Journal of ABORIGINAL ECONOMIC DEVELOPMENT

Volume 8, Number 2

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Journal of Aboriginal Economic Development

Volume 8, Number 2

Captus Press

The Journal of Aboriginal Economic Development is the first journal devoted exclusively to issues and practices in the field of economic development and Aboriginal peoples' communities. The journal, published jointly by Captus Press and Cando (Council for the Advancement of Native Development Officers), offers articles that are of interest to those who teach and those who work in the field.

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Please note that the publication of this issue of JAED corresponds with the 20th Anniversary of Cando's Annual National Conference & AGM — *Celebrating Effective Partnerships* — to be held October 28–31, 2013 in Winnipeg, Manitoba.

The Cando National Conference is the only platform that focuses exclusively on topics and trends related to the advancement of Aboriginal economic development in Canada. It is an important venue for economic developers and related stakeholders to come together, create new business contacts, share best practices, address obstacles, and reveal existing trends in our dynamic economy. Through a program of top speakers, cutting-edge topics, training and educational tours, conference attendees will not only see the region's innovative energy, but leave with fresh strategies and tools to take their communities to the next level. Over the years, a significant portion of the content for our *Journal of Aboriginal Economic Development* has originated from Cando conference presentations and participants.

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THE ARTIST

Garry Meeches Sr.

MAQUA DOODEM — BEAR CLAN

Garry's artwork can be found throughout many galleries and tourist Venues. As a world renowned Saulteaux artist, he was born on the Long Plain Reserve in Manitoba in 1957. While developing and presenting his distinct Plains style art, Garry Meeches has travelled all around the world. His focus ranges from wildlife, scenery, people and more.

ARTIST'S STATEMENT
"Traditional Celebration"

Garry Meeches Sr.

The flowers I put in are from the Manitoba region, and the figures inside the teepee represent people opening up dialogue for co-operation amongst each other, and most importantly giving thanks to the Creator.

Editor's Comments

Warren Weir

This Special Edition of the *Journal of Aboriginal Economic Development* focuses on on-reserve property rights and the development and management of on-reserve lands. To do that we have partnered with two leaders in the field: David Natcher and Marena Brinkhurst.

Dr. David Natcher is currently a professor in the Department of Bioresource, Policy, Business and Economics, at the University of Saskatchewan, in Saskatoon, Saskatchewan. Trained as a cultural anthropologist, his research interests rest largely in environmental and economic anthropology. David's training and professional experience lie predominantly in qualitative and community-based research. His experience has been cultivated through applied research partnerships with Aboriginal communities in Alaska and Canada. This is where he has had the opportunity to research and publish on the various challenges faced by rural communities, the changing northern economy, and the strategies employed by Aboriginal and other resource dependent communities to deal effectively with social, political, economic and environmental change. By working directly with Aboriginal resource users, tribal governments, federal, state and provincial government agencies, and resource development industries, David has gained considerable insights. This has included issues relating to indigenous systems of land tenure (particularly in relation to traditional ecological knowledge), the politics of resource allocation, and how power is articulated, and best negotiated, in contested environments. He has an extensive CV that includes a significant list of publications, including books, book chapters, and journal articles. Much of the information in this

biographical overview came from David's University of Saskatchewan website (see http://ilmi.usask.ca/people/david-natcher/index.php).

Marena Brinkhurst recently completed her Master's in Resource and Environmental Management in the Faculty of the Environment, Simon Fraser University and lives in Vancouver, British Columbia. She now works as a planner, consultant, and researcher focused on land use planning, land policy, land rights reform, and land tenure and management systems. She is passionate about preventing and resolving conflicts over land and resources and empowering sustainable and equitable land use, especially for Indigenous and marginalized peoples. She is a community planner at Beringia Community Planning Inc., a small Canadian firm that specializes in working in partnership with Aboriginal communities (www.beringia.ca). Her graduate research was in partnership with the Penticton Indian Band in British Columbia and investigated the history and land management implications of the on-reserve land tenure system created by the federal Indian Act, and in particular individual land-holdings on reserves. She can be contacted by e-mail (marena.brinkhurst@gmail.com).

The impressive selection of articles devoted to the topic of land and lands-management, located primarily in the Lessons from Research section of our Journal, is situated between two long-standing and ongoing sections of the Cando Journal — Lessons from Experience and The State of the Aboriginal Economy. In Lessons from Experience, Michelle White-Wilsdon describes and profiles Cando's 2012 Economic Developer of the Year Award Winners. The Economic Development of the Year Awards, presented at last year's Cando Conference, include:

- Eileen Paul — Outstanding Individual EDO,
- Abenaki Associates — Private Sector Business, and
- Membertou — Community Category.

Located at the end of the Journal are two articles devoted to better understanding the state of the Aboriginal economy. In the first submission, Phillip Lashley and M. Rose Olfert analyze off-reserve employment options for on-reserve First Nations in Canada. In the second article, Robert Oppenheimer focuses on Aboriginal employment in 2012 and reviews the changes since 2011.

In ending, everyone at Cando and Captus Press — especially those of us who sit on the JAED editorial committee — would like to extend a heartfelt thank you to David Natcher and Marena Brinkhurst for taking on this important topic in such a timely, balanced and informing manner. This is indeed a Special Issue.

Editor's Introduction

Wanda Wuttunee

Most Canadians do not understand the parameters of Aboriginal contributions to the country's economy. As a result it is easy to cling to the stereotypes of poverty and dysfunction that affect a portion of our population. It is easy to remain ignorant of the wonderful efforts that many are making and how they are succeeding in the business world. CANDO recognizes the contributions within our own communities through their awards but often the impacts that the winners have go beyond their own communities.

Eileen Paul, Membertou Nation, is honored for her work in supporting the growth of small business in her community. She is a manager of a business centre that lends a helping hand to those with an idea but who lack the skills necessary to succeed. She has paid attention to women and has special programming designed for them.

The community of Membertou is also recognized. The history of struggle and poverty that was overcome through the vision of its leadership is inspirational. Membertou is building a nation with its focus on self-sufficiency, control of the land, investment in infrastructure and a way to reach out to partners by demonstrating their healthy community. Leadership at its finest.

Running a business is a daunting prospect and yet Abenaki Associates has survived and thrived for more than 30 years. The information technology and management world is highly competitive but Abenaki Associates has developed relationships that have

strengthened their business and made many friends across the country.

Enjoy these stories of success in Canada's Aboriginal communities and share them with a friend.

2012 ECONOMIC DEVELOPER OF THE YEAR AWARD WINNERS

Michelle White-Wilsdon
CANDO LEAD RESEARCH & SPECIAL PROJECTS COORDINATOR

Recognize! Celebrate! Honour!

In 1995 the Cando Economic Developer of the Year Award was created to recognize and promote recent or long-standing Aboriginal economic development initiatives throughout Canada. All winners past and present share a common desire to bring their communities forward as each pursues a vision of sustainable economic self-sufficiency. Although the path of economic development may vary from one Aboriginal community to another, the goal is always the same. That goal is to improve the wealth, prosperity and quality of life for Aboriginal people.

When the Economic Development of the Year Awards was established in 1995, only one award was given to the community who demonstrated excellence in Aboriginal economic development. Throughout the years, it became apparent that there were businesses and individuals also deserving of recognition for their contributions to the advancement of Aboriginal economic development. That is why today, Cando grants Economic Development of the Year Awards in three separate categories:

1. Aboriginal Private Sector Business
2. Individual EDO
3. Community Category

Three outstanding examples of Aboriginal economic development were awarded for their hard work over the past year. Delegates at the 2012 Cando National Conference celebrated, recognized and honoured winners in three categories: Individual EDO, Community & Aboriginal Private Sector Business. The following are the Economic Developer Award Winners for 2012.

CANDO ECONOMIC DEVELOPER OF THE YEAR AWARD WINNER INDIVIDUAL CATEGORY: *EILEEN PAUL*

Eileen Paul is a member of the Mi'kmaq community of Membertou. She is a single mother of three and for the past eight years has held the position of manager of the Membertou Entrepreneur Centre. In 2005, Membertou established a unique partnership with the YMCA of Cape Breton to open an Entrepreneur Centre in Membertou. The centre now provides customized business training and support to interested entrepreneurs in the Membertou community. As manager of the Membertou Entrepreneur Centre, Eileen offers a business development program that includes customized training and workshops as well as one-on-one support for new and existing businesses.

Eileen is currently working towards her certification with the Council for the Advancement of Native Development Officers (CANDO) and has also been certified in Train the Trainer through Cape Breton University. Eileen works together with Aboriginal Business Canada (ABC), Ulnooweg Development Group and other federal, provincial and community economic development agencies to determine how best to provide investment capital and funding to support new business ventures in Membertou.

In keeping up with the needs of her clients, Eileen maintains memberships in several organizations including the Atlantic Aboriginal Economic Development Network (AAEDN), the Sydney and Area Chamber of Commerce, the Canada–Nova Scotia–Mi'kmaq Tripartite Forum, CANDO, E-Spirit Youth Entrepreneur Program and she is also a member of the Membertou Governance Committee. Eileen has represented Aboriginal women in business by participating in the National Status of Women roundtable discussions held in Ottawa. On International Women's Day, Eileen's hard work was recognized when the Membertou Entrepreneur Centre's Aboriginal Women Balance Success Story was selected as one of the feature profiles and was part of Canada's showcase material and information kit at the United Nations Commission on the Status of Women (UNCSW). The 65th session of the Commission of the Status of Women took place at the United Nations Headquarters in New York. The session hosted 5,000 delegates from around the world.

Balance: Aboriginal Women in Business

Eileen is very involved with her community and is committed to helping Aboriginal entrepreneurs. Recognizing the needs of many Aboriginal women, Eileen developed the "Balance: Aboriginal Women in Business" which was the first initiative that focused on Aboriginal women in the business world.

The Balance initiative includes business forums, workshops, business skills certification programs and research. Aimed at developing business skills, creating networks and establishing peer groups, the initiative supports business start-ups and expansion in Atlantic Canada.

In 2008, Eileen began by coordinating a small business forum in Nova Scotia entitled "Balance — Women in Business". The project was deemed so successful that it developed into a larger scale Atlantic-wide initiative in 2009 and 2010. A total of 400 participants took part in the Balance forums over the three-year period.

In 2010, the Membertou Entrepreneur Centre evaluated the impact of the Balance forums on Aboriginal women in business. The evaluation involved 100 participants and 10 focus group sessions were conducted in Aboriginal communities across the Atlantic Provinces. Results from the evaluation demonstrated that over a three-year period forum participants established, expanded and created long-term partnerships for business. Key recommendations included the need for more networking and more business development training.

Eileen now offers a certificate program comprised of seven courses that will prepare participants for establishing their own business. The participants will gain an understanding of all the components that form a proper business plan. When the participant has finalized the courses, they will be prepared to seek financing and/or funding by using the business plan they have developed throughout this program.

Importance of Women in Business

For many years Aboriginal women have not been taken seriously or even recognized in the busi-

ness world. There was no support or programs geared towards Aboriginal women. Taking this into consideration it was imperative to see that this initiative move forward. To create a conference focusing on Aboriginal women, Eileen needed to ensure the funding agencies understood the importance and dedication of this initiative.

One of the major challenges that Eileen had faced throughout the development of her initiatives was securing financial support from different entities. However, building strong and trustworthy relationships with partners is key to success. Accountability is an important aspect in everything you do and with proven success being properly documented it is easier to show that programs and courses being provided to communities are essential in creating an enduring community.

Eileen is easily motivated in this field of work because she enjoys helping community members who have a vision of opening or expanding their own business. The Membertou Entrepreneur Centre has not only encouraged Aboriginal women but various community members to explore the idea of owning and operating their own business. The Entrepreneur Centre offers support, as well as guidance and Eileen often goes above and beyond to help her clients take the next step in achieving their dreams.

CANDO ECONOMIC DEVELOPER OF THE YEAR AWARD WINNER: ABORIGINAL PRIVATE SECTOR BUSINESS CATEGORY: *ABENAKI ASSOCIATES — PARTNERING WITH FIRST NATIONS FOR SUCCESS*

In today's competitive business environment, a company's reputation and market knowledge are precious assets. Nobody appreciates that more than Percy Barnaby of Abenaki Associates.

As an Aboriginal company dealing almost exclusively with First Nations, we have always considered ourselves as partners with our client communities and have built up a strong relationship of trust with them over the 30 years we have worked to promote sound financial management. "Some of our customers have been with us since we formed Abenaki in 1984. When we go to conferences, for example, they'll come to our booth and literally hug us. Other exhibitors are a little baffled by that but that's who we are. Our clients are also our friends," he says.

Abenaki Associates is owned by Percy, a Mi'kmaq from Eel Ground First Nation, his wife Carol Ann (an Ojibway from Northern Ontario). The couple, along with business partner Michelle Poirier, started the company in their home in Ottawa in 1984. "At the time, there was a lack of information technology on reserves. Percy had the idea of giving a computer course to aboriginal groups and the response was overwhelming. As entrepreneurs, we recognized a great business opportunity," he says. Percy decided to name the business "Abenaki" which means "people of the new dawn" in Micmac. "We thought the name was very appropriate. After all, we saw our company as helping our people evolve with a new technological era," he says.

Twenty-nine years later, it seems that he was right. Abenaki Associates is a highly successful and growing company serving a pan-Canadian market, which includes 625 First Nation communities and a large number of Aboriginal businesses and related organizations all over the country.

"Our information technology and management products and services are tailored to the unique needs of these communities. One of our strengths as an Aboriginal-owned company is that we are sensitive to the cultural needs of these groups and some of the obstacles they face, such as being in remote communities," says Barnaby. In the 1980s, the company established a Business Partner relationship with Computer Associates, who owned Accpac, a financial management software which is used by almost 90% of First Nations. Abenaki was the first company to provide First Nations related financial software training on topics including Financial Reporting, Accounts Receivable and Payable, Payroll, Asset Management, Purchase orders and Commitment Accounting. In the late 1980s they started developing First Nations Management software to integrate with the Accpac system and their product line continues to grow and improve based on recommendations from their clients. Abenaki now has solutions for Income Assistance, Case and Active Measures Management, and the management of other critical programs such as Income Assistance, Child and Family Services, Post Secondary Student Tracking, Safe

Water and Infrastructure, Housing Inspection and Community Human Resources.

One of the keys to building Abenaki has always been establishing partnerships. Not only has their partnership with Sage helped grow the business. In the early days of the firm when they wanted to start classroom style training for their clients, Percy spoke with Eaton's who had labs in all major cities. They agreed to give Abenaki access to the labs as they saw it as a mutually beneficial partnership which also gave them an opportunity to market to the growing Aboriginal market segment. Other long-term partnerships have been formed with companies like Microsoft and Dell. They have also recently reignited an old relationship with CAN-8, a language learning system.

Growing the business has not been without its challenges. "Each time we develop an application our competitors copy it, and sometime even copy our advertising complete with spelling mistakes", Percy remarked. "The other issue in the beginning was access to adequate financing since most financial institutions did not understand the potential of the First Nations market and were afraid that we would not be able to collect receivables because our clients were on reserve. However, possibly the biggest hurdle to overcome was convincing potential clients that an Aboriginal firm could provide a better level of service to them than some of the large national accounting firms that suddenly saw a market for financial management software in the Aboriginal community." In many ways, Abenaki was a pioneer in the establishment of an Aboriginal-owned business.

Finding qualified staff has also been a long-standing issue when it comes to training their clients and providing the top-notch customer support they strive to achieve. It is notable that the newest staff member has been with Abenaki for almost six years.

Today, Abenaki continues to explore new ways of marketing and growing their business. Most of their products are now cloud based, and clients enjoy the benefit of very efficient remote support when they encounter a technical issue, thanks to the use of secure web-based technology. Many services that used to require a trip to the other side of the country can now be performed using remote access tools.

CANDO ECONOMIC DEVELOPER OF THE YEAR AWARD WINNER COMMUNITY CATEGORY: *MEMBERTOU: A MI'KMAW COMMUNITY*

Named after the Grand Chief Membertou (1510–1611) the community of Membertou belongs to the greater tribal group of the Mi'kmaw Nation. Membertou is situated 3 kilometers from the city of Sydney, Nova Scotia. It is one of five Mi'kmaw communities in Cape Breton, and one of thirteen in the Province of Nova Scotia. Membertou is an urban First Nation community consisting of over 1260 people.

Membertou was not always situated at its present location. Many years ago, Membertou (formally known as the Kings Road Reserve) was located just off of Kings Road, along the Sydney Harbour. In 1916, the Exchequer Court of Canada ordered the relocation of the 125 Mi'kmaq; the first time an Aboriginal community had been legally forced through the courts to relocate in Canadian history. In 1926, the Membertou community was officially moved to its present day location.

In 1995 the Membertou Band had 37 employees, was operating on a $4 million dollar budget while dealing with a $1 million dollar annual operating deficit. The community was poor with low morale and a high unemployment rate. It was then that Chief Terrance Paul decided it was time for a major change. With great determination he and the council recruited band members that had left the reserve years prior to pursue their education and were employed throughout the country.

This new formed leadership decided that an unprecedented approach for Membertou was needed and that it would start by putting its financial house in order while embracing transparency and accountability. While this task required sacrifice it also generated a renewed sense of accomplishment and discipline that quickly earned the respect of external parties in government and industry. Over the past decade, Membertou's budget and number of employees has grown exponentially. There are many new internal departments and businesses now located within Membertou.

ISO Certification

Membertou has developed many economic development initiatives over the years. Developing and maintaining numerous partnerships Membertou has grown and succeeded in many business endeavors. In January of 2002 Membertou received official notification of its ISO status, making Membertou the first Aboriginal government in the world to have many of its departments ISO 9001 certified. The purpose of ISO 9001:2008 compliance is to further enhance Membertou's economy based on the pillars of sustainability, conservation, innovation and success. The ISO designation allows Membertou to position itself as a very credible player in the global market economy.

