The Rise of Sovereign Patent Funds:

Insights and Implications

September 2014

deepcentre

Centre for Digital Entrepreneurship
+ Economic Performance



About the DEEP Centre

The Centre for Digital Entrepreneurship and Economic Performance (DEEP Centre) is a Canadian economic policy think-tank based in Waterloo, Ontario. Founded in 2012 as a non-partisan research institute, the DEEP Centre's work shapes how jurisdictions build fertile environments for launching, nurturing and scaling companies that will thrive in an increasingly connected world. We understand the changing drivers of success in the global economy and the critical interconnections between technology, entrepreneurship and long-run economic performance. Our goal is to help policymakers identify and implement powerful new policy levers to foster innovation, growth and employment in their jurisdictions.

Join us in building a new foundation for prosperity. www.deepcentre.com

About the Authors

Dr. Warren Clarke is a Senior Research Associate at the DEEP Centre where his work includes a strong focus on the politics of intellectual property (IP) and the evolving role of the state in the regulation of the global economy. Warren's doctoral dissertation at the Balsillie School of International Affairs focused on international relations and global regulatory politics. His recent work has been published in Global Society and World Economics. Warren is a Board member for the Waterloo branch of the Canadian International Council (CIC) and was previously a doctoral fellow at the Centre for International Governance Innovation (CIGI).

Acknowledgements

The author would like to thank Anthony Williams, Dan Herman, Kuyler Neable, Peter Cowan, and Sean Wang for their valuable insights and helpful feedback in the research and writing of this piece. All errors and omissions remain solely his.



Since 2010, jurisdictions including South Korea, Japan, France and Taiwan have moved to establish sovereign patent funds (SPFs), a new type of investment vehicle intended to acquire strategically important intellectual property assets and, in so doing, promote national economic objectives. What are these organizations? What are their objectives? And what are the key implications for policymakers? This paper provides early-stage answers to these questions. It begins by providing an overview of the functions and objectives of existing SPFs, and analyzes both potential advantages and criticisms of these new vehicles for public policy. The final section of the paper examines the implications of SPFs for policymakers in other countries, including Canada, which have not yet established similar funds.

Table of Contents

Introduction	1
What are Sovereign Patent Funds?	1
Defensive Strategies	
Offensive Capabilities	3
Service Provision	
Protection and Retention of IP Assets	5
Criticisms of SPFs	5
Insights and Implications	8
Conclusion	11
Works Cited	12



Introduction

In the twenty-first century knowledge economy, the development and proper management of an economy's knowledge resources is more important than ever. Propelled by high-value employment, future economic prosperity will be tied largely to the ability to turn ideas and inventions into commercializable products and services. This is a challenge shared by every economy, creating, in turn, a race among countries to provide domestic entrepreneurs with a competitive edge. As a result, policy-makers must focus on the domestic intellectual property (IP) ecosystem and the important link between our IP rights regime and the international trends that shape the exchange of ideas, employment, and growth. Several countries, notably France, South Korea, Japan, and Taiwan, are pushing ahead with the development and implementation of new and innovative policy models intended to spur investment in research and development (R&D) and help domestic firms grow and prosper.

This paper examines one such innovative model: sovereign patent funds (SPFs). Like more traditional sovereign wealth funds (SWFs), SPFs are investment vehicles supported by state governments. What makes SPFs unique, however, is their mandate to acquire strategically valuable IP in order to further national economic objectives. What are these new organizations? What do they do? And what are the implications for policy makers? This paper provides some early-stage answers to these questions.

The paper begins by outlining the core objectives of existing SPFs. After reviewing some of their potential advantages, the second section of the paper considers existing criticisms of these bodies. The paper concludes by examining implications for policy-makers and potential responses to the emergence of SPFs. It is the product of original research, including a series of interviews with high-level policy-makers in several SPFs. These individuals and their organizations have chosen to remain anonymous, and the DEEP Centre respects their wishes.

What are Sovereign Patent Funds?

Though a number of countries began establishing SPFs in 2010, little is known about their economic agendas or how they go about achieving their objectives. This opacity is enhanced by their significant diversity across countries in terms of structure and operations. At the broadest level, patent funds can be defined as "entities that invest in the acquisition of titles to patents from third parties, with a view to achieve a return my monetizing those patents through sale, use of security interest, licensing or litigation" (Expert Group 2012, 38). In other words, they act as market intermediaries between buyers and sellers, but do not directly

"What makes SPFs unique is their mandate to acquire strategically valuable IP in order to further national economic objectives."



"The most prominent SPFs have attracted funding in the range of CAD\$100 million to \$500 million, with the potential to generate additional funds from the private sector."

The Rise of Sovereign Patent Funds: Insights and Implications

produce goods or engage in R&D activity. While this definition is accurate, it obscures key aspects of what sovereign patent funds do in practice, and how their activities may work to benefit domestic companies as well as the broader innovation ecosystem. The key difference between SPFs and private-sector funds stems from the latter's access to funding from public sources. Though levels vary significantly, some of the most prominent SPFs have attracted funding in the range of CAD\$100 million to \$500 million, with the potential to generate additional funds from the private sector. In addition, SPFs are differentiated by the involvement, to a greater or lesser degree, of public actors in the creation and/or management of the funds themselves. However, it is worth noting that the day-to-day management of most SPFs occurs at arm's length from direct government control. Taken together, then, SPFs are best defined as entities that acquire patents from third parties to achieve a variety of national economic benefits, ranging from direct monetization through licensing or litigation to defensive strategies that protect vulnerable sectors.

Viewed in terms of objectives and activities, the DEEP Centre disaggregates the work of SPFs into four distinct categories: 1) defensive objectives; 2) offensive capabilities; 3) provision of professional services and; 4) the preservation and retention of valuable IP resources. Each of these streams will be examined in turn below.

Defensive Strategies

The defensive function of SPFs stems from the perceived need to protect domestic firms —whether they are national champions, or under-resourced small and medium-sized enterprises (SMEs)—from aggressive litigation on the part of foreign competitors, non-practicing entities (NPEs) or patent assertion entities (PAEs), often referred to as patent trolls. Policy-makers and business leaders across a number of countries have become increasingly concerned about the effects of aggressive litigation by PAEs in particular, which seek to acquire a large number of patents and generate revenue through actual or threatened litigation. A recent study by Catherine Tucker (2014) at the Massachusetts Institute of Technology demonstrated, for example, that litigation by PAEs has had a negative impact on investment in innovation. Another recent study noted that fully 67% of new patent infringement lawsuits in the US were filed by PAEs (Fung 2014). At the same time, patent conflicts between rival technology firms such as Apple, Samsung, and Google have become increasingly costly.

In this context, defensive goals have been instrumental in motivating a number of countries, particularly in East Asia, to establish SPFs. Taiwan's IP Bank, which operates as a subsidiary of the country's Industrial Technology Research Institute,

1 For a detail and an overview of different types of patent funds, see Wang (2010).



was created in 2011 to provide an umbrella of protection for domestic companies against litigation. That same year, defensive imperatives similarly motivated the creation of Intellectual Discovery, the South Korean SPF. In both cases, the push for greater protection was triggered by increased targeting of key national firms (e.g. Samsung in South Korea and HTC in Taiwan) by foreign firms and PAEs (Monroig and Terroir 2012, 86).

"SPFs may create a deterrent against litigation by assembling a significant national patent portfolio and establishing a credible threat of potential retaliatory action."

SPFs may use a variety of strategies and tactics in attempts to defend domestic firms. At the most basic level, SPFs may create a deterrent against litigation by assembling a significant national patent portfolio and establishing a credible threat of potential retaliatory action. SPFs may, for example, acquire valuable patents in areas where foreign competitor firms operate, and particularly in areas where assertion could be damaging to the operations of those competitors. In the event that a foreign competitor launches an enforcement action against a domestic firm, SPFs can deploy patents in their portfolio as a countermeasure (Guellec and Meniere 2014, 26). Defensive patent funds may also acquire particular patents in an effort to "dry out" the market and prevent foreign competitors or PAEs from acquiring valuable patents that could be used against domestic firms. Such drying out tactics could potentially help secure freedom to operate in the absence of litigation, or help smooth the entry of domestic firms into foreign markets (WIPO 2013, 41).

Offensive Capabilities

As a corollary of their defensive function, SPFs also possess offensive capabilities, insofar as they have the potential to assert the patents in their portfolios. While the propensity of SPFs toward litigation as a means of monetizing patents in their portfolios remains unclear, existing SPFs have taken enforcement action against foreign companies. The French SPF France Brevets, for example, recently undertook litigation against LG Electronics and HTC for their alleged infringements of patents in the area of near field communications.

Due to the challenges inherent in monetizing patents, some have suggested that SPFs may demonstrate an increasing propensity toward aggressive litigation over time (Expert Group 2012, 46). However, SPFs have fewer incentives to quickly monetize patents through litigation than their private sector counterparts. Though the details of organizational design vary between specific funds, the provision of government support to SPFs allows them to adopt a more long-term approach to investment than private sector funds, thereby removing some of the incentive to generate a short-term return quickly through direct litigation. Still, as recent activity by France Brevets demonstrates, SPFs will use legal action to enforce their patents under certain conditions.



Service Provision

In addition to defensive and offensive functions, SPFs provide a number of service functions that may be of significant value to domestic firms. On one side, SPFs can help domestic firms and public research organizations (PROs) realize the value of their IP resources. One of the goals of France Brevets, for example, is to generate a "fair return for public and private research," particularly by helping French firms generate value from their patents (Asselot 2012). Due to a lack of knowledge and resources, many small firms and public bodies fail to realize the value of the patents they hold.² In this context, SPFs can help firms—particularly SMEs—and public bodies assess the value of their patents and monetize them through the creation of licensing programs. In a similar vein, SPFs may act to increase patent utilization by purchasing dormant patents and bundling them into larger patent clusters. In doing so, they may help to extract value from previously unutilized domestic IP resources.³ The Japanese Innovation Network Corporation (INCJ), for example, recently established a fund to purchase dormant patents in Japan with the aim of aggregating and commercializing these resources.

SPFs can also provide a valuable service by aggregating existing patents into clusters around particularly technologies. In doing so, SPFs can significantly reduce transaction costs for those seeking to licence a series of patents in a particular area (Expert Group 2012, 44). As IP expert Bertrand Sautier (2013) notes, as a result of the "growing complexity of the research process" it is now more "difficult for a company to get all the required licences before producing goods or services incorporating such technology." SPFs can help to alleviate some of this complexity by creating a type of patent superstore—a one-stop shop—for licensing related to a particular technology. By intermediating between patent holders and licensees, SPFs can act as market makers and reduce transaction costs for both parties. Such bundling activities may help reduce licensing costs for domestic companies and institutions, thereby removing potential financial impediments to research and innovation activity.

In addition, one of the services provided by SPFs that often goes unrecognized is the provision of high-level professional IP expertise to SMEs that would not otherwise be able to access such resources. Economic policy-makers in various countries increasingly recognize the importance of IP expertise in the growth and success of domestic companies, particularly start-ups, operating in knowledge-intensive industries. France Brevets, for example, has built a deep pool of IP management expertise, with a particular focus on monetization strategies.

2 For an interesting analysis, see Bessen (2014).

3 On dormant patents, see: Arai (2000), particularly chapter 9.

"SPFs may act to increase patent utilization by purchasing dormant patents and bundling them into larger patent clusters."



By entering into revenue-sharing partnerships with French firms, France Brevets is able to provide tailored IP advisory services to small firms that would not otherwise be able to access it. The provision of such expertise is arguably one of the most important roles played by SPFs in relation to domestic firms.

Protection and Retention of IP Assets

Finally, SPFs may play a role in preventing the flight of valuable IP beyond a country's borders and—to a lesser extent—in protecting domestic firms directly from foreign competition. With respect to the former function, SPFs may purchase patents deemed strategically important before foreign firms can acquire them. By purchasing dormant Japanese patents, for example, the INCJ's SPF can proactively prevent these resources from being acquired by groups outside Japan (Monroig and Terroir, 2012). More directly, SPFs may act to block the entry of foreign competitors into a country by acquiring and asserting patents, or to extract royalties from competitor firms to the benefit of domestic companies.

The mandate and activities undertaken by SPFs thus vary widely. Some SPFs, such as the Taiwanese IP Bank, are predominantly defensive in orientation. Others, such as South Korea's Intellectual Discovery and France Brevets, take a more holistic approach, which includes a strong focus on service provision. Taken together, a number of the functions performed by SPFs appear to offer benefits to both states and domestic firms. Conversely, other aspects of SPF activity have drawn criticism, with respect to both the core purpose and rationale underlying the creation of these bodies and in regard to the viability of their operational model.

Criticisms of SPFs

The existence and operations of SPFs have attracted considerable criticism from some quarters. The most vocal opponents of these new institutions, which include conservative commentators and a small number of US policy-makers, describe them as "state sponsored patent trolls" (Lopez 2014). These critics suggest that, like private patent assertion entities, SPFs are likely to focus on generating revenue through broad-based patent acquisition and aggressive litigation. For example, Mario Lopez, President of the Hispanic Leadership Fund, describes SPFs as "traditional patent trolls with the regulatory muscle and capital of government resources behind them" (ibid.). At its core, this criticism suggests that these organizations, like private-sector patent trolls, are little more than "parasitic predators" who use offensive litigation as a means of imposing a tax on innovative companies (Cooper 2014).

"SPFs may play a role in preventing the flight of valuable IP beyond a country's borders and —to a lesser extent—in protecting domestic firms directly from foreign competition."



"Some critics argue that
SPFs represent an effective
subsidy to domestic business
and may be used to prop

up or provide support

to domestic firms."

Moreover, critics suggest that the creation of SPFs in some countries is likely to spawn an "arms race" of patent acquisition and litigation by other states. Fearing that the creation of SPFs in other countries will put their firms at a competitive disadvantage, critics suggest that other countries are likely to move to create their own SPFs. Taken to the extreme, this process could threaten to enmesh sovereign states in a proxy war of patent acquisition and litigation against foreign firms in competitor countries. Not only would this IP arms race impose costs on consumers and firms, it could potentially lead to more broad based political conflict between states (Balto 2013).

A related criticism of SPFs suggests that these organizations are anti-competitive and inherently protectionist. With respect to the former, some critics argue that SPFs represent an effective subsidy to domestic business and may be used to prop up or provide support to domestic firms. More generally, these critics suggest that SPFs represent an unwarranted and inherently inefficient government intervention in private markets. Expressing this view in The Washington Times, Stephen DeMaura (2013), President of Americans for Job Security, argues that SPFs "promote an anti-competitive precedent across industries where patents are essential," and that "the market should remain the driver of innovation and competition, not governments with funding for aggressive behaviour." Others, such as Congressman Peter DeFazio, have gone further, calling SPFs "a form of 'protectionism'" (quoted in Levine and Kim 2013). Some critics have also suggested that SPFs, like more traditional forms of protectionism, are likely to generate a cascade of beggar-thy-neighbour-type policies that ultimately undermine free trade (Ellis 2014).

Some commentators and analysts have also begun to question the legality of SPFs under international law. Legal expert and researcher Thibault Schrepel (2014, 5–8) suggests that the activities of the French SPF may be prohibited by the Treaty on the Functioning of the European Union. Timothy Lee (2013) has also suggested that the actions of SPFs violate Article III:4 of the General Agreement on Tariffs and Trade, which requires signatory countries to provide imported products treatment which is "no less favourable" than that accorded to domestically produced products. Lee also suggests that these bodies may violate the World Trade Organization's (WTO) Agreement on Subsidies and Countervailing Measures (ibid.). It should be noted, however, that while some commentators have urged the United States to take action against SPFs in the WTO, the validity of the claims levied against SPFs has not yet been evaluated by the WTO's dispute settlement system, or by any other judicial or quasi-judicial body.

While US commentators have questioned the rationale and legitimacy of SPFs themselves, some experts in the IP community have offered a more nuanced critique of the potential long-term viability of the model. This critique is most clearly visible in the evaluation of the SPF model by the European Expert Group on Intellectual Property Rights Valorization. Considering a French proposal for the establishment of a European-wide SPF, the Expert Group expressed concern about the ability of such an institution to successfully commercialize its patent portfolio. For example, the group doubted the ability of a European-wide SPF to "carry out patent valorization effectively" and expressed concern that such a fund "could end up with a large number of valueless patents aggregated at high cost" (Expert Group 2012, 46). In light of these concerns and the relatively untested nature of the model, the group rejected the proposal to establish a European SPF.

Some of the criticisms levied at SPFs appear significantly overstated. In particular, the concern that they are government bankrolled patent trolls with a propensity to focus on the short-term monetization of patents through aggressive litigation is not supported by existing evidence. Nor is such a conclusion necessarily appropriate in light of the structure and objectives of these funds. At the very least, the shareholder structure of SPFs and, particularly, the provision of state funds suggest a long-term investment orientation with a focus on patent monetization through development and commercialization. This is not to suggest that these funds will not undertake enforcement action, but rather, that their institutional structure suggests a lower propensity to litigate, particularly over the short term, than private PAEs.

At the same time, some concerns about SPFs are worth further consideration. In particular, the potential for SPFs to be deployed as a barrier to imports or activities undertaken by foreign firms—either through the use of patents to block market entry or to extract royalties that may be transferred to domestic competitors—represent a more serious issue that could raise concerns about SPFs vis-à-vis various international trade agreements. In addition to the current framework, the position of SPFs in the context of ongoing trade negotiations such as the Trans-Pacific Partnership Agreement remains unclear.

The challenges of effectively implementing the SPF model, as identified by the European Expert Group, also have merit. While not eliminating the possibility of the model's successful implementation, their doubts about the capacity of SPFs to accurately and efficiently evaluate and acquire patents suggests there is a need to focus significant attention on SPF design. Indeed, one of the most important challenges facing new and existing SPFs may be the recruitment and retention of staff with sufficient expertise to successfully implement the fund's overall objectives.



Insights and Implications

While few jurisdictions have sought to establish SPFs, the fact that several have means that ignoring SPFs altogether is not an option. A lack of public or private debate on the merits of establishing similar entities is required. At a minimum, policy-makers should actively monitor the actions and transactions of foreign funds and consider how to respond. As noted, SPFs currently operate in a grey area with respect to existing trade rules, and an effort must be made by policy-makers to ensure that domestic firms are not adversely affected by engagement with these new bodies.

in a grey area with respect to existing trade rules, and an effort must be made by policy-makers to ensure that domestic firms are not adversely affected by engagement with these new bodies."

With respect to the Canadian context, several factors require specific engagement. Notably, the option to create a Canadian SPF should remain on the table. While undoubtedly controversial, the concept, which numerous other knowledge-driven economies have embraced, merits further discussion and an honest evaluation of the potential impacts it would have on the country's environment for innovation and economic growth. Particularly salient benefits in the Canadian context include the potential to: address the issue of IP "flight"; the opportunity to provide an avenue for patent monetization for Canadian SMEs and PROs; and the means to provide a measure of protection to large Canadian corporations that have become targets for litigation. At the same time, the establishment of an SPF in Canada comes with considerable costs and carries a number of potential risks. For example, a Canadian SPF would likely be coolly received in parts of the United States. Given Canada's deeply interdependent political relationship with its southern neighbour, the threat of retaliatory measures may outweigh the benefits. In addition, the cost of staffing-up a new organization and granting it the requisite funds to operate may make it an unattractive proposition to some Canadian policy-makers.

The issue of IP flight is becoming increasingly salient to the Canadian economy. Concern about Canada's intellectual assets moving offshore entered the public consciousness in 2011, following the sale of Nortel Network's patent portfolio to a consortium of companies for \$US4.5 billion. The following year, the Canadian International Council (CIC) released a report highlighting the broader issue of IP flight and Canada's technology deficit (2011). These issues gained prominence once again in 2013, in tandem with questions about the future of BlackBerry—formerly Research in Motion—and its cache of over 5,000 patents. As DEEP Centre Executive Director Dan Herman (2013) notes, the future of BlackBerry's patents once again raised the issue of "whether Canada is naive in not guarding some of the country's most important—and often publicly funded—assets." As long as a significant share of Canada's valuable intellectual assets continues to be transferred abroad, concerns about the short- and long-term consequences of this trend are likely to persist.

The establishment of a Canadian SPF could help address some of these concerns. Either independently, or as part of a larger consortium, such a fund could seek to acquire valuable knowledge resources and retain them in Canada. The authors of the CIC report made this case explicitly in 2011, arguing that the Canadian government should create a patent fund that could "salvage IP when tech firms go bankrupt" (CIC 2011, 44). Properly conceived, such a fund could even assist in the establishment of licensing programs, which would prevent firms from entering bankruptcy, thereby retaining important IP in Canada at significantly lower cost. Finally, similar to the model adopted by the INCJ, such a fund could also focus on acquiring dormant patents to ensure that those resources are not acquired and relocated abroad.

In addition, the creation of a Canadian SPF could provide an important avenue for Canadian SMEs and PROs to obtain value from their IP resources through licensing partnerships. This is true, evidently, for all jurisdictions. On the private side, Canadian firms continue to struggle to attract venture capital funding to finance early stage development (ibid.). A Canadian SPF could provide an avenue for Canadian firms in cutting-edge sectors to realize the value of their patents more quickly and effectively, while simultaneously granting them access to high-level IP expertise beneficial to the firm's longer-run development. In a similar vein, despite an increasing focus on commercialization, Canadian universities struggle to derive monetary value from publicly funded research outputs. For example, Michael Geist (2010) notes that in 2008, all Canadian universities combined derived a net income of only \$CAD 2.1 million from efforts to commercialize their IP. While certainly not a panacea, by providing expertise and reducing transaction costs, a Canadian SPF could assist universities and other PROs in their commercialization efforts.

Finally, a Canadian SPF could help to provide a measure of protection to Canadian companies that have been targeted by the aggressive litigation strategies of foreign competitors and patent trolls. For example, globally, Canadian firm BlackBerry remains one of the firms most targeted by patent trolls. A lack of understanding of IP and the cost of potential litigation serves as barriers to firm growth as Canadian start-ups and SMEs try to scale up and expand their operations to new and larger markets, particularly the United States (Balsillie 2014). Elsewhere, the targeting of national champions by aggressive NPEs, such as Samsung in South Korea and HTC in Taiwan, has prompted other jurisdictions to create SPFs. Canadian firms of all sizes may thus stand to benefit from the protection offered by the creation of a Canadian SPF. It is worth noting, however, that the overall defensive benefits offered by these funds remain difficult to accurately assess at this stage.



"Obtaining sufficient financial and human capital would be essential to the success of any SPF."

The Rise of Sovereign Patent Funds: Insights and Implications

While boasting some potential advantages, a proliferation of SPFs would also carry inherent risks. Certain political constituencies in the United States are currently working to solidify the perception of SPFs as state-sponsored patent trolls. Despite the questionable veracity of some of these claims, there is a risk that this perception may lead the US government to take an increasingly negative view of these entities. The Obama administration and US Congress are already working to limit the negative impacts of private PAEs in the United States. If SPFs ramp up their enforcement actions, the hostility towards private PAEs in the US may grow to encompass SPFs. In this context, establishing an SPF could theoretically make the creator of such funds a target for US legal action in forums such as the WTO. More broadly, the establishment of such a fund could undermine relations with the US and expose the creating country to the risk of retaliatory action. At the same time—and despite protestations to the contrary—foreign policy-makers must not be naive about the willingness of US policy-makers to intervene to protect domestic firms or to promote IP strategy and policies that advance their economic and geopolitical interests (Kahin 2013).

Finally, there is the risk that policy-makers across jurisdictions would be unwilling to devote the resources necessary to establish a fund modelled on successful SPFs like France Brevets. A comparable Canadian fund would likely require an initial investment of \$CAD100–200 million, in addition to the costs required to assemble a team of experienced and highly qualified IP professionals. In the current context, there may be a reluctance to invest the financial resources necessary to establish a world-class Canadian SPF capable of providing significant benefits to Canadian firms and the broader economy. In addition, it may prove difficult for policy-makers to identify and recruit a team of IP professionals with the requisite skills, experience, and expertise to effectively manage the new fund. Obtaining sufficient financial and human capital would thus be essential to the success of any SPF.

⁴ One contributor to this research noted that funding constraints could be partially offset by exploring a mixed-funding model based on private and public sector contributions. This model has already been implemented in a number of existing SPFs.



Conclusion

The establishment of SPFs in countries such as France, South Korea, Taiwan, and Japan carry important implications for policy-makers around the globe. Given the growing importance of IP in economic activity, policy-makers need to remain keenly aware of the steps being taken in other countries to support the development of high-value industries and to nurture and protect domestic firms. Economic success in the twenty-first century global economy will depend, in large part, on the ability to effectively develop, grow, manage, and maintain domestic knowledge resources.

"Economic success in the twenty-first century global economy will depend, in large part, on the ability to effectively develop, grow, manage, and maintain domestic knowledge resources."

Though some critics will undoubtedly cry foul about the encroachment of the state into private markets, policy-makers cannot ignore the key and growing role of government in the realm of IP and innovation. In light of institutional innovations in other countries, including SPFs, it is now imperative that policy-makers begin formulating a strategy to maintain and enhance competitiveness in this arena. Otherwise, laggards risk being left behind in the race to build the highly competitive knowledge-based firms and industries that will drive future employment and economic growth. While it is still too early to recommend that policy-makers establish "made-in—host country" SPFs, it is clear that an honest evaluation of its costs and benefits is warranted. In the meantime, policy-makers must remain vigilant in tracking the activities of SPFs established elsewhere. Ensuring a level playing field for domestic firms in their activities abroad is and must continue to be the primary axis of contemporary economic diplomacy.



Works Cited

Arai, Hisamitsu. 2000. Intellectual Property Policies for the Twenty-First Century: The Japanese Experience in Wealth Creation. Geneva: World Intellectual Property Organization.

Asselot, Pascal. 2012. "France Brevets, Patents and Aggregation." Presented at the OECD Epert Workshop, Patent Practice and Innovation, Paris, May 11. http://www.oecd.org/sti/inno/workshop-patent-practice-and-innovation-Asselot.pdf

Balsillie, Jim. 2014. "Intellectual Property Rights Must Be Protected." The Waterloo Region Record. February 3. http://www.therecord.com/opinion-story/4346330-intellectual-property-rights-must-be-protected/

Balto, David. 2013. "State-Sponsored Patent Trolls Signal New Form of Protectionism." Roll Call, September 16.

Bessen, James. 2014. "The Case Against Software Patents." VOX, July 9.

CIC. 2011. Rights and Rents: Why Canada Must Harness Its Intellectual Property Resources.

Cooper, Horace. 2014. "The Spector of State-Sponsored 'Patent Trolls." Human Events, April 16.

Demaura, Stephen. 2013. "The Creepy Business of Patent Trolls." The Washington Times, October 9.

Ellis, Ryan. 2014. "The Secret Plan to Kill Free Trade." Forbes, March 27.

Expert Group on IPR Valorisation. 2012. Options for an EU Instrument for Patent Valorisation. European Union. http://ec.europa.eu/enterprise/policies/innovation/files/options-eu-instrument-patent-valorisation_en.pdf

Fung, Brian. 2014. "Patent Trolls Now Account for 67 Percent of All New Patent Lawsuits." The Washington Post, July 15. http://www.washingtonpost.com/blogs/the-switch/wp/2014/07/15/ patent-trolls-now-account-for-67-percent-of-all-new-patent-lawsuits/

Geist, Michael. 2010. "Commercialization of IP in Canadian Universities: Barely Better than Break Even." Michael Geist blog post, August 31. http://www.mi-chaelgeist.ca/2010/08/ip-commercialization-in-can-uni/



Guellec, Dominique, and Yann Meniere. 2014. "Markets for Patents: Actors, Workings and Recent Trends." In Patent Markets in the Global Knowledge Economy: Theory, Empirics and Public Policy Implications, edited by Thierry Madiès, Dominique Guellec, and Jean-Claude Prager, 9–32. Cambridge: Cambridge University Press.

Herman, Dan. 2013. "In the National Interest? Is BlackBerry's Patent Hoard a Strategic National Asset?" Policy Options 34(8).

Kahin, Brian. 2013. "Patently Geopolitical: The New Frontier of Government and Market Interaction." Intellectual Property Watch, August 26.

Lee, Timothy. 2013. "US Should Keep Foreign Governments From Becoming Aggressive Patent Trolls." Desert News, December 17.

Levine, Dan, and Miyoung Kim 2013. "Insight: Nation-states Enter the Contentious Patent-buying Business." Reuters, March 20.

Lopez, Mario. 2014. "State Sponsored Patent Trolls Are Bad for Consumers." Inside Sources, May 15.

Monroig, Miyuki, and Patrick Terroir. 2012. "Inside Asia's Patent Funds." Intellectual Asset Management 54: 85–92.

Sautier, Bertrand. 2013. "French Sovereign Patent Fund Shows Muscle: France Brevets Spearheads Patent Litigation in Germany." The IPKat, August 6. http://ipkitten.blogspot.ca/2013/08/french-sovereign-patent-fund-shows.html

Schrepel, Thibault. 2014. "France Brevets: A State-owned Patent Troll, Harmful... and Illegal?" Generation Libre, January 22.

Tucker, Catherine. 2014. "The Effect of Patent Litigation and Patent Assertion Entities on Entrepreneurial Activity." MIT Sloan School Working Paper 5095-14.

Wang, Allen. 2010. "Rise of the Patent Intermediaries." Berkeley Technology Law Journal 25(1): 159–200. http://scholarship.law.berkeley.edu/btlj/vol25/iss1/7

WIPO. 2013. Study on Patents and the Public Domain II. WIPO Committee on Development and Intellectual Property No. CDIP/12/INF/2 REV.