparative advantage in technology or socio-economic rules in the states that are using SPFs that cannot be readily duplicated elsewhere? If more granular information and analysis could be obtained regarding existing SPFs and NPEs and their strategies, strengths, weaknesses and interactions, this would facilitate further economic, legal and policy research into their potential utility in a national IP and innovation strategy.

With limited desire to interfere in the marketplace and with limited resources, national governments must choose policy levers compatible with their overall innovation strategies, political systems and economies. The purposes of the SPF would need to be consistent with the overall government strategy on IP and innovation, economic policy and

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<sup>1</sup> For example, France Brevets targets Internet communications technology, the Internet of things, aerospace, clean technology and energy, the auto industry and life sciences. See [www.francebrevets.com/en](http://www.francebrevets.com/en).

international trade. Is there a way to design an SPF that would be compatible with Canada's trade-oriented open economy, its preference for multilateral rules-based approaches to global governance and its conservative stance on sovereignty and extraterritoriality?

The legal and governance structure of an SPF would need to be carefully considered to address potential legal issues. If it is truly a *sovereign* fund, then a range of public international law rules likely apply to it, but if the structure is more of a public-private partnership, it may be possible to avoid some of these issues, although other issues, such as compatibility with competition law and conflict of interest, could arise. Thus, as the objectives and governance structure of an SPF shift, the spectrum of potential legal issues may also shift. Further analysis would need to be done to determine whether an SPF's preferential treatment of local industry would be compatible with trade rules prohibiting discriminatory subsidies (technical barriers to trade) and the investment rules of national treatment and nondiscrimination. The SPF's anticipated role in supporting certain domestic industries might raise potential competition law and policy issues. These potential trade, investment and competition issues, as well as constitutional division of powers issues, would need to be considered in designing a national or provincial SPF. There could also be conflict of interest issues if the various private enterprises that the SPF is supporting have objectives that are incompatible with the public goals of the SPF or that conflict with each other. Transparency and accountability mechanisms would need to be incorporated into the design of the SPF to mitigate risks and ensure efficacy. Careful design of the legal and governance framework would be necessary to identify and limit these risks. An interesting challenge would be to map out the domestic and international law dimensions to be addressed for such a policy instrument to be used in Canada.

Because it appears that SPFs try to leverage country-specific advantages, identifying what those are in Canada would be important. Industry-specific data is needed to pinpoint which sectors might be promoted through SPF-like supports and how to choose the right human and capital infrastructures to buttress sectoral investments. Although there is still too much uncertainty about the economic and

political costs and benefits of an SPF to warrant creating one in Canada at this time, it may nevertheless be useful to deconstruct the policy objectives of the SPF to identify elements that might be able to contribute to a new national or provincial IP and innovation strategy.

The policy objectives that might be considered desirable are the following:

- to purchase domestic patents that are at risk of foreign takeover and thereby help maintain and create innovation jobs in Canada and prevent brain drain of IP entrepreneurs to the United States and other countries;
- to organize a system for patent licensing, cross-licensing and technology transfer, and to commercialize IP generated at universities and other research institutions, including for open source management of public interest or university research to advance innovation;
- to organize sectoral innovation support efforts to focus on developing standard essential patents that could entrench advances made through aggregating related patents;
- to create an organization to aggregate IP expertise, facilitate interagency cooperation and provide mentoring/ advisory services in IP commercialization and globalization strategy; and
- to consider whether there is a need to create litigation risk insurance to help Canadian innovation industries protect their markets through offensive and defensive IP litigation in Canada and abroad.

Governments would need to decide which policy objectives they would want to pursue as part of their IP and innovation strategy, considering other socio-economic policies and objectives, and whether there are other public, private or mixed public-private mechanisms that could more effectively fulfill the objective.

A further study could consider whether Canada would benefit from experimenting with small-scale pilots to test the efficacy of these ideas and determine how well they integrate into the overall IP and innovation strategy. For example, could a mechanism addressing some or all of the five elements noted above be integrated into an innovation cluster focused

on a specific burgeoning industry sector that has high strategic potential to accelerate economic growth? Could industry leaders in that sector be persuaded to co-fund and partner with the government to form a cluster? Could universities be persuaded to identify relevant IP to contribute to the cluster, and are there creative and imaginative ways in which patents could be collectively held and managed to provide benefits to Canadian innovators, creators, researchers and entrepreneurs?

One potential cluster to consider would be clean technology and energy, an industry of crucial importance to Canada as it transitions to a low-carbon future. Other clusters to consider for applying experimental policy supports are biomedical technology, Internet communications technology and fintech/blockchain. In each case, it would be important to consider a range of policy instruments and the roles of public and private sector actors to determine which would be most effective in the context.

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## Recommendations for Further Research

The economic and political costs and benefits of an SPF remain uncertain. However, this brief survey of the SPF suggests that there are interesting policy objectives associated with the SPF that are worth considering in designing an IP and innovation strategy for Canada. Therefore, it would be useful to do further economic, legal and policy research on these objectives to determine whether they are desirable and what combination of public, private and mixed public-private mechanisms would most efficiently and effectively address them. It will be important to identify Canada's strategic innovation sectors and examine whether an innovation cluster centred on one or more of these sectors could benefit from inclusion of mechanisms that address some of these policy objectives. A further area of research to consider is whether there might be an emerging need for multilateral discussion about how to counter the impact of SPFs and NPEs in global innovation markets.

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## Conclusion

While this short policy brief can only provide an outline of possible issues related to use of SPFs, it does also highlight that there is a substantial gap in information and analysis. See the appendix for an overview of the research that currently exists regarding the implications and the use of the SPF globally. There is a need for more in-depth and interdisciplinary study of the phenomenon. Such research could develop valuable analytical policy frameworks for scholars and policy makers.

This discussion proceeded on the premise that integrating IP strategy into overall innovation policy is essential because of the importance of IP as a source of national economic development and the competitive nature of the global marketplace. The SPF forces scrutiny of this proposition and of questions about the relative impact on innovation strategy of other forms of IP, such as copyright, trademarks and trade secrets, that are not covered by the SPF. With limited desire to interfere in the marketplace and limited resources, national governments must choose policy levers compatible with their overall innovation strategies, political systems and economies. It would be useful to do further economic, legal and policy research into whether some or all of the objectives of the SPF would be compatible with an integrated Canadian IP and innovation policy and what combination of public and private mechanisms might be best suited to the Canadian innovation ecosystem. In this regard, it would be particularly useful to study how desired objectives might be integrated into Canada's strategic sectoral innovation clusters.

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## Appendix

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The International Law Research Program (ILRP) at CIGI is an integrated multidisciplinary research program that provides leading academics, government and private sector legal experts, as well as students from Canada and abroad, with the opportunity to contribute to advancements in international law.

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Our research programs focus on governance of the global economy, global security and politics, and international law in collaboration with a range of strategic partners and support from the Government of Canada, the Government of Ontario, as well as founder Jim Balsillie.

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