

Unlocking IP-backed Financing Series

Country Perspectives Canada's Journey



Table of contents

Disclaimer	4
Acknowledgments	5
Acronyms	6
Executive summary	7
Canada's journey	8
Introduction	8
The role of small and medium-sized enterprises in the economy of Canada	8
The importance of intangible assets: IP	9
IP use and ownership by Canadian firms	10
Moving towards an economy of intangibles	12
The role of government in IP and intangible capital	13
Local legal and regulatory framework	17
Registration of IP security – federal and provincial jurisdictions	17
Capital reserve requirements	18
IP financing by the numbers	19
Who is using their IP as collateral?	20
Patents as a financial security	20
Trademarks as financial security	22
Local institutions engaged in IP-backed financing	24
Government institutions	24
Financial institutions	25
Use of IP as collateral for equity financing	26
Government-backed guarantees and funds	26
Role of IP insurance	27
Role of IP valuation and expertise	27
Challenges of IP-backed financing in Canada	29
Regulatory landscape	29
IP Valuation	30
Secondary markets	30
Disclosure and data availability	30
Planning for the future	31
Endnotes	32

Disclaimer

The views expressed in this publication are those of the authors and do not necessarily represent those of the institutions to which they are affiliated nor those of WIPO or any other persons or institutions.

Acknowledgments

The World Intellectual Property Organization (WIPO) and the Canadian Intellectual Property Office (CIPO) would like to thank the author of the report, Lisa Desjardins, Deputy Director, IP Awareness and Education at the CIPO.

CIPO would also like to acknowledge the valuable expertise and insights generously provided by several experts, including:

- Gray Barski, Economist, CIPO
- Diego Santilli, Chief, Corporate Management Sector, CIPO
- Catalina Miranda, Vice-President, Regulatory and Standards, Canadian Institute of Chartered Business Valuators (CBV Institute)
- Patrick Blanar, Director, Strategy and Innovation Policy Sector, Innovation, Science and Economic Development (ISED)
- Kiriakoula Hatzikiriakos, Manager-Senior Legal Counsel, Commercial/International sector of Legal Affairs, National Bank of Canada
- Jean-Philippe Bourgeois, Client and Partner Relations Officer, Small Business and Marketplace Services, ISED
- Lally Rementilla, Managing Partner, IP-Backed Financing, BDC Capital, Business Development Bank of Canada (BDC)
- Samuel Archambault, Senior Outreach and Partnerships Officer, ExploreIP, ISED
- Sharon Ho, Legal Counsel, Innovation Asset Collective (IAC)
- Mathieu Larivière, Manager, Strategy, Research and IP, ISED
- Adriana Vega, VP, Government Affairs, Canadian Venture Capital and Private Equity Association (CVCA)
- Roula Thomas, Director, IP Assist, Industrial Research Assistance Program, National Research Council Canada

Acronyms

BAIs Business accelerators and incubators

BDC Business Development Bank of Canada

CAD Canadian dollar

CBV Chartered Business Valuators

CIC Canada Innovation Corporation

CIPO Canadian Intellectual Property Office

CSBFP Canada Small Business Financing Program

CVCA Canadian Venture Capital and Private Equity Association

GDP Gross domestic product

ICT Information and communication technology

IP Intellectual property

IPON Intellectual Property Ontario

ISED Innovation, Science and Economic Development

IVS International Valuation Standards

IVSC International Valuation Standards Council

LGV Loss given default

NAICS North American Industry Classification System

NRC IRAP National Research Council of Canada's Industrial Research

Assistance Program

PPSA Personal Property Securities Act

QCC Civil Code of Quebec

R&D Research and development

SME Small and medium-sized enterprises

US United States of America

WIPO World Intellectual Property Organization

Executive summary

The market value of many successful companies today is predominantly composed of their intellectual capital, involving a combination of efficient operations and the effective conversion of unique ideas into intangible assets such as inventions, creations and brands. Although these assets significantly contribute to a company's value, their definition, accurate valuation and use as collateral often pose challenges.

In Canada, intellectual property (IP) is recognized as a significant contributor to business value among both companies and financial institutions. Consequently, IP-owning companies typically secure triple the financing of companies without IP.¹ The use of patents and trademarks in financing transactions is growing. However, commercial lenders and venture capital entities may not rely solely on intangible assets as collateral due to the complexities involved in their valuation and management.

The challenges of intangible asset financing in Canada are similar to those in other countries. Intangible asset financing requires expertise in both IP and relevant markets, monitoring IP management and development, and understanding the link between IP and the value and loan repayment ability of a company. Canadian commercial banks have included IP as security for decades, however, such a security often also includes other asset forms.

Against this backdrop, governments and creditors are developing stronger frameworks and mechanisms to enable firms to leverage their intangible assets effectively. Canada has launched initiatives to provide education, guidance and financial support to enterprises aiming to protect their IP and to build a stronger IP footprint. Investments in intangible capital are significant, reflecting the importance placed on fostering innovation and growth through IP.

This report, part of a compendium of country reports for WIPO, provides an overview of typical IP use and ownership among Canadian firms. Trends will be presented to show how patents and trademarks are used as security in commercial lending, together with discussion of the involvement of lending institutions in intangible asset financing.

This report also highlights the IP-backed financing capital fund at the Business Development Bank of Canada (BDC) which offered IP-backed financing from 2020 to 2025 to IP-rich companies, facilitating their growth and scalability. This program underscored the components of intangible asset financing, founded on an understanding of how IP protects the overall value of a company. BDC initiatives enhanced the effectiveness and attractiveness of the IP system for both investors and IP owners.

The focus in Canada on leveraging intangible assets through strategic IP management and financing reflects a broader commitment to fostering innovation and economic growth. By understanding the challenges and support mechanisms for IP-backed financing, Canada could pave the way for a more dynamic and competitive economy, driven by the full potential of its intellectual assets.

Canada's journey

Introduction

Canada, a nation with a population of 40 million and a workforce of nearly 17 million, is the second-largest country globally by area and is rich in natural resources. The country is ranked fourth in global natural resource reserves valued at approximately CAD 45.4 trillion² and fourteenth on the Global Innovation Index in 2024,³ attributes that significantly contribute to its gross domestic product (GDP) and enable Canada to stand out among its peers.

The economy of Canada is the ninth largest globally,⁴ and is both mature and diversified in nature with thriving manufacturing, technology and services sectors. This economic strength is exemplified by Canadian companies renowned for their impressive portfolios of intangible assets, including BlackBerry Ltd., Nortel Networks Corporation, OpenText Corporation, Bombardier Inc. and Shopify.

The role of small and medium-sized enterprises in the economy of Canada

Despite being home to many notable multinationals, the industry landscape in Canada is defined by over 1.3 million companies, 98 percent of which are small and medium-sized enterprises (SMEs) with fewer than 100 employees. SMEs are pivotal to the Canadian economy, contributing significantly to GDP in both the goods and services sectors. Between 2015 and 2019, SMEs accounted for an average of 53.2 percent of GDP in the goods-producing sector and 51.8 percent of GDP in the services-producing sector.

The professional, scientific, and technical services sector is comprised of the highest number of businesses, representing 11.7 percent of all companies. This is closely followed by the construction sector at 11.5 percent, and the retail sector at 10.7 percent.⁷

Although SMEs are the backbone of the Canadian economy in terms of job creation, innovation and economic growth, they can often face challenges in leveraging intangible assets to drive their business growth.

The importance of intangible assets: IP

Intangible assets, particularly IP, are essential for fostering an innovative and productive economy. They encompass creations of the mind, such as inventions, literary and artistic works, designs, symbols, names, and images used in commerce. These assets hold significant value for businesses, driving competitiveness, innovation and economic growth.

The importance of IP is underscored by the Statistics Canada IP Awareness and Use Survey, 2019, which found that more than half of Canadian businesses that owned IP credited it with improving their business success (figure 1).8 The most commonly cited benefit was increased business value through improved competitiveness and reputation (38.7 percent). Other reported benefits included higher revenues (31.1 percent), strengthened long-term business prospects (29.7 percent) and expanded markets (25.8 percent) (figure 1). In direct relevance to this report, according to 10.7 percent of survey respondents, owning IP also facilitated access to financing (figure 1).

Increased business value Increased revenues Strengthened long-term business prospects **Expanded markets** Provided new opportunities for collaboration with other businesses Increased employment Facilitated access to financing Positioned business for acquisition Other contributions 15 20 25 30 35 40 Percentage

Figure 1 Reported benefits of owning IP, 2017–2019

Source: Statistics Canada⁹

Investing in IP offers a compelling value proposition, both in Canada and abroad. However, some Canadian SMEs with significant innovative potential may struggle with insufficient resources or capacity to fully capitalize on their IP assets. Key challenges include IP awareness and literacy, costs associated with obtaining and enforcing IP rights, and barriers to commercialization. Consequently, smaller companies are less likely than larger enterprises to invest in IP, with only 20 percent of businesses with fewer than 100 employees owning IP assets, compared to 72.6 percent of businesses with 500 or more employees.

Concerted efforts and collaboration across the IP ecosystem are essential for supporting SMEs. Moreover, ensuring strong IP protection and effective financing can drive sustainable growth and prosperity through the use and ownership of Canadian IP.

IP use and ownership by Canadian firms

IP use and ownership in Canada are vital components of the country's economic framework. IP enables businesses to protect and commercialize their innovations, which is essential to maintaining a competitive edge in both domestic and international markets.

Recent insights into IP use and ownership in Canada further emphasize these points. The latest data reveals evolving trends in how Canadian businesses are recognizing the strategic value of IP.

Patent filing: a focus on innovation in key sectors

Advanced technology use drives innovation, leading to new IP creation and ownership. According to the Statistics Canada Survey of Innovation and Business Strategy, 2022, using advanced technology promotes innovation by enabling new functions or significantly improving existing ones compared to commonly used technologies. In 2022, nearly half (47.2 percent) of all businesses adopted at least one advanced technology. Between 2020 and 2022, businesses using advanced technologies were significantly more innovative (85.2 percent) compared to non-users (60.0 percent).

The use of clean technologies saw an increase in 2022, with 9.9 percent of businesses adopting them, a 1.3 percent increase on 2019. Large businesses (15.5 percent) were more likely to use clean technologies than small businesses (9.5 percent) and medium-sized businesses (9.9 percent). The utilities sector was the leader in clean technology adoption, with 33.5 percent of businesses using them in 2022.¹⁴

The rise in clean technology adoption also boosts IP portfolios, protecting environmental innovations. Between 2015 and 2022, Canadian companies consistently engaged in patent filing activities, both domestically and abroad (figure 2).¹⁵ In particular, companies in the cleantech, manufacturing, and information and communication technology (ICT) service industries have reported the highest rate of patent ownership,¹⁶ highlighting a strong focus on innovation and IP protection within these sectors. This consistent engagement demonstrates the importance that these industries place on safeguarding their technological advancements and maintaining a competitive edge.

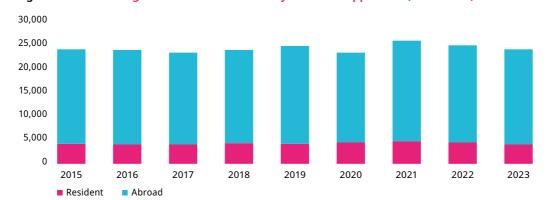


Figure 2 Patent filings in Canada and abroad by Canadian applicants (2015–2023)

Source: WIPO IP Statistics Data Center¹⁷

Trademark filings: strong signal of global expansion for Canadian brands

In recent years, with the exception of 2022, trademark filings by Canadian companies have been rising both domestically and abroad, indicating an expanding global footprint of Canadian trademarks globally (figure 3).18

The resurgence in trademark filings in 2023 and beyond indicates a robust recovery and a renewed focus on protecting brand assets from 2022. The CIPO 2022–2023 Annual Report highlights a record number of trademark examinations and approvals, underscoring the commitment of Canadian businesses to securing their trademarks amid evolving market dynamics.¹⁹

60,000 50,000 40.000 30,000 20,000 10.000 n 2015 2016 2017 2018 2019 2020 2021 2022 Resident Abroad

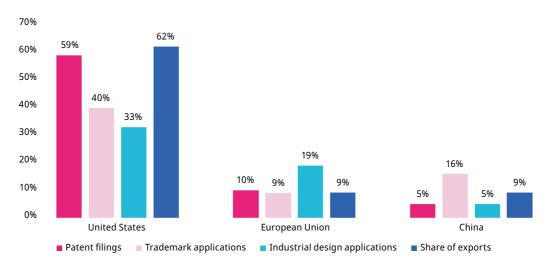
Figure 3 Trademark applications in Canada and abroad by Canadian applicants (2015–2022)

Source: WIPO IP Statistics Data Center²⁰

Canadian trade abroad: export destinations reflect similar trends in international IP filings

In 2019, 75 percent of Canadian exports were destined for the United States of America, followed by the European Union (EU) (8 percent) and China (4 percent). The percentages of Canadian IP filings abroad are similar, however, many such filings are done by a few Canadian subsidiaries of multinational companies (figure 4).

Figure 4 Share of Canadian patent, trademark, and industrial design applications abroad vs. share of exports (2022)



 $Note: EU \ includes \ filings \ at \ the \ European \ Patent \ Office, \ the \ European \ Union \ Intellectual \ Property \ Office \ and \ national \ intellectual \ property \ offices \ in \ the \ EU.$

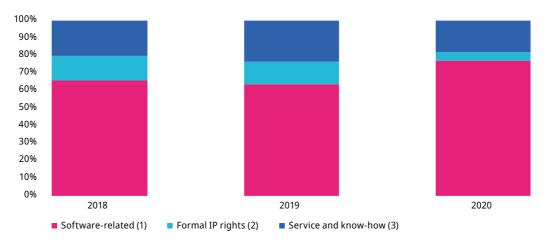
Sources: Exports: Statistics Canada; IP filings: CIPO, IP Canada Report 2024²¹

IP revenues from research and development: ICT sector dominates with software-related IP payments

Payments received for IP remain integral to businesses in Canada. In 2020, receipts rose by 36.6 percent, from CAD 6.5 billion to CAD 8.9 billion.²² ICT companies dominated, receiving nearly 90 percent of these payments. The rise was largely due to digitalization spurred by the pandemic.²³ In 2021, businesses in Canada performing research and development generated more revenue from the use of their IP than ever before.

Software-related IP alone represented over 70 percent of total IP revenues, highlighting the significant contribution of the sector to the economy and its central role in IP revenue generation (figure 5).

Figure 5 Business enterprise payments received for IP and other technological services, all industries (2018–2020)



Notes:

- (1) Software-related revenues include payments received for original software, packaged or off-the-shelf software and databases (useful life exceeding one year);
- (2) Formal IP rights include payments received for patents, copyrights, trademarks, industrial designs and integrated circuit topography;
- (3) Service and know-how include payments received, such as technical assistance, industrial processes and know-how. Source: Statistics Canada²⁴

As demonstrated by the substantial revenue generated from software-related IP in the ICT sector, effective IP management is crucial for maintaining a competitive advantage and fostering long-term business success. This not only fuels economic growth but also positions Canada as a leader in innovation on the global stage.

Moving towards an economy of intangibles

The Canadian economy is increasingly driven by intangible assets. In 2022, 21.2 percent of businesses reported owning at least one type of IP asset. These IP assets are a significant driver of innovation, with 83.9 percent of businesses possessing innovative IP assets between 2020 and 2022, compared to only 68.6 percent without IP assets.²⁵

Multinational businesses have significantly leveraged the benefits of IP, with 49.0 percent of multinationals owning IP assets compared to just 16.9 percent of non-multinational companies. Canadian multinationals are particularly proactive: 57.6 percent own IP assets and 72.0 percent are seeking IP protection, surpassing their foreign counterparts operating in Canada.²⁶

SMEs generally have greater sensitivity to financial issues than larger companies. In 2020, 82.4 percent of SMEs sought external financing. On a per-employee basis, the average amount of debt financing requested for companies with 1–4 and 5–19 employees is much higher than the average amount per employee for companies with 20–99 and 100–499 employees, indicating a higher dependency on accessible finance.²⁷ Access to capital continues to be crucial for

the growth of SMEs as they contend with inflation and business operations costs, however, traditional financing avenues often favor tangible assets over intangible ones.²⁸ This can create a significant barrier for innovation-oriented SMEs that may possess valuable IP while lacking substantial physical collateral. As a result, there is a pressing need to leverage intangible assets as a source of financing to increase diversification of funding sources.

IP-backed financing, where IP assets are used as collateral for loans, is vital to innovation and growth. It can provide SMEs with the financial flexibility they need to bring innovations to market, reducing their dependency on more traditional, tangible forms of credit. By using IP-backed financing, SMEs can unlock the value of their intangible assets, accessing capital to scale operations, invest in innovation and enhance their market competitiveness.

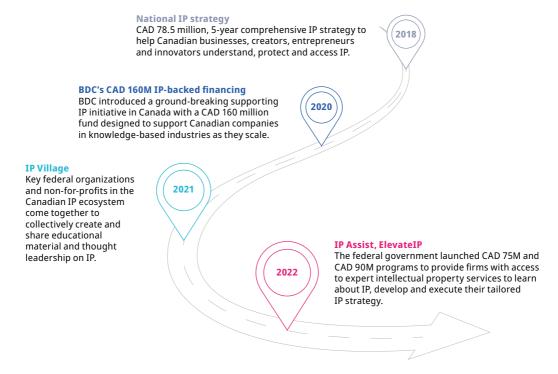
The role of government in IP and intangible capital

Canadian companies have demonstrated a robust commitment to intangible capital, with investments growing from CAD 7.1 billion in 1976 to CAD 134.3 billion in 2016.²⁹ This growth, outpacing tangible investments, is significantly supported by sectors like manufacturing, finance and insurance, reflecting a strong focus on IP, software, and research and development.

The Canadian Government plays a crucial role in supporting IP development and financing. In 2018, Canada launched the National IP Strategy, which included several initiatives to support the development of IP and to promote IP-backed financing (figure 6).

The National IP Strategy outlines the key initiatives that underscore the commitment of Canada to fostering innovation and economic growth. These efforts are designed to enable Canadian businesses to leverage their intangible assets more effectively, ensuring their competitiveness in an increasingly knowledge-driven global economy.

Figure 6 Federal Canadian IP-related initiatives



Sources: Evaluation of the National Intellectual Property Strategy 30 ; BDC's CAD160M IP-backed Financing 31 ; IP Village: IP resources for your business 32 ; ElevateIP 33 ; Funding Cybersecurity & IP Protection through IRAP 34

2018 – National IP strategy: strengthening innovation and economic growth in Canada

Through the implementation of its National IP Strategy in 2018, the Canadian Government recognized the critical role of IP in fostering innovation and economic growth. This strategy was designed to address gaps in IP awareness and protection, to support businesses in leveraging IP assets and to create a robust IP rights management framework.

Key elements include better IP education, support for IP advisors and measures to combat IP misuse, enabling Canadian innovators to effectively commercialize their ideas and maintain a competitive edge in the global market.

Five program areas were created as a result of the launch of the National IP Strategy:

- IP Centre of Expertise: At this centre, IP experts offer professional advice and training, and
 foster collaboration to ensure federal public servants have the necessary IP resources. Their
 goal is to manage and address IP in a way that benefits Canadian businesses and the public.³⁵
- 2. **Indigenous IP Program**: This program promotes Indigenous awareness, education and involvement in both domestic and international discussions regarding the intersection of the IP system with the protection of Indigenous knowledge and cultural expressions.
- 3. **IP Legal Clinics**: This initiative encourages the creation and enhancement of IP legal clinics in Canadian law schools. It aims to provide affordable IP information to businesses and individuals while giving students hands-on experience with practical IP-related issues.³⁶
- 4. **Patent Collective Pilot Program (Innovation Asset Collective)**: This program uses a membership model to bring together small to medium-sized firms, helping them to collaborate with a view to achieving better IP outcomes for all members.³⁷
- 5. **ExploreIP (formerly Canada's IP Marketplace)**: This online tool allows businesses, entrepreneurs and innovators to discover IP that is held by the Government, academia and other public sector institutions, and is available for licensing and commercialization.³⁸

The IP strategy commitment included ongoing support and continued development of the IP Awareness and Education products and services of CIPO that offers IP education tools and resources and consultations with IP Advisors, to help innovators and businesses to understand how to leverage IP to achieve commercial and business success.

2020 - IP-backed financing fund of the BDC

The BDC is a Crown corporation owned by the Canadian Government. In 2020, BDC Capital, the investment branch of BDC, launched its CAD 160 million IP-backed financing program. The goal of this program was to provide IP-rich companies in knowledge-based industries with the capital they needed to accelerate commercialization, increase competitiveness and expand globally.

The unique fund offered tailored and patient capital, providing financial assistance through debt, quasi-equity and equity to businesses that have successfully leveraged their IP portfolios for commercialization or licensing, with funding of between CAD 2 and 10 million.³⁹

The fund involved flexible lending through terms that are carefully structured to meet the specific needs of companies. By offering funding through convertible notes that transition into minority equity investments, the fund ensured that companies retained control over their business. The innovative funding model also allowed companies to access additional capital at an earlier stage compared to traditional lenders.

The BDC IP-backed fund was Canada's flagship program for IP-backed financing, and was specially designed to overcome the challenges of IP-backed financing. It was run by a multidisciplinary team with experience in credit, venture capital, IP valuation monetization and entrepreneurship. A key differentiator of the fund was the integration of IP analytics and valuation techniques throughout the investment process, which enabled the team to make high-conviction investments.

Following investment, the fund also monitored the IP development progress and competitive landscape of its clients. The fund offered access to significant in-depth strategic guidance

from IP experts who had a wealth of experience in IP valuation and strategy of innovative companies. Beyond financial support, the program offered long-term value to clients, provided assistance to companies as they navigated the complexities of scaling up, ensured that their IP was maximized for sustainable growth and that had the governance, talent and investor base needed to compete globally.

In early 2024, the fund started offering IP development loans to its clients. These loans finance IP-related expenses that helped clients to create, protect and monetize their IP portfolios. Eligible expenses included, but were not limited to, the following:

- Advisory fees, such as IP strategy development; licensing strategy studies; and cyber and security assessment, remediation, and digital forensics;
- Legal and agent fees for activities such as: patent or trademark prosecution; development of non-disclosure; employment and contractor agreements; and freedom to operate reports;
- Insurance premiums, such as IP liability and cyber policies;
- Accounting and tax fees, such as IP valuation and IP transfer pricing analysis;
- Other corporate expenses, such as IP manager salaries; memberships and expenses related to the participation in IP-related organizations or standard-setting bodies; and subscriptions to IP search and management software.

By dedicating funds to IP development, this loan was meant to help create accountability for clients in their IP strategy execution. The broad range of IP-related expenses that it covered also ensured that clients were making holistic investments in intangible assets.

2021 – IP Village: strong government-wide collaboration to build IP awareness

In 2021, the BDC, CIPO, the Trade Commissioner Service, ISED, the Intellectual Property Institute of Canada, the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP), key federal organizations and not-for-profit organizations in the Canadian IP ecosystem came together to create the IP Village.⁴⁰ The initiative is a collaborative approach to collectively create and share educational material where thought leadership, practical intelligence, best practices and questions and answers relating to IP are shared. The IP Village aims to strengthen the ability of all parties to guide Canadian enterprises and connect them with IP information and expertise, thereby enhancing understanding and the effective use of IP among Canadian SMEs.

For example, participants in the IP Village have come together to present and record two series of educational webinars. IP Talks is a video series offering in-depth explanations of IP protection in Canada and key foreign markets; IP strategy; support programs for protection and scaling up businesses with or without IP; and IP enforcement.

In 2024, the IP Village published IP Insights, recorded panel discussions with recipients of the BDC IP-backed financing, their IP lawyers and other stakeholders involved in commercializing and scaling up IP-based businesses in data and computing, consumer products, medical technologies and clean technologies. These webinars are hosted on the CIPO YouTube channel and have been viewed by thousands of Canadian SMEs.

Canadian entrepreneurs seeking funding to help them protect and leverage their IP can also find information on funding programs from IP Village participants on the CIPO web pages.

2021–2022 – IP Assist and ElevateIP: an ongoing commitment to build IP-savvy and IP-rich companies

Between 2021 and 2022, NRC IRAP received CAD 75 million over three years to manage the IP Assist program, designed to provide high-growth client firms with access to expert IP services for IP education and the development and execution of tailored IP strategies. In 2021, CAD 90 million was allocated to ElevateIP, a four-year program (2022–2023 and 2025–2026) aimed at helping business accelerators and incubators (BAIs) to provide Canadian start-ups with the necessary tools to understand, strategically manage and leverage their IP.

As Canada makes strategic progress in fostering a stronger culture of innovation and IP awareness, the commitment to equipping SMEs with enhanced understanding, protection and use of IP is very encouraging.

IP efforts in the provinces

At the provincial level, governments have also invested in and supported organizations seeking to assist companies in securing strategic IP rights to protect their freedom to operate. For example, the province of Ontario has established Intellectual Property Ontario (IPON), a board-governed, provincial agency providing assistance to the postsecondary, and research and innovation sectors for the generation, protection, management and commercialization of IP.

IPON provides expert IP advice and access to IP resources to help researchers and companies to better understand how to maximize the value of IP, strengthen their capacity to grow, compete in the market, and enhance research and commercialization outcomes. In 2023, IPON launched a CAD 2 million pilot funding program for colleges and universities to expand their innovation and commercialization efforts.⁴¹

Since 2016, the province of Quebec has provided tax incentives to qualified corporations that can reduce their Quebec tax rate on eligible income attributable to IP assets such as patents, computer programs and plant varieties.

The initiatives and investments made in recent years are sowing the seeds for a transformative shift that may impact how companies view and harness their IP. Moreover, they could pave the way for more IP-rich enterprises seeking to leverage their assets as collateral for IP-backed financing, leading to potentially significant economic benefits for Canadian SMEs.

Local legal and regulatory framework

Registration of IP security – federal and provincial jurisdictions

IP such as patents, trademarks, copyrights, and trade secrets can be used as collateral to secure financing in diverse ways. However, the process of using IP as collateral in Canada involves navigating both federal and provincial laws.

In Canada, IP rights are governed by federal legislation. Conversely, property and security interests are regulated at the provincial level. This distinction necessitates an understanding of how to properly register security interests in IP assets.

CIPO

CIPO maintains registries for formal IP rights, including patents, trademarks, industrial designs and copyrights. These registries serve to inform the public of absolute title assignments, transfers, historical amendments to IP licenses, security agreements, ownership changes, and assignments related to IP registrations in Canada. While CIPO records these details for informational purposes, it is not a legal requirement to register any type of security in the federal IP registries.

Provincial Personal Property Security Acts

IP security interests must be registered under the respective provincial Personal Property Security Acts (PPSA) and their registries. This is because the registration of a security interest in a federal IP registry does not override the priority assignments of secured property that are subject to provincial property laws. Courts rely on provincial laws to determine the priority of security interests.

Dual registration approach

In practice, creditors often employ a "belt and suspenders" approach by registering security interests under both the provincial PPSA and federal IP statutes. This dual registration enables a more comprehensive record of security agreements and highlights scenarios in which IP is used either as stand-alone collateral or as part of an all-personal property bundle that includes tangible property and equity.

At the federal level, a record of security interests in IP registries ensures notification to the public, protects interests, facilitates financing, supports regulatory compliance, and aids strategic IP management.

Capital reserve requirements

Basel III is a set of international banking regulations developed by the Basel Committee on Banking Supervision to strengthen bank regulation, supervision, and risk management following the 2007–2008 financial crisis. Key aspects include higher capital requirements, a leverage ratio and enhanced liquidity requirements to ensure banks can absorb shocks from financial stress.

Canadian banks must adhere to Basel III, which significantly influences their capital and collateral management practices. According to the regulations, banks must hold more capital against risk-weighted assets, with higher-risk assets requiring greater capital reserves.

Intangible assets and risk

Intangible assets like IP are considered higher risk than short-term or tangible assets, due to their volatility and valuation challenges. As a result, IP-backed loans necessitate higher capital reserves, translating into a higher loss given default (LGD). This higher LGD means banks must allocate more capital to cushion potential losses from these loans.⁴²

The increased capital requirements for IP-backed loans reduce their profitability for banks, as more capital must be set aside, limiting funds available for other lending activities. Consequently, banks may be more hesitant to engage in IP-backed financing, or might charge higher interest rates to offset the higher capital costs.⁴³

Basel III emphasizes the importance of collateral liquidation. Tangible assets like real estate and equipment are easier to value and liquidate than intangible assets like IP, which can be complex and fluctuate in value. This further discourages banks from favoring IP as collateral.

IP financing by the numbers

The 2020 Survey on Financing and Growth of Small and Medium-Sized Enterprises reveals that SMEs holding formal IP are more proactive and successful in securing external financing. Not only do they request and receive financing more frequently, they also secure larger amounts and use funds more strategically, particularly for growth initiatives such as research and development and market expansion.

In 2020, 91 percent of SMEs holding IP requested external financing, compared to 81 percent of SMEs without IP.⁴⁴ This is reflected in higher debt financing engagement, with 21 percent of IP holders seeking debt financing, compared to 16 percent of non-IP holders. In addition to being more likely to pursue loans, SMEs holding IP also experience higher approval rates (93 percent vs. 88 percent) and secure significantly larger financing, with an average authorized debt of CAD 757,000 for IP holders compared to CAD 245,000 for non-IP holders.⁴⁵ The type of debt funding most commonly sought by SMEs with registered IP are lines of credit, followed by term loans.⁴⁶

Moreover, SMEs with formal IP are more likely to use these funds for strategic growth. SMEs holding IP are 3.4 times more likely to use debt financing for research and development (9 percent vs. 3 percent), and are also more likely to use it to enter into new markets (11 percent vs. 4 percent).

Beyond debt financing, SMEs holding IP are more inclined to explore a broader range of financing options. For example, 8 percent of SMEs holding IP seek lease financing (compared to 5 percent of those without IP), and 33 percent pursue trade credit financing (1.4 times more likely than those without IP at 23 percent). They are also more likely to request equity financing (4 percent vs. 1 percent) and government financing (85 percent vs. 75 percent).

Overall, the data suggests that SMEs holding formal IP enjoy a distinct advantage in accessing a variety of funding sources. Not only are they more likely to secure financing, but they also tend to receive larger amounts and use these resources more strategically for growth and innovation.

Who is using their IP as collateral?

In general, around half of patent and trademark applications from Canadian SMEs come from companies generating less than CAD 10 million annually.⁴⁷ Around one in five patent and trademark applications come from Canadian companies with revenues of between CAD 10 million and CAD 99 million, and between one in 10 trademark applications and three in 10 patent applications come from Canadian SMEs generating more than CAD 100 million.

However, companies with higher revenues are most likely to use these IP assets in security agreements. For example, Canadian companies earning between CAD 10 million and CAD 99 million represent 51 percent of the trademarks used in security agreements, despite representing 20 percent of trademark applications.

Similar observations can be made when looking at the number of employees within a company. Although companies with over 100 employees represent only 2 percent of all Canadian companies, they represent 56 percent of patents and 62 percent of trademarks involved in security agreements.⁴⁸

Patents as a financial security

Between 2000 and 2016, CIPO recorded 2,800 security agreements involving over 17,100 patents.⁴⁹ Just over half (53 percent) of recorded security agreements include patents with only foreign patent applicants (figure 7). Around 40 percent of recorded agreements involved patents filed exclusively by Canadian applicants, while the remaining 7 percent consisted of patents with both Canadian and foreign applicants.

250 200 100 50 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Canadian applicants Foreign applicants ■ Mixed applicants · · · Linear (trend)

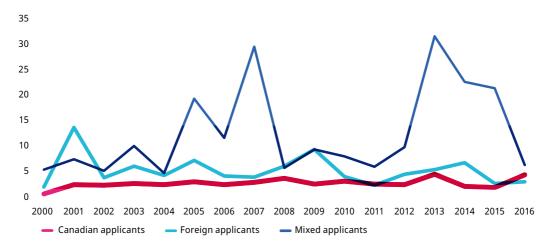
Figure 7 Number of security agreements for patents filed with CIPO (2000–2016)

Source: CIPO internal dataset

Patent applicants for security agreements

The average number of patents per security agreement varied significantly between the applicant groups. The security agreements with mixed applicants involved on average 13 patents per agreement; almost four times more patents than agreements filed for patents with exclusively Canadian applicants (an average of 3.4 patents per agreement) (figure 8). Security in patents filed exclusively by foreign applicants had on average 5.9 patents per agreement (figure 8).

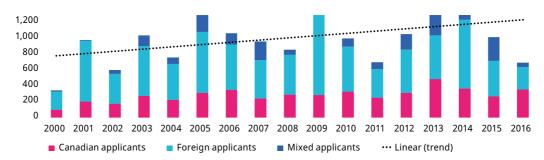
Figure 8 Number of patents per security agreement and applicant nationality (2000-2016)



Source: CIPO internal dataset

In total, more than half of the patents (56 percent) involved in security agreements were filed by foreign applicants; 26 percent were filed exclusively by Canadian applicants; and 16 percent were filed by members of the group of mixed applicants. (figure 9)

Figure 9 Total number of patent applications per year involved in security agreements (2000–2016)



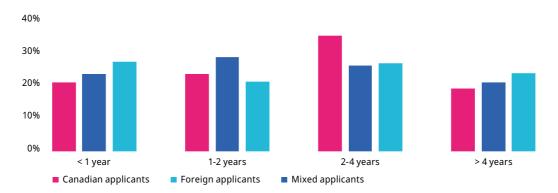
Source: CIPO internal dataset

Duration of patents security agreements

A subset of 423 security agreements were selected and analyzed to determine the duration for which the security agreement was in force.⁵⁰

Based on the subset, more security agreements with Canadian applicants had their patents locked into a security agreement for a longer period than security agreements with mixed or entirely foreign applicants. Around 55 percent of agreements with exclusively Canadian patent applicants tended to be active over 2 years; 53 percent of agreements with mixed patent applicants had a lifetime of under 2 years; and agreements with foreign applicants had the most even distribution of the duration of the agreement (figure 10).

Figure 10 Distribution of security agreement duration for security in patents



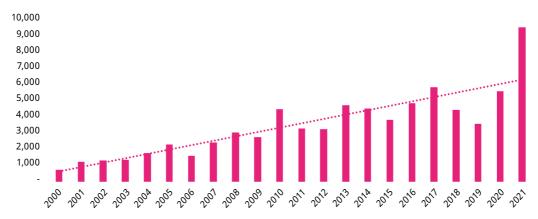
Source: CIPO internal dataset

Trademarks as financial security

Unlike the patent data, which links security agreements to one or several patents, security agreements for trademarks are registered for each trademark. In addition, the number of security agreements for trademarks is overstated since security agreements registered in the CIPO trademark database include both security agreements and licensing agreements. The data is not limited to scenarios in which these trademarks were used only as a security.

From 2000 to 2021, CIPO recorded security agreements related to 77,000 trademarks (figure 11). Over this period, the annual number corresponding to trademark security saw an eightfold increase, from 1,228 in 2001 to over 9,630 in 2021 (figure 11).

Figure 11 Trademark security interests and license agreements recorded with CIPO (2000–2021)

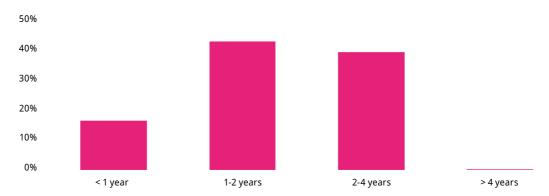


Source: CIPO internal datasets

Duration of trademark security agreements

A subset of the trademark security agreements was analyzed for the duration of these agreements. The results indicated that trademarks are locked up in security agreements for a shorter period than patents. Well over half of trademarks were used as security for less than two years (figure 12).

Figure 12 Duration of security agreements for trademarks



Source: CIPO internal dataset

Local institutions engaged in IP-backed financing

Government institutions

BDC51

The BDC program on IP-backed financing was the first of its kind in Canada, and was designed to scale up companies with at least CAD 1 million in annual revenue that have rich IP portfolios, including patents, industrial designs, trade secrets, copyrights, proprietary software and data. From 2020 to 2025, the program offered IP-backed financing of CAD 2 million to CAD 10 million via term and convertible debt and equity investments.

The program served the needs of companies in underserved industries where strong IP strategies and portfolios are necessary. The fund also facilitated access to advice and expertise to assist portfolio companies in further developing their IP strategies and portfolios, with a view to competing globally. The BDC IP-backed financing program extended beyond capital and also provided clients with access to a network of IP professionals and strategists.

By July 2023, the fund had received 1,500 applications and closed 15 deals.⁵² An inspiration to like-minded stakeholders, the BDC IP-backed financing program was a key driver of the development of an inclusive ecosystem.

Key success factors of the program

The program offered an integrated solution with IP analytics and valuation techniques that are embedded into a lending or equity investment process. Applicants underwent a multi-step process to evaluate their IP maturity, together with in-depth discussions and due diligence on their IP portfolio.

To qualify, applicants needed to showcase teamwork and an ability to provide investors with an overview of their IP portfolio, as well as how the company used IP to build and protect its competitive aspects and market share. Applicants could expect their entire IP strategy to be taken into account, including pending rights, providing proof of IP ownership, and being able to explain how trade secrets are managed.

These insights were used to establish the links between the products and the relevant market, something the BDC calls the product-market-moat fit, which must involve the following:

- Evidence of a value proposition to customers and a product adopted by a large and growing multinational market.
- An IP portfolio that effectively protects competitive advantage. Applicants are
 asked to fill in an IP questionnaire to disclose all IP rights, where patent claims
 are linked with the respective features or components of the product. The team
 at the BDC takes responsibility for a patent landscape analysis to determine the
 competitive position of the applicant.

- Statements of how the company can adapt and use its IP to increase market share in a growing market.

All claims and competitive advantage stated in the applications were validated through primary and secondary research. This included verification of market size, clients, distributors and suppliers, and often discussions with key opinion leaders.

The BDC team also met with the applicant's IP team to validate the IP strategy, history, and culture to determine which incentives, protection mechanisms, monitoring, and research activities the applicant had in place to safeguard and grow an optimized portfolio of IP rights.

Applications that passed due diligence then progressed to IP valuation, in which claims and assumptions were quantified through one or several IP valuation methods, including cost, income and market methods. Finally, the financing terms and conditions were outlined and, once negotiated and approved, the financing was issued.

As an investor, the IP-backed financing team at the BDC Capital had an ongoing commitment to its clients and regularly met to ensure their IP strategy was managed effectively for an optimal project-market-moat fit. This ongoing commitment could also include scanning the market for events that could affect the value of the IP portfolio, including acquiring new IP rights or letting go of others.

The deals have spanned a range of Canadian companies, though the most popular sectors had health care, sustainability and enterprise hardware solutions. Four of the recipients have shared their success stories in recorded panel discussions in the IP Insights playlist available on the CIPO YouTube channel.⁵³

Financial institutions

Based on data from securities registered with CIPO, it has been observed that the six largest Canadian banks – Bank of Montreal, National Bank of Canada, Royal Bank of Canada, Scotiabank, Canadian Imperial Bank of Commerce, and Toronto Dominion Bank (TD Bank) – hold security interests in IP. This data indicates that these commercial banks have been taking security over IP for several decades. While the inclusion of IP as collateral is evident, it is important to note that these security interests are likely to encompass other forms of assets as well, in accordance with capital reserve requirements.

Specific bank programs supporting IP financing

Some of these banks have developed specific financing programs that aim to ensure the protection and use of inventions, recognizing the strategic importance of IP for business growth. For example, TD Bank launched the TD Patents for Startups program in 2019.⁵⁴ This program is designed to support early-stage companies by providing funding and assistance with the patent application process in Canada, the United States and other jurisdictions. The initiative aims to help startups harness the value that patents can offer, facilitating their growth and innovation. By offering such support, TD Bank helps startups to navigate the complex patent landscape, ensuring that they can protect their inventions and leverage their IP for business development.

The TD Patents for Startups program had its second round announced in January 2022, demonstrating the ongoing commitment of TD Bank to supporting innovation and IP protection for startups.⁵⁵

Use of IP as collateral for equity financing

In 2023, the venture capital industry in Canada saw nearly CAD 7 billion invested into 660 deals. Since 2019, the ICT sector has seen by far the most investment activity, representing between 60 and 78 percent of Canadian venture capital investments per year (figure 13).⁵⁶

The Canadian Venture Capital and Private Equity Association (CVCA) confirms that, in general, investors consider that a company's IP portfolio is too risky to be the single collateral. Investors undertake significant due diligence of IP assets to verify that IP portfolios are aligned with the overall business plans of firms. Although many of the venture capital portfolio companies already own quality IP and have growing IP portfolios, IP does not dominate the investment discussion or even decisions; these depend on the degree to which the IP portfolio is aligned with the business strategy of the company, whether there is a track record of success, and the presence of intellectual capacity to commercialize and scale up. IP becomes more relevant when the investment is in companies with IP that is already generating revenue.

12,000
10,000
8,000
4,000
2,000

ICT Life sciences Cleantech Agribusiness

Figure 13 Canadian Venture Capital sector investment activity (2019 -2023)

Source: CVCA⁵⁷

The CVCA also stresses the importance of the ownership and commercialization of Canadian IP in terms of attracting investments.

Government-backed guarantees and funds

At a federal level, one of the main government-backed funding instruments is the <u>Canada Small</u> <u>Business Financing Program</u> (CSBFP), a program that facilitates access to financing for small <u>businesses</u>. The program is administered by ISED Canada, and it provides a loan guarantee to financial institutions, encouraging them to grant loans to small businesses that might otherwise have difficulty in obtaining financing. This is a federal Government initiative designed to help small businesses to access the financing they need to expand, purchase, or improve their fixed assets, intangible assets, and working capital costs.

CSBFP partners with private sector lenders to provide financing that would otherwise be unavailable, or would only be available under less favorable conditions. The CSBFP is a national program that operates through a network of financial institutions but is not involved in the disbursement and administration of the loans. Private sector lenders are responsible for making all credit decisions, approving, disbursing and administering the loans, and registering the loans with the CSBFP. Each lender has its own lending criteria subject to the requirements of the CSBFP. Once the loan is approved, the borrower receives the funds from the lender, not the government.

During the 2019–2020 fiscal year, the program guaranteed 5,746 loans valued at CAD 1.3 billion.⁵⁹ The program is delivered through financial institutions, which are also responsible for due diligence and overall risk assessment of the company, including the structuring of the loan and underlying assets.

The program is available to small businesses in Canada with gross annual revenues of CAD 10 million or less. Since 2022, financing through the CSBFP includes a term loan of up to CAD 1 million, of which CAD 150,000 can be used for intangible assets and working capital costs. In addition, the CSBFP offers a line of credit of up to CAD 150,000 for working capital costs.

Role of IP insurance

Companies may assume that IP assets are insured as part of existing business insurance. However, incidents such as patent infringement, damages from IP infringement allegations and trade secret misappropriation are often excluded from insurance policies, whose primary focus is not IP issues. Insurance companies carry out due diligence prior to accepting any clients, and discussions are held to assess the registered IP of a client; how exposed such IP is; any IP terms and conditions in contracts; the costs for which the client is seeking coverage; and whether there have been any previous risks or issues related to their IP. As such, insurance can be used as a tool for growth. Insurance providers offering IP insurance can help companies to analyze and articulate IP risk.

In Canada, there are both traders and companies offering IP insurance. For example, members of the Innovation Asset Collective can access IP insurance through their members base IP liability insurance coverage, which provides CAD 1 million in defensive coverage and CAD 500,000 in enforcement coverage over a 12-month policy period.

Role of IP valuation and expertise

IP typically forms part of the valuation of a business for a variety of situations like mergers, financial reporting, tax or financing purposes.

Canadian IP valuation experts typically have a combination of expertise in technology, law and finance. However, there is no official or licensed designation for IP valuation experts in Canada. Many IP valuation experts are either employed in-house or offer IP valuation as a professional service tailored to client needs. There are no promulgated or required standards for IP valuation in Canada in the context of secured transactions or other uses.

The industries most likely to own IP in Canada are cleantech, information and cultural industries, and manufacturing. ⁶⁰ As such, expertise in IP valuation is closely tied to expertise in business entity valuation, particularly in these key sectors (ICT, life sciences). Some IP valuators are members of the Canadian Institute of Chartered Business Valuators (CBV Institute). CBV Institute leads the Chartered Business Valuator (CBV) profession, Canada's only designation dedicated to business valuation since 1971.

CBVs are trained in intangible asset valuation, including the valuation of IP, and practice in a variety of areas of business and asset valuation. CBVs are often engaged by management to undertake intangible asset valuations in business combinations. Valuation of IP is covered in the CBV Institute Program of Studies, particularly as part of the specialized "Valuation for Financial Reporting" course.⁶¹

Work performed by CBV Institute members is generally governed by Practice Standards.⁶² The valuation standards applicable to IP valuation are:

- Practice Standard No. 110 addresses report disclosure in a valuation report;
- Practice Standard No. 120 addresses the work performed by the valuator;
- Practice Standard No. 130 addresses the documentation that should be retained by the valuator;
- International Valuation Standards (IVS).

CBV Institute is a long-standing member and sponsor of the International Valuation Standards Council (IVSC) and has contributed significantly over the years to the drafting of IVS, including IVS 200 "Businesses and Business Interests" and IVS 210 "Intangible Assets", encompassing the

valuation of identifiable intangible assets, including IP. 63 A range of valuation approaches are acceptable in valuing both the business and its IP in line with the IVS. 64

Given the versatility of IP, IP owners, international portfolios, and formal and informal ownership, CBVs often manage the valuation together with experts who have technical, legal, and in-depth knowledge of the subject market and industry. To this end, CBVs often consolidate a range of reports from third parties to get a complete assessment of the IP, including legal, technical and market aspects associated with IP.

Challenges of IP-backed financing in Canada

Canadian SMEs face unique challenges when leveraging IP as a financing tool for business growth. The outlined challenges – regulatory landscape, IP valuation, secondary markets, and disclosure and data availability – are interconnected and collectively impact the ability of SMEs to secure funding and grow their businesses.

Regulatory landscape

The regulatory landscape for using IP as collateral poses significant challenges to creditors in Canada:

Complexity and fragmentation

- Creditors must navigate both provincial registries and the federal IP registry for IP rights. The lack of a unified interface between these registries complicates the due diligence process.
- Terminology differences across systems (e.g. mortgagor vs. assignee; transfer vs. assign) add to the complexity. Changes in registrations are not always instantaneous, which can lead to discrepancies and delays.

International considerations

 Accepting foreign IP as collateral requires verification of the status and priority of the IP abroad, with checks across multiple jurisdictions, making the process timeconsuming and costly.

Unregistered IP

 While unregistered IP such as unregistered copyrights, trademarks and trade secrets can be used as collateral, they are generally less valuable due to the lack of legal protection for registered IP.

Higher capital reserves

 Regulatory requirements on higher capital reserves for intangible assets make it less profitable for creditors to accept IP as stand-alone collateral.

IP Valuation

Valuing IP for financing purposes is challenging due to several factors:

- Industry-specific knowledge: Accurate IP valuation demands a deep understanding of the specific industry, the nature of the IP rights (e.g. patent claims, trademark status), and their alignment with market demand and size.
- A complex valuation process: The valuation process requires integrating both quantitative
 and qualitative aspects, including market demand, accounting and tax rules related to IP
 investments and revenue. This necessitates a team of experts, making it a costly exercise.
- **Lack of standardized guidelines:** Despite principle-based practice standards, there is no universally accepted guideline for IP valuation. This lack of standardization complicates the valuation process and can lead to inconsistencies.
- Ongoing efforts for standardization: Initiatives like the Memorandum of Understanding between the IVSC and WIPO aim to develop and spread best practices for IP valuation.⁶⁵ The IP Valuation Standards Committee of Licensing Executives Society International is also working towards creating a consensus-based framework for qualitative considerations.⁶⁶

Secondary markets

Secondary markets for IP are small and underdeveloped, presenting challenges in relation to the following:

- Resale value: IP resale value in secondary markets is often much lower than its value when
 in use. This makes IP less attractive as collateral for financing.⁶⁷
- IP brokering: IP can be sold through niche markets such as IP brokering, where the
 value often depends on whether or not the IP rights are infringed. Potential buyers
 might purchase IP to avoid litigation, which adds a layer of complexity to the valuation
 and sale process.⁶⁸

Disclosure and data availability

There are significant challenges related to the disclosure and availability of IP-related data, including in relation to:

Financial reporting standards: Canadian corporations have been preparing financial statements according to International Financial Reporting Standards since 2011.⁶⁹ Specifically, International Accounting Standard 38 governs the disclosure of IP assets, classifying them under intangible assets on the balance sheet, which makes them largely invisible to investors and shareholders.

Lack of comprehensive reporting requirements: There are few requirements for companies to report their IP rights, status and value. Even when disclosed, creditors need to verify whether the IP rights are in good standing and if any portions are secured. This requires accessing information from both federal and provincial registries, further complicating the process.

Development status and scope transparency: Understanding the real Technology Readiness Level of IP requires more than just reading a patent. ⁷⁰ Transparent disclosure of the development status and scope of IP is crucial but often insufficient, making it difficult for creditors to accurately assess the value and viability of IP as collateral.

In summary, while IP-backed financing has the potential to unlock significant value, the regulatory complexities, challenges in accurate valuation, underdeveloped secondary markets, and issues related to disclosure and data availability create substantial obstacles for creditors and investors in Canada.

Planning for the future

Canada's journey towards an economy driven by intangible assets is paved with both opportunities and challenges. By fostering a culture of IP awareness, enhancing support mechanisms for SMEs, and addressing regulatory and market challenges, Canada can unlock the potential of its intellectual assets. Not only will this drive innovation and economic growth, but it will also ensure that Canadian enterprises remain competitive on the global stage.

In alignment with its 2023–2028 business strategy, CIPO is committed to playing a pivotal role in this transformation. CIPO will provide comprehensive IP education and training to foster a deeper understanding of IP across various sectors. By streamlining IP processes and offering tailored support to SMEs, CIPO aims to make IP services more accessible and efficient.

Furthermore, through collaborations with industry stakeholders and international partners, CIPO will work to understand and potentially respond to market challenges, ensuring a robust IP ecosystem that supports the commercialization of innovations. These efforts will empower Canadian businesses to capitalize on their intangible assets, enabling them to drive sustained economic growth and to secure a competitive edge in the global marketplace.

Endnotes

- Statistics Canada, Debt financing requests and amount authorized for small and medium enterprises (x 1,000), Table: 33-10-0433-01, Release date: 2022-03-02. Available at: www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3310043301 [Accessed February 5, 2025].
- 2 10 Countries With the Most Natural Resources (investopedia.com). Available at: www.investopedia.com/articles/markets-economy/090516/10-countries-most-natural-resources.asp [Accessed February 5, 2025].
- WIPO (2024), Global Innovation Index 2024. Available at: www.wipo.int/web-publications/global-innovation-index-2024/ [Accessed February 5, 2025].
- 4 International Monetary Fund, World map and country ranking by GDP, current prices, 2024. Available at: www.imf.org/external/datamapper/NGDPD@WEO/OEMDC/ADVEC/WEOWORLD [Accessed February 5, 2025].
- 5 Statistics Canada, Table 33-10-0661-01 Canadian Business Counts, with employees, December 2022.
- Innovation, Science and Economic Development Canada, Key Small Business Statistics 2022. Available at: ised-isde.canada.ca/site/sme-research-statistics/en/key-small-business-statistics-2022 [Accessed February 5, 2025].
- 7 Ibid.
- Intellectual Property Awareness and Use Survey, 2019. Available at: www.150.statcan.gc.ca/n1/daily-quotidien/210218/dq210218b-eng.htm [Accessed February 5, 2025].
- 9 Ibid.
- 10 Ibid.
- 11 Ibid.
- Survey of Innovation and Business Strategy, 2022. Available at: www150.statcan.gc.ca/n1/daily-quotidien/240430/dq240430b-eng.htm [Accessed February 5, 2025].
- 13 Ibid.
- 14 Ibid.
- WIPO IP Statistics Data Center, Patents. Available at: www3.wipo.int/ipstats/key-search/ indicator [Accessed February 5, 2025].
- Statistics Canada, Table 33-10-0334-01, Intellectual property ownership inside and outside of Canada, by business characteristics. Available at: www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3310033401 [Accessed February 5, 2025].
- WIPO IP Statistics Data Center. Available at: www3.wipo.int/ipstats/ips-search/patent [Accessed February 6, 2025].
- 18 CIPO, "IP Canada Report 2021", March 2023.
- 19 CIPO, Annual Report 2022–2023. Available at: <u>ised-isde.canada.ca/site/canadian-intellectual-property-office/sites/default/files/documents/CIPOCS-2108-AR22-23-ENG_final.pdf</u> [Accessed February 5, 2025].
- WIPO IP Statistics Data Center, Trademarks. Available at: www3.wipo.int/ipstats/ips-search/trademark [Accessed February 6, 2025]

- 21 Sources: Statistics Canada, International merchandise trade for all countries and by Principal Trading Partners, monthly (X 1,000,000), Available at: www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1210001101 [Accessed on February 16, 2024); IP filings: CIPO, "IP Canada Report 2024", forthcoming.
- The Daily Research and development in Canadian industry: Intellectual property, 2021 (statcan.gc.ca), Available at: www.150.statcan.gc.ca/n1/daily-quotidien/230926/dq230926b-eng.htm [Accessed February 5, 2025]
- 23 Ibid.
- 24 Statistics Canada, Table 27-10-0349-01, Business enterprise payments made and received for intellectual property and other technological services by industry group based on the North American Industry Classification System (NAICS) (x 1,000,000). Available at: www.150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2710034901 [Accessed February 5, 2025]. Some data to be used with caution.
- The Daily Survey of Innovation and Business Strategy, 2022. Available at: www.150.statcan.gc.ca/n1/daily-quotidien/240430/dq240430b-eng.htm [Accessed February 5, 2025].
- 26 Ibid.
- 27 Statistics Canada, External financing requests and reason for not seeking external financing of small and medium enterprises, Table: 33-10-0429-01, Release date: 2022-03-02.
- Canadian Survey on Business Conditions, third quarter 2024. Available at www.150.statcan.gc.ca/n1/daily-quotidien/240827/dq240827a-eng.htm [Accessed February 5, 2025].
- W. Gu and R. Macdonald, Statistics Canada, "Business Sector Intangible Capital and Sources of Labour Productivity Growth in Canada", release date February 12, 2020. Available at: www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2020005-eng.htm [Accessed February 5, 2025].
- 30 Evaluation of the National Intellectual Property Strategy. Available at: https://ised-isde.canada.ca/site/audits-evaluations/en/evaluation/evaluation-national-intellectual-property-strategy [Accessed March 25, 2025].
- BDC's \$160M IP-backed Financing. Available at: https://www.bdc.ca/en/about/ mediaroom/news-releases/bdc-launches-financing-envelope-support-ip-development-canada [accessed March 25, 2025].
- 32 IP Village: IP resources for your business. Available at: https://ised-isde.canada.ca/site/canadian-intellectual-property-office/en/ip-village-ip-resources-your-business [Accessed March 25, 2025].
- 33 ElevateIP. Available at: https://ised-isde.canada.ca/site/elevateip/en [Accessed March 25, 2025].
- Funding Cybersecurity & IP Protection through IRAP. https://www.copoint.ca/insights/funding-cybersecurity-and-ip-protection-through-irap [Accessed March 25, 2025].
- 35 IP Centre of Expertise. Available at: www.canada.ca/en/services/business/ip/intellectual-property-centre-of-expertise.html [Accessed February 6, 2025].
- 36 IP Clinics Program. Available at: <u>ised-isde.canada.ca/site/intellectual-property-strategy/en/legal-clinics-program</u> [Accessed February 6, 2025].

- Patent Collective Pilot Program. Available at: <u>ised-isde.canada.ca/site/patent-collective-pilot-program/en [Accessed February 6, 2025].</u>
- ExploreIP: Canada's IP Marketplace. Available at: <u>ised-isde.canada.ca/ipm-mcpi/?lang=en</u> [Accessed February 6, 2025].
- James Nurton, "The Future Looks Brighter for IP-Backed Financing", WIPO Magazine, July 2023. Available at: www.wipo.int/wipo_magazine_digital/en/2023/article_0021.html [Accessed February 5, 2025].
- 40 IP Village: IP resources for your business. Available at: <u>ised-isde.canada.ca/site/</u> <u>canadian-intellectual-property-office/en/ip-village-ip-resources-your-business</u> [Accessed February 5, 2025].
- 41 IPON, Report: Colleges & Universities Annual Commercialization Plans. Available at www.ip-ontario.ca/s/Colleges-and-Universities-Annual-Commercialization-Plans.pdf [Accessed on February 5, 2025].
- 42 Government of Canada, Office of the Chief Actuary, Guidance, Capital Adequacy Requirements (CAR) (2024) Chapter 5 Credit Risk Internal Ratings-Based Approach. Available at www.osfi-bsif.gc.ca/en/guidance/guidance-library/capital-adequacy-requirements-car-2024-chapter-5-credit-risk-internal-ratings-based-approach [Accessed on February 5, 2025].
- 43 Rementilla, L. (2023). Intellectual Property-Backed Financing. In: Bader, M.A., Süzeroğlu-Melchiors, S. (eds) Intellectual Property Management for Start-ups. Management for Professionals. Springer, Cham. Available at: doi.org/10.1007/978-3-031-16993-9_9.
- SME Profile: Innovative enterprises in Canada. Available at: https://ised-isde.canada.ca/site/sme-research-statistics/en/research-reports/sme-profile-innovative-enterprises-canada [Accessed March 25, 2025].
- 45 Ibid.
- Statistics Canada, Table 33-10-0432-01, Debt financing requests by instrument type from small and medium enterprises. Available at: www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3310043201 [Accessed February 5, 2025].
- 47 CIPO internal data.
- 48 Statistics Canada, Table 33-10-0222-01, Canadian Business Counts, with employees, December 2019, Table 17-10-0005-01 Population estimates on July 1st, by age and sex; and ISED calculations. Available at: ised-isde.canada.ca/site/sme-research-statistics/en/key-small-business-statistics/key-small-business-statistics-2020#how-SME [Accessed February 5, 2025].
- In 2019 there were changes made to the patent laws in Canada, lifting the requirement of registration of any grant and conveyance of exclusive rights. Since then, only the requirement to register definite transfers of ownership remains. This change reduced the number of records included in the dataset, resulting in a narrowing of the analysis to security that was released before the registration requirement changed.
- The origins of the patent applicants for this subset were distributed in a similar manner to those corresponding to the overall 2,800 security agreements.
- Adapted from Rementilla, L. (2023). Intellectual Property-Backed Financing. In: Bader, M.A., Süzeroğlu-Melchiors, S. (eds) Intellectual Property Management for Start-ups. Management for Professionals. Springer, Cham. Available at: doi. org/10.1007/978-3-031-16993-9_9.

- James Nurton. The Future Looks Brighter for IP-Backed Financing. WIPO Magazine. July 2023. Available at: https://www.wipo.int/wipo_magazine_digital/en/2023/ article_0021.html.
- CIPO, IP Insights: Data and Computing, 2024. Available at: www.youtube.com/
 www.youtube.com/
 <a href="www.youtube.com/"watch?v=r928g8hwGsg&list=PLU_CZUot18pu-TmHEy7E573o8crTR9l
- "TD helps patent next generation of low carbon technologies", October 31, 2019. Available at: td.mediaroom.com/2019-10-31-TD-helps-patent-next-generation-of-low-carbon-technologies [Accessed February 5, 2025].
- 55 "TD helps build future innovation in Cleantech, Healthtech, and ESG through new patent funding", January 26, 2022. Available at: stories.td.com/ca/en/news/2022-01-26-td-helps-build-future-innovation-in-cleantech-2c-healthtech-2c-a [Accessed February 5, 2025].
- Year-End 2023 VC and PE Canadian Venture Capital Market Overview, February 22, 2024, Available at www.cvca.ca/insights/market-reports/year-end-2023/ [Accessed on February 5, 2025].
- 57 CVCA, "Canadian Venture Capital Market overview, 2022 Year in Review". Available at reports.cvca.ca/books/jmtj/ [Accessed February 5, 2025].
- Canada Small Business Financing Program. Available at: <u>ised-isde.canada.ca/site/canada-small-business-financing-program/en</u> [Accessed February 5, 2025].
- 59 Between April 1, 2019 and March 31, 2020.
- Statistics Canada, Intellectual Property Awareness and Use Survey, 2019. Available at: www150.statcan.gc.ca/n1/en/daily-quotidien/210218/dq210218b-eng.pdf?st=PzV40u7S [Accessed February 5, 2025].
- 61 CBV Institute, Program of Studies. Available at: cbvinstitute.com/become-a-cbv/program-of-studies [Accessed February 5, 2025].
- 62 CBV Institute, Practice Standards. Available at: cbvinstitute.com/members-students/ standards-ethics/practice-standards/ [Accessed February 5, 2025].
- 63 IVS effective January 31, 2025. Available at www.ivsc.org/standards/ [Accessed February 5, 2025].
- 64 Ibid.
- IVSC press release, "IVSC and World IP Organisation [sic.] (WIPO) Announce Collaboration to Promote Intellectual P Valuation", February 18, 2023. Available at: www.ivsc.org/ivsc-and-world-intellectual-property-organisation-wipo-announce-collaboration-to-promote-intellectual-property-valuation/ [Accessed February 5, 2025].
- Licensing Executives Society International, IP Valuation. Available at: lesi.org/category/ articles/ip-valuation/ [Accessed February 5, 2025].
- 67 Rementilla, L. (2023). Intellectual Property-Backed Financing. In: Bader, M.A., Süzeroğlu-Melchiors, S. (eds.) Intellectual Property Management for Start-ups. Management for Professionals. Springer, Cham. Available at: doi.org/10.1007/978-3-031-16993-9_9.
- Canadian IP Voices podcast. Interview with Louis Carbonneau, Episode 27, February 2023. Available at: https://canadian-ip-voices.simplecast.com/episodes/how-not-to-spend-money-on-bad-patents [Accessed February 5, 2025].

- International Financial Reporting Standards, Jurisdictional profile: Canada. Available at: www.ifrs.org/content/dam/ifrs/publications/jurisdictions/pdf-profiles/canada-ifrs-profile.pdf [Accessed February 5, 2025].
- Denoncourt, Janice, "Seeking and Hiding: Corporate Disclosure Norms, Non-Financial Technology Information and the Technology Readiness Level (TRL) System", January 6, 2023.