Membertou and the Indian Act

Membertou has accomplished several incredible successes and has proven that effective governance can be instrumental in overcoming many of the traditional obstacles to commercial development on reserve. However, overcoming these obstacles had come with a price. Much time and energy had gone into overcoming these barriers concerning the Indian Act.

Membertou had entered into the Framework Agreement on First Nation Land Management with Canada on February 12, 1996. The agreement was amended and approved on behalf of the Government of Canada which declared that Membertou govern its reserve lands and resources, rather than having it managed under the Indian Act.

Membertou created a Governance Committee and is now creating a land code which will have to be approved by the community and Chief and Council. Once approved, this land code will become the land law of Membertou. It will replace the land management provisions of the Indian Act. Membertou wishes to preserve and protect its relationship with the land as well as to ensure sustainability for future generations. Creating this land code will allow Membertou to have more control over what is developed on their land and the right to make laws in respect of Membertou lands and resource.

Level Playing Field

In 2012 Membertou First Nation had become the first Aboriginal government to secure long term financing through the First Nation Finance Authority (FNFA). The FNFA is an Aboriginal not-for-profit organization whose purpose is to provide low-rate loans, investment options, and capital planning advice to First Nation governments. After completing the requirements in the Fiscal and Statistical Management Act, Membertou was approved for a $10 million dollar repayable loan to build new infrastructure within the community.

Like most First Nation governments, Membertou only had one option and that was high interest/high risk borrowing. Now that the FNFA funded Membertou's loan request through its Interim Long Term Financing program Membertou stands on a level playing field with the global business community experiencing fewer barriers and restrictions.

Creating an Enduring Community

Membertou has taken on many economic development initiatives to better the community as a whole. These business and infrastructure ventures have not only brought capital and employment to Membertou, but to the surrounding communities including Sydney. Membertou has created a very strong community within a community. Membertou has proven it is possible to progress while still staying true to your culture and heritage.

Guest Editors' Introduction

David Natcher and Marena Brinkhurst

Welcome to this special issue of the JAED, focusing on the topic of on-reserve property rights and the development and management of on-reserve lands. On-reserve land tenure systems, as well as their reform, have become the topic of considerable debate among scholars, policy-makers and First Nation governments in Canada. At issue is the potential to privatize parcels of collectively held reserve lands and the means available for First Nations to determine their own legal systems for land rights on their reserve lands.

In this special issue, we have assembled a collection of papers that address historical and contemporary questions of land privatization and on-reserve land tenure systems across Canada. We are excited to have this collection facilitated by the JAED given its commitment to sharing lessons from experience and its extensive readership among First Nations leaders and economic development and land management practitioners. We sincerely hope that the contents of this issue will help to inform and inspire further discussions and research on the complex relationship between land tenure and the social and economic development of Aboriginal communities in Canada.

Overview of Special Issue Articles

In our first research article, David Newhouse and Heather Shpuniarsky provide historical and contemporary context of Aboriginal land tenure reforms in Canada and guides us through some of the current debates over proposed changes to on-reserve property rights. Frank Tough then explores two very relevant examples of the

effects of the individualization of lands once held collectively by Native American tribes and the Métis of western Canada. Taking a look at local land management impacts of individual reserve landholdings, guest editor Marena Brinkhurst and her co-authors Joan Phillip and Murray Rutherford share research findings based on the experiences of the Penticton Indian Band in British Columbia. In our forth paper, legal scholar Jamie Baxter examines how some First Nations are designing their own land codes and property law systems on their reserve and treaty lands, offering comparisons of different options using information-cost theory. Focusing on the First Nations Land Management Act (FNLMA), Mary Doidge, Brady James Deaton, and Bethany Woods share findings from their analyses of factors that influence whether a First Nation chooses to adopt the FNLMA Framework Agreement. Marena Brinkhurst and Anke Kessler then share findings from an economic analysis of national data on lawful possessions — a form of individual landholdings on reserves that are formally registered with the federal government — to explore what factors correspond with the use of the lawful possession tenure system. The final paper by Natcher and his colleagues examines the complex relationship between the political stability of First Nation governments in Saskatchewan and corresponding measures of social and economic well-being. This paper, like the others in this special issue, highlights the challenges associated with on-reserve economic development.

Overarching Themes

Several of the papers in this special issue utilize statistical data about First Nations reserve lands, economies, and well-being indicators. A common theme voiced by the authors is the challenges associated with finding and using reliable data. For many First Nations communities, the availability of reliable data is often limited, incomplete or outdated, and with recent changes to the census process these vital socio-economic data may be further restricted. Data on First Nations reserve lands, and the land interests that exist on them, are collected and maintained by Aboriginal Affairs and Northern Development Canada and Natural Resources Canada. While it is possible to access some of these data publicly (from the ministries' websites and from ministry staff directly), the authors agree that there is a need to develop consistent and valid assumptions and operating procedures for using these data more systematically. Given data limitations, the statistical studies in this issue do not claim to be definitive; rather, they represent the forefront of analysis of First Nations' socio-economic status. It is necessary that we continue to

expand data collection and analysis if it is to be of any use in informing future polices.

This collection of papers also demonstrates that while Aboriginal land tenure reform and institutional change has a long history, the reforms now being proposed will undoubtedly have profound and wide-reaching impacts on First Nations individuals and communities, many of which we are still in very early stages of understanding. The papers in this issue also illustrate the enormous diversity and complexity that exists in First Nations land tenure systems today, even without specific consideration of the highly variable customary systems that exist on reserves across the country. This diversity must be accounted for and accommodated in national debates over First Nation land tenure reforms.

It is clear that many questions remain and require further discussion and analysis in order to inform on-reserve land tenure management and potential reforms. This special issue is just one part of an ongoing and growing discussion that we hope will inspire and encourage more researchers and practitioners to explore these questions, collaborate on further research, and share findings and experiences.

ABORIGINAL LAND TENURE REFORMS IN CANADA
A Discussion of "Beyond the Indian Act"

David Newhouse and Heather Shpuniarsky
DEPARTMENT OF INDIGENOUS STUDIES, TRENT UNIVERSITY

> In the words of Hernando De Soto, the co-chair with Madeline Albright of the UN Committee for Legal Empowerment of the Poor, "You don't have to travel to Zambia or Peru to see dead capital. All you need to do is visit a reserve in Canada. First Nation people own assets, but not with the same instruments as other Canadians. They're frozen into an Indian Act of the 1870s so they can't easily trade their valuable resources."
>
> Manny Jules, Standing Committee on Finance, 15 September 2009

INTRODUCTION

This paper explores the Aboriginal property rights proposal put forth by Thomas Flanagan, Christopher Alcantara and Andrea Le Dressay in their recent book titled *Beyond the Indian Act: Restoring Aboriginal Property Rights* (2010). To situate their proposal, this paper provides some additional background on other Aboriginal land reform efforts in Canada that have occurred over the past forty years.

In general, the proposal set out by Flanagan and his colleagues represents one of the latest proposals for converting "Lands reserved for Indians" into lands where Indian individuals and Bands enjoy full property rights. The foundational argument for this change is based on the work of respected Latin American economist Hernando de Soto's *The Other Path* (1986) and *The Mystery of Capital* (2000). De Soto argues that one of the reasons why urban slum dwellers in the third world are so poor is that they suffer from a deficient system of property rights that prevents them from using their small parcels of land or houses as collateral in loans and hence they are unable to "unlock" the capital contained within them. The establishment of property rights that are "secure, easily defined, enforced and traded" (Flanagan et al. 2010: 171) is the foundation of modern Aboriginal economies. Flanagan et al. see Indian reserve lands as representing "unlocked capital" as a result of the restrictive property right provisions of the Indian Act. Unlocking the potential of reserve lands requires the development of a new regulatory environment for Indian lands. Unlocking reserves enables "ownership of underlying title by First Nations Governments and secure individual property ownership affirmed by guaranteed title" (2010: 169).

Since the Royal Proclamation of 1763, Indian lands have been sequestered from the main economic space of Canada and have had a restricted set of property rights. Fee simple title, necessary to unlock the capital within, is not one of the property rights enjoyed by Indian individuals or Bands. Since 1969, with a growing emphasis on economic development and resolution of land claims, there have been several pro-

posals which attempt to do this and at the same time respecting the desire for protection of the land in the case of default or sale. Flanagan and his colleagues argue that the way forward is to create a system of property rights that provides fee simple title to land for individuals and a reversionary right to Indian Bands. They propose the passage of a First Nations Property Ownership Act as a way of enacting this system in Canada. This would provide, on a voluntary basis, a fee simple title for individuals for Indian land and a reversionary title to Indian Bands in the event of sale or default by individuals or others.

THE FLANAGAN PROPOSAL

In *Beyond the Indian Act: Restoring Aboriginal Property Rights*, the authors put forth a concept of Aboriginal property ownership.[1] It is important to understand the difference between property and land. What is being proposed is the transformation of land into property, essential for effective participation in the Canadian capitalist economy. The basis of a successful economy, they argue, is one in which secure and exchangeable property rights exist. Flanagan et al state that the objective of their proposed First Nations Property Ownership Act "... is to assist them to unlock the tremendous economic potential of First Nations land, to become productive contributors to the Canadian economy, and to provide a mechanism that will allow them to create the level of prosperity that other Canadians take for granted" (Flanagan et al. 2010: 172).

The authors believe, with good reason, that one of the main obstacles to First Nations on reserve economic development and entrepreneurship is the lack of an effective "property rights framework". Under the Indian Act, communities do not own their own land in fee simple. While land can be divided using certificates of possession and lease, as well as customary landholding regimes, it is difficult to pledge land as collateral. Use decisions require the involvement of the federal Crown that has legislative control over reserve lands and the responsibility to manage them for the benefit and use of the First Nations. In addition, the provincial Crown possesses underlying or reversionary title.

Under the Indian Act, First Nations in most cases cannot use their land as collateral for bank loans. This makes it difficult for many Aboriginal entrepreneurs to gain funding to start their businesses. However, Flanagan et al. argue we are in an era of "red capitalism" (2010: 4) and maintain that business opportunities in Aboriginal communities are greater than ever. Yet investments are hindered by the lack of security in Aboriginal property rights such as they exist under the Indian Act. A multi-layered bureaucracy that an investor must access to begin business on reserve translates into increased legal costs and an increased time commitment to bring the project to fruition. For potential investors, this loss of revenue and uncertainty does not seem attractive.

Manny Jules,[2] the author of the forward to this book, maintains that property ownership and complex market economies are long established practices among First Nations peoples. He frames the proposed *First Nations Property Ownership Act* in terms of a restoration of rights that have been removed by the Indian Act. He believes that First Nations governments must work toward seeking national support for this initiative, in order to continue and enhance creative economic development.

Based on the work of Manny Jules and the Nisga'a, Flanagan et al. propose federal legislation that would provide for First Nations communities to establish a property rights system

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1 De Soto states: "Every asset — every piece of land, every house, every chattel — is formally fixed and updated records governed by rules contained in the property system. Every increment in production, every new building, product, or commercially valuable thing is someone's formal property. Even if assets belong to a corporation, real people still own them indirectly, through titles certifying that they own the corporation as 'shareholders'" (de Soto, The Mystery of Capital, 2000: 48).

Property ownership is attached to economic prosperity because it allows assets to generate capital because, according to de Soto: (i) They fix the economic value of assets; (ii) They integrate disbursed information into one system; (iii) They make people accountable; (iv) They make assets fungible; (v) They allow people to network; (vi) They protect transactions (op. cit., 49–62).

This is distinguished from the definition of land that, in its noun form, can refer to the ground, specific territory, people within a specific territory, etc. In these definitions, which are vast, property ownership of land and a legal interest within it are a small part (www.dictionary.com).

2 Manny Jules is former Chief Kamloops Indian Band and Chief Commission, First Nations Tax Commission.

supported by a Torrens style land title system. Believing that conditions are now ripe for this legislation, proponents of the *First Nations Property Ownership Act* see it as being complementary to the *First Nations Statistical Management Act, the First Nations Goods and Services Tax, and the First Nations Land Management Act*. The *First Nations Property Ownership Act* would allow communities to opt out of certain sections of the Indian Act and exercise control in jurisdictions that have most recently been exercised by Canada. Second, there appears to be political support for this initiative across party lines. In order for this "escape" legislation to be successful, Flanagan et al. believe it needs to be led by First Nations, enable First Nations powers to replace parts of the Indian Act, support markets on First Nations land, be optional, and create First Nations institutions to carry out these responsibilities (Flanagan et al. 2010: 169).

Flanagan and colleagues recommend that the new Act encompass the following principles:

1. First Nations must gain fee simple ownership title over their current lands.
2. Individual First Nations must have underlying title in their land, so that when there is an issue where individual title is lost or removed by someone else, the title to land reverts back to the First Nation. This involves all of the accompanying responsibility of taxation and management.
3. There should be a Torrens style land title system to manage and record transactions.
4. All accompanying legislation should seek to harmonize provincial and First Nations jurisdictional gaps to provide for investment certainty.
5. It should be an optional piece of federal legislation that releases communities from the land governance parts of the Indian Act.

In addition to these principles, Flanagan et al. state that the First Nations Property Ownership Act must provide First Nations with ownership of underlying title and individual fee-simple title in order to be effective. The federal legislation should anticipate and deal with possible provincial concerns surrounding rights of resumption. It should also create "the titling, registry, and surveying structure to support a Torrens title system" (Flanagan et al. 2010: 169). This can either be done through the legislation itself or by empowering the First Nations to make the required laws. This legislation should integrate all other laws that could be affected by it, thereby reducing transaction costs for development.

Flanagan et al. envision this legislation providing the certainty investors seek for doing business on First Nations land. He states that the First Nation could choose to provide indefeasible title to current landowners, in whatever manner they possess them, or they could provide leasehold and/or strata title. This legislation would be optional and participation in this legislation would have to be supported by the community. The community may choose to apply this legislation only to a specific part of their land or all of their territory. Flanagan et al. argue that the legislation should provide the necessary amount of flexibility and choice for communities who want to participate.

Implementation of the legislation would require the creation of appropriate institutions, over time, for registering title, an assurance fund to cover costs arising from fraud or other risks, and education and training in the new system. The major benefit of the legislation would be to bring selected First Nations lands into the economic space of Canada with full and secure property rights thus improving the foundation for the enhancement of the market economy. There are also additional benefits as Flanagan et al. outline:

1. Reduced Transaction Costs — By creating a First Nations standard for land title and integrating these standards with other provincial and federal laws and provisions costs would be reduced. In addition, standards skills would be transferable across jurisdictions and between First Nations. These cost reductions would be accompanied by improved infrastructure and investor certainty, which would allow for greater investment and increased employment.
2. First Nations Home Ownership — This system would allow First Nations to participate in open-market residential developments. This may result in an easing of the strain of housing shortages placed on current First Nations governments. In addition, home ownership allows for the building of

equity that could be used to start businesses. Finally, tradable properties allow for people to move to greater areas of economic opportunity while still remaining on First Nations land.

3. Lower Costs of Government — With improved rates of employment and increased wealth, there will be a smaller need for First Nations social programming that is directed toward alleviating poverty.
4. Higher First Nations Revenues — A First Nations land-title system will generate growth and wealth for the First Nation itself. Particularly if the First Nation is collecting property taxes, etc.
5. Reduce Number of Disputes — In regards to estates, particularly in the area of multiple heirs, the land-title legislation would ensure a more efficient transition. If there is no will, it may easier to clear multiple titles through sale and if there are no heirs the title reverts back to the First Nation. In addition, a title system would provide a way of transferring title in the event of marital breakdown, because the property could be sold on an open market and the money then divided.
6. Improved Incentives — This system would create a group of people who directly benefit from these policies who would advocate for an improved investment climate. He states that the property ownership system would provide incentive for First Nations resolution of land claims.
7. International reputation — Property ownership would be recognized internationally as a hallmark of achievement. Participation in this act would reject assimilation and recognize underlying First Nations title to the land.

THE TORRENS SYSTEM

The fundamental difference between the Torrens system and other land registry systems is that only the act of registration can change ownership of land, not a private agreement between sellers. This system is based on elements that generate secure title such as registration, certainty of title in the registry, a system of priorities for ranking competing interest, and assurance that the registered owner is the true owner of the title. This is much different than the current land registry system under the Indian Act that is considered to be a deeds system. In this system, the registrar files the records but does not determine their legality nor does the registrar have any involvement in the effect of these documents. The risk lies with the parties. In order to alleviate this, the parties purchase title insurance that increases the cost of the transaction. This is unnecessary in the Torrens system (Taylor 2008: 9–17).

The Torrens system is a dominant land tenure system throughout much of the former British Empire. Baxter and Trebilcock in a 2009 study referring to Australia's experiences with converting Indigenous lands into a Torrens land system, found the "... central challenges are the accurate and appropriate spatial characterization of lands when boundary definitions may operate differently (e.g., according to topographic features rather than mathematically defined parcels), and the integration of overlapping rights, restrictions and responsibilities on Indigenous lands. The existence of functional as well as spatial rights in land — e.g., different rights of use held by different 'owners' to the same physical area — may also present challenges" (Taylor 2008: 118).

OTHER CONTEMPORARY PROPERTY RIGHTS SYSTEMS

It is important to consider the concept of land property rights in the context of other land property right models that have been implemented in Aboriginal self–government agreements over the last four decades.

James Bay and Northern Quebec Act

Following the historic *Calder* (1973) decision, the James Bay Cree entered into negotiations with the Quebec government. These negotiations resulted in the James Bay and Northern Quebec Act (1975) and ushered in a new era of treaty negotiation between First Nations, provinces and the federal government. In this agreement, claim to Cree traditional lands are surrendered while the received land is divided into three categories, each with different rights and interests. Category I lands are reserved for Cree communities and they have municipal-type jurisdiction over these lands. However, Quebec

has rights to the sub-surface and mineral rights and if these minerals are required by the province then compensation will be given to the communities in the manner legislated by the Indian Act. Category I lands may only be sold to the province of Quebec. Category II lands lay just outside of Cree communities proper and fall under provincial jurisdiction. The Cree retain exclusive harvesting and hunting rights on these lands and any development, mineral extraction, etc. must be done with the consent of the community affected. Category III lands refer to areas where both First Nations and non-First Nations can exercise hunting and harvesting rights, though non-First Nations must exercise these rights within provincial game laws. The agreement is silent on individual property rights.

Sechelt

The *Sechelt Indian Band Self-Government Act, 1986*, was the first piece of legislation passed after the pledge of the federal government to pursue community self-government negotiations. This Act recognizes the Sechelt Band authority to exercise powers such as to enter into contracts and agreements; acquire, sell and dispose of property; and spend, invest and borrow money. The community created its own constitution establishing its government, membership code, legislative powers and system of financial accountability. Among these powers are the abilities to pass laws concerning access to and residence on Sechelt lands, administration and management of lands belonging to the band, and local taxation of reserve lands. The Sechelt Government owns Sechelt lands in fee simple and can be disposed of pursuant to the regulations set out in the Sechelt constitution. The most common analogy for the Sechelt model of self-government is a municipal style government, where federal and provincial laws are frequently applicable.

In addition, the Sechelt were one of the first signatories to participate in the BC Treaty Process in 1994. They are at Stage 5 of the six stage process. This treaty would enhance the self-government agreement by creating the ability to add land to the existing territory, ownership of surface and sub-surface rights, commercial fishing licences, and $52 million.

Gitxsan

Following the seminal *Delgamuukw* ruling in 1997, the Gitxsan offered to enter into a treaty process with both Canada and British Columbia. However, in 2008, the Gitxsan hereditary chiefs issued an Alternative Governance Model, which stood in opposition to the current models of Treaty Governance undertaken by other First Nations in British Columbia. According to the Gitxsan, they are not interested in creating a parallel society. Rather, they view the treaty process as one that brings them into Confederation and makes them full participating members in Canadian society. The Gitxsan propose a governance model based upon their traditional governance system, organized around their hereditary chiefs and houses. They propose the dissolution of band council government and want those funds to be diverted toward the provincial government for the delivery of services. This means that the Indian Act would no longer apply to the Gitxsan and federal and provincial delivery of services would continue as usual but with room for a voice of the Gitxsan. The Gitxsan are not interested in "Treaty Settlement lands" and instead opt to maintain a relationship with their territory of over 33,000 km. This means that "[t]he economic value of our collective inherited interest (which is neither fee simple nor sovereign but is certainly real, court-ordered and subject to definition) is to be realized by the process of accommodation articulated by the Supreme Court of Canada. In practical terms this will presumably be effected by a combination of own investment, arrangements with external investors, and revenue sharing agreements with governments, especially the provincial in the case of resources" (Gitxsan Treaty Team 2008: 6–7). In addition to being able to determine the use of territory and resources, the Gitxsan Alternative Treaty Model states that the Gitxsan people will be able to inherit property as part of their shared interest in the land.

Nisga'a

After the enactment of the treaty, one of the first acts passed by the Nisga'a Nation was the Land Title Act in 2000. They chose to implement a Torrens land-title system, which "does away with the need for a chain of titles to a property as is common in a deeds registry

system" (Flanagan et al. 2010: 163). Diane Cragg, Registrar of Land Titles for the Nisga'a Nation, describes the Torrens system as "a way of expressing traditional values through a new means". Traditionally a statement of interest, or the passing of the name, in land was always done through a large gathering where the history or the adaawak was shared and witnessed. Now, through the Torrens system, it is the title certificate that establishes that history and it is publicly available for everyone to access (Flanagan et al. 2010: 164).

Under this system, the Nisga'a Nation owns its lands in fee simple. They retain underlying title and exercise jurisdiction in the areas of estates, land management, etc. The nation is discussing whether or not they will be granting individual fee-simple property rights. If they are able to provide assurance of these rights against fraud, these individual property rights would be as secure as property rights anywhere in Canada (Flanagan et al. 2010: 165). The Nisga'a title system is compatible with the BC land title system so that if desired, both systems can be used. The standards for the Nisga's system are in keeping with the requirements of the BC system. This system has also allowed for a significant cost reduction in doing business on Nisga'a lands. By creating property rights that are similar to the rest of the province, creating a searchable database, and providing a transparent process with timelines, potential investors are not shouldering any extra costs. When and if the Nisga'a begin to provide individual title, there will be an effective dispute resolution mechanism in place for dealing with matrimonial property and estates. There is a slight difference with the Torrens system and the Nisga'a land title system: their system allows for the registry of some "cultural land interests" (Flanagan et al. 2010: 165).

Tsawwassen

The Tsawwassen First Nation Treaty was enacted in April of 2009. Part of the BC Treaty Commission, it is the first urban treaty in BC and it is the first treaty negotiated within this process. This treaty allows for the creation of a Tsawwassen Constitution and the Tsawwassen government is enabled to pass municipal level laws in addition to being able to administer some provincial services such as education and health care. Tsawwassen also provides for non-Tsawwassen (those that live on Tsawwassen lands) participation in its government in decisions that significantly affect them. The Tsawwassen First Nation also retains rights to make laws concerning resources on their territory. They may harvest wildlife and fish in their territory but they are subject to conservation laws.

Regarding land and property issues, the Tsawwassen treaty provides for ownership of Tsawwassen land in fee simple. Tsawwassen territory, which is comprised of 290 hectares of former reserves and 372 hectares of former Crown provincial land, is owned in fee simple by the Tsawwassen government. In addition, they also own an additional 62 hectares from the surrounding area, though this land will remain under the Corporation Delta jurisdiction. The Nation has the option of adding to their territory as leases in the surrounding area become due and they will hold the first right of refusal option for purchase. The treaty also provides taxation powers to the Tsawwassen First Nation, as well as a share in taxes collected by the province of British Columbia.

HISTORICAL CONTEXT OF INDIAN LAND REFORM — FROM PROTECTION TO PARTICIPATION

It is difficult to discuss First Nations property rights without providing a glimpse at the historical landscape in which these land reforms are situated. Until recently, it was widely held that First Nations peoples did not have institutions of private property prior to the arrival of Europeans. First Nations peoples have consistently held and managed land for thousands of years. Complex systems were developed and used to establish and maintain relationships with the land. Territorial ownership was recognized and land was seen as the property of clans, families and individuals. Ownership carried with it a set of responsibilities for use, maintenance and protection of the land and its resources. It is fair to say that early European newcomers may not have recognized many of the practices as part of a land tenure system, as they saw ownership through their own cultural lenses. Much of North America was seen through the lens of "terra nullius" that looked for particular types of activities as the basis for an ownership claim.

Beginning in 1763 with the Royal Proclamation and the Treaty of Niagara in 1764, the policy of the British government regarding Indian land was one of protection. The British Crown used the Appalachian Mountains as a natural boundary between land that could be settled by non-Aboriginal people and Indian Territory. The Crown was also the only entity that could negotiate treaties and land surrenders and the Indian people could only surrender/sell their land to the British Crown (Miller 2009: 67–73). A new category of "Indian land" was created with a limited set of property rights.

There was an influx of settlers into what was to become Canada and the British government reaffirmed itself as the only body to which the Indians could cede their land. During this period the Crown concluded a number of land cessations and treaties. Eventually, these treaties included specific lands be "set aside" for Indian communities known as reserves. Individual ownership of land by Indians was not contemplated. The processes for surrenders/sales/ceding of land to the Crown reflected a view that Indian land was collectively possessed. It became an offense for non-Aboriginal peoples to encroach or trespass on these lands (Bartlett 1990: 11). Indians at this time were considered to be subjects of the Crown and in need of protection from the non-Aboriginal settlers. The Crown's policies of the protection of Indian lands continued alongside the policies of civilization in the 19th century.

Individual ownership of land was widely accepted as one of the hallmarks of civilization and it was thought that owning land in this manner would facilitate Indian people's integration into British Canadian society. The Gradual Civilization Act of 1857 formally entrenched a policy of civilization of Indian peoples. It provided for enfranchisement and linked it to the concept of private property ownership. When Indians who sought enfranchisement had met all the requirements and passed a three-year probation, they would receive an individual allotment of reserve land that they owned in fee simple. The allotment was considered their share of reserve land. This land would then cease to be part of the reserve (Milloy 1991: 147–8) and be subject to taxation and seizure for payment of debts. The British North American Act of 1867 gave Canada control over Indians and Indian lands. Canada continued the civilization policies of previous years and passed the Gradual Enfranchisement Act in 1869. This act continued to tie individual land ownership to enfranchisement but also introduced the location ticket that provided some limited rights of possession associated with individual tracts of land and it meant that it could be passed to heirs upon death (op. cit., 150–52).

With the Indian Act of 1876 the rules surrounding Indian land continued to evolve. The location ticket system continued with the insertion of the need for approval of the band council in addition to that of the superintendant-general to gain one (ibid.). The amendments to the Indian Act in 1951 ushered in a change in policy for the Canadian government. Many of the most restrictive laws were removed, though the goal for integration into Canadian society remained. The location ticket system was recognized as outdated and was replaced by the certificate of possession system. This system is more fee-simple like, as people were able to use the property as they saw fit, yet people who have a Certificate of Possession may only transfer or sell the certificate to another band member and that transaction must be approved by Indian Affairs. Band members, then, are able to gain possession of individual tracts of land through certificates of possession, leases and customary landholdings (Baxter and Trebilcock 2009: 73).

In the 1960s the Canadian government realized that conditions on reserves and for First Nations people on a whole were not improving. The Hawthorn-Tremblay Report was released which recommended that First Nations people be recognized as "Citizen's Plus". The main plank of economic development policy, according to Hawthorn-Tremblay, was to encourage the movement of Indians away from reserves to take jobs in nearby cities and towns. Indian land rights were not specifically addressed by the report's authors. Participation in local natural resource development was viewed as secondary. The federal government response to this report was the Statement on Indian Policy of the Government of Canada (1969), known as *the White Paper*. This document proposed a number of changes to Indian Policy, including the repeal of the Indian Act, a rejection of land claims and a statement that First Nations people should be integrated into mainstream Canadian society. Within this paper, the government recognized the cumber-

some land tenure system established by the Indian Act was a source of frustration and held people back from full economic participation in Canada. The White Paper recommended an Act which provided for steps toward owning reserve land in fee simple and that the management of those lands would be in the hands of the bands if they chose. It made clear that this would be a gradual process whereby bands could choose the specifics of how they wanted to manage their lands (Statement on Indian Policy, 1969). The ultimate goal would be total band control over land and ownership in fee simple and the removal of the Canadian government as trustee.

The wording of this section of the White Paper is not unlike the premise put forth in Flanagan and his colleagues. Flanagan et al. emphasize the cumbersome and inefficient nature of the current land tenure system on reserve and links this to the challenge of attracting investors and using the land as collateral for economic benefits. Flanagan et al. link the benefits of fee simple property ownership to the alleviation of poverty on reserve through the attraction of potential outside investors in businesses and other economic ventures. The White Paper speaks of full participation in Canada, as do Flanagan et al. The White Paper proposals sought to remove the existing protections of land and First Nations peoples. The main difference is that Flanagan et al. propose indefeasible and reversionary rights or underlying title to First Nations land be vested with First Nations.

After the rejection and subsequent withdrawal of *the White Paper*, spurned by the principles established in *The Red* Paper (the response authored by Harold Cardinal and presented by the Indian Association of Alberta), an intense period of negotiation directed at improving the political, economic and social status of First Nations began. New land management regimes were negotiated as part of comprehensive claims agreements and the self-government policies of the federal government. The principle of local solutions rather than template solutions is foundational, as are the principles of protection and First Nations ownership. Self-government discussions and agreements have highlighted the need to develop approaches to economic development that go beyond new government programming.

In 1985, a new category of Indian reserve land was created. Section 25 of the Indian Act allows Indian Bands to designate land, ie conditionally surrender their interests in the land to the Crown and to use the land in economic development projects. This new category was seen as a measure to facilitate development while protecting land. The Report of the Royal Commission on Aboriginal Peoples devoted considerable effort to developing a set of principles that could be used as the basis for securing lands for "economic self-reliance, cultural autonomy and self-government" (RCAP 1996: 573–74).

Consistent with the principle of local solutions, some communities began to approach the province and the federal government to find ways to address their own issues. For example, Manny Jules and the community of Kamloops in BC thought that the provincial collection of taxes on lease holdings on reserve was wrong. It resulted in double taxation to the leasees, as the province collected taxes with no services in return while the community had to charge the leasees for services that they were providing. The courts maintained that the only way to change collection of property taxes was to change the Indian Act and this community proposed that property tax jurisdiction on First Nations lands be transferred to the communities. The First Nations Property Tax Act was an optional piece of legislation that was passed in 1988. The collection of these taxes has helped to expand the revenues of the participatory First Nations, in addition to expanding the amount and quality of services provided (Flanagan et al. 2010: 143–44). To facilitate the implementation of this Act, the Indian Taxation Advisory Board was created in 1989.

This act was followed in 1997 and 1998 by the First Nations Sales Tax on Selected Products Act, which allowed First Nations to collect GST on sales of fuel, alcohol and tobacco on their land. This was expanded in 2003 with the First Nations Goods and Services Tax Act so that communities could collect GST on all eligible products and services. However, only a few communities are opting into this legislation unlike the property tax legislation (op. cit., 147).

In 1999, the First Nations Land Management Act (FNLMA) was passed. This legislation allows participating First Nations to make laws on their land that are common to all local governments in Canada. For example, First Nations can make laws concerning zoning, land use, conservation, development, and possession. This Act

requires a community to create its own land code, with the support of the community, by which all First Nations, potential investors and developers must abide. These codes are specific to each First Nation and can look different from one community to the next. To facilitate the implementation of this Act, the Lands Advisory Board was created (First Nations Land Management Act, 1999).

One of the criticisms of the FNLMA is that due to the possible uniqueness to the land codes and corresponding laws across First Nations communities, investment by outsiders may be more complicated. Flanagan and colleagues argue that providing a model land code would decrease the costs of doing business in these communities because there would not be a diversity of different laws with which to become acquainted. In addition, they criticize the lack of a central institution to aid communities with model land codes and zoning regulations (Flanagan et al. 2010: 118–19). In essence, Flanagan et al. recommend federal legislation so that there are not as many land codes as there are communities. There would be only the main act and some flexibility with in its parameters. First Nations communities who participate in the First Nations Property Ownership Act could choose to apply their land-title system to a specific part of their land and could limit tenure to leasehold title or they could apply the land title system to all of their land and institute comprehensive fee simple ownership (Flanagan et al. 2010: 170). These are not the only choices as they emphasize that this legislation must be flexible and provide for an "infinite" number of choices in between. However, if there are infinite choices for the way First Nations choose to exercise their property ownership this may not counter their own critique of the diversity of Land Codes under the FNLMA.

In 2005, the First Nations Fiscal and Statistical Management Act was passed. This legislation allows First Nations to access capital markets for infrastructure financing. Those First Nations who have opted into it have the powers of a local government to pass laws pertaining to non-payment of property taxes or violation of land use rules. The First Nations Commercial and Industrial Act was passed the same year and is meant to fill in regulatory gaps that may exist between provincial and federal laws and regulations regarding development on First Nations lands. This allows development projects to proceed as planned and not become tied up in unnecessary jurisdictional disputes (First Nations Fiscal and Statistical Management Act). This is designed to attract potential investors because they will not have any extra costs and they will be familiar with the regulatory regime in place.

These various pieces of optional federal legislation are designed to work in concert with one another. It is apparent that through these Acts, First Nations can achieve a higher degree of control over their land and what happens on their land than is possible under the Indian Act. In addition, these Acts allow First Nations the potential of accessing revenue that can expand their economic capacity. Though these acts provide First Nations with various tools to create laws and a measure of *de facto* sovereignty over lands, reversionary title to First Nations lands still remain with the Crown. In these pieces of legislation, First Nations governments are not provided with the ability to leverage their land nor provide individual title.

Looking back at the history of land reform as it applies to First Nations peoples in Canada, one can see the evolution of how the Canadian government has understood the legal relationship between First Nations people and land. This began with the initial understanding of First Nations interest in the land as being no more than usufructuary and fee simple ownership being tied to those who were considered "civilized". Recently, communities can opt out of certain parts of the Indian Act under the FNLMA and create their own land codes, laws, etc. The evolution is literally one of protection to participation.

The First Nations Property Ownership Act fits into this picture quite nicely. Indeed, it echoes some of the arguments toward fee-simple ownership on reserve mentioned as early as the White Paper. It stands to provide much of the local control possible within the FNLMA but goes further in that it guarantees title in fee-simple, creating a legal recognition of underlying First Nations title to their lands. Flanagan et al. imply that this Act, then, would be more beneficial, for this reason, than a self-government agreement where at the end Canada still retains underlying title. Used in conjunction with the FNLMA, FNCIDA, FSMA, etc., this Act could

theoretically provide many of the elements of a local/provincial government.

Flanagan et al. argue that the public good is advanced in this case through the provision of certainty for investors that flow from clarifying and modernizing the property rights of Indian reserve land. Certainly, there is much to be gained from this clarification and from the development of a common system of recognized and granting land title. We should also recognize that capitalism is a remarkably resilient and adaptable system that is able to adjust world wide to a vast array of systems of land tenure. Negotiation of rights is a key feature of the system that allows for local variation and practice.

Securing First Nations underlying title to the land, reversionary rights are an attractive asset to this proposal as these do not exist in self-government agreements. It remains to be seen whether or not Canada and the provinces will agree. The proposed change represents a large change for them. While the Crown can act in the right of Canada and provinces, it remains to be seen whether the Crown in the right of First Nations is a concept that will gain resonance, either among federalists or Aboriginal nationalists.

Supporting First Nations communities to develop and implement the proposed property rights is key. This legislation depends greatly upon the state of the governing institution of the First Nation, which under the Indian Act, flows through the band council. Good governance and a comprehensive vision of the future, not to mention a collective understanding of relationships and responsibilities to the land, are necessary to participate in this legislation. It appears as though this legislation would favour communities with larger governance structures, as many people would be necessary to begin, monitor and participate in the carrying out of this land tenure system.

In this vein, Baxter and Trebilcock (2009) emphasize three broad challenges that need to be examined further before communities and the federal government undertake the architecture of this legislation.

1. Regionalism — it is not possible to apply uniform legislation to the diversity of First Nations communities, lands, experiences, visions, and capacities. They suggest more research into how it would be possible to accommodate diversity within such federal legislation and recommend looking at the FNLMA, as well as particular provincial legislation that would allow for regional diversity. The range of economic opportunities possible vary with the location of the First Nation and the legislation would have to allow for the differences between the realities of a small reserve in northern Manitoba, a medium sized community in New Brunswick and a large reserve in Ontario that is closer to urban centres. It is acknowledged that there will be as many challenges that arise as there are First Nations and that there must be more than simply stated flexibility to deal with them.
2. Different Economic Outcomes — communities need to balance different economic interests. This legislation allows for both collective and individual property rights in fee simple and the ensuing legal responsibilities. In communities there will be a number of different ways that First Nations community members will seek to exercise their rights and responsibilities and this must be balanced with and understanding of collective interests.
3. Federal Government — finally, Baxter and Trebilcock (2009: 119–21) maintain that the involvement of the federal government in the evolution of this legislation is very general. The authors believe that the federal government's position should be clarified and their commitment to transitional programming and the phasing out of current programming (such as loan programs already in place) should be clearly stated.

In the context of the evolving and complex arena of Aboriginal property rights, Aboriginal and treaty rights, self-government and treaty negotiations and as an expression of a way of moving forward in a modern capital economy, the ideas contained within the Flanagan et al. proposal are worth further consideration and discussion. Defined, secured and enforceable property rights are foundational to participation in modern market economies. It is important to understand that Aboriginal political objectives are broader than economic development. Protection and enhancement of cultural property, equitable distribution of wealth, enhancement of

individual choice, development of accountable and effective First Nations governments are also important goals that need to be examined as well when considering such fundamental issues of land reform. Balancing First Nations cultural values and customs with contemporary individual rights is also an important aspect to be explored in some depth. The wholesale adoption of a new system of property rights, however attractive, ought to occur with informed public discussion and debate.

One might also examine, in some depth, the lands rights evolving in the BC Treaty models, looking at them through the lens of land protection and market acceptance. It would be helpful to conduct research on the impact and effects of those property management regimes that have been implemented to determine if they are resulting in significant changes as forecast. It would be helpful to understand what other institutions and policies have been put into place to make them work as well as understand better the implementation issues. Land reform of such significance does not occur without other effects. For example, how have those First Nations that have fee simple regulations prevented the concentration of land among a small group people? How have these new regimes helped local entrepreneurs? Who has benefited and how are important questions? There is also an implicit assumption in the Flanagan et al. proposal that First Nations residents are resident on Indian reserves. As more than half of the First Nations population resides in urban centres, the application of the property rights concepts in this environment needs exploration. After all, De Soto's work was stimulated by his observations of urban poverty.

CONCLUSION

In summary, the Flanagan et al proposal represents the latest attempt to transform Indian land into a form of property that would be attractive to full participation in a market economy. It is a shift away from the protectionist policy of the Indian Act. It proposes that First Nations communities would have reversionary title to reserve land, that First Nations individuals would be able to hold reserve land in fee simple title and that reserve land could be sold to outsiders and still remain under the jurisdiction of the local First Nation, a situation similar to land in other jurisdictions in Canada. Flanagan and his colleagues argue that the future of Aboriginal peoples lies in greater institutional integration and homogeneity with those of the mainstream. While integration and homogeneity are important public goods, so too are separateness and diversity. This distinction is critical if First Nations hope to reflect their customs and culture in their own property regimes in the future.

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"FULL CIRCLE"
Theories of Property Rights as Indicated by Two Case Summaries Concerning the Individualization of Collective Indigenous Lands Interests

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ABSTRACT

The "Rule of Law" and "Individual Property Rights" are often regarded as necessary conditions for economic growth and development. Recently, the common ownership of First Nation reserve lands in Canada was identified as "Dead capital." Apparently, the problems of delayed development can be traced to a dysfunctional property system. A serious critique of collective ownership with its concomitant high transactions costs suggests a stronger on-reserve role for market relations. Only by individualizing land ownership and coming out from under the Indian Act can the commercial potential of reserve lands be realized. Clearly, a closer look at the property rights paradigm is required. To assist with a discussion of such proposals for development, this paper will employ a critical economic history approach, by (i) explaining the foundations of the property rights paradigm; (ii) employing two case summaries to demonstrate how US and Canadian authorities directed the conversion of collective Indigenous land holdings to individual transferable titles; and (iii) identifying some outcomes associated with the creation of transferable individual rights in property. Two case summaries demonstrate how economic history can illustrate the private property rights experiences of Indigenous peoples. Coercion by the United States government resulted in the breakup (allotment) and sale of large Indian territorial reservation lands. In the Canadian prairie west, Métis entitlements took the form of grants of millions of acres of scrip and the assignment or conveyance of their interests left them without a land base. In these cases, lands and entitlements ostensibly reserved for Indigenous peoples were diverted to emerging settler land markets. Evidence suggests that the weaker property rights of speculators/settlers triumphed over the legally recognized rights of Indigenous peoples. In other words, the Rule of Law in respect of property was somewhat different for settlers/speculators and Indigenous peoples. In these historical cases, the individualization of collective ownership into transferable assets had similar outcomes that do not seem to accord with predictions that economic growth will ensue from the promotion of private property rights and the reduced transaction costs.

INTRODUCTION†

Growth and divergence are intellectual concerns for many economic historians. In many quarters, Anglo or Anglo-American settlement regions are regarded as having created the right mix of institutions that generated growth and prosperity; however, the Native or Indigenous populations of these societies tend to be economically distinct from the mainstream and can be compared with populations of the poor periphery. Among several explanations for western growth and development, (i) individual property rights, and (ii) the Rule of Law, seem to be most worthy of consideration with respect to *historical causation* of the market as a harbinger of growth, development and prosperity. A robust combination of individual property rights and the Rule of Law promises efficiency with justice.

This article is associated with a general and ongoing concern about the diversion of lands, formally set aside for Indigenous Peoples, to the market, more specifically a market created by White settlement. Here, two seemingly dissimilar case studies: (i) the Indians of the mid-western United States whose reservations were allotted with some lands sold as surplus; and (ii) the Métis of western Canada whose Indian title was converted to scrip, are both historical examples in which in forms of collective title were individualized. The historical experiences of crafty forms of "dispossession by grant" can inform present day debates about First Nation reserves in Canada and test the views about institutional economics. A reconstruction of the initial formulation of a *property rights paradigm* is relevant to developing understandings of historical causation associated with the loss of land by Indigenous peoples. Significantly, in these case summaries, the question of the appropriation of Indigenous lands and property law intersect, but perhaps in ways that the proponents of the property right paradigm might not have imagined. In fact, in terms of this journal theme of "the field of economic development and Aboriginal peoples' community", development economist Erik Reinert's assertion that "... attempts to isolate single features of market economies without seeing the whole ... tend to obfuscate rather than illuminate"[1] can be applied to proscriptive approaches to Aboriginal economies. However, with respect to private titling lands, as a means to promote credit and market relations, Reinert warned: "But as several studies in Latin America have shown, giving property rights to the poor may very well lead them to sell their houses in order to buy food or healthcare. They also easily fall victims to fraud in this new and unfamiliar situation. Property rights without economic development may actually make things worse than they were in pre-capitalist societies."[2] Given this warning about individualization, a form of privatization, can anything insightful be learned about the economic history of the transformation of collective interests in the land to marketable assets? Certainly, the lot of the many Indians and Métis did not improve with their acquisition of individual rights.

Because a credible argument has been made that the titling of informally held parcels of lands will lead to growth and prosperity for many of world's poor,[3] an introduction to the conceptualization underlying the property rights paradigm in light of the individualization of Indigenous lands has relevance to an exploration of approaches to economic development and First Nation reserves.

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1 Erik S. Reinert, *How Rich Countries Got Rich ... And Why Poor Countries Stay Poor* (London: Constable, 2007), p. 220.

2 Reinert, *How Rich Countries Got Rich*, p. 221.

3 On the connections between allotment and titling, see Ezra Rosser, "Anticipating de Soto: Allotment of Indian Reservations and the Dangers of Land-Titling" in D. Benjamin Barros (Ed.), *Hernando de Soto and Property in a Market Economy* (Burlington: Ashgate Publishers, 2010) pp. 61–81.

THE CANADIAN FUR TRADE AS AN INSPIRATION FOR THE PROPERTY RIGHTS PARADIGM

It might seem ironic to some social scientists that Harold Demsetz's insights and inspiration concerning the relationship between property rights and an efficient internalization of externalities arose from the work of Eleanor Leacock, a Marxist/feminist anthropologist,[4] who wrote on the Montagnais Indians, as then known as, of northeastern (present-day) Canada. Her historical and field research contributed significantly to a debate about the origins of hunting territories among mobile Subarctic Indians.[5] The claim by Frank Speck and a few others, that Algonquin private property (hunting territories) predated the fur trade, a dig at the notion of the viability of communalism, has seemingly been set aside by Demsetz, since he construed from Leacock's study an understanding that the fur trade created certain externalities (i.e., over-hunting) that were dealt with by developing a property system that internalized those costs. Briefly defined: "... property rights convey the right to benefit or harm oneself or others."[6] In fact, Leacock's "The Montagnais Hunting Territory and the Fur Trade" resulted in a major re-assessment of the Speck/Eiseley thesis concerning pre-fur trade origins of individualistic hunting territories.[7]

It is worth revisiting this seminal piece on property economics even by deploying his exact wording when necessary. Demsetz proposed: " ... the emergence of new property rights takes place in response to the desires of the interacting persons for adjustment to new benefit-cost possibilities."[8] Several of his key postulates affirm:

1. property rights guide incentives to increase the internalization of externalities;
2. internalization of externalities occurs when internalization of gains exceed costs of internalization;
3. technological and price changes will induce changes to property systems, even from communities that lack well developed property systems;
4. long-term viability of a society depends upon changes to behavior so as to accommodate externalities brought by "technology or market value;" and
5. a potential externality exists for "every cost and benefit associated with social interdependencies."[9]

It would seem to economists then, subarctic Indians as rational actors, would abandon their collectivist orientations and deal with non-sustainable hunting (production) by seizing the opportunity to obtain a benefit. However, does an internalization of the benefits and harms of externalities really explain the changes that occurred in subarctic land tenures? In other words, has the property rights paradigm correctly assimilated Leacock's argument?

INTERNALIZING EXTERNALITIES: THE ADOPTION OF PROPERTY RIGHTS DURING THE CANADIAN FUR TRADE

For our purposes, it is worth reconstructing Demsetz's understanding of the fur trade property rights example by reviewing his summary:

> Leacock clearly established the fact that a close relationship existed, both historically and geographically, between the development of private rights in land and the

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4 See Richard Sutton & Richard Lee, "Obituary: Eleanor Burke Leacock", *American Anthropologist* 92(1) (1990): 201–205.

5 See Harold Demsetz, "The Exchange and Enforcement of Property Rights", *Journal of Law and Economics* 7 (1964): 11–26; Harold Demsetz, "Toward A Theory of Property Rights", *American Economic Review*, 57(2) (1967): 347–59; and Eleanor Leacock, "The Montagnais 'Hunting Territory' and the Fur Trade", *American Anthropologist*, 56(5), part 2 memoir no. 78 [1954]. For a very useful summary of the discussion of Northern Algonquian Land Tenure, see Adrian Tanner, "The New Hunting Territory Debate: An Introduction to some Unresolved Issues", *Anthropologica* 28(1–2) (1986): 19–36.

6 Demsetz, "Toward A Theory of Property Rights", p. 347.

7 Frank G. Speck & Loren C. Eiseley, "The significance of the hunting territory systems of the Algonkian in social history", *American Anthropologist* 41(2) (1939): 269–80.

8 Demsetz, "Toward A Theory of Property Rights", p. 350.

9 While allowing that changes in property rights systems could be legal or moral experiments, Demsetz stated: "... but in a society that weights the achievement of efficiency heavily, their [property rights] viability in the long run will depend on how well they modify behavior to accommodate to the externalities associated with important changes in technology or market value." Demsetz, "Toward A Theory of Property Rights", pp. 348, 350.

> development of the commercial fur trade. The factual basis of this correlation has gone unchallenged. However, to my knowledge, no theory relating privacy of land to the fur trade has yet been articulated. The factual material uncovered by Speck and Leacock fits the thesis of this paper well, and in doing so, it reveals clearly the role played by property rights adjustments in taking account of what economists have often cited as an example of an externality — the overhunting of game.[10]

Demsetz implied that his theory of property rights was an inference derived from the factual record set out by Speck and Leacock. In the case of Leacock's study, she explored the relationships between land tenure and the fur trade. Significantly, in terms of the history of the underpinnings of the property rights paradigm, Speck and Leacock disagree sharply on the origins of family hunting territories; based on early 20th century fieldwork, Speck held that individual property arrangements existed before contact; in other words, during an era when the conditions for internalizing the externalities did not exist. In fact, one of the difficult questions for the field of Subarctic Ethnohistory concerns the nature of land tenure before the advent of the fur trade and whether this trade influenced a change from large hunting ranges to family hunting territories.[11]

A few years later, in a publication with Armen A. Alchian, an elaboration on the importance of the fur trade as an illustration of the logical and beneficial adoption of individual rights was offered:

> The coming of the fur trade to the New Continent had two consequences. The value of furs to the Indians increased and so did the scale of hunting activities. Before the coming of the fur trade, the Indians could tolerate a social arrangement that allowed free hunting, for the scale of hunting activities must have been too small to seriously deplete the stock of animals. But after the fur trade, it became necessary to economize on the scale of hunting. The control system adopted by the Indians in the Northwestern part of the continent was to substitute private rights in land for free access to hunting lands. By owning the right to exclude others from their land, Indian families were provided with an incentive to inventory their animals. Under a free access arrangement, such inventories would have been depleted by other hunters. With private rights to hunt the land these inventories could be maintained at levels more consistent with the growing market for furs.[12]

Before the fur trade, externalities existed; but these externalities were insignificant, hence "... it did not pay for anyone to take them into account"; consequently, nothing resembling private ownership in land existed.[13] Apparently, much intellectual product has been built upon this one small case study, which interestingly, occurred on the periphery of the world system.

Notwithstanding the lack of agreement about the origins of the "institution" of family hunting territories in the Canadian Subarctic, Demsetz correctly recognized two important consequences of the fur trade: (i) the value of furs to Indians increased; and (ii) the scale of hunting activity rose sharply.[14] Evidently, both consequences increased the importance of externalities associated with free hunting.[15]

Such an explanation is not irrelevant, on its own, it suggests a certain mechanical reductionism of the social-cultural responses to economic changes. Not surprisingly then, there would seem to be little evidence that mobile caribou hunters had been conceptualizing land uses in terms of calculating the costs and bene-

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[10] Demsetz, "Toward A Theory of Property Rights", p. 351.

[11] "Who owns the Beaver? Northern Algonquian Land Tenure Reconsidered", in Charles A. Bishop & Toby Morants (Eds.), Special Issue *Anthropologica* 28(1–2) (1986).

[12] Armen A. Alchian & Harold Demsetz, "The Property Right Paradigm", *Journal of Economic History* 33(1) (1973): 24–25.

[13] Demsetz, "Toward A Theory of Property Rights", pp. 351–52.

[14] Demsetz, "Toward A Theory of Property Rights", p. 352.

[15] This problem of externalities arising from a lack of property rights would later be referred to as the tragedy of the commons by some, while others conceptualized the problem as open access.

fits of internalizing externalities.[16] As a logical construct the Demsetz/Alchian thesis on fur trade property rights negated the Speck/Eiseley belief that individualistic land tenure did not come into existence because of externally induced changes to the economy. A significant historical aspect of the process, as identified by Leacock, concerned the basic relations of the production; a development not recognized by Demsetz and Alchian.[17] A tendency towards more selective production (a specialization in trapping beaver) encouraged a re-arrangement of how labour could be organized. A shift from large group hunting of migratory caribou to family trapping of sedentary beaver was necessary. Changes to the social organization of labour processes, and not merely an adjustment to land tenure, are integral to the increase in value of furs and the resulting increasing scale of hunting activity.

The creation of (new) property rights arising out of the fur trade was not as exclusive as Demsetz and Alchian seem to have imaged. Leacock provided several qualifications:

> For instance, the laws of patrilineal inheritance do not supersede band interest. The occurrence of widely separated brothers lands and the lack of any really small holdings attest to the continual readjustment of band lands to fit the needs of band members. Each Indian has a right to trapping lands of his own, and at the request of the chief a band member must give up part of his ground, if necessary, for another's use. There is no material advantage to an individual hunter in claiming more territory than he can personally exploit. Nor is there any prestige attached to holding a sizable territory or any emphasis on building up and preserving the paternal inheritance.[18]

Accordingly, Leacock clarified the character of the property right: "Neither can land be bought or sold. In other words, land has no value as 'real estate' apart from its products. What is involved is more properly a form of usufruct than 'true' ownership."[19] Leacock was careful not to overstate the extent of social-cultural change, and to specifically identify an "exchange value" dynamic to "economic behaviour." She explained:

> My hypothesis is, first, that such private ownership of specific resources as exists has developed in response to the introduction of sale and exchange into Indian economy which accompanied the fur trade and, second, that it was these private rights — specifically to fur-bearing animals — which laid the basis for individually inherited rights to land. The first assumption is supported by the emphasis on rights to the beaver among the Montagnais as well as by the differential protection of individual property where immediate needs are involved as compared to acquisition for sale. For instance, trespass, or socially disapproved encroachment on another's territory, can occur in one case only — when hunting for meat or fur to sell. The concept of trespass as simple physical encroachment on another's land does not exist, nor do berrying, fishing, bark-gathering, or hunting game animals constitute trespass. These products of the land are communally owned in that they can be hunted or gathered anywhere.[20]

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[16] However, Demsetz recognized that other factors can result in the creation of property rights: "I do not mean to assert or to deny that the adjustments in property rights which take place need be the result of a conscious endeavor to cope with new externality problems." Demsetz, "Toward A Theory of Property Rights", p. 350.

[17] Rogers and Leacock summarized the process of fragmentation: "As the Indians became more dependent on the tools, utensils, clothes, and food that they exchanged for pelts, they were faced with the constant choice to remain part of larger groups with more chance to socialize and with greater security in case of poor hunting, accident, or illness; or to spend more time apart in small groups and trap for furs. Individuals and groups made different decisions at different time, but over the years there was an increasing tendency for the lodge-groups to fragment into smaller units for more efficient trapping and to stay at some distance from one another within specific areas that have been called "hunting territories'." Edward S. Rogers & Eleanor Leacock, "Montagnais-Naskapi" in June Helm (volume editor), *Subarctic*, vol. 6 in William S. Sturtevant (Series Editor), *Handbook of North American Indians* (Washington: Smithsonian Institution, 1981) pp. 179–80.

[18] Leacock, "The Montagnais Hunting Territory and the Fur Trade", p. 1.

[19] Leacock, "The Montagnais Hunting Territory and the Fur Trade", pp. 1–2.

[20] Leacock, "The Montagnais Hunting Territory and the Fur Trade", p. 2.

In effect, the spatial boundaries for harvesting food diverged from the territory used to produce for exchange value (fur).[21] And in contrast to the property rights paradigm's selective construction of causality, Leacock cautioned: "There are many contributing factors of greater or lesser importance which must have affected the relative ease and speed with which the hunting territory developed, such as the replacement of wooden traps and deadfalls by far more efficient steel traps ..."[22]

Moreover, Leacock noted the influence of consumption on economic behavior and reasoning:

> The more furs one collects, the more material comforts one can obtain. In contrast to the aboriginal situation, material needs become theoretically limitless. The family group begins to resent intrusions that threaten to limit its take of furs and develops a sense of proprietorship over a certain area, to which it returns year after year for the sake of greater efficiency.[23]

In Leacock's "The Montagnais 'Hunting Territory' and the Fur Trade", fluidity in social group membership and territorial access were noted thoroughly.

Clearly, the social and economic changes that occurred in the Canadian subarctic as a consequence of the fur trade are simplified by the mechanical construct of a property right development premised on the existence of consciousness decisions to internalize the externalities so that gains of the property right will exceed the costs of open access. In fact, in the western Subarctic, not part of Leacock's study of the Montagnais (Innu), the mercantile and monopolistic Hudson's Bay Company (HBC) was instrumental in promoting, with mixed results, conservation measures (i.e., dealing with the harm of an externality). Moreover, as Ray's account of the HBC's conservation schemes in the 19th century demonstrated, attempting to put fur production on a sustainable basis entailed both planning (e.g., maximum production quotas) and property rights (adjusting land tenure arrangements) approaches.[24] Such "mixed economy" methods succeed, but such historical facts are not in accord with the underlying ideology of the property rights paradigm.

RECOGNITION OF THE VALUE OF HISTORICAL RESEARCH ON PROPERTY

The argument for dealing with externalities by adopting more private forms of property has its own economic logic. The fact that early formulation of the property right argument did not have much empirical depth on Indian land tenures in the Canadian fur trade, and thus might seem somewhat deficient as an exemplar, should not constitute a fatal flaw for this line of reasoning; it does, however, suggest that prescriptive paradigms may fall short as contemporary policies if the social/cultural/geographical complexity is reduced to narrow and mechanical reasoning. Significantly, the suggestion by Alchian and Demsetz that "[t]here exist very many property right phenomena that could benefit from thoughtful attention"[25] inspires this comparative interest in the individualization of Indigenous collective property rights, and in particular, a desire to assess the assumption that the creation of property rights is essentially guided by the logic of efficient market integration/formation, unencumbered by the forces of colonialism.

Alchian and Demsetz opened the door to historical causality, stating: "... our purpose here is to facilitate historical research on these problems by clarifying somewhat the content of these questions."[26] They supplied three important

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[21] Leacock, "The Montagnais Hunting Territory and the Fur Trade", p. 7.

[22] Leacock, "The Montagnais Hunting Territory and the Fur Trade", p. 8.

[23] Enhanced consumption possibilities are not at odds with the category "benefit" used by the property rights paradigm, see Leacock, "The Montagnais Hunting Territory and the Fur Trade", p. 7.

[24] See Arthur J. Ray, "Some conservation schemes of the Hudson's Bay Company, 1821–50: An examination of the problems of resource management in the fur trade", *Journal of Historical Geography* 1(1) (1975): 49–68; and Ann M. Carlos & Frank D. Lewis, "Property rights, competition, and depletion in the eighteenth-century Canadian fur trade: the role of the European market", *Canadian Journal of Economics* 32(3) (1999): 705–28.

[25] Alchian & Demsetz, "The Property Right Paradigm", p. 26.

[26] Alchian & Demsetz, "The Property Right Paradigm", p. 17.

issues that afford opportunities for ongoing historical inquiry: "(1) What is the structure of property rights in a society at some point in time? (2) What consequences for social interactions flow from a particular structure of property rights? and, (3) How has this property rights structure come into being?"[27]

In part, they were concerned by the fact that most of the work done on the *origins of capitalism* was produced by the Left.[28] Similarly, they noted that "The identification of private rights with anti-social behavior is a doctrine as mischievous as it is popular" because "contrary to some popular notions, it can be seen that *private* rights can be socially useful precisely because they encourage persons to take account of *social costs*."[29] In other words, justice and efficiency are co-dependent. By suggesting: "A rigorous test of this assertion [gains of internalization is greater the costs of internalization] will require extensive and detailed empirical work,"[30] these proponents of the property rights paradigm acknowledged a need for historical research. The questions that they proposed provide a very good starting point for economic history of Indigenous Peoples.

The specifics of the appropriation of Indigenous lands in the Anglo-American settler realm are seldom appreciated in the scholarly settlement literature. For the individualization case studies, it is important to realize that long-term changes to Indigenous property rights occurred in two stages: first, some recognition of an Indigenous interest in land with some concomitant protection of their collective interests for lands remaining outside of the sphere of evolving settler property relations; and subsequently, considerable further encroachment on the remaining Native collective land interests by the individualization of these lands. The legal and economic aspects of the individualization of Indigenous lands in the past should be of interest to both the theoretical proponents of the property rights paradigm as the path to efficiency and justice, and to those advocates that pursue policies of formally titling lands as a development policy.

LEGAL PROTECTION IN THE FIRST INSTANCE

For a variety of reasons during the colonial era, a free market of exchanges between Indian landowners and White settlers was not the mechanism that created good title. In British North America and New Zealand, the British Crown had to deal with the acquisition of Indigenous lands. Even though the proprietary interest of Indians was generally recognized in British North America, problems emerged from the manner by which early colonists took Indians lands. In 1763, as a result of "great Frauds and Abuses",[31] a Royal Proclamation concerning British North America outlined the means for the Crown to intervene and acquire Indian interests in their hunting grounds.[32] Significantly, the private purchase of Indian lands from Indians was banned, in effect, this proclamation created a pre-emption right for the Crown. For Indians, any benefit from the Crown's responsibility for preventing frauds and abuses came with the cost of dealing with a monopsony. An 1837 report from the UK Parliamentary Select Committee on Aborigines affirmed the intent of the 1763 Proclamation stating "So far as the

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[27] Alchian & Demsetz, "The Property Right Paradigm", p. 17.

[28] In their own words: "It is unfortunate that the study of the underpinnings of capitalism has been left by default to its critics on the left." Alchian & Demsetz, "The Property Right Paradigm", p. 16.

[29] Alchian & Demsetz, "The Property Right Paradigm", p. 24.

[30] Demsetz, "Toward A Theory of Property Rights", p. 350.

[31] Kings Court, *By the King a Proclamation* (7 October 1763), (Kings Printer, 1763). The Royal Proclamation of 1763, aspects of which remained as policy of the American republic after 1783, established some aspects concerning the concept of Indian Title. In what remained of British North America after 1783, the categories unceded Indian Territories or Indian hunting grounds was used to identify land outside of the sphere of settlement. Until 1930, and throughout much of the Canada, the federal government took responsibility for a treaty process that sought an extinguishment of Indian title. By and large this policy was not pursued in British Columbia, Quebec, and the far north, and consequently, in the 1970s a political and legal struggles for land rights emerges.

[32] The political/legal concept of the Crown does not apply to US state after 1783. Concerning the legal and economic significance of the Royal Proclamation of 1763, the purchase of lands prior to that proclamation, and the continuation of the government's exclusive right to purchase Indian lands after 1776; see Stuart Banner, *How The Indians Lost Their Land: Law and Power on the Frontier* (Belknap Press of Harvard University, 2005) pp. 85–111.

lands of the Aborigines are within any territories over which the dominion of the Crown extends, the acquisition of them by Her Majesty's subjects, upon any title of purchase, grant or otherwise, from their present proprietors, should be declared *illegal and void*."[33] Even with a strong sense of property rights and the rule of law emanating from the metropolis, the emergence of land markets in regions of White settlement necessitated the circumvention of some protectionist intentions concerning Indigenous interests in territory.

THE CONVERSION OF COLLECTIVE INDIGENOUS LAND HOLDINGS TO INDIVIDUAL TRANSFERABLE TITLES

Although the schemes and procedures for individualizing the collective land interests of the US Indians and the Métis of western Canada took different forms, the outcomes were similar in that economic growth did not ensue.

Allotment of Reservation Lands in the United States

Treaty processes, in both Canada and the United States, were employed to appropriate Indian lands by government acquisition of the "Indian Title."[34] In the American mid-west, sizable lands were set aside as tribal reservations. A policy, known as *allotment*, given force and implemented by the Dawes Act, 1887, under the guise of civilizing Indians, allotted individual private property rights and sold the remaining (i.e., "surplus") reservation lands. The breaking up of reservations, by individual allotment and sale was designed ostensibly to promote Indian agriculture, self-sufficiency, political and cultural assimilation, and to terminate the wardship status of American Indians by breaking the collectivism of the tribal system.[35] The Dawes Act proponents, according to economic historian Carlson "had an almost mystical faith in the power of private property to promote the assimilation of Indians into white society" and that increased Indian agriculture would follow from the security of land titles.[36] In the Oklahoma Territory, where a large concentration of Indians who had been removed from their tribal territories east of the Mississippi River, a similar process of individualizing and alienated tribal lands occurred.[37]

The Allotment system awarded immediately an allotment of the collective interest to the reservation, a tribal homeland, to individuals. Initially, a Head of Family was to receive 160 acres, single adults or orphaned children 80 acres each; and other children 40 acres.[38] This sort of titling exercise also required the legal division of the reservation by survey. These grants were eventually converted to fee simple by a patent

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[33] Great Britain, Parliament, House of Commons, *Select Committee on Aborigines (British Settlements) with Minutes of evidence, appendix and index* (London: House of Commons, 1837), p. 78 [emphasis added]. The humanitarian ideology of the era purported that authority over Natives should lie solely with the Colonial Office, executive office of the global British Empire, see R. Cole Harris, *Making Native Space: Colonialism, Resistance, and Reserves in British Columbia* (Vancouver: University of British Columbia Press, 2002) pp. 3–16.

[34] The treaty process and the modern day costs of the claims process, and the benefits provided by both historical treaties and modern land claim settlements in Canada, must be regarded as significant transaction costs by the property rights paradigm. For a comparison of historical treaties and modern land claims see, Peter J. Usher, Frank J. Tough & Robert M. Galois, "Reclaiming the Land: Aboriginal Title, Treaty Rights and Land Claims in Canada", *Applied Geography* 12(2) (1992): 109–32.

[35] On the thinking associated with the justification of allotment policies, see Wilcomb E. Washburn, *The Assault on Indian Tribalism: The General Allotment Law (Dawes Act) of 1887* (Philadelphia: J.B. Lippincott, 1975). For an economic history to allotment, see Leonard A Carlson, *Indians, Bureaucrats, and Land: The Dawes Act and the Decline of Indian Farming* (Westport: Greenwood Press, 1981).

[36] Leonard A. Carlson, "Federal Policy and Indian Land: Economic Interests in the Sale of Indian Allotments, 1900–1934", *Agricultural History* 57(1) (1983): 35.

[37] The Dawes Act, 1887 did not include the Indians of Oklahoma, nonetheless a somewhat coercive process was pursued. Treaties and a unified resistance to allotment prevented the unilateral enforcement of the Dawes Act. Congress ordered surveys in 1895 and compilations of membership rolls in 1896 but the tribes held off negotiations until the Curtis Act, 1898 (Act terminating tribal rights). It should be noted that the Creeks, Cherokees, and Choctaw-Chicasaw tribes were able to secure mineral rights through these negotiations. See Angie Debo, *And Still the Waters Run, The Betrayal of the Five Civilized Tribes* (Princeton University Press, 1972, original 1940) pp. 3, 35.

[38] However, in 1891, the allocation was modified: all adults received 80 acres of agricultural land or 160 acres of grazing land, see Banner, *How The Indians Lost Their Land*, p. 276; and Delos Sacket Otis, *The Dawes Act and the Allotment of Indian Lands*, Francis Paul Prucha, ed. (Norman University of Oklahoma Press, 1973, original 1934) pp. 6–7.

from the federal government.[39] The right to own reservation lands in severalty was not sought by Indians, in fact, the allotment policy was resisted, but noncompliance was not an option. If individual Indians would not select an allotment within four years, the Secretary of the Interior Department would impose a selection.

The original design of the US allotment scheme restricted the transferability of individual land interests. The transition from common reservation lands to full fee simple ownership, (the ability to lease, sell, bequeath, etc.) was not intended to be immediate. A federal land patent (proof of legal title) did not accompany the initial allotment of individual parcels of land, but parcels were held in trust by the federal government for the Indian allottees. So while a grant was made, it was encumbered by a 25-year transition period that restricted the sale of the allotments. The restrictions on transferability and alienation, based on trust/ward ship status of Indians, were intended to allow time for individual Indians to appreciate the value of property and to improve the lands by investing their labour. However, the changing conditions governing the alienability of individual allotments during the trust period would determine the amount of reservation land available to satisfy the impulses of demand. The Dawes Act was amended in 1902 to allow, with official approval, heirs and the guardians of minors to sell or lease allotments whether or not the trust period had expired.[40] Effectively, the trust period was terminated with the Burke Act of 1906.[41] "Competent" Indians could obtain patents to their allotments, and later, the allotments of incompetent Indians could be sold with the proceeds going to the benefit of the allottee. In 1919, half-blood and quarter-blood Indians were given "full and complete control of all their property."[42] Since discretion about when the allotments owned by particular individuals could be conveyed was largely left up to local Indian agents,[43] the erosion of the trust period was responsive to local land market demands.

Métis Entitlements in Western Canada

In Canada and the United States, governments had more land than cash, and certificates promising a parcel of land were a ready means to pay for an assortment of services and claims.[44] These promissory certificates might be variously referred to as, bounty, warrants, or scrip and commonly provided a potential grant of a surveyed, but unimproved parcel of land. Regardless, these paper grants were an institutional innovation of colonial property relations. Such entitlements could be converted into a fee simple title by a letter patent. Often these paper entitlements were dispensed as a form of remuneration, especially for military services. Warrant/bounty/scrip entitlement schemes were attractive to speculators because the potential value of the land could be discounted, and consequently, administrator efforts to prevent or regulate assignment were often frustrated.[45]

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[39] It is tempting to refer to the process of individualizing tenures as titling, since in the case of the US allotment policy, a patent (i.e., legal title) to a parcel of land was issued. However, titling often refers to recognition of an existing use or "ownership".

[40] Banner, *How The Indians Lost Their Land*, p. 281.

[41] For details, see Banner, *How The Indians Lost Their Land*, p. 282.

[42] Rule 1 of Commissioner Sells Six Rules for the Guidance of Indian Employees as cited by Jay P. Kinney, *A Continent Lost—A Civilization Won: Indian Land Tenure in America* (John Hopkins Press, 1937) p. 292.

[43] Banner, *How The Indians Lost Their Land*, p. 282.

[44] In 1776, the US Congress decided to raise an army by promising land bounties as remuneration, a precedent for other wars up to 1855, and by 1907, some 68.2 million acres of public lands were allocated as bounty land warrants, see Benjamin H. Hibbard, *A History of the Public Lands Policies* (New York: Peter Smith, 1939, original 1924) p. 132; Payson J. Threat, *The National Land System, 1785–1820* (New York: Russell & Russell, 1967, original 1910); and Rudolf Freund, "Military Bounty Lands and the Origins of the Public Domain", *Agricultural History* 20(1) (1946): 8–18. In the old Province of Canada, scrip was issued to the children of the United Empire Loyalists and the militia, see Lillian F. Gates, *Land Policies of Upper Canada* (Toronto: University of Toronto Press, 1968) pp. 282–83. Later (ca. 1870–1930), Canada provided bounty warrants for military campaigns (Red River in 1870, the Northwest in 1885 and South African War Volunteers 1899–1902), and the North West Mounted Police; and scrip for the Original White Settlers, commutation of hay lands and colonization, as well as, land and money scrip to the Métis of Manitoba and the Northwest Territories.

[45] For a positive interpretation of speculation in this era, see Douglass C. North, *Growth and Welfare in the American Past: A New Economic History* (Englewood, NJ: Prentice-Hall, 1966) pp. 122–36.

The Métis are strongly associated with the fur trade, an industry that encouraged the development of a New Peoples through the mixing of Indian women and European traders. However, these people were not simply a random mixed-blood population, but they asserted a national identity and are recognized as one of the Aboriginal Peoples of Canada.[46] Section 31 of the *Manitoba Act*, *1870* recognized the Indian title of the Métis residing in the Province of Manitoba and promised a land grant of 1.4 million acres. Children of Manitoba Métis were granted individual patents to real estate in the amount of 240 acres, and as a parallel process, adults were granted money scrip that could be exchanged for Dominion Lands.[47]

After some uncertainty, the Department of the Interior created a scrip claims process in 1885 for individual Métis residing in the Northwest Territories. The question of Indian title for Métis residing outside of Manitoba was addressed by the *Dominion Lands Act*, *1879* and approximately 5.4 million acres of land (ca. 1875–1925) was granted under the authority of the *Manitoba Act* or *Dominion Lands Act*. The Canadian government's approach to the Métis entailed individual entitlement grants to both adults and children.[48]

Essentially, scrip was a coupon, issued to individual claimants/grantees, that could be redeemed either directly for *homestead lands* (i.e., 160 acres of *land scrip* could obtain 160 acres of land) or *money scrip* could be used to purchase the same lands. However, as the price of homestead lands increased beyond one dollar per/acre, land scrip became more valuable to scrip buyers. With the onset of rapid settlement of western Canada following the end of the long recession (ca. 1897), the development of a land market was reflected in a sharp increase in land scrip issued relative to money scrip.

The process for converting a Métis claim for land scrip into a grant of fee-simple title was rather complicated and rarely involved the Métis grantee.[49] Numerous Orders in Councils authorized Commissions to take claims and officials to manage the process. Commissioners travelled to Northwest Métis communities, trading posts and missions, held sittings and took statutory declarations. Claimants identified themselves as Halfbreeds which officials understood to simply mean the presence of both White and Indian blood. Documents moved between local land offices, banks, law offices and the Lands Patent Branch in Ottawa. Significantly, the coupons were seldom delivered to the Métis grantees.[50]

With respect to land scrip, the grantee had to be present in the Dominion Land Office to locate their scrip, that is, apply their entitlement of a scrip coupon to a legally defined parcel of land. The interest in the land located with scrip could be transferred or conveyed prior to the issuing of a patent. However, the *Rule of Location* required that only after the scrip had been located, in effect, payment for the land, could

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[46] According to the Métis National Council the definition of Métis is: "a person who self-identifies as Métis, is distinct from other Aboriginal Peoples, is of historic Métis Nation Ancestry, and is accepted by the Métis Nation"; see <http://www.metisnation.ca/>.

[47] For a discussion on Manitoba Métis Claims derived from the *Manitoba Act* 1870, see Frank Tough & Véronique Boisvert. "'I am a half-breed head of a family ...': A Database Approach to Affidavits Completed by the Métis of Manitoba, ca. 1875–1877", in Denis Gagnon, Denis Combet & Lise Gaboury-Diallo (Eds.), *Histoires et identitiés métisses: hommage a Gabriel Dumont/Métis Histories and Identities: A Tribute to Gabriel Dumont* (Winnipeg: Presses Universitaires de Saint-Boniface, 2009) pp. 141–84. Note "Public Lands" were referred to as Dominion Lands in the Canadian Northwest and were administrated by the Department of the Interior, an agency of the federal government. Canada implemented a township survey system and homestead policies modeled after US Public Lands policies.

[48] It should be appreciated that scrip entitlements were subject to cutoff dates. For the *Manitoba Act* and Halfbreed scrip issued between 1885 and 1889, applicants had to be born before 15 July 1870.

[49] For details on the scrip process see, Frank Tough, "'Terms and Conditions as May Be Deemed Expedient': Metis Aboriginal Title", and "Appendix C: Some Land Scrip Intricacies", in *"As Their Natural Resources Fail": Native Peoples and the Economic History of Northern Manitoba, 1870–1939* (Vancouver: University of British Columbian Press, 1996) pp. 114–42 and 321–33; Frank J. Tough & Erin McGregor, "'The Rights to the Land May Be Transferred': Archival Records as Colonial Text — A Narrative of Métis Scrip", in Paul W. DePasquale (Ed.), *Natives and Settlers, Now and Then: Historical Issues on Treaties and Land Claims in Canada* (Edmonton, University of Alberta Press, 2007) pp. 33–63.

[50] For one region, only 17 (1.7 percent) coupons of a sample of 1015 were delivered to the grantees. Library and Archives Canada, Public Records of the Department of the Interior, Record Group 15, vols. 1518–1520, Delivery Registers (hereafter LAC, RG15).

the interest in the land be assigned to a third party. Land scrip was especially useful in allowing settlers to circumvent onerous homestead regulations, that had been designed to prevent speculation and to award land to *bona fide* settlers.[51]

In the case of land scrip, the question of sharp dealings largely rests on the question of compliance with the Rule of Location. Several sources suggest that few grantees actually went to Dominion Land Offices to locate and then assign scrip.[52] W.P. Fillmore, who purchased scrip certificates in Northwest Saskatchewan during the 1906 treaty process as a student of law, readily observed the speculative interest in scrip. He immediately recognized the logistical problem of how scrip buyers would obtain the title (patent) without the involvement of scrip grantees, since "It would have been a matter of considerable difficulty to go north and find the person named in the scrip and bring him out to the Land Office."[53] Fillmore explained how buyers located a scrip coupon with the intention of obtaining a patent: "... I was told that the practice was for the holder of a scrip to pick out some local Indian or half-breed and take him to the Dominion Land Office and present him to the person named in the scrip. The holder of the scrip, pretending to be the agent of the half-breed, would designate the land. The patent to this land would then be issued, and the scrip holder would then have to get title."[54] Such a practice, entailing forgery, impersonation, suborning of perjury was at odds with the *Criminal Code of Canada*.[55] Due to these sharp dealings, some Métis sought remedies by making demands upon legal and political systems.

With respect to impersonation, the unsuccessful legal efforts of Antoine and Joseph L'Hirondelle petitioning for compensation for the loss of their coupons generated a number of archival records that challenge the view that the conversion of Métis land scrip into land was legal.[56] In correspondence to Minister of Justice C.J. Doherty, their lawyer E.B. Edwards advised: "The circumstances clearly show that the scrip has not come into the hands of the Crown in due course but, on the contrary, *through a course of fraud and forgery and personation*."[57] Because of a possible appeal in this case, the Justice Department contacted their legal representative, H.L. Landry, who had successfully fended off the claims of L'Hirondelles at trial, nevertheless, he advised candidly on the risk of an appeal: "I might personally say that should the suppliants in this case succeed before the Supreme Court of Canada, there would be not only hundreds, but thousands of cases of a similar nature brought at once if fiats [decrees] were given, as there is no doubt that there were more *forgeries and impersonations in scrip* cases in Western Canada than you can even realize."[58] Not surprisingly, a Justice Department legal opinion recommended to the Minister a quieting of the appeal by the L'Hirondelles, stating: "... the subsequent dealing with the scrip was admittedly tainted with fraud" while pointing out "that many similar claims might be presented if the suppliants succeed on appeal."[59]

Following a successful complaint against Edmonton merchant, land speculator, and well known scrip-buyer, Richard Secord, concerning the forgery and suborning impersonation of a grantee, the *Criminal Code of Canada* was amended by Parliament so as to place a three year limitation on the prosecution of scrip

[51] Kevin MacLennan, "For the 'Purposes of the Dominion': Métis Entitlement and Regulatory Regime of Half-breed Scrip" (BA Honors Thesis, University of Alberta, 2002).

[52] Based on a regional sample of 742 land scrip coupons, 725 were assigned to third parties and 3 were patented to the grantee. Some cases were unredeemed or missing. LAC, RG15, vols. 1539–1550, location registers.

[53] William P. Fillmore, "Half-breed Scrip", *Manitoba Bar News* 3(2) (1973): 128.

[54] Fillmore, "Half-breed Scrip", p. 128.

[55] Canada, *Criminal Code of Canada*, Revised Statutes of Canada, 1906, chapter 146, s. 408, s. 468, s. 469.

[56] *L'Hirondelle (Antoine) v. The King* [1916] 16 Exchequer Court of Canada Reports, pp. 193–98.

[57] LAC, RG15, vol. 865, file 724372, Edwards to Doherty (11 August 1916), [emphasis added].

[58] LAC, RG15, vol. 865, file 724372, Landry to Deputy Minister of Justice (23 August 1916), [emphasis added].

[59] LAC, Public Records of the Department of Justice, RG13, vol. 2507, file C391, Memorandum, Plaxton to Minister of Justice (15 November 1916).

frauds.[60] Secord's charges were dropped. Eventually, the rationale supporting this controversial enactment surfaced. A memorandum from Parliamentary Counsel Francis Gisborne stated:

> The object of the clause is to provide a prescription of three years with respect to any offence relating to the location of land issued by half-breed script [*sic*]. It is urged that there were a good many irregularities amounting to fraud and perjury in connection with the location of these lands, and parties are raking up these *frauds for the purpose of blackmailing*. If this clause passes any such prosecution would be proscribed as the offences were committed a long time ago.[61]

Apparently, the impersonation of grantees was less of a concern than the purported blackmailing of scrip buyers who benefited from forgery, fraud and impersonation. Certain progressive Members of Parliament opposed the sanctioning of scrip fraud. Consequently, the problem of the fraudulent acquisition of lands through Métis scrip was again forced upon Justice Department officials. With respect to the de-criminalization of scrip frauds, a legal opinion from the Justice Department acknowledged:

> It appears that the scrip was handed to the half-breeds by the agent of the Indian Department and it was then purchased, for small sums of course, by speculators. However, the half-breed himself was required by the Department of the Interior to appear in person at the office of the land agent and select his land and hand over the scrip. In order to get over this difficulty the speculator would employ the half-breed to impersonate the breed entitled to the scrip. *This practice appears to have been very widely indulged in at one time*.
>
> *The practice was winked at evidently at the time and the offences were very numerous*. The transactions are ancient history now and the Department considered that it would be in the best interests of all to pass this section in a way of general amnesty. A substantial reason also exists probably in the fact that a conviction would throw a cloud upon the title to lands which may have passed through the hands of innocent purchasers for value in the meantime.[62]

Senior Justice Department officials and the Minister of Justice were aware that grantees did not locate the land, and consequently, the subsequent assignment of the property interests, obtained by locating scrip, had to be forged as well. The Justice Department's support for an amnesty concerning scrip frauds displayed little concern for the Métis. At the very least, the alienation of scrip interests in land, intended as compensation for the loss of Indian title, was tainted by sharp dealings and concomitantly, the possible disruption of colonial property relations (a cloud upon the title) was a larger concern.

SOME OUTCOMES FROM THE CREATION OF THE TRANSFERABLE INDIVIDUAL RIGHTS IN PROPERTY

Generally, historians in the field of Native history do not employ economic concepts to examine the underlying dynamics of the process that created new property rights for Indians and the ensuing outcomes. In contrast, Carlson's quantitative approach to the US allotment process demonstrated that external economic interests shaped federal policy.[63] In *Indians, Bureaucrats, and Land*, he tested a demand model for allotment and found that the Office of Indian Affairs "chose reservations for allotment as a direct response to the interests of whites who wanted to develop reservation lands" and that substantial benefits were gained by non-Indians.[64] To elaborate: "... that reservations were

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[60] Specifically, the amendment limited prosecution for "any offence relating to or arising out of the location of land which was paid for in whole or in part by script [*sic*] or was granted upon certificates issued to half-breeds in connection with the extinguishment of Indian titles. Copy found in LAC, RG15, vol. 2113, Criminal Code, Location of Halfbreed Scrip.

[61] Nearly a year after the adoption of this amendment to the Criminal Code, Sir James Lougheed read this copy into the record, see Canada, *Debates of the Senate of the Dominion of Canada* (Ottawa: Kings Printer, 1922), [21 June 1922], p. 500.

[62] LAC, RG13, vol. 2170, file 1853, legal opinion (14 October 1921) [emphasis added].

[63] Carlson, *Indians, Bureaucrats, and Land*, p. 67.

[64] Carlson, *Indians, Bureaucrats, and Land*, p. 166.

chosen for allotment when the land become sufficiently attractive to white settlers to warrant the cost of allotment. The first reservations to be allotted were those in the most developed and fertile lands in the eastern Great plains and the Pacific Northwest while reservations in the remote locations were not allotted until higher prices expanded transportation facilities made these sufficiently attractive to white settlers."[65] The capacity of Indians to take advantage of a new property arrangement did not influence the timing of the allotting of particular reservations. In effect, the practice of the allotment policies had less to do with providing the opportunity for Indians to benefit from the experience of private property, than to satisfy the land demands of White settlers.

Carlson demonstrate that the anti-tribal mandate of the Office of Indian Affairs was reconciled with the interests of settlers and speculators, and consequently, the sale of allotted Indian lands coincided with benefits to the purchaser.[66] His economic interest model anticipated that the land patent rules would be interpreted to permit Indian allotters to sell their patented land when benefits deriving from land to non-Indian purchasers increased. With increases in the parity prices for agricultural products, benefits to farmers would accrue from the purchase of additional lands. Carlson considered whether the Office of Indian Affairs would make more Indian available for sale as a response to potential net benefits.[67] A regression analysis of lagged price parity ratio convincingly explained year-to-year changes in the volumes of land sales.[68] The First World War stimulated demand for US agriculture production and in turn, a demand for Indian lands, according to Carlson: "Not only were whites more eager to buy Indian land during periods of high agricultural prices, Indians would have been more eager to sell their land then as well."[69] Prices played a decisive role in moving lands from the domain of a tribal reservation to the realm of settler and market behaviour shaped the outcome of the allotment scheme. The fact that patented allotted land were sold during periods of high prices was not inconsistent with the trustee role of the federal government, however, more patents (a necessary precursor to sale) were issued during years of high prices and as Carlson suggested: "It is hard to imagine that many more Indians were suddenly able to manage their own affairs in the years 1917–1920 than had been ready to do so in 1916."[70] Carlson's conclusion that Indian policy was shaped by the benefits that Whites would receive, rather than serving the interests of the Indians was a significant finding and relevant to the dispossession of Indigenous peoples by White settler societies.

Not surprisingly, land fragmentation occurred with the division of allotments by heirs. Banner provided an example of uneconomic fragmentation: in the mid-20th century a parcel of land worth $8,000 had 439 shares, and a third were receiving a nickel in annual rent.[71] With the intricacies of fee-simple ownership (i.e., disposing of patented allotted lands owned by Indians), Banner commented on other opportunities that developed: "Some of the predators were lawyers, who discovered they could exploit the Indians' unfamiliarity with the American legal system. ... charging exorbitant fees for the simplest of tasks."[72] These particular property rights were accompanied by rules of law unfamiliar to the owners of the patented lands. Economic theory might suggest that a situation of asymmetrical information between buyers and sellers existed. The outcome of the alienation of reservation title in the US included: a decline in Indian land ownership with a concomitant transfer of lands to White interests, as well as a decline in

65 Carlson, "Federal Policy and Indian Land", p. 38.

66 Carlson, "Federal Policy and Indian Land", p. 37.

67 Carlson, "Federal Policy and Indian Land", p. 38.

68 The agricultural price parity ratio of an index of farm product prices received by farmers and index of operating expense and living costs paid by farmers, see Carlson, "Federal Policy and Indian Land", pp. 40–43.

69 Carlson, "Federal Policy and Indian Land", p. 43.

70 Carlson, "Federal Policy and Indian Land", p. 44.

71 Banner, *How The Indians Lost Their Land*, p. 285.

72 Banner, *How The Indians Lost Their Land*, pp. 284–85.

Indian agriculture.[73] Notwithstanding, the large number of scrip coupons that were issued to claimants, the Métis were left with neither an individual nor collective land base. From its inception, the Métis scrip system was something of sham.

CONCLUSION: SOME IMPLICATIONS FROM THE HISTORY OF PROPERTY FOR INDIGENOUS PEOPLES

Before summarizing and concluding, consideration of one additional archival source is required. After the newly appointed Lieutenant-Governor of Manitoba Archibald had worked out a land policy concerning the Métis or Halfbreed grant of 1.4 million acres in 1870, he advised the Minister in Ottawa:

> The whole tendency of Modern Legislation, not only on this side of the Atlantic, but beyond it, is to strike off the fetters which clog the free traffic in land. There is no state in the Union, and no Province in the Confederation, so far as I know, that has not abolished "Estates Tail."
>
> All the tendency of Modern Legislation is in the line of abandoning the feudal ideas respecting lands and bringing Real Estate more and more to the condition of personal property and abolishing restraints and impediments on its free use and transmission.
>
> It does not seem to me that it would be wise in the case of Manitoba to reserve a Policy approved by the *common sense of the world*, and in accord with the habits and thoughts of modern life.[74]

Enthusiasm for unregulated markets as a universal, common sense is not a recent sentiment.

The consequences for the Métis were anticipated by Archibald:

> So far as the advance and settlement of the Country is concerned, it would be infinitely better to give a Half-breed a title in fee to his lot. He might make a bad use of it — in many cases he would do so. He might sell it for a trifle. He might misuse the proceeds. Still the land would remain, and in passing from the hands of a man who did not know how to keep it, to those of one who had money to buy it, the probabilities are all in favor of the purchaser being the most thrifty and industrious of the two, and the most likely to turn lands to valuable account. Suppose, therefore, the worst to happen that can happen — suppose the men for whose benefit the land was intended should not know how to value the boon conferred, still the land would find its way into the hands of other settlers. It would be cultivated and improved. One individual might take the place of another; thrift might come into the place of improvidence; but the country would be no loser by any number of such changes. It is by just such movements that a hamlet, or village, or town grows up, and if they were prevented by the interposition of artificial barriers, these would really operate as a premium on thriftlessness and negligence. My strong conviction, therefore, is that whatever is given under the half-breed clause should be given absolutely.[75]

By making this grant, based on a need to deal with Indian title, alienable by those that were entitled to a share of the 1.4 million acres, lands would be improved because the thrifty and industrious would replace those that did not know how to value or keep it. Again Archibald:

> Those who do not occupy, deriving no benefit from the ownership, will, as a class, be ready to convert their land into something can use and *will be sure to sell*.[76]

Here the rules governing a constitutionally protected Métis land grant were designed to ensure absolute and individual ownership of the Métis grant so that a dispossession of whole people could be carried out by thousands of small, individual transactions. The Métis, had been an energetic and essential component of the mer-

[73] This outcome was established by Carlson, *Indians, Bureaucrats, and Land*, pp. 133–63.

[74] LAC, RG15, vol. 236, file 7220, Archibald to Howe (27 December 1870).

[75] LAC, RG15, vol. 236, file 7220, Archibald to Howe (27 December 1870), [emphasis added].

[76] LAC, RG15, vol. 236, file 7220, Archibald to Howe (27 December 1870), [emphasis added].

cantile fur trade, but became a "road allowance people" and they later referred to themselves as a "Forgotten People."[77]

Lieutenant-Governor Archibald's rational for dispossession (free use and transmission, improvements, thrift, industry, inducements to sell) is congruent with the property rights paradigm. Decades ago, Demsetz asserted: "... it is essential to note that the valuation power of the institution of property is most effective when it is most *private*."[78] Can dispossession, even if carried out in clear violation of the colonizers own rules, be posited an acceptable cost of economic growth? Demsetz also concluded: "If a net increase in the total value of property follows a change in the mix of rights, the change should be allowed if we seek to maximize wealth",[79] because "Not to allow the change would be to refuse to generate a surplus of value sufficient to compensate those harmed by the change. The process of calculating the net change in value will, of course, involve the taking into account of side effects ..."[80] In other words, private property tenures generate the most value, and by this rationale, the restrictions on alienation of Indian lands need to be changed.

While something of an argument can be made to demonstrate that the economic growth of White settler societies rested on such property arrangements, the same cannot be said for Indigenous Peoples. The predicted causal paths between economic performance and efficiency gained by reducing transaction costs concomitant with the advancement of individual property rights are not apparent in the historical experiences of US allotments and Métis scrip. For these peoples, externally devised institutions of private property for the enjoyment of individuals did not initiate "sustained economic growth",[81] instead even more of their lands were attained by settlers.

In these brief case studies, the individualization of land ownership was less about creating efficiency (internalizing externalities) as about a massive appropriation of lands, dispossession if you will, by clearing away collective ownership and usufruct customs to promote settlement. These lands were then allocated to White settlers. Moreover, it seems hard to infer these from historical experiences that the mere titling of individual property interests will be a panacea for economic growth and development. Inspired by De Soto's *The Mystery of Capital*,[82] bold propositions to knock down the Indian Act and bring market discipline to communities; as well, new revenues will be generated from Canadian Indian reserves are just some of the promised outcomes of individualized property rights.[83] Flanagan, Alcantara and Le Dressay explained: "We support making available, to those First Nations who are interested, the same property-rights tools that have made economic advancement possible for other Canadians."[84] The purported successes of the private titling of land in the Global South has been cycled back by Flanagan, Alcantara, and Le Dressay as an antidote for dealing with Indian Act inefficiencies and as a means to mobilize the "Dead Capital" of reserve lands and resources.

Hernando de Soto's argument about titling Third Word land parcels has been used as policy

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77 For meaning of the designation Road Allowance People, see, John Weinstein, *Quite Revolution West: The Rebirth of Métis Nationalism* (Calgary: Fifth House, 2007) pp. 20, 22, 64–65.

78 Demsetz, "The Exchange and Enforcement of Property Rights", p. 19, [emphasis in original].

79 Demsetz, "The Exchange and Enforcement of Property Rights", p. 19.

80 Demsetz, "The Exchange and Enforcement of Property Rights", p. 19. To a certain degree, modern claims processes entertain the costs of dispossession.

81 The case for individual property rights increasing "the productivity of society" is made by Douglass C. North & Robert Paul Thomas, "An Economic Theory of the Growth of the Western World", *The Economic History Review*, New Series, 23(1) (1970): 1–17.

82 Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West but Fails Everywhere Else* (New York: Basic Books, 2000).

83 Tom Flanagan, Christopher Alcantara & André Le Dressay, *Beyond the Indian Act: Restoring Aboriginal Property Rights* (Montréal: McGill-Queen's University Press, 2010).

84 Flanagan et al., *Beyond the Indian Act*, p. 54. A succinct account of the history of US allotment of reservations under the Dawes Act, which they regard as a failed experiment, demonstrated an awareness of historical property issues. Flanagan et al., *Beyond the Indian Act*, pp. 42–54.

prototype for First Nations reserves in Canada by Flanagan, Alcantara and Le Dressay in *Beyond the Indian Act*, but de Soto's argument has a strong resemblance to much of the institutional economics literature and the emphasis that Demsetz had placed on individual property rights, but if one drills down, the Demsetz/Alchian property rights paradigm can be traced back to Eleanor Leacock's study of changes to land tenures as a consequence of the fur trade. With some irony then, the historical case of the subarctic hunting territories, even if selectively assimilated, seems to have inspired Demsetz's theory of private property as an institution that simply generates good due to the internalization of externalities.

In opposition to reductionist constructs, Reinert asserted: "Property rights per se were not responsible for either capitalism or economic growth; it was an institution created by a certain production system in order to make it function better" and in response to over-generalizations about the historical importance of property rights claims, Reinert argued: "The mode of production of the Venetians — in contrast to the mode of production of hunters and gathers — brought with it the need for the regulation of property rights."[85] The cases concerning the allotment of US Indian reservation lands and Métis scrip coupons should demonstrate that the individualization of collective interests were not simply regrettable, risky historical experiences, but also, suggest that the artificial allocation of property rights will result in dispossession not development.

[85] Reinert, *How Rich Countries Got Rich*, p. 220.

LAND MANAGEMENT ON INDIVIDUALLY HELD LANDS UNDER THE INDIAN ACT RESERVE LAND TENURE SYSTEM
Experiences from the Penticton Indian Band

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ABSTRACT

This paper is based on case study research with the Penticton Indian Band (PIB) that examined the land management implications of individual landholdings (Certificates of Possession, CPs) on First Nations reserves under the Indian Act, both historically and today. We summarize the history of the landholdings system on PIB's main reserve and report on how CPs impact PIB's contemporary local land management. We also discuss PIB's efforts to adapt its land tenure and management systems locally while continuing to operate within the overall land management framework of the Indian Act; efforts that make PIB's experiences particularly interesting for other First Nations and their land managers, federal officials and policy makers, and researchers. Our objective in this paper is to complement and broaden existing research on CPs by focusing on land management challenges from PIB's experiences.

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1. INTRODUCTION

Societies around the world have rules and arrangements for holding, using, and transferring land. These "land tenure" rules determine how individuals, groups, communities, and others access and use land and other land-based natural resources. A community or geographical area may contain several types of land tenure, such as private land ownership, leases, mortgages, common property, and state ownership (Bruce 1998: 1; Dekker 2003: 209). A land tenure system describes all of these land tenure rules as well as responsibilities accompanying them and the institutions that govern land tenure arrangements. Land tenure systems can be enshrined in formal law or created by informal, local practices and agreements, or a mix of both. Land tenure systems exert powerful influences and constraints on use and management of land and resources, as well as social outcomes such as distribution of benefits from land.

Across Canada, there are pockets of land that operate under a land tenure system different from surrounding lands. The Canadian *Indian Act* (R.S.C. 1985, c. I-5) establishes a unique land tenure system for First Nations reserves,[1] areas of land held by the federal government for the collective use and benefit of an Indian Band, as defined pursuant to section 2 of the *Indian Act*.[2] Since 1869 Bands have had the option to officially allot and federally register parcels of land to individual Band members, effectively creating a limited form of private property on reserves (Alcantara 2003: 401). These holdings are legally referred to as "lawful possessions" and are evidenced by "Certificates of Possession," and are locally called CPs, CP lands, or Locatee lands. Although the majority of reserves today have no CPs, where they do exist they have become an influential part of the community fabric and local land management.

There is a surprising lack of published research concerning the history, impacts, and practical implications of land tenure systems on reserves in Canada (Alcantara 2003; Baxter & Trebilcock 2009; Egan & Place 2013; Hibbard, Lane & Rasmussen 2008). Particularly lacking is empirical research on the CP system and its implications for land management, including land use planning. There is also need for research that gives voice to local land management experiences and perspectives of First Nations communities and individuals themselves.

This paper is based upon a detailed, local-level case study of individual landholdings under the *Indian Act*, historically and today, undertaken in partnership with the Penticton Indian Band (PIB) (Brinkhurst 2013). Here, we summarize the history of the landholdings system on PIB's main reserve and report on how CPs impact PIB's contemporary local land management. We also discuss PIB's efforts to adapt its land tenure and management systems locally while continuing to operate within the overall lands management framework of the *Indian Act*; efforts which make PIB's experiences particularly interesting for other First Nations and their land managers, federal officials and policy makers, and researchers.

2. CONTEXT

2.1. *Indian Act* Land Tenure and Management System

The *Indian Act* and federal policy determine the formal components of the CP system, and reserve land management more generally (except for reserves that operate under alternative arrangements, such as self-government agreements, modern treaties, or Land Codes created under the *First Nations Land Management Act*). By law, CPs are permanent, transferrable, inheritable, and saleable to other Band members (*Indian Act*, s. 20). CP lands can be leased to Band members or non-Band members. To be officially recognized, land transactions involving CPs require federal approval (*Indian Act*, s. 20; Yuen 2009). In contrast, Band Council or general Band approval of a CP land transaction is only required if it involves a lease or a permit longer than 49 years, or in some cases if there are issues with lot access or servicing. While a

[1] Some Reserves operate under alternative arrangements, such as self-government agreements or modern treaties, but these are the minority.

[2] Section 2(1) "band" means a body of Indians (a) for whose use and benefit in common, lands, the legal title to which is vested in Her Majesty, have been set apart before, on or after September 4, 1951.

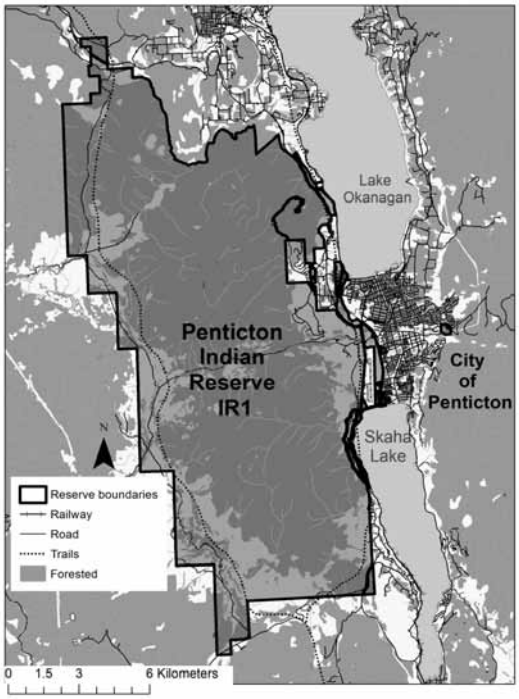
Band Council cannot otherwise independently veto a lease of a CP (Alcantara 2003: 414; INAC 2005: 50), it is currently federal policy to only authorize leases that have been supported by a Band Council Resolution, including confirmation that the lease does not contravene existing land use plans or by-laws. As a result, Bands can object to locatee leases and the federal government will consider this when assessing applications (Ballantyne 2010: 44; INAC 2005: 50).

The *Indian Act* and federal policy also regulate what other authorities a Band has over its reserve lands. For example, Bands have the authority to make land use by-laws and zoning plans, but the federal Minister of Aboriginal Affairs can disallow these (*Indian Act*, ss. 81–82). Researchers have identified many potential problems with land management under the *Indian Act* land regime, particularly as a result of regulatory gaps and insufficient empowerment of Bands to administer and manage lands (Edgar & Graham 2008; Moffat & Nahwegahbow 2004; Office of the Auditor General 2009). In the last three decades, additional authority over land management has been devolved to some Bands through negotiated arrangements, through s. 53 and s. 60 of the *Indian Act* and the Regional Lands Administration Program (RLAP) or Reserve Land and Environment Management Program (RLEMP), or through the *First Nations Land Management Act*. However, the RLAP and s. 53 and s. 60 land management programs are no longer funded by the federal government.

2.2. Penticton Indian Band

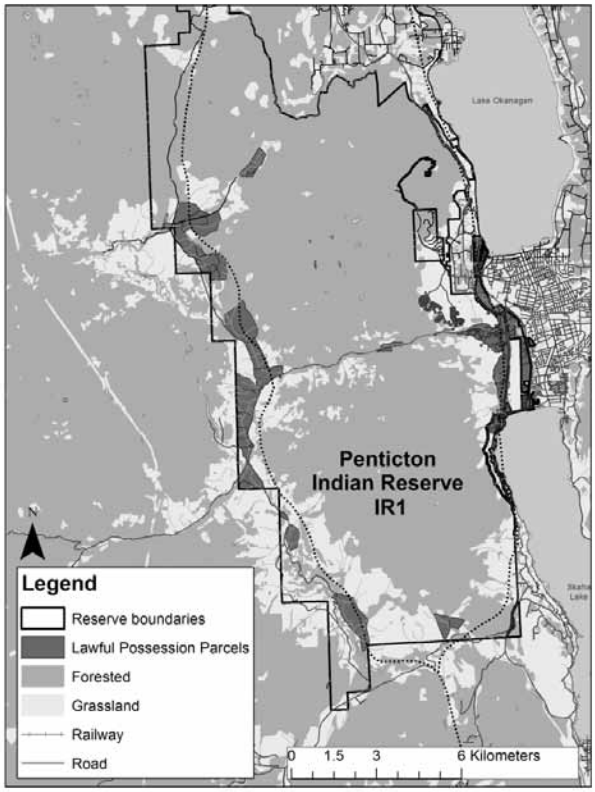
The Penticton Indian Band (PIB) is an Okanagan, or Syilx, First Nation located in the Okanagan Valley in the southern interior region of what is today the Canadian province of British Columbia (B.C.) and Syilx Traditional Territory, see Figure 1. The main PIB reserve (I.R.1),

FIGURE 1
Penticton Indian Band Reserve (I.R.1)



Source: Author generated. Date from GeoGratis. © Department of Natural Resources Canada. 2012.

FIGURE 2
Current Lawful Possession Parcels, 2012



Source: Author generated. Data from PIB Lands Office, GeoGratis. © Department of Natural Resources Canada. 2012.

initially created in 1856 and formally allotted in 1877, is currently 18,539.8 hectares (Geomatics Services AANDC 2012) and is the largest reserve by area in B.C. (PIB 2013). The landscape is a mix of forested, mountainous land, grassy bench lands, and flat lowlands. The landscape is semi-arid and primarily ponderosa pine, sagebrush, and grassland habitat, with spruce and fir at higher elevations (MoE 1998).

The current population of PIB is 1,025 members, with 537 living on reserve (AANDC 2013). PIB uses customary elections and has a reputation among First Nations and government staff for being politically active and independent. PIB has been named as one of the "land rich" nations of the Okanagan (TOBE 2008) because it has large areas of undeveloped land adjacent to the city of Penticton. However, these lands are mostly held as CPs by individual members and families (illustrated in Figure 2). Approximately 6.5% (just over 1,200 hectares) of the total reserve area is held as CPs, but these lands are the most suitable for housing, development, and agriculture.

2.3. Research Project

This paper reports findings from a three-year research collaboration with the PIB Lands Department. Our project was an exploratory case study and used primarily qualitative data and

methods. We collected information from twenty-one semi-structured interviews with Band staff and members, other First Nations staff, and federal staff. These data were supplemented with community sessions and group discussions; participant observation; federal land registry and survey data; analysis of historical and contemporary documents from the federal government and Band Council; review of legislation and policy documents; and an extensive review of published research on land tenure, First Nations reserves, and reserve land management. We analysed our data using qualitative coding, guided by (but not constrained within) the Institutional Analysis and Development Framework (Ostrom 2011), a traditional Syilx framework for inclusive community discussions and learning (Brinkhurst, Alec, and Kampe 2013), and a Strengths–Challenges–Changes framework developed with the PIB Lands Department to aid with practical application of research findings (Brinkhurst 2013). We shared our initial findings with interview participants and community members for validation and to inform a second round of analysis.

3. EVOLUTION OF INDIVIDUAL LANDHOLDINGS ON RESERVES

3.1. National History

In the early history of the reserve system created by colonial authorities in Canada, Bands managed their lands internally and used local, customary tenure systems. Over time, Canadian federal officials became more involved with reserve governance and replaced local management systems with limited local administration of the federal system. Officials routinely recommended more standardized and legally recognized registration of individual landholdings to reduce "dependence on handouts" (Alcantara 2003: 402) and "gradually eliminate communal tenure practices" (INAC 1978: 66) as part of wider goals of assimilation. Government policy developed an "overriding tendency to emphasize the individual to the detriment of the community" that persisted well into the 1970s (Cunningham 1997: 29).

The 1876 *Indian Act* created the Band Council structure of local government and gave Councils the legal authority to allot reserve lands to individuals and have them federally registered as Location Tickets (provided that allotments were approved by the federal government). Use of Location Tickets was limited and uneven across the country, especially in western Canada where reserves were established later than those in eastern provinces. Looking to strengthen and encourage uptake of registered individual landholdings, the federal government reformed and standardized the tenure system in 1951 into the CP system that exists today (Camp 2007: 4.1.2; House of Commons 1951: 71).

3.2. PIB History

Prior to contact and European colonization, the seasonally nomadic Syilx used a system of land tenure wherein nested territories were managed by tiers of Chiefs. Local level Chiefs would grant family units the authority to use and manage specific areas and resource sites, but this was not permanent ownership, it could shift and was contingent upon responsible management and ongoing approval from the Chief and community (Carstens 1991; ONA 2001; Thomson 1994). After contact and particularly following the creation of the Okanagan reserves in the late 1800s, Syilx Bands, including PIB, gradually shifted away from customary tenure to the system of federally registered, permanent individual landholdings (Brinkhurst 2013; Carstens 1991).

The reserve system concentrated families into smaller areas of land, and seasonally nomadic lifestyles shifted to settled, agricultural lifestyles. In our interviews, PIB Elders recounted how before Location Tickets and CPs, individuals and families were given permission by Chiefs to use and live on areas of land based on their demonstrated ability or intention to use it productively, as a farm, ranch, or home site. As time passed, local federal agents encouraged Band leadership and members to formally register land holdings with the federal government as Location Tickets.

Federal registration of landholdings was attractive for some individuals and families. Location Tickets were presented as a way to protect one's claim to land in the eyes of the colonial legal system and to provide greater security during a time of social, political, and economic upheavals. Later, registration gave individuals additional legal powers, such as the right to lease land. A small number of PIB members began to use the federal land registration system

in the 1930s but registration was uneven, depending on individuals' relationships with the local federal agent and attitudes towards written documents and the federal government generally. In 1955 the federal government created the Fry Plan sketches of existing landholdings on the PIB reserve. While these were not legal surveys, they were the first formalized maps of landholdings and were used as the basis for later surveys.

Oral history and Band documents illustrate how most PIB community members were concerned about adopting the new, foreign system and preferred the customary system of having land holdings recognized and protected by their family, traditional leadership, and the community. Thus, until the 1970s, land tenure on the PIB reserve was mixed — some landholders held land under the local customary system and others had registered lawful possessions with the federal government.

In the 1970s, the PIB Chief and Council decided to have all land holdings registered and to standardize land policies to align with the federal system. The primary drivers for this standardization appear to have been a desire to reduce land disputes in the community and give individual land holders equal opportunities to access the benefits of landholding under the federal system (Brinkhurst 2013). Around this time, PIB members grew concerned about the amount of land being allotted and registered to individuals, and the fairness of allotment decisions. In the early 1980s, PIB adopted a community policy that no more large allotments would be allowed. Instead, lands would only be allotted for small house lots in planned, Band-led housing subdivisions. This policy continues today. Aside from this local restriction, PIB Chief and Council and the Band Office use the CP system as laid out in the *Indian Act* and federal policy. It should be noted that not all members have agree with using the CP system. Despite efforts to equalize land tenure security and to standardize land policies, some individuals and families continue to feel like they were not treated fairly in the transition to registered holdings and many individuals are not familiar with the rules, rights, and responsibilities associated with the CP system.

As PIB gradually adopted registered individual landholdings between the 1930s and 1980s, land management authority shifted away from Band leadership and the collective community towards individual locatees and the federal government. While Chief and Council remained locally influential, under the *Indian Act* framework for reserve land management they had less control over the land use decisions of individual landholders. In large part this is because PIB did not formalize by-laws or land use plans with the federal government. Other local land management tools are not legally recognized under the *Indian Act* framework. Since the late 1970s, PIB has been working to reclaim land management powers and in the 1990s, leadership turned greater focus towards managing individual land uses through community land use planning and regulatory tools such as by-laws.

4. PIB'S CP LAND MANAGEMENT CHALLENGES

We investigated how PIB's land tenure history and the current CP system impact PIB's land management today. For PIB, as for other Bands (L. Vanderburg & R. de Guevara, personal communication, 2011; Bak, personal communication, 2012), there appear to be some significant benefits of the CP system, both for individual members and for Bands. These include increased tenure and economic security for individuals, the ability to lease or mortgage CPs, and improved incentives for investing in land and land developments (Fiscal Realities Economists 2007; Flanagan, Alcantara, and Le Dressay 2011; Brinkhurst 2013). As these potential benefits of CPs have been discussed elsewhere, our objective in this paper is to complement previous research and broaden the discussion of CPs by focusing on land management challenges we identified from PIB's experiences and adaptations that PIB has made to address challenges.

4.1. Limited Regulation of CP Land Use

Under section 81 of the *Indian Act*, Band Councils can choose to create by-laws and land use plans, approved by the federal government, that govern use of CP lands, including conditions for developments and leases. However, challenges with funding, enforcement, and capacity have hampered land management efforts by Bands, including PIB (Office of the Auditor General 2009). Until recently, there have been few formal regulations or constraints on CP holders in PIB,

except at the federal level. As a result, PIB lacks adequate tools to address and prevent situations of incompatible land uses, transboundary effects, and pollution from land uses on CP lands. PIB currently has two federally registered by-laws, an animal control by-law and a water systems by-law (allows the Band to charge for non-member use of the Band well system). In our interviews Band leadership, staff, and many Band members identified the need for expanded, clearer, and more enforceable land use regulations. Enforcement has proven challenging because of limited resources and the social and political challenges of enforcing rules in a small, close-knit community. While some attempts to address local land use issues met with co-operation from CP landholders, others were left unresolved because the situations became too hostile. PIB has also had challenges with lessees of CP land creating environmental or safety issues on their leased lands. Because PIB does not have a comprehensive regulatory framework for local land management, many of these situations ultimately required federal intervention. However, federal and provincial agencies have encountered difficulties enforcing their regulations on reserves (such as health and safety regulations or endangered species legislation), including opposition from individual Band members and occasionally Band governments.

4.2. Buckshee Leases

Another challenge for PIB's management of CP lands is that some land transactions by CP holders, particularly leases, are not officially registered with the Band Council and/or federal government. Informal leases, locally called "buckshee leases," other land deals (such as sale to another Band member) occur when a CP holder enters into land agreements outside of *Indian Act* provisions and without Ministerial approval. These may be known or unknown to the Band Office. These agreements expose the individual lessors, lessees, and the Band to potentially significant legal and financial risks if there are disputes over the deal or if damage is caused to the land or buildings involved. Buckshee leases also by-pass local land management efforts, such as land use planning, or federal approvals such as environmental impact assessments, and so can result in incompatible neighbouring land uses and reduce the potential value or uses of nearby lands.

4.3. Cultural and Ecological Protection

Band Council and staff have less authority over use and management of CP lands than Band lands. This creates a landscape of fragmented control and complicates planning for landscape-level concerns such as ecosystem protection, watershed management, or habitat conservation. In PIB's history, some allotments of land were made without full consideration of associated ecological or cultural values and today this is causing some concern for ecological and cultural protection. On the other hand, in some cases CP allotments may positively influence conservation: in our interviews several PIB members indicated that having lawful possession of an area generates feelings of greater responsibility to that land and empowers them to protect it independently of changes in political leadership or Band development goals. However, other PIB CP landholders want to develop their land and they perceive ecological or cultural protection efforts as a threat to their land use and development powers.

There have been multiple cases of CP landholders in PIB and other Okanagan Bands who have been unable to develop their landholdings because of federal environmental controls (e.g., set-backs from waterways, endangered species or habitat). This can cause individuals great frustration. For many, their landholding is the only land asset available to them due to the general lack of reserve land for sale, challenges of receiving additional or alternative lands from their Band, and the expense of purchasing or renting off-reserve lands. Under the current *Indian Act* lands system it is not clear how conservation requirements should be balanced with individual interests. If CP landholders have land expropriated from them they are entitled to compensation; however, if land use is regulated or constrained in such a way as to preclude certain uses, there is currently no clear legal requirement that individual landholders be compensated.

4.4. Land Use Incompatibilities

Individual land holdings on reserves increase the need for land use planning, especially if there is

high potential for leasing or development. With a CP, individuals have authority to decide how to use their land, including potentially developing it or leasing it to a third-party user or developer. If a Band lacks land use planning tools such as zoning or land use by-laws, it runs the risk of having incompatible land uses and negative cross-boundary effects between land parcels. This is a leading concern of PIB Band staff and landholders, who are concerned that decisions by landholders or their lessees might negatively impact neighbouring land uses or development potentials. In PIB this concern is largely precautionary, given that there has not been a high level of development on CP lands to date. However, PIB does have some existing uses and leases on its lands, including industrial and commercial uses, that already influence land uses and potential developments around them.

4.5. Spatial Planning Concerns

CP landholdings on some reserves have resulted in challenges with ensuring access to lots and providing infrastructure and servicing (Chawathil First Nation 2010). Larry Pardy, Manager of Lands, Environment and Natural Resources in the Atlantic region of Aboriginal Affairs and Northern Development Canada, attributes many of these issues to the lack of planning when holdings were originally allotted (L. Pardy, personal communication, 2012). In many reserves, including PIB, allotments were historically made for agricultural land uses and so were often large, irregular, and dispersed. The original spatial layout of lots typically persists today and has repercussions for access and servicing infrastructure. The lot layout that was at one time attractive for agricultural or privacy reasons today means lots are often landlocked, difficult to access by vehicle, and require extensive, inefficient infrastructure to service. For PIB, many proposed developments on CP lands have stalled because of a lack of access and servicing to lots.

CP landholdings have also inhibited or delayed some community infrastructure development on PIB's reserve. For example, attempts by Chief and Council to improve road safety (by widening them and adding sidewalks) were opposed by affected landholders and the perceived political and social repercussions of forcing the issue meant that Band staff and Council dropped their plans. Even in such cases of significant community benefit, there has been and is strong reluctance by PIB's leadership to resort to expropriation of land. In PIB, there is historical sensitivity about governments' abusing their power and taking lands from the Band and individuals. As well, respect for individuals' decisions and not using force against them is a deeply embedded cultural value for PIB members. These local cultural and historical factors effectively make the Band Council's expropriation powers a non-functional authority.

4.6. Obstacles to Land Development

Some aspects of CPs may be advantageous for private land development, such as faster approval processes than for developments on Band-held land (Gailus, John & Chunick 2009: 1.1.6). However, less frequently discussed are land development challenges associated CP lands: constraints on Band developments; fragmentation; fractionation; and limited land markets.

PIB's CP allotments have reduced the amount and type of land available for Band-led developments. Allotments are frequently located on land that is most suitable for housing, agriculture, physical infrastructure, and other economic developments. The majority of PIB's most developable and economically valuable land is now held by individuals under CPs. As well, developments on remaining Band land can be constrained or delayed because they require access or other permissions from CP holders. Individuals can be reluctant to grant consent, particularly if they do not support the development or if it significantly impacts their own land uses. As noted previously, expropriation of individual lands is unattractive for PIB's Chief and Council. Another concern is highlighted by the Chawathil First Nation (near Hope, British Columbia) in their Community Land Use Plan, where they explain that because the federal government does not fund residential or community development on CP lands, the presence of CP holdings has seriously reduced the Band's ability to raise capital for community projects (Chawathil First Nation 2010). This is less of a concern for PIB because it has retained greater amounts of Band land, although the locations may not be ideal for development.

Another development challenge that PIB has encountered with CP lands is fragmentation of prime developable land into parcels held by many different owners. For large-scale developments, such as commercial areas or large housing developments, fragmentation means that multiple landholders must agree on the development and coordinate negotiations and plans. Comparing two ongoing development negotiations, one entirely on Band land and the other involving multiple CP landholders, a PIB Lands staff member observed that developing on lands held by many individuals

> makes more obstacles, because you need all these people on board to sign on to the whole thing ... just to get it started ... and you're never going to get all of these people to agree to one thing. You're never going to get half ... you never will have them signing off on certain things that would make it a reality. (PIB Lands staff member, personal communication, 2012).

Another form of fragmentation occurs when a single landholding becomes shared among a large number of co-owners, a situation known as "fractionation" (Shoemaker 2003: 729). Fractionation occurs when individuals inherit a share of an interest in a parcel as a result of tenancy-in-common laws, such as those that apply to reserve lands (INAC 2005). In extremes, fractionation can result in more than 1000 individuals all holding shares in a single parcel of land in as little as six generations (Indian Land Tenure Foundation 2012). This can severely reduce the per-capita economic value of the land involved (Deaton 2007; Indian Land Tenure Foundation 2012; Shoemaker 2003) and makes the land parcel essentially impossible to use if land laws require all owners of shares in the land to consent to any proposed use (Indian Land Tenure Foundation 2012). In PIB, fractionation is only in early stages but it is occurring: there are cases of parcels with as many as 40 individuals who have a tenancy-in-common interest. In interviews PIB CP holders reported issues with reaching agreement between as few as three co-owners. As well, some individuals with a share to a CP may no longer live on reserve and the Band may not have contact information for them, effectively preventing any land use decisions until they can be found. Additional complications can arise if a non-Band member inherits an interest in a CP. Non-members cannot own part of a CP, and unless they agree to transfer or sell their interest, it is opened for purchase by any Band member. In these cases, there is potential for non-family members to acquire interests in fractionated parcels. PIB Lands staff described situations where this has seriously exacerbated disagreement over the use of the fractionated parcel. Interestingly, not all our interviewees considered fractionation to be negative because it can mean that land decisions are made by a family, or at least a group of individuals, and so prevents individual decisions that may be damaging or short-sighted for collective interests.

A third challenge to land development is the constrained market for CP lands. The *Indian Act* requires that only Band members can hold CPs (other than leases), limiting the pool of potential buyers. For PIB, many Band members do not have the funds available to purchase a CP. As well, CP sales are very rare because most land holders prefer to hold on to their land or transfer or subdivide it to family members. As a result of these factors, it is difficult to acquire reserve land other than through allotment. As well, much of the information and institutional infrastructure typically generated by a land market (such as reliable estimates of fair market value, or venues for public listings of land sales) are less available or more difficult to access.

PIB's constrained land market means that it is harder, sometimes impossible, for individuals to obtain land that is most appropriate for their land uses. Land parcels differ in their characteristics and suitability for various uses. When the exchange of land parcels is difficult, as it is in PIB, an inefficient distribution of land can result. In PIB's experience, some CP holders who have development proposals do not have suitable landholdings and sale or exchange of their lands has not been viable. Other PIB members complain about CP holders who have land with high development potential but do not want to develop.

4.7. Uncertainty

Managing CP lands on the PIB reserve is complicated by disagreements and ambiguities over the legal rights of CP holders, rights that some individual landholders interpret to be more

extensive than what is officially laid out in federal policy. There is also a general unfamiliarity with land-related procedures under the *Indian Act*, such as the process for making legal transfers of land or wills, or the negotiation and registration of leases. In interviews, PIB staff explained that the lack of understanding of the rules of the *Indian Act* and federal policy means that some CP holders are very sensitive and reactionary to anything perceived as limiting their rights. This makes it difficult for Band staff to collaborate with landholders on land regulation, management, and planning. As well, many landholders are frustrated by the complexity and unfamiliarity of CP system rules and policies, especially the various assessment and reporting requirements of the federal approval process for leases and developments.

4.8. Community Relations

Finally, many of our research participants expressed concerns about how the federal individual landholding system impacts community relations because of perceived inequality and ongoing disputes over land. In some reserve communities, permanent individual landholdings have created or worsened inequality. An example of this situation exists just north of PIB. The Westbank First Nation, a self-governing First Nation with extensive land development projects, today has the majority of its reserve land held as CPs by a small number of individuals, meaning other members have very limited access to reserve land (L. Vanderburg & R. de Guevara, personal communication, 2011; Flanagan & Alcantara 2002: 14). Many Westbank CP holders have leased their lands for housing developments. Interviewed Westbank First Nation staff explained to us that while this has greatly benefited the individual landholders, it has also undermined community cohesion and concentrated wealth and power over land (R. de Guevara & L. Vanderburg, personal communication, 2011). In PIB there is also uneven land distribution because some families were historically allotted much larger areas than would now be permitted by the Band Council. Since land sales or exchanges with non-family members are rare occurrences, most land stays in the family, handed down through generations. There is also inequality of land value and development options, depending on location, size, access restrictions, or other limits to development. The distribution of power is also affected, because CP holders with large, developable holdings have more sway over development on the reserve than other Band members. Interviewees expressed concern that increasing development on CP lands will make unequal land distribution more apparent and exacerbate political and social tensions.

Land disputes also continue to cause conflict between community members, families, and the Band Office. The severity of disputes range from strained relations to court cases. In PIB's history, there were problems with inequality of land allotments, inconsistent registration practices, boundary disputes, and disputed land deals. Some of these problems were related to differences between those who used the traditional, local land tenure system and those adopting and using the federal government's system. Many disputes are ongoing or will flare up again after appearing to be resolved for many years. This has created an environment where individuals and families are defensive and intensely private about land matters. Landholders are suspicion of the Band Office and federal government. There is animosity and rivalry between families rooted in land disputes or inequality of landholding. And land decisions are sensitive within families and often lead to disputes. The lack of openness regarding land strains community land decisions, such as land use planning, and discourages collaboration between landholders. These impacts are not only social and political — some disputes slow or prevent construction of homes, infrastructure, and other potential developments. Efforts by Band staff or individual landholders to coordinate land uses to avoid incompatible uses or achieve infrastructure efficiencies have suffered because many landholders are unwilling to engage or trust each other with information (A. Eneas, personal communication, 2011; J. Kruger, