

Staff Discussion Paper/Document d'analyse du personnel—2023-25

Last updated: October 13, 2023

An Overview of the Indigenous Economy in Canada

by Alex Chernoff and Calista Cheung



Canadian Economic Analysis Bank of Canada, Ottawa, Ontario, Canada K1A 0G9

achernoff@bankofcanada.ca, ccheung@bankofcanada.ca

Bank of Canada staff discussion papers are completed staff research studies on a wide variety of subjects relevant to central bank policy, produced independently from the Bank's Governing Council. This research may support or challenge prevailing policy orthodoxy. Therefore, the views expressed in this paper are solely those of the authors and may differ from official Bank of Canada views. No responsibility for them should be attributed to the Bank.

Acknowledgements

The authors would like to thank Barton Loutit for his input, and Denise Abella, Greg Adams, Jamal Dumas and Jerome Lyons for excellent research assistance. This paper has benefitted from many helpful discussions and comments from Joshua Slive, Fernando Aragon, Ernie Daniels, the National Indigenous Economic Development Board, Julie Pellerin of the Assembly of First Nations, Chris Hajzler, Larry Schembri and Brigitte Desroches.

Abstract

Attempts to measure aspects of the Indigenous economy in Canada are limited by data availability and quality. Drawing on the most recent data sources and research, we provide an overview of the Indigenous economy in Canada. This includes a discussion of the various characteristics of the Indigenous economy, including the labour market and the business sector, institutional settings, and the state of infrastructure. While several measures suggest economic outcomes have improved for Indigenous Peoples in recent decades, institutional settings and gaps in infrastructure and financing continue to hinder their economic progress. The creation of new institutions is helping Indigenous communities to overcome historic barriers to growth, but continued progress is needed to improve data on the Indigenous economy. This would enable policymakers and Indigenous leaders to measure progress and make informed decisions.

Topics: Central bank research, Development economics, Financial services, Labour markets, Monetary Policy Transmission, Regional economic developments

JEL codes: E01, E02, N41, N42, O43, P48

Résumé

Les tentatives pour évaluer divers aspects de l'économie autochtone au Canada sont contrariées par des problèmes de disponibilité et de qualité des données. Nous nous appuyons sur les sources de données et les recherches les plus récentes pour présenter une vue d'ensemble de l'économie autochtone au pays. Nous analysons notamment différentes caractéristiques de cette économie, dont le marché du travail, le secteur des entreprises, le cadre institutionnel et l'état des infrastructures. Bien que plusieurs indicateurs montrent une amélioration de la situation économique des Autochtones au cours des dernières décennies, le cadre institutionnel et les lacunes en matière d'infrastructures et de financement restent un obstacle à leur développement économique. La création de nouvelles institutions aide les communautés autochtones à se libérer des entraves historiques à la croissance, mais les progrès doivent se poursuivre pour que soient améliorées les données sur l'économie autochtone. De meilleures données permettraient aux décideurs et aux leaders autochtones de mesurer les progrès accomplis et de prendre des décisions éclairées.

Sujets : Recherches menées par les banques centrales, Économie du développement, Services financiers, Marchés du travail, Transmission de la politique monétaire, Évolution économique régionale

Codes JEL: E01, E02, N41, N42, O43, P48

Introduction

The Bank of Canada's mandate to promote the economic and financial well-being of Canadians includes a responsibility to advance economic reconciliation (Macklem 2021). Indigenous Peoples in Canada have long faced systemic barriers to developing their economies, which have led to persistent socio-economic disparities relative to non-Indigenous people. As described in the First Nations Financial Management Board's (FMB) "RoadMap Project," these socio-economic gaps impede reconciliation, while a lack of data limits the ability of policy-makers to make informed decisions that can benefit Indigenous economies (FMB 2022). These issues are important for the Bank of Canada to better understand, not only because they limit the productive potential of the Canadian economy but also because gaps in Indigenous access to finance hinder the transmission of monetary policy to the Indigenous economy (Schembri 2022).

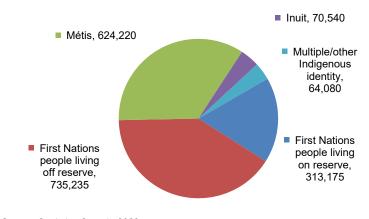
This paper provides an overview of the Indigenous economy in Canada based on the latest available data and research. It begins with a short description in section 1 of the Indigenous population in Canada, followed by a summary in section 2 of the available data and studies to measure the Indigenous economy. Section 3 describes the institutional settings, and section 4 discusses characteristics of the Indigenous economy, including the labour market, the business sector, access to finance and the state of infrastructure.

1. The Indigenous population in Canada

Indigenous Peoples in Canada are diverse, with unique cultures, languages and histories. About 1.81 million people self-identified as Indigenous in the 2021 Census, representing 5% of the population (Statistics Canada 2022a). Three main groups are recognized by the *Constitution Act* (1982, section 35) (**Chart 1**):

- The **First Nations** are the largest group, with over 1.05 million people in more than 630 First Nations communities across Canada, representing more than 50 nations and 50 languages. Almost 30% of First Nations people live on a reserve, the term used for a tract of land where legal title is held by the federal government for the use of a particular First Nation.
- The Métis are a distinct people who originated from the intermarriage of European settlers with Indigenous women

Chart 1: The Indigenous population in Canada



Source: Statistics Canada 2022a

in the western Canadian prairies during the 18th century. The Métis Nation homeland includes the three Prairie provinces, as well as parts of British Columbia, Ontario and the Northwest Territories.

• Inuit comprise about 70,500 people living mainly in the arctic regions of Canada and sharing the common language of Inuktitut (with many dialects). Approximately 69% of Inuit live in the Inuit Nunangat, where they are the majority of the population. Inuit Nunangat comprises four regions in northern Canada: the territory of Nunavut, the Inuvialuit Settlement Region (in the Northwest Territories), Nunavik (in northern Quebec) and Nunatsiavut (in northern Labrador).

Compared with non-Indigenous people in Canada, the Indigenous population is younger, growing faster and more likely to live in rural areas. The Indigenous population grew by 18.9% from 2011 to 2016 and by 9.4% from 2016 to 2021. This exceeds the growth in the non-Indigenous population of 4.2% and 5.3%, respectively, over these periods (Statistics Canada 2022b). This faster growth reflects, in part, rising rates of self-identification but also higher fertility rates.

Almost 60% of the Indigenous population in Canada lives in rural areas (compared with one-third of the non-Indigenous population), while about one-quarter live in the 12 largest cities (Organisation for Economic Co-operation and Development 2020). Their population distribution varies significantly by region. For example, Indigenous people account for only 2%–3% of the population in the largest provinces, Ontario and Quebec, but for 18% in Manitoba and 86% in Nunavut (**Chart 2**). Indigenous people are often the majority populations in northern communities.

Logarithmic scale Nunavut Northwest Territories Yukon Manitoba Saskatchewan Newfoundland and Labrador Alberta British Columbia Nova Scotia Canada New Brunswick Ontario Quebec Prince Edward Island 0% 2% 5% 14% 37% 100% ■First Nations ■Métis Inuit ■Multiple Indigenous responses ■Indigenous responses not included elsewhere

Chart 2: Indigenous share of population by province and territory

Source: Statistics Canada 2022a

2. Data gaps in measuring the Indigenous economy in Canada

Attempts to measure the size or contributions of the Indigenous economy in Canada are limited by data availability and quality. Although the Organisation for Economic Co-operation and Development (OECD) (2020) reports that Canada has relatively good data compared with other OECD countries with Indigenous populations, those data provide only a partial picture of the Indigenous economy. For example, survey

¹ For examples of Canada's data see Statistics Canada, "<u>Statistics on Indigenous Peoples</u>," modified on July 19, 2023.

data are often unavailable at the community level, are not comparable across communities or with non-Indigenous communities and are not timely or available at regular frequencies (Trevethan 2019). The scarcity of high-quality data also reflects a lack of trust and participation from Indigenous Peoples in government-run surveys as a result of the long history of discrimination and research conducted with little input from Indigenous communities (Steffler 2016).

The information gaps are especially large for on-reserve and northern Indigenous communities, and these gaps often reflect community size, remoteness and jurisdictional issues that limit data collection and validation (Feir, Gillezeau and Jones 2018). Statistics Canada (2022b) notes that unique challenges associated with data collection during the 2021 Census led to the highest number of incompletely enumerated First Nations reserves and settlements since the 1996 Census, a trend that had otherwise been declining over time.² In addition, Statistics Canada excludes on-reserve communities from its monthly Labour Force Survey and the consumer price index.³ Often, data on some small communities are suppressed for privacy reasons or excluded for lack of participation or inconsistent definitions of who falls into categories such as First Nations and Métis, among other issues (Trevethan 2019). One result is that Nunavut is often excluded from national data.⁴ These data gaps limit the ability of governments to effectively provide services to Indigenous Peoples (First Nations Financial Management Board 2022).

The two main sources of publicly available national data on Indigenous Peoples in Canada are the population census and the voluntary postcensal Indigenous Peoples Survey (IPS), though the latter has excluded on-reserve communities since 2006. Both are conducted by Statistics Canada every five years, most recently in 2021 and 2017, respectively. Beyond these, other periodic surveys focus on thematic issues such as health, education and employment, including two major surveys conducted by the First Nations Information Governance Centre on reserve and in northern First Nations communities. Steffler (2016), Feir and Hancock (2016), and the OECD (2020) provide good summaries of the available data in Canada and discuss their limitations.

Indigenous Services Canada's Community Well-Being (CWB) index (Indigenous Services Canada 2019) is the most comprehensive of publicly available measures of socio-economic conditions permitting comparison of First Nations and Inuit communities with other Canadian communities, though it has limitations. It includes four components constructed from census data from 1981 to 2016: educational attainment, labour force activity, income per capita and housing conditions. In 2016, out of a total of over 1,000 Indigenous communities in Canada, CWB scores were available for 623 First Nation and 50 Inuit communities, but only 357 of these have consistent data from 1990 onward (Feir, Gillezeau and Jones 2018). Another shortcoming is the absence of indices for Indigenous populations living in urban or non-Indigenous communities (Anielski and Hilton 2021). Furthermore, the CWB index provides only a partial

_

² Statistics Canada (2022c) notes that 2021 Census data collection was paused, and in some cases halted altogether, due to challenges associated with the COVID-19 pandemic, regional wildfires and the trauma associated with the confirmation of unmarked graves of Indigenous children who attended residential schools.

³ Statistics Canada states that this is due to operational difficulties in collecting data from remote locations and the large costs and efforts associated with it (Statistics Canada 2019, 2020).

⁴ For example, the Canada Mortgage and Housing Corporation reports only on housing starts for communities with populations above 10,000, which excludes all 25 Nunavut communities.

⁵ The IPS was designed to complement the census, with a thematic focus on health or socio-economic topics. However, a lack of participation from First Nations communities on reserve and in northern communities meant that coverage was largely limited to Métis, Inuit and First Nations living off reserve.

picture of Indigenous prosperity. The Auditor General of Canada (2018) points out that the CWB omits several dimensions of well-being considered to be important to Indigenous Peoples, such as health, environment, language and culture. For example, a study on subjective well-being conducted by Kant et al. (2014) reveals that land laws, traditional diets, social ties and cultural sites are deemed the most important factors that can affect well-being positively or negatively in the two First Nations communities studied.

Data are also lacking to measure traditional activities that Indigenous Peoples use to supplement their income and for barter in communities, such as hunting, fishing and making clothes or artwork (OECD 2019). Such activities not only help meet the basic needs of households but also play an important role in maintaining ties with the land, community and traditional knowledge.⁶ Official statistics may thus understate the extent of Indigenous economic activity and well-being.

Other data gaps include measures of Indigenous household spending, business investments and exports, government revenues and expenditures, and price conditions on reserves. Few data exist to track performance over time of the Indigenous business sector, although the Canadian Council for Aboriginal Business (CCAB) has been conducting periodic large-scale national surveys of Indigenous business conditions, most recently in 2021.

Despite these gaps in data, some studies have attempted to quantify the size or contributions of the Indigenous economy using different methodologies (**Table 1**). While the estimates vary considerably, they suggest that the share of gross domestic product (GDP) of Indigenous People is well short of half of their population share, which speaks to the significant economic disparity that exists between the Indigenous and non-Indigenous populations in Canada.

Efforts are being made to fill these information gaps. For example, in 2021 the Bank of Canada partnered with the CCAB, Global Affairs Canada and Big River Analytics to conduct a large-scale national survey of Indigenous-owned businesses, to include some special questions on firms' price, wage and inflation expectations (Cheung et al. forthcoming). And in 2022, Statistics Canada published two datasets aimed at better measuring the economic contribution of Indigenous Peoples to the Canadian economy:

- Preliminary data are available from Statistics Canada's Indigenous Peoples Economic Account (IPEA) pilot project, based on the Canadian System of National Accounts framework. The IPEA includes annual estimates of Indigenous nominal GDP, output and number of jobs from 2012 to 2020 by industry and by province and territory. Estimates are also available by Indigenous identity and by residence on or off reserve, but only for the year 2015, based on 2016 Census data.
- Estimates have been released of the number of Indigenous-owned businesses in Canada from 2005 to 2018, by province, size, industry, and gender and age of the business owner.8

These two new datasets represent a significant step forward, but limitations remain. One is the lack of data over the last three to five years. Furthermore, the IPEA does not measure Indigenous-owned physical capital, a key component of the Canadian System of National Accounts. This is an important limitation,

⁶ For more information, see Natcher (2018) and Poppel (2006).

⁷ For more details, see Ayotte and Bridger (2022).

⁸ See Gueye, Lafrance-Cooke and Oyarzun (2022a, 2022b).

given that a substantial literature finds that Indigenous Peoples face barriers accessing credit and financing and consequently use less capital than non-Indigenous businesses in Canada (see section 4d).

Table 1. Estimates of the size and contributions of the Indigenous economy⁹

Sector/Region	Estimate of total size	Source	Methodology
	or contribution, year		
Indigenous GDP	\$48.9 billion in 2020	Statistics Canada:	Estimates of Indigenous GDP are derived by
	(2.2% of Canadian	Indigenous Peoples	applying the share of income earned by the
	GDP)	Economic Accounts	Indigenous population to total Canadian GDP,
		(Ayotte and Bridger	using available data on labour income earned by
		2022)	Indigenous workers and the operating surplus of
			Indigenous-owned businesses.
Indigenous business	37,000 Canadian-	Statistics Canada	The number of Indigenous-owned businesses in
counts	controlled private	(Gueye, Lafrance-	Canada is estimated by linking the four censuses
	corporations and	Cooke and Oyarzun	from 2001 to 2016 and other datasets
	unincorporated	2022a, 2022b)	containing information on Indigenous identity
	employer businesses,		to the administrative Canadian Employer-
	2018		Employee Dynamics Database. Imputation is
			made for those businesses where Indigenous
			identity of ownership was unavailable.
Indigenous gross	\$30–31 billion by	TD Economics	The authors incorporate household,
national income	2016 (1.5% of	(Gulati and Burleton	government and business income sources and
	Canadian gross	2011, 2015)	make several strong assumptions in calculating
	national income)		their estimates.
First Nation	\$13.6 billion for fiscal	First Nations	Estimates are based on analysis of audited
government	year 2018–19	Financial	financial statements from 473 First Nations. For
revenues		Management Board	the fiscal year 2018–19, First Nations
		(2020)	government revenues were composed of \$4.4
			billion of "own source revenue" and \$9.2 billion
			in transfer revenues from various levels of
			government and settlements.
GDP on First Nation	0.3% of Canadian	Tsiroulnitchenko and	Estimates of GDP on First Nation reserve census
reserves	GDP, 2006	Hazell (2011)	subdivisions (based on Statistics Canada's
			definition) are derived using average earnings
			and employment data for the Indigenous
			population on reserve. Sources are the 2006
	40.01.111.		Census and Aboriginal Population Profiles. 10
Indigenous	\$2.3 billion in 2016	Manitoba	Estimates of household, business and
contribution to	(3.9% of Manitoba's	Keewatinowi	government spending and their GDP impacts
Manitoba's GDP	GDP)	Okimakanak,	are derived through input-output multipliers.
		Southern Chiefs'	
		Organization, and	
		Brandon University	
		Rural Development	
		Institute (2019)	

⁹ Estimates of Indigenous contributions to regional economies are based on different methodologies and are thus not necessarily comparable across regions.

¹⁰ See the definition of "on reserve" for the <u>2021 Census of Population</u>.

Indigenous	\$1.14 billion in 2015	Group ATN	Estimates of household, business and
contribution to the	(1% of Atlantic GDP)	Consulting Inc. (2016)	government spending and their GDP impacts
Atlantic region's GDP			are derived through input-output multipliers.
First Nations	First Nation	Mirzaei, Natcher and	A 2015 survey of household spending on two
contribution to	government and on-	Micheels (2020)	First Nation reserves estimates on-reserve
Saskatchewan's GDP	reserve household		household spending patterns and refines
	spending accounted		provincial multipliers to estimate economic
	for 1.2% and 0.4% of		impacts of First Nation households. The authors
	Saskatchewan's GDP,		use government consolidated audits to estimate
	respectively, in 2015.		expenditures from First Nation governments.

3. Institutional barriers and developments

The economic disparities faced by many Indigenous communities are rooted in the history of colonization, dispossession of their traditional lands, and systemic barriers to economic participation and development (Royal Commission on Aboriginal Peoples 1996). Indigenous land rights play an important role in offering opportunities for sustainable economic development (OECD 2020), and these rights vary significantly across communities.

For First Nations, the National Indigenous Economic Development Board (NIEDB) points to the restrictive land regime under the *Indian Act* as the most notable systemic barrier (NIEDB 2019). The *Indian Act* assigns federal control over the reserve lands, and those with status under the *Indian Act* are registered on a list with the federal government. Based on the 2021 Census, roughly 72% of First Nations people have registered for Treaty Indian status; of those, 41% live on reserve. When reserves were created, they were often placed on less valuable land with few natural resources, far away from major population centres. According to the Royal Commission on Aboriginal Peoples (1996), almost 70% of reserves are located more than 50 kilometres from a service centre. 12

Property rights restrictions under the *Indian Act* are often cited as an important hindrance to economic development within First Nations communities because they raise transaction costs and impede access to capital. Although bands have rights to exclusive use and occupation of their reserve lands, the legal title remains with the Crown, and thus any formal land transaction must be approved by the band council and the federal government (Aragón and Kessler 2020). Furthermore, reserve land is communal and cannot be seized by legal process, mortgaged or pledged to non-band members. These property ownership restrictions mean that First Nations operating under the land management provisions of the *Indian Act* often lack the necessary collateral to access business loans, which impedes firm creation and hence employment opportunities on reserve. The lack of businesses on reserve means a large share of earnings leave the community because households consume goods and services off reserve (Mirzaei, Natcher and Micheels 2020).

Removing systemic barriers to Indigenous land sovereignty is seen as necessary to achieving economic reconciliation, as outlined in the 2022 National Indigenous Economic Strategy for Canada (NIES) report

¹¹ Enacted in 1876, the *Indian Act* is the primary statute defining the relationship between the federal government and the majority of First Nations.

¹² A service centre is defined as a community where the following are available: supplies, material and equipment; a pool of skilled or semi-skilled labour; at least one financial institution; and provincial and federal services.

¹³ See Alcantara (2007), Anderson and Parker (2009) and Aragón (2015).

developed by over 20 Indigenous organizations (Canadian Association of Native Development Officers et al. 2022). Although First Nations widely view the *Indian Act* as archaic and paternalistic, no clear consensus exists on a path to overhaul or abolish it. ¹⁴ Some First Nations have opposed previous attempts to reform the act because of a lack of viable alternatives or a desire to retain some of its elements.

In recent decades, First Nations governments have developed various arrangements enabling them to opt out of certain *Indian Act* provisions and exercise jurisdiction over activities on their lands, including new legislative and institutional frameworks (See **Box 1**). For example, First Nations that have negotiated modern treaties, self-government agreements, constitutions or opt-in arrangements such as the First Nations Land Management (FNLM) regime or *First Nations Fiscal Management Act* are no longer governed by the *Indian Act* and can set their own laws and policies on a broad range of matters. The FMB's "RoadMap Project" proposes that further expansion of jurisdiction and fiscal powers of First Nation governments helps pave the way toward self-determination and economic reconciliation.¹⁵

Since 1982, the *Constitution Act* (section 35) has recognized and protected the "existing aboriginal and treaty rights" of Indigenous Peoples. ¹⁶ Canada has signed 26 modern treaties (or comprehensive land claim agreements) since 1975. Recent research has found that modern treaties are associated with lower rates of poverty and inequality (Taghizadeh Imani 2021); labour income gains for Indigenous households (Pendakur and Pendakur 2018); and an increase in mining agreements, real wages and house prices (Aragón 2015). However, modern treaties may not be a desirable path for all First Nations because they have often entailed the loss of both protected reserve land status and tax exemptions for property located on reserve, in return for fee simple ownership of land (Eyford 2015). While fee simple ownership provides rights to sell or transfer ownership, it is controversial due to the potential implications for loss of Indigenous land base (Boutilier 2016). For many First Nations, the FNLM regime is an attractive option because it removes the federal government's decision-making authority over their lands without altering their constitutional rights or reserve land status.

Inuit and Métis have never been subject to the *Indian Act*. The Métis did not have a distinct land base until Alberta's *Métis Population Betterment Act* (1938) established eight Métis settlements in the province of Alberta with a total population of about 5,000 people. Only Métis registered with the Métis National Council and its five provincial counterparts are recognized as Indigenous under the *Constitution Act* (section 35). Meanwhile, Inuit have signed modern land claims and established different forms of government in the four Inuit regions. For example, one of the largest comprehensive land claim agree-

¹⁴ Several <u>legislative attempts</u> have been made to reform or repeal the *Indian Act*. The federal government is "working with Indigenous Peoples to support them in their work to rebuild and reconstitute their nations, advance self-determination and, for First Nations, facilitate the transition away from the *Indian Act* and toward self-government." For more details, see the Crown-Indigenous Relations and Northern Affairs Canada web page on Indigenous <u>self-government</u>.

¹⁵ See Chapter 5, "Jurisdiction and Fiscal Powers."

¹⁶ The two main types of treaties—historic treaties signed between 1701 and 1923, and modern treaties signed after 1970—differ significantly in how they define the nature of rights and obligations. Historic treaty rights often include land to be set aside for exclusive First Nations use as well as hunting and fishing rights on unoccupied Crown land. According to Crown-Indigenous Relations and Northern Affairs Canada, the federal government recognizes 70 historic treaties signed over this period, forming the basis of the relationship between the Crown and 364 First Nations, representing 600,000 First Nations peoples. Modern treaty rights often include ownership of lands, resource revenue sharing and self-government.

Box 1. Institutional arrangements for First Nations to opt out of *Indian Act* provisions

The *Indian Act* has been amended several times. Some important amendments and new legislations have been introduced to increase the capacity of First Nations to participate in the Canadian market economy, including:

- In 1988, Bill C-115 amended the *Indian Act*, and a short time later Bill 64 was introduced in British Columbia. These bills authorized First Nations to collect property taxes from non–First Nations people with property on reserves. If a First Nation opted not to implement property taxation, the provincial and local governments would continue to tax the leasehold on those lands.
- In 1996, the *Framework Agreement on First Nation Land Management* was signed by 13 First Nations and the federal government. In 1999, the Framework Agreement was implemented through the *First Nations Land Management Act*. Together, these form the *First Nations Land Management* regime. They enable First Nations to opt out of 44 land management provisions under the *Indian Act* by developing and enacting their own land laws (known as a land code), to exercise control and protection of their lands while preserving reserve status. As of July 2023, 105 First Nations in Canada have ratified a land code, and another 100 are in various stages of doing so. The Framework Agreement also established the *First Nations Lands Advisory Board* and *First Nations Land Management Resource Centre* to support First Nations in developing land laws and management systems.
- In 2005, the *First Nations Fiscal Management Act* (FNFMA) was passed. This federal legislation gives First Nations governments fiscal authority over property tax and local revenues, financial administration laws, and financing for infrastructure and economic development. The act increases First Nations local revenue-raising powers to the same level as those of municipal governments in Canada, improves First Nations access to capital markets for infrastructure financing, improves accountability and transparency, and enhances the First Nations investment climate. As of October 2023, 353 First Nations (over half) had opted into the framework or are in the process of doing so. The FNFMA established the following institutions to create a system of regulatory oversight and enforcement for First Nations that is equivalent to the provincial regulatory framework for local governments:
 - i. The **First Nations Tax Commission (FNTC)** creates the regulatory framework for First Nation local revenue and expenditure systems. The FNTC established the **Tulo Centre of Indigenous Economics** in 2008 to provide education and research to support its objectives.
 - **ii.** The **First Nations Financial Management Board** provides First Nations with a regulatory framework for financial management.
 - iii. The **First Nations Finance Authority (FNFA)** helps to pool First Nation borrowing requirements, and then raises financing by marketing and issuing debentures (secured from First Nation tax or other revenues) on capital markets at commercial rates. In 2011, the **Financing Secured by Other Revenues Regulations** took effect, allowing all First Nations with their own sources of revenues to secure loans from the FNFA.
 - iv. The **First Nations Infrastructure Institute** was established in 2023 through an amendment to the FNFMA. This institute will work with participating First Nations and Indigenous organizations to plan, optimize and build capacity to successfully deliver infrastructure projects.
- In 2006, the First Nations Commercial and Industrial Development Act took effect, allowing the
 federal government to adopt regulations on reserve that are compatible with those off reserve. This
 reduces regulatory uncertainty for major commercial and industrial development on reserve lands.

ments created the territory of Nunavut in 1999, granting Inuit powers of self-government and province-like jurisdiction similar to that of the other territories.¹⁷ In Nunatsiavut, only Inuit can be elected to government, whereas Nunavut, Inuvialuit and Nunavik have public governments that allow any resident to be elected. However, as described in the NIES report, governments under Inuit land claim agreements do not have the means to raise financing through a public finance authority such as the First Nations Finance Authority to fund infrastructure investments in the way that municipal governments can.

4. Characteristics of the Indigenous economy

and Galoustian 2020).

The available data suggest that Indigenous Peoples face large and persistent economic disparities relative to non-Indigenous people in Canada, despite some improvement over the past decade. Whereas Indigenous Peoples make up 5% of the population, they accounted for roughly 2.2% of Canadian GDP in 2020. Indigenous-owned businesses accounted for 1.5% of all private businesses in Canada in 2018, though more recent data suggest this share could be between 1.6% and 3.5% (Statistics Canada 2022i, 2022j, 2022k, 2022l, 2023c, 2023d, 2023e). In 2022i, 2022k, 2022l, 2023c, 2023d, 2023e).

Significant gaps remain in average income levels, employment rates, housing and infrastructure conditions, and educational attainment (NIEDB 2019). Such gaps are also observed in other countries with significant Indigenous populations, such as New Zealand, Australia, the United States and Mexico (OECD 2019). Economic conditions vary widely across Indigenous communities, however, with the largest disparities experienced by on-reserve First Nations and the smallest by Métis populations. Furthermore, levels of inequality within Indigenous communities are higher than those within non-Indigenous communities, based on the dispersion in CWB scores (Richards 2020) and Gini coefficients (Taghizadeh Imani 2021).

A 2016 report published by the NIEDB estimates that raising Indigenous income to close the income and employment gaps between Indigenous and non-Indigenous populations in Canada would have added \$27.7 billion to the Canadian economy in 2015 (Fiscal Realities Economists 2016).²⁰ Using a similar methodology at a more disaggregated level, a 2015 report by the Centre for the Study of Living Standards estimates that closing such gaps over 20 years would increase the level of GDP in Canada by 1.4% by 2031, adding a cumulative \$335 billion in output over the 2011–31 period (Calver 2015).

This section provides a descriptive summary of the Indigenous economy, including industrial and regional composition, labour market outcomes, business sector characteristics, access to finance and

¹⁷ However, only 18% of the land in Nunavut has been transferred to Inuit ownership (through the corporation Nunavut Tunngavik Inc., which receives royalties for resource extraction on its land). The remaining land is owned by the federal government. As a result, the Nunavut government receives very little income from royalties (Hageman

¹⁸ This calculation uses the IPEA estimate of Indigenous GDP for 2020 from Ayotte and Bridger (2022), and the 2020 estimate of the total income-based Canadian GDP from Statistics Canada Table 36-10-0221-01. Making the same calculation over time using these sources indicates that the Indigenous share of GDP was relatively unchanged at 2.3–2.4% of Canadian GDP between 2012 and 2019.

¹⁹ The calculation uses estimates of Indigenous and non-Indigenous business counts from Gueye, Lafrance-Cooke and Oyarzun (2022a), which include only Canadian-controlled private corporations and unincorporated employer businesses.

²⁰ The report calculates the additional income that would be earned by province if average labour earnings and employment rates in the Indigenous population were to match the non-Indigenous average. The impact on GDP by province is then calculated using labour income multipliers from Statistics Canada's input-output tables.

infrastructure deficiencies. These metrics provide only a partial picture of Indigenous living standards, as some argue that an Indigenous approach to measuring economic progress needs to consider the value of natural, social and cultural assets (Podlasly et al. 2020; Anielski and Hilton 2021).

4.a. The composition of the Indigenous economy

Based on IPEA estimates, the industrial composition of Indigenous GDP looks quite different from that of the Canadian economy. Public services—including health care and education—as well as construction are the most important sectors in the Indigenous economy, whereas they account for much smaller shares in the total Canadian economy (**Chart 3**). Meanwhile, manufacturing; mining, oil and gas extraction; and professional, scientific and technical services contribute less to the Indigenous economy than they do to the total Canadian economy. Regionally, Indigenous GDP is more concentrated in western provinces than is Canadian GDP. Manitoba, Saskatchewan, Alberta and British Columbia collectively account for over half of Indigenous GDP (55.7%), compared with roughly one-third of Canadian GDP (34.2%) (**Chart 4**).

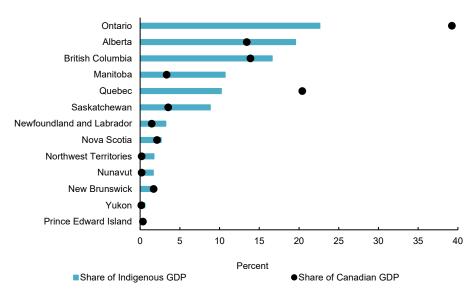
Share of gross domestic product, 2020 Public administration, health care, social assistance, education Construction Finance, insurance, real estate Retail, wholesale Manufacturing Other services Mining, oil and gas Transportation and warehousing Accommodation, food, recreation Professional, scientific and technical services Agriculture, forestry, fishing Information and cultural industries 35 0 5 10 15 20 25 30 Percent ■Share of Indigenous GDP ● Share of Canadian GDP

Chart 3: Industrial composition of the Indigenous gross domestic product

Sources: Ayotte and Bridger 2022; Statistics Canada 2023a

Chart 4: Regional distribution of Indigenous gross domestic product

Share of gross domestic product, 2020



Sources: Ayotte and Bridger 2022; Statistics Canada 2022d

The IPEA estimates also suggest that the Métis accounted for almost 44% of Indigenous GDP in 2015, a relatively high share considering they made up only 35% of the Indigenous population in the 2016 Census. Meanwhile, almost half of Indigenous GDP could be attributed to First Nations in 2015, and almost 4% to Inuit. The vast majority (86%) of Indigenous GDP was generated off reserve that year.

The data in **Chart 3** and **Chart 4** do not fully capture economic activity in Indigenous communities. For example, Arriagada and Bleakney (2019) find that 85% of Inuit aged 25–54 in Inuit Nunangat participated in at least one traditional land-based activity, and over a quarter of these reported doing so as a means to earn money or supplement their income. Canada's 2017 Indigenous Peoples Survey indicates that almost 60% of First Nations living off reserve and Métis aged 15 and older reported participating in such activities. Traditional food harvesting is especially important in northern communities, where market prices of food are significantly higher. Estimates of such food production in Nunavut have ranged from \$40 million to \$198 million, annually. Given the large range of estimates and the importance of accurately measuring all aspects of the Indigenous economy, refining estimates of the non-market, cultural and environmental values created by Indigenous communities is an important topic for future research.

²¹ For their study, Arriagada and Bleakney (2019) define land-based activities as hunting, fishing, trapping and gathering wild plants as well as making clothing, footwear, handicrafts and artwork.

²² The \$40 million estimate comes from a 2004 report by the Canadian Arctic Resources Committee referenced in Statistics Canada (2006a), whereas Warltier, Landry-Cuerrier and Humphries (2021) provide an estimate of \$198 million.

4.b. Persistent gaps in labour market outcomes

A significant gap exists in the labour market outcomes of Indigenous and non-Indigenous people in Canada.²³ Among Indigenous groups, the Métis have had the highest employment rate, followed in descending order by off-reserve Status First Nations, Inuit and on-reserve Status First Nations (**Chart 5**).²⁴ These employment rate gaps widened slightly between 2006 and 2016 as the employment rate fell slightly for each of the Indigenous groups, while it remained constant for the non-Indigenous population. Although the number of employed Indigenous workers aged 25–64 grew by 45% during this period, the Indigenous population of the same age range grew at an even faster rate of 48%. This rapid growth is consistent with the findings of Drummond et al. (2017) and Kim and Sharpe (2017), who predict that the Indigenous population will continue to make important contributions to labour force growth in Canada in the coming decades. The employment rate gap remained steady between 2016 and 2021, as employment rates dropped for all Indigenous groups as well as the non-Indigenous population, perhaps reflecting the labour market effects of the COVID-19 pandemic.

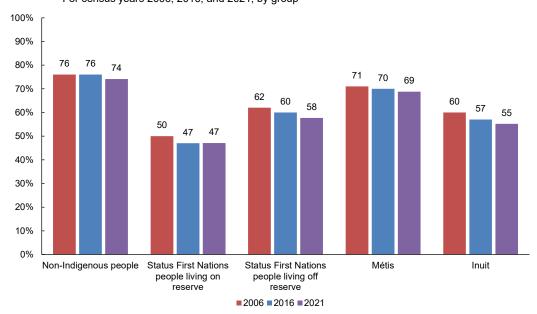
More recent insights into the employment rate of Indigenous Peoples during the pandemic can be gleaned from the Labour Force Survey, although this survey excludes on-reserve First Nations. Following the downturn from the COVID-19 pandemic, employment levels were slower to recover for Indigenous Peoples than for non-Indigenous people. However, by the summer of 2021, the employment rate for Indigenous Peoples had increased to 57.7%, surpassing its pre-pandemic level though still below the non-Indigenous employment rate of 61.2% (Statistics Canada 2021a).

.

²³ In this section, we rely primarily on census data when comparing labour market indicators across Indigenous and non-Indigenous peoples in Canada, given the census's comprehensive coverage of the Indigenous population.

²⁴ Whereas the publicly available census table for 2021 (Statistics Canada Table 98-10-0281-01) includes income statistics by Indigenous geography (e.g., on and off reserve) and status as Registered or Treaty Indian, the tables for the 2006 and 2016 censuses do not include this level of detail. For the 2006 and 2016 years, we thus rely on Statistics Canada 2021e, which provides separate estimates for on and off reserve, but only for Status First Nations. Since this report provides statistics specific to Status First Nations, our charts in this section use statistics from the 2021 Census tables that are also for Status First Nations, to ensure that the values across different years are comparable.

Chart 5: Employment rate among individuals aged from 25 to 64, Canada For census years 2006, 2016, and 2021, by group



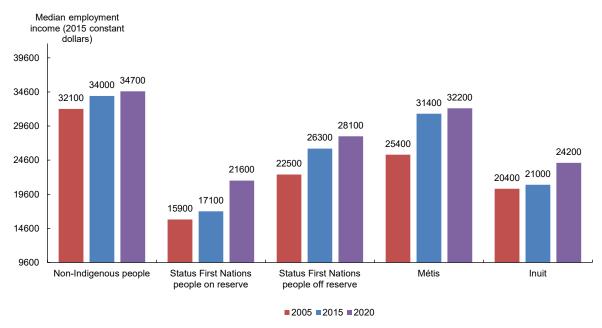
Sources: Statistics Canada 2006b; Statistics Canada 2017a; Statistics Canada 2021e; Statistics Canada 2022c

Earnings inequality between Indigenous and non-Indigenous peoples is a long-standing feature of Canadian labour markets.²⁵ As of the 2021 Census, the median employment earnings of the Indigenous population were 82% of those of the non-Indigenous population, though this is up considerably from 70% in 2005 **(Chart 6)**. The Indigenous population enjoyed faster growth in median employment earnings between 2015 and 2020, compared with the non-Indigenous population²⁶

²⁵ See Lamb (2013) and Pendakur and Pendakur (2011).

²⁶ The rapid growth of Indigenous median employment earnings between the 2016 and 2021 Censuses is not a pandemic-related statistical anomaly. For the 2021 Census, Statistics Canada collected and released statistics for both 2019 and 2020 income years. Over this period, the growth in median employment earnings for the Indigenous population was at least twice as large as that for the non-Indigenous population, regardless of whether 2019 or 2020 is used in the calculation.

Chart 6: Median employment income, Canada 2005, 2015 and 2020, by group



Sources: Statistics Canada 2006b; Statistics Canada 2017b; Statistics Canada 2021e; Statistics Canada 2022e; Statistics Canada 2020b

Nonetheless, there is considerable heterogeneity in the median employment earnings across different Indigenous groups, with Métis earning the most, followed in descending order by Status First Nations living off reserve, Inuit and Status First Nations living on reserve. This is consistent with a recent Statistics Canada report, which finds that in 2015, 44.0% of people living on reserves were in low-income households, more than three times the rate of 14.4% for the total population in Canada (Statistics Canada, 2021b).

The OECD (2018) notes a persistent wage gap of roughly \$2.50 per hour between Indigenous and non-Indigenous people in Canada over the period from 2006 to 2016. The report argues that this wage gap is related to the Indigenous population working disproportionately more in occupations where educational requirements are lower and less in knowledge industries. The human resources module of the IPEA shows that the fraction of Indigenous workers with a trade certificate, college diploma, university degree or higher qualification increased by only half a percentage point between 2012 and 2019, from 47.84% to 48.35%. Accelerating this trend would help close the wage gap, as Hu, Daley and Warman (2019) find that the returns to skills are very similar for Indigenous and non-Indigenous peoples in Canada. They argue that higher levels of educational attainment can reduce the wage gap.

Chart 7 shows that the level of educational attainment in the Indigenous population has increased in recent decades. In 2021, 78% of the Indigenous population aged 25 to 64 had at least a high school diploma, compared with 91% of the non-Indigenous population of similar age. The Métis have the largest prime-aged population share with at least a high school diploma, followed in descending order

-

²⁷ Calculated from Table T2.4-1 of Ayotte and Bridger (2022).

by off-reserve Status First Nations, on-reserve Status First Nations and Inuit. Progress between 2006 and 2021 was similar for Status First Nations and Métis, but the Inuit high school attainment rate stalled between 2016 and 2021 after a decade of strong growth. A recent study by Statistics Canada (2021c) finds that Indigenous women are more likely than Indigenous men to have a bachelor's degree or higher. Furthermore, this gender gap has increased over time as the fraction of the Indigenous population aged 25–64 with a bachelor's degree or higher grew faster for females than males over the period from 2006 to 2016.

Lamb (2014) studies the determinants of high school completion for First Nations living on and off reserve and argues that outcomes could be improved by providing better employment opportunities and a culturally sensitive learning environment and curriculum. The NIES report also stresses the importance of addressing gaps in education and labour markets. It recommends addressing these gaps through enhancements in Indigenous schooling from kindergarten through grade 12, financial literacy at all ages, entrepreneurial resources, and workforce and labour market strategies.

For census years 2006, 2016 and 2021, by group 100% 89 85 90% 85 82 77 75 80% 70% 60 57 56 56 60% 49 50% 40% 30% 20% 10% 00% Non-Indigenous Status First Nations Status First Nations Métis Inuit people people living on people living off reserve reserve **■**2006 **■**2016 **■**2021

Chart 7: Percentage of individuals aged 25 to 64 with a high school diploma or a higher level of education, Canada

Sources: Statistics Canada 2006b; Statistics Canada 2018; Statistics Canada 2021e; Statistcs Canada 2022c

4.c. Business sector characteristics

Business ownership is less prevalent in the Indigenous population in Canada than in the non-Indigenous population. In 2018, there were approximately 39 Indigenous-owned private businesses for every thousand Indigenous persons aged 15–64 in Canada, as compared with 108 non-Indigenous businesses

_

²⁸ A challenge to characterizing the Indigenous business sector is the lack of a common definition of what constitutes an Indigenous business. As a result, estimates of Indigenous business characteristics can vary considerably from study to study. As previously noted, there is also a long history of discrimination and non-participatory government research in Indigenous communities (Steffler 2016), and this may lower survey response rates and contribute to discrepancies across studies.

for every thousand non-Indigenous persons n the same age range.²⁹ As shown in **Chart 8**, annual growth in the number of both Indigenous-owned and non-Indigenous-owned private enterprises in Canada declined from 2006 to 2018. However, since 2013, the number of Indigenous-owned businesses has grown at a slower rate than that of non-Indigenous businesses in every year. In this section, we discuss the unique characteristics of the Indigenous business sector, including strengths and barriers to growth.

6% 4% 2% 0% -2% -4% 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 Indigenous-owned Non-Indigenous-owned

Chart 8: Slower growth in number of Indigenous-owned businesses relative to non-Indigenous businesses since 2013

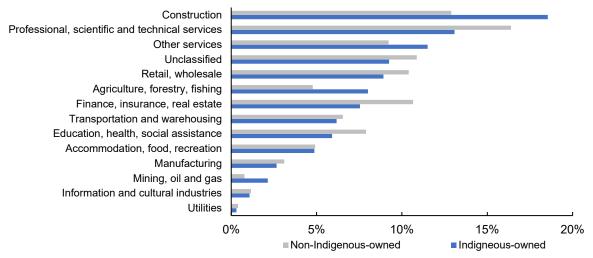
Source: Statistics Canada 2022f

Compared with non-Indigenous-owned businesses, Indigenous-owned businesses are more concentrated in the construction, agriculture, forestry and fishing sectors (**Chart 9**). A relatively smaller share of Indigenous-owned businesses are in professional, scientific and technical services as well as in the finance, insurance, real estate, rental and leasing sectors. Interestingly, the size distribution of Indigenous-owned firms is quite similar to the distribution for non-Indigenous businesses, with the majority having either no employees or only one to four employees (**Chart 10**).

_

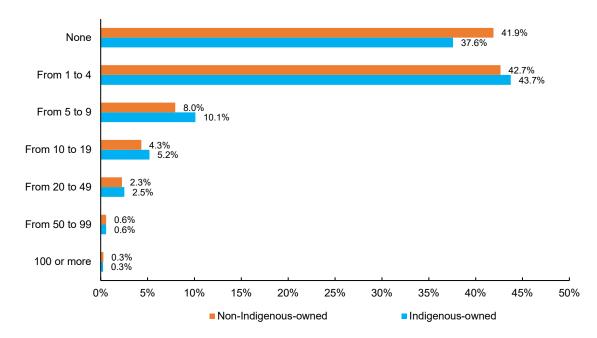
²⁹ These estimates use Statistics Canada Table 14-10-0364-01 for population estimates, and Table 33-10-0631-01 for estimates of Indigenous-owned and non-Indigenous-owned business counts from 2005 to 2018, based on Gueye, Lafrance-Cooke and Oyarzun (2022a). The latter estimates include only Canadian-controlled private corporations and unincorporated employer businesses for which gender, Indigenous identity, age, province and size can be determined. They exclude publicly traded and foreign multinational companies, unincorporated businesses without employees, and businesses in the public administration sector.

Chart 9: Share of Indigenous- and non-Indigenous-owned businesses by sector, 2018



Source: Statistics Canada custom tabulation using data from Gueye, Lafrance-Cooke and Oyarzun 2022a

Chart 10: Share of Indigenous- and non-Indigenous-owned business counts by employee size, 2018



Source: Statistics Canada custom tabulation using data from Gueye, Lafrance-Cooke and Oyarzun 2022a

Similar to their share in Indigenous GDP, Métis people owned a disproportionately high share (47%) of Indigenous businesses relative to their 35% population share.³⁰

The export propensity of Indigenous small and medium-sized enterprises (SMEs) seems comparable to that of non-Indigenous SMEs, although estimates vary by study. In a large national survey of Indigenous-owned businesses conducted by the CCAB in 2021, almost 15% of all firms reported having ever exported (Cheung et al. forthcoming). Only about 7% of SMEs in the sample had exported in 2020, however, which was lower than the 12.1% of Canadian SMEs that year (CCAB and Global Affairs Canada 2023). Bélanger Baur (2019) reports that estimates from Statistics Canada's Survey of Financing and Growth of Small and Medium Enterprises indicate a similar range of export propensities for Indigenous SMEs (12.0% in 2014 and 7.9% in 2017). This is important because exporting is often associated with highly productive businesses (Melitz 2003). Consistent with this perspective, the CCAB (2016) finds Indigenous SMEs are highly engaged in product and process innovation, and the majority of the businesses surveyed reported a positive outlook for future revenue growth.

However, other studies point to a considerable performance gap between Indigenous and non-Indigenous businesses. Jafri and Alasia (2019) find that profits, revenues and the count of businesses per resident all tend to be considerably lower for businesses located in Indigenous census subdivisions (CSDs) relative to businesses in non-Indigenous CSDs of similar population size.³³ These outcomes may reflect in part the institutional barriers discussed in section 3—barriers that inhibit economic development on Indigenous land in Canada, as argued by Richard, Calla and Le Dressay (2008). They show that the regulatory framework governing First Nations' lands increases the cost of doing business by as much as four to six times the cost on non-Indigenous lands.

The CCAB (2016) survey highlights that the lack of digital infrastructure and difficulty finding qualified Indigenous employees are obstacles to the growth of Indigenous businesses. This latter challenge is related to the gap in educational attainment between the Indigenous and non-Indigenous populations in Canada, as discussed in section 3b. In addition, difficulty accessing financing is a barrier. This is discussed in the next section.

4.d. Access to finance

A substantial literature indicates that people from Indigenous communities face greater barriers to accessing finance than do non-Indigenous people in Canada. Research conducted by the National Aboriginal Capital Corporations Association (NACCA) and the CCAB finds that difficulty accessing financing is a major barrier to growing Indigenous businesses (Conference Board of Canada 2017; CCAB 2016). These

_

³⁰ The statistics in this paragraph use the 2021 Census population estimates from Statistics Canada Table 98-10-0264-01 and estimates of the number of private enterprises by Indigenous identity of ownership (as of 2018) from Statistics Canada Table 33-10-0632-01.

³¹ These shares are much smaller than the 24.4% estimated in 2019 based on the CCAB's 2015 Aboriginal Business Survey (Bélanger Baur 2019). As described in CCAB and Global Affairs Canada (2023), the discrepancy relative to Bélanger Baur's (2019) estimates may reflect differences in both the question wording and the sampling frame between the 2015 and 2021 surveys.

³² By comparison, Bélanger Baur (2019) notes that the same Statistics Canada survey estimates that the export propensity of the general population of Canadian SMEs was 11.8% and 11.7% in 2014 and 2017, respectively.
³³ An important limitation of this methodology is that their definition of "Indigenous business community" does not consider ownership. For example, an Indigenous-owned business operating in a non-Indigenous CSD would be considered part of the non-Indigenous business community.

studies also find that Indigenous businesses tend to rely on personal savings as a primary source of financing. By some estimates, First Nations and Inuit businesses accessed only 0.2% of the total available capital in Canada in 2013 (National Aboriginal Economic Development Board 2017, now known as the National Indigenous Economic Development Board). This report also finds that Indigenous businesses access three types of capital at much lower rates than non-Indigenous businesses do: market sources, assisted market sources and non-market sources of finance:

- Market sources of finance are conventional financing instruments supplied without government support. They include bank loans, bonds and equity. Access to market capital had improved significantly for Indigenous businesses by 2013 to account for 54% of total business financing, up from 39% in 2003. Despite this, the average First Nations and Inuit enterprise accessed only \$9 for every \$100 of market-sourced financing obtained by an average non-Indigenous business in 2013. Bank loans accounted for the majority of the capital raised by Indigenous businesses, with limited use of bonds, debentures, commercial paper or other instruments commonly used by Canadian businesses (Collin and Rice 2019).
- Assisted market sources of finance reduce risks or related transaction costs to the provider, thereby enabling lending for investments that would normally exceed a provider's risk tolerance. These include loan guarantees, provisions for loss reserves and tax credits. Of these sources of finance, First Nations and Inuit businesses accessed only \$11 for every \$100 obtained by non-Indigenous firms in 2013.
- Non-market sources of finance include support for investments that would not qualify for conventional loans due to unattractive risk-return metrics. Such support includes government and non-government grant funding. In this case, First Nations and Inuit businesses accessed only \$48.50 for every \$100 obtained by non-Indigenous businesses in 2013.

Numerous factors seem to impair the ability of Indigenous businesses, households and governments to access capital efficiently. As discussed in section 3, property rights restrictions under the *Indian Act* limit access to low-cost secured loans (Pel 2020), thus raising debt service costs for First Nations businesses and preventing home ownership for many households on reserve. The Canada Mortgage and Housing Corporation (CMHC) finds that in 2016, the Indigenous home ownership rate was 49.6%, compared with 72.6% for all of Canada, and this rate had declined somewhat since 2011 (CMHC 2021). Furthermore, the poor socio-economic conditions experienced by First Nations and Inuit communities can undermine creditworthiness and make access to funding and capital more challenging. Deficient infrastructure and the limited availability of banking services in remote communities, together with low financial literacy, can also contribute to reduced financial capacity.³⁴ Finally, results from a survey on the use of fringe financial institutions reveal that many people self-identifying as Indigenous found mainstream financial institutions to be unwelcoming (Bowles et al. 2011). These barriers to financial inclusion lead to chronic underinvestment in Indigenous communities and lower the capacity to remedy the socio-economic problems they face, creating an adverse feedback loop. The barriers also hinder the transmission of monetary policy to the Indigenous economy, as discussed in Schembri (2022).

A number of institutions and programs have been developed to address the gaps that Indigenous communities face when attempting to obtain finance (**Table 2**). For example, the strong track record of the First Nations Finance Authority (described in section 3, **Box 1**) has enabled First Nations governments

.

³⁴ For further research on Indigenous access to financial services, through physical and digital channels, and Indigenous financial capability, see, for example, Buckland, McKay and Reimer (2016), Buckland (2017), Chen et al. (2021) and Collin (2011).

to borrow at rates comparable to those of municipal bonds in Canada (Schembri 2022). Members of First Nations that have enacted a land code under the First Nations Land Management regime (see **Box 1**) may have options to grant land leases to themselves to secure conventional financing for housing mortgages and CMHC mortgage insurance on reserve (CMHC 2019). In addition, more than 50 Indigenous financial institutions (IFIs) across Canada provides direct loans to Indigenous entrepreneurs. Created in the 1980s with federal government support, IFIs are controlled and managed by Indigenous people and serve Indigenous businesses through developmental lending, business financing and support services. They are part of the NACCA network.

Table 2. Programs that support Indigenous access to finance

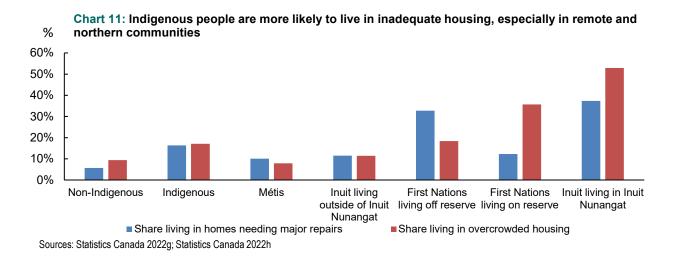
Program name	Provider	Type of support	Program description		
Business and government financing					
First Nations Finance Authority loan	First Nations Finance Authority	Loan	Provides loans to First Nation governments, funded by issuing debentures at commercial interest rates that are secured by First Nation own-source revenues.		
Aboriginal Business Financing Program (ABFP) Aboriginal Developmental Lending Assistance (ADLA) Interest Rate Buy- Down (IRB)	National Aboriginal Capital Corporations Association	Grant	The ABFP program matches non-repayable federal contributions up to \$99,000 for Indigenous entrepreneurs and up to \$250,000 for community-owned Indigenous businesses. The ADLA compensates Indigenous financial institutions (IFIs) for developmental loan losses and the high cost of developmental loan administration. The IRB provides a subsidy to qualified IFIs with low liquidity ratios. This subsidy offsets the interest costs for securing additional loans from private lending institutions to increase developmental lending assistance to Indigenous businesses.		
Enhanced Access Loan Fund	National Aboriginal Capital Corporations Association	Interest- free loan	Provides repayable, interest-free loans to IFIs to lend to Indigenous businesses operating in unserviced regions to offset transaction costs.		
Indigenous Entrepreneur Loan	Business Development Bank of Canada	Loan	Provides up to \$350,000 loans to start or grow Indigenous businesses.		
Indigenous Business Grant	Canadian Council for Aboriginal Business (CCAB) and Google	Grant	Google is contributing \$1.5 million over two years to be distributed through the CCAB to Indigenous businesses to support digital development and growth opportunities.		
Housing financing					
First Nations Market Housing Fund	First Nations Housing Market Fund	Credit enhance- ment facility	Provides a financial backstop to a First Nation's housing loan guarantees made to financial institutions.		

Over the past three decades, IFIs have issued Indigenous businesses more than 50,000 loans, amounting to \$3 billion, with very low rates of loan losses (NACCA 2021). About 40% of Indigenous firms in the CCAB's 2016 Aboriginal Business Survey cited IFIs as an important source of financing, although its more recent 2021 survey suggests that very few Indigenous businesses use IFIs as a *main* source of financing (Cheung et al. forthcoming). According to Collin and Rice (2019), maximum loan sizes that have not changed for over 20 years combined with a long period of low interest rates have constrained the network's ability to

keep up with the investment needs of Indigenous businesses. In 2021, NACCA launched a \$150 million Indigenous Growth Fund with support from the federal government; the fund allows IFIs to draw capital to provide more and larger loans to Indigenous businesses.

4.e. Infrastructure deficiencies and higher costs of living

Well-designed infrastructure is widely thought to be a key ingredient to developing a business, growing an economy and raising living standards. But many Indigenous communities lack adequate infrastructure for basic needs. This applies especially to those living on reserves or in remote locations. For example, based on the 2021 Census, members of Indigenous communities were significantly more likely than non-Indigenous people to live in homes that either were overcrowded or needed major repairs, especially those living on reserve or in Inuit Nunangat (**Chart 11**). Furthermore, many First Nation reserves have water systems that pose medium or high health risks. As of July 7, 2023, there were 28 long-term drinking water advisories in effect in 26 communities (Indigenous Service Canada 2023).



Remote Indigenous communities have significant infrastructure deficiencies when compared with both southern metropolitan areas and remote non-Indigenous communities of similar size, as Johnston and Sharpe (2019) show. The authors develop an index that quantifies infrastructure access across 236 communities in Canada. The gaps are smallest for Métis communities and largest for Inuit communities. Likely owing to their extreme remoteness, Inuit communities score lowest among all communities on the economic infrastructure sub-index, which incorporates access to roads, the electricity grid and adequate broadband. In particular, Nunavut has no highways, railways or roads connecting any of its communities, and it relies on imported diesel for all of its power generation. Nunavut residents face severe housing shortages and internet speeds eight times slower than the Canadian average (Nunavut Tunngavik Incorporated 2020).

These deficiencies can impede economic growth and business development in Indigenous communities. Based on the CCAB's 2016 Aboriginal Business Survey, 40% of Indigenous businesses reported unreliable or no internet connection as a key obstacle (CCAB 2016). These problems were most common for

businesses located on reserve, in the north and in the Atlantic provinces. Indeed, in 2022 only 43.3% of households on First Nations reserves had access to 50 Mbps download and 10 Mbps upload speeds, compared with 91.4% of all Canadian households (Canadian Radio-television and Telecommunications Commission 2023). These speeds are needed for online business applications and to support multiple simultaneous users.

Underdeveloped transportation infrastructure and long distances to deliver goods contribute to significantly higher costs of living in many remote Indigenous communities. A study by Robitaille et al. (2018) finds that in 2016 the average consumer spending basket cost 28.7% more in Nunavik than an equivalent basket in the city of Québec, with the food component costing 55% more. The relatively high cost of food may explain the authors' finding that Nunavik residents devote 42% of their expenditures to food, more than twice the share allocated by Québec residents. Similarly, a study by Food Secure Canada finds that a typical grocery basket in some northern Ontario Indigenous communities costs over 200% more than one in Toronto; households in those Indigenous communities spend more than half their income on groceries (Veeraraghavan et al. 2016).

By some estimates, First Nations face an infrastructure deficit of almost \$350 billion (Daniels 2023). As described in the FMB's "RoadMap Project," these gaps reflect a combination of regulatory restrictions arising from the *Indian Act*, which create inefficient bureaucratic processes while limiting own-source revenues and access to long-term capital, and a lack of capacity to plan, develop and manage infrastructure assets (FMB 2022). In March 2023, the *First Nations Fiscal Management Act* was amended to enable First Nations to establish an infrastructure institute (**Box 1**) to address the gap in capacity. The institute aims to advise First Nations governments on best practices in planning and implementing infrastructure projects, and its creation is one of the recommended action items included in the NIES report (Canadian Association of Native Development Officers et al. 2022).

5. Conclusion

The Indigenous economy is growing, and Indigenous workers will contribute significantly to the future growth of the Canadian labour market. While several measures suggest Indigenous economic outcomes have improved in recent decades, significant disparities continue to hinder Indigenous economic progress relative to the non-Indigenous population. These include institutional barriers and gaps in infrastructure and financing. However, new institutions and frameworks are helping Indigenous communities overcome some of these barriers. Continued progress is needed to improve data on the Indigenous economy to enable policy-makers and Indigenous leaders to measure progress and make informed decisions that can benefit the well-being of Indigenous Peoples.

This paper highlights several important knowledge gaps regarding the Indigenous economy and Canada. Important topics for future research include the following:

 More work is needed to refine estimates of the non-market, cultural, and environmental value generated by Indigenous communities. While recent work has contributed to improved measurement of these aspects of the Indigenous economy, the large range of estimates in the literature points to the need for further research.

- Analysis is needed on the drivers of labour market outcomes and the pathways to reducing gaps. For
 example, several studies we discuss find that educational attainment reduces the wage gap between
 Indigenous and non-Indigenous people. Yet, further study is needed on topics such as the postsecondary choices of Indigenous youth, including the level of program and degree specialization,
 which may differ from the choices of earlier generations.
- Future research should focus on factors affecting mobility of Indigenous populations between on reserve and off reserve for First Nations people, to and from Inuit Nunangat for Inuit, and more generally between urban and rural locations.
- More work is needed to better understand the successes, opportunities and barriers to growth for Métis- and Inuit-owned businesses. While the existing research has better coverage of First Nationsowned businesses, additional study of the determinants of business outcomes on and off reserve, and across different First Nations, is also needed. In addition, the development of a register of Indigenousowned businesses in Canada would support research in this area.

References

Alcantara, C. 2007. "Reduce Transaction Costs? Yes. Strengthen Property Rights? Maybe: The First Nations Land Management Act and Economic Development on Canadian Indian Reserves." Public Choice 132 (3): 421–432.

Anderson, T. L. and D. P. Parker. 2009. "<u>Economic Development Lessons from and for North American Indian Economies</u>." *Australian Journal of Agricultural and Resource Economics* 53 (1): 105–127.

Anielski, M. and C. A. Hilton. 2021. "Money, Meaning and Metrics in the Emerging 100 Billion Dollar Indigenous Economy: An Indigenous Perspective of Well-being-based Economies." Indigenomics Institute, June.

Aragón, F.M. 2015. "<u>Do Better Property Rights Improve Local Income? Evidence from First Nations' Treaties</u>." *Journal of Development Economics* 116: 43–56.

Aragón, F. M. and A. S. Kessler. 2020. "Property Rights on First Nations Reserve Land." *Canadian Journal of Economics* 53 (2): 460–495.

Arriagada, P. and A. Bleakney. 2019. "Inuit Participation in the Wage and Land-based Economies in Inuit Nunangat." Statistics Canada Catalogue No. 89-653-X2019003, June 13.

Ayotte, C. and J. Bridger. 2022. "Indigenous Peoples Economic Account: Methodology and Preliminary Results." Income and Expenditure Accounts Technical Series. Statistics Canada Catalogue No. 13-604-M2022001, modified December 1.

Bélanger Baur, A. A. 2019. "Indigenous-Owned Exporting Small and Medium Enterprises in Canada." Global Affairs Canada and Canadian Council for Aboriginal Business, June 21.

Boutilier, S. 2016. "An Unsung Success: The First Nations Land Management Act." Policy Options, August 18.

Bowles, P., D. Ajit, K. Dempsey and T. Shaw. 2011. "<u>Urban Aboriginal Use of Financial Institutions: Survey Evidence from Prince George, British Columbia</u>." *Journal of Socio-Economics* 40 (6): 895–902.

Buckland, J., D. McKay and N. Reimer. 2016. "<u>Financial Inclusion and Manitoba Indigenous Peoples:</u>
Results from an Urban and a Rural Case Study." Canadian Centre for Policy Alternatives.

Buckland, J. 2017. "Indigenous Financial Empowerment through Enhancing Capability and Inclusion." Presentation to Aboriginal Financial Officers Association (Canada) National Conference, Calgary, Alberta.

Calver, M. 2015. "Closing the Aboriginal Education Gap in Canada: Assessing Progress and Estimating the Economic Benefits." Centre for the Study of Living Standards Research Report 2015-03.

Canada Mortgage and Housing Corporation. 2019. "<u>Better Access to Home Financing for First Nations</u>." Ottawa, November 27.

Canada Mortgage and Housing Corporation. 2021. "<u>Homeownership Rate Varies Significantly by Race</u>." *Research Insight*, November.

Canadian Association of Native Development Officers, Canadian Council for Aboriginal Business, Indigenous Works, National Aboriginal Capital Corporations Association and National Indigenous Economic Development Board. 2022. "National Indigenous Economic Strategy for Canada 2022: Pathways to Socioeconomic Parity for Indigenous Peoples." June.

Canadian Council for Aboriginal Business. 2016. "Promise and Prosperity: The 2016 Aboriginal Business Survey."

Canadian Council for Aboriginal Business and Global Affairs Canada. Forthcoming. "Adàwe: Export Experiences of Indigenous Entrepreneurs."

Canadian Radio-television and Telecommunications Commission. 2023. "Communications Market Report." Modified June 20.

Chen, H., W. Engert, K. P. Huynh and D. O'Habib. 2021. "An Exploration of First Nations Reserves and Access to Cash." Bank of Canada Staff Discussion Paper No. 2021-8.

Cheung, C., J. Fudurich, J. Shah and F. Suvankulov. Forthcoming. "Survey of Indigenous Firms: A Snapshot of Wages, Prices and Financing of the Indigenous Business Sector in Canada." Bank of Canada Staff Discussion Paper.

Collin, D. 2011. "Aboriginal financial literacy in Canada: Issues and directions." Paper prepared for the Task Force on Financial Literacy.

Collin, D. and M. L. Rice. 2019. "Evening the Odds: Giving Indigenous Ventures Access to the Full Financial Toolkit." MacDonald Laurier Institute, May.

Conference Board of Canada—Northern and Aboriginal Policy. 2017. "Opportunities to Improve the Financial Ecosystem for Aboriginal Entrepreneurs and SMEs in Canada." Report prepared for the National Aboriginal Capital Corporations Association and Business Development Bank of Canada, February 14.

Daniels, E. 2023. "How Ottawa Could Turn \$200 Million into \$4 Billion for Indigenous Infrastructure." Financial Post, March 21.

Drummond, D., A. Sharpe, A. Murray and N. Mask. 2017. "The Contribution of Aboriginal People to Future Labour Force Growth in Canada." Centre for the Study of Living Standards Research Report No. 2017-07.

Eyford, D. R. 2015. "A New Direction: Advancing Aboriginal and Treaty Rights." Report of the Ministerial Special Representative on Renewal of the Comprehensive Land Claims Policy, Indigenous and Northern Affairs Canada, February 20.

Feir, D. and R. L. A. Hancock. 2016. "Answering the Call: A Guide to Reconciliation for Quantitative Social Scientists." Canadian Public Policy 42 (3): 350–365.

Feir, D., R. Gillezeau and M. Jones. 2018. "<u>Illuminating Indigenous Economic Development</u>." University of Victoria Department Discussion Paper No. 1806.

First Nations Financial Management Board. 2020. "<u>First Nations Revenue Source Research: Final</u> Report." October 16.

First Nations Financial Management Board. 2022. "The RoadMap Project."

Fiscal Realities Economists. 2016. "Reconciliation: Growing Canada's Economy by \$27.7 Billion:

Background and Methods Paper." Prepared for The National Aboriginal Economic Development Board,
November 2016.

Group ATN Consulting Inc. 2016. "\$1.14 Billion Strong: Indigenous Economic Performance in Atlantic Canada." Report submitted to the Atlantic Aboriginal Economic Development Integrated Research Program, Atlantic Policy Congress of First Nations Chiefs, March 31.

Gueye, B., A. Lafrance-Cooke and J. Oyarzun. 2022a. "<u>Identifying Indigenous Business Owners and Indigenous-Owned Businesses.</u>" Statistics Canada Analytical Studies: Methods and References Series, Catalogue No. 11-633-X, No. 045, November 24.

Gueye, B., A. Lafrance-Cooke and J. Oyarzun. 2022b. "Characteristics of Indigenous-owned Businesses." Statistics Canada Economic and Social Reports, Catalogue No. 36-28-0001, December 22.

Gulati, S. and D. Burleton. 2011. "Estimating the Size of the Aboriginal Market in Canada." TD Economics Special Report, June 17.

Gulati, S. and D. Burleton. 2015. "The Long and Winding Road Towards Aboriginal Economic Prosperity." TD Economics Special Report, June 10.

Hageman, A. and P. Galoustian. 2020. *Economic Aspects of the Indigenous Experience in Canada*. Kingston, Ontario: Queen's University.

Hu, M., A. Daley and C. Warman. 2019. "<u>Literacy, Numeracy, Technology Skill, and Labour Market</u> Outcomes among Indigenous Peoples in Canada." *Canadian Public Policy* 45 (1): 48–73.

Indian Act, R.S.C., 1985, c. I-5.

Indigenous Services Canada. 2019. "National Overview of the Community Well-Being Index, 1981 to 2016." May 22.

Indigenous Services Canada. 2023. "Remaining long-term drinking water advisories." Last modified on August 23.

Jafri, H. and A. Alasia. 2019. "A Profile of Businesses in Indigenous Communities in Canada." Statistics Canada Reports on Special Business Projects, Catalogue No. 18-001-X, August 28.

Johnston, N. and A. Sharpe. 2019. "An Infrastructure Index for Remote Indigenous Communities." Centre for the Study of Living Standards Research Report No. 2019-04.

Kant, S., I. Vertinsky, B. Zheng and P. M. Smith. 2014. "<u>Multi-Domain Subjective Wellbeing of Two Canadian First Nations Communities</u>." *World Development* 64: 140–157.

Kim, M. and A. Sharpe. 2017. "The Contribution of Métis to Future Labour Force Growth in Canada." Centre for the Study of Living Standards Research Report No. 2017-08, December.

Lamb, D. 2013. "Earnings Inequality among Aboriginal Groups in Canada." *Journal of Labor Research* 34 (2): 224–240.

Lamb, D. 2014. "Aboriginal Early School Leavers On- and Off-Reserve: An Empirical Analysis." Canadian Public Policy 40 (2): 156–165.

Macklem, T. 2021. "Opening Statement Before the Symposium on Indigenous Economies." Ottawa, Ontario, November 29.

Manitoba Keewatinowi Okimakanak, Southern Chiefs' Organization, and Brandon University Rural Development Institute. 2019. "Indigenous Contributions to the Manitoba Economy." January.

Melitz, M. J. 2003. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity." *Econometrica* 71 (6): 1695–1725.

Mirzaei, O., D. Natcher and E. T. Micheels. 2020. "Estimating the Regional Economic Impacts of First Nation Spending in Saskatchewan, Canada." The Review of Regional Studies 50 (1): 53–69.

Natcher, D. 2018. "Normalizing Aboriginal Subsistence Economies in the Canadian North." In *Resources and Sustainable Development in the Arctic*, edited by C. Southcott, F. Abele, D. Natcher and B. Parlee, Chapter 12. London: Routledge.

National Aboriginal Economic Development Board. 2017. "Recommendations Report on Improving Access to Capital for Indigenous Peoples in Canada." July.

National Indigenous Economic Development Board. 2019. "<u>The Indigenous Economic Progress Report 2019</u>."

Nunavut Tunngavik Incorporated. 2020. "Nunavut's Infrastructure Gap: Executive Summary." September.

Office of the Auditor General of Canada. 2018. "Report 5—Socio-economic Gaps on First Nations Reserves—Indigenous Services Canada." 2018 Spring Reports of the Auditor General of Canada to the Parliament of Canada (Spring).

Organisation for Economic Co-operation and Development. 2018. "Indigenous Employment and Skills Strategies in Canada." In OECD Reviews on Local Job Creation. Paris: OECD Publishing.

Organisation for Economic Co-operation and Development. 2019. "Indigenous Economic Development and Well-being: Statistics and Data Governance." In Linking Indigenous Communities with Regional Development. Paris: OECD Publishing.

Organisation for Economic Co-operation and Development. 2020. <u>Linking Indigenous Communities with Regional Development in Canada</u>. Paris: OECD Publishing.

Pel, A. 2020. "Reforming Section 89 of the Indian Act: Tinker, Waiver, Soldier (On), Sigh?" Lakehead Law Journal 4 (1): 67–78.

Pendakur, K. and R. Pendakur. 2011. "Aboriginal Income Disparity in Canada." Canadian Public Policy 37 (1): 61–83.

Pendakur, K. and R. Pendakur. 2018. "The Effects of Modern Treaties and Opt-in Legislation on Household Incomes in Aboriginal Communities." Social Indicators Research 137 (1): 139–165.

Podlasly, M., S. von der Porten, D. Kelly and M. Lindley-Peart. 2020. "<u>Centering First Nations Concepts of Well-Being: Toward a GDP-Alternative Index in British Columbia</u>." British Columbia Assembly of First Nations Discussion Paper, November.

Poppel, B. 2006. "Interdependency of Subsistence and Market Economies in the Arctic." In *The Economy of the North*, edited by S. Glomsrød and I. Aslaksen, Chapter 5. Oslo: Statistics Norway.

Richard, G., J. Calla and A. Le Dressay. 2008. "The High Costs of Doing Business on First Nations lands in Canada." Fiscal Realities Economists.

Richards, J. 2020. "No Easy Answers: Insights into Community Well-Being Among First Nations." C.D. Howe Institute E-Brief, May 21.

Robitaille, J., E. Guénard, S. Lévesque and G. Duhaime. 2018. "The Cost of Living in Nunavik in 2016—Revised and Expanded Version." Canada Research Chair on Comparative Aboriginal Conditions, Université Laval Research Report.

Royal Commission on Aboriginal Peoples. 1996. "Report of the Royal Commission on Aboriginal Peoples." October.

Schembri, L. 2022. "Economic Reconciliation: Supporting a Return to Indigenous Prosperity." Remarks at the National Aboriginal Capital Corporations Association, Gatineau, Quebec, May 5.

Statistics Canada. 2006a. "Harvesting and Community Well-being Among Inuit in the Canadian Arctic: Preliminary Findings from the 2001 Aboriginal Peoples Survey—Survey of Living Conditions in the Arctic, 2001." Catalog No. 89-619-XIE. Minister of Industry Report, March.

Statistics Canada. 2006b. "Aboriginal Identity, Age Groups, Area of Residence, Sex and Selected Demographic, Cultural, Labour Force, Educational and Income Characteristics, for the Total Population of Canada, Provinces and Territories, 2006 Census - 20% Sample Data." Catalogue No. 97-564-XCB2006002.

Statistics Canada. 2017a. "Aboriginal Identity, Labour Force Status, Major Field of Study - Classification of Instructional Programs (CIP) 2016, Highest Certificate, Diploma or Degree, Registered or Treaty Indian Status, Age and Sex for the Population Aged 15 Years and Over in Private Households of Canada, Provinces and Territories and Census Metropolitan Areas, 2016 Census - 25% Sample Data." Table 98-400-X2016267. 2016 Census, November 29.

Statistics Canada. 2017b. "Aboriginal Identity (9), Employment Income Statistics, Highest Certificate, Diploma or Degree, Major Field of Study - Classification of Instructional Programs (CIP) 2016, Work Activity During the Reference Year, Age and Sex for the Population Aged 15 Years and Over in Private Households of Canada, Provinces and Territories, 2016 Census - 25% Sample Data." Table 98-400-X2016268. November 29.

Statistics Canada. 2018. "Aboriginal Identity, Secondary (High) School Diploma or Equivalent, School Attendance, Registered or Treaty Indian Status, Age and Sex for the Population Aged 15 Years and Over

<u>in Private Households of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2016 Census - 25% Sample Data.</u>" Table 98-400-X2016177. March 28.

Statistics Canada. 2019. "The Canadian Consumer Price Index Reference Paper." Catalogue no. 62-553-X. Ottawa, February 27.

Statistics Canada. 2020. "Guide to the Labour Force Survey." Catalogue no. 71-543-G. Ottawa, April 9.

Statistics Canada. 2021a. "Study: Labour Market Impacts of COVID-19 on Indigenous People: March 2020 to August 2021." The Daily, November 16.

Statistics Canada. 2021b. "Low-Income Statistics for the Population Living on Reserve and in the North Using the 2016 Census." The Daily, September 21.

Statistics Canada. 2021c. "Study: The Achievements, Experiences and Labour Market Outcomes of First Nations, Métis and Inuit Women with Bachelor's Degrees or Higher." The Daily, October 20.

Statistics Canada. 2021e. "A Snapshot: Status First Nations People in Canada," Indigenous Peoples Thematic Series, April 20.

Statistics Canada. 2022a. "Indigenous Identity by Registered or Treaty Indian Status and Residence by Indigenous Geography: Canada, Provinces and Territories." Table 98-10-0264-01. 2021 Census, September 21.

Statistics Canada. 2022b. "Indigenous Population Continues to Grow and Is Much Younger than the Non-Indigenous Population, Although the Pace of Growth Has Slowed." The Daily, September 21.

Statistics Canada. 2022c. "<u>Highest Level of Education by Indigenous Identity, Indigenous Geography and Labour Force Status: Canada, Provinces and Territories</u>." Table 98-10-0423-01. 2021 Census, November 30.

Statistics Canada. 2022d. "Gross Domestic Product, Income-Based, Provincial and Territorial, Annual (x 1,000,000)." Table 36-10-0221-01. November 8.

Statistics Canada. 2022e. "Employment income statistics by Indigenous identity and highest level of education: Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations with Parts." Table 98-10-0427-01. November 30.

Statistics Canada. 2022f. "Private Enterprises by Sex and Indigenous Identity of Ownership, Age Group of Primary Owner and Enterprise Size." Table 33-10-0632-01. November 24.

Statistics Canada. 2022g. "<u>Dwelling Condition by Indigenous Identity and Residence by Indigenous Geography: Canada, Provinces and Territories</u>." Table 98-10-0286-01. September 21.

Statistics Canada. 2022h. "<u>Housing Conditions Among First Nations People, Métis and Inuit in Canada from the 2021 Census</u>." Catalogue no. 98-200-X, issue 2021007. Ottawa, September 21.

Statistics Canada. 2022i. "Private Sector Business Counts by Majority Ownership, First Quarter of 2022." Table 33-10-0492-01. February 25.

Statistics Canada. 2022j. "<u>Private Sector Business Counts by Majority Ownership, Second Quarter of 2022.</u>" Table 33-10-0502-01. May 30.

Statistics Canada. 2022k. "Private Sector Business Counts by Majority Ownership, Third Quarter of 2022." Table 33-10-0532-01. August 30.

Statistics Canada. 2022l. "Private Sector Business Counts by Majority Ownership, Fourth Quarter of 2022." Table 33-10-0601-01. November 25.

Statistics Canada. 2023a. "<u>Gross Domestic Product (GDP) at Basic Prices, by Industry, Annual Average (x 1,000,000)</u>." Table 36-10-0434-03. September 1.

Statistics Canada. 2023b. "Consumer Price Index, Annual Average, Not Seasonally Adjusted." Table 18-10-0005-01. January 17.

Statistics Canada. 2023c. "Private Sector Business Counts by Majority Ownership, First Quarter of 2023." Table 33-10-0633-01. February 27.

Statistics Canada. 2023d. "Private Sector Business Counts by Majority Ownership, Second Quarter of 2023." Table 33-10-0664-01. May 29.

Statistics Canada. 2023e. "Private Sector Business Counts by Majority Ownership, Third Quarter of 2023." Table 33-10-0687-01. August 28.

Steffler, J. 2016. "The Indigenous Data Landscape in Canada: An Overview." Aboriginal Policy Studies 5 (2): 149–164.

Taghizadeh Imani, S. (Under the direction of G. Duhaime and C. Fleury). 2021. "Trends in Poverty and Inequality in the First Nations Communities of Canada (2006–2016)." Canada Research Chair on Comparative Aboriginal Condition. Québec: Université Laval.

Trevethan, S. (2019). "Strengthening the Availability of First Nations Data." Research paper prepared for Indigenous Services Canada and The Assembly of First Nations, January 30.

Tsiroulnitchenko, E. and E. Hazell. 2011. "Economic Activity of the On-Reserve Aboriginal Identity Population in Canada: Gross Domestic Product Estimates for Indian Reserves, 2000 and 2005." Centre for the Study of Living Standards Research Report 2011-08, August.

Veeraraghavan, G., K. Burnett, K. Skinner, P. Williams, D. Martin, A. Jamal, M. Ramsay and C. Stothart. 2016. "Paying for Nutrition: A Report on Food Costing in the North." Food Secure Canada, September.

Warltier, D., M. Landry-Cuerrier and M. M. Humphries. 2021. "<u>Valuation of Country Food in Nunavut Based on Energy and Protein Replacement</u>." *Arctic* 74 (3): 355–371.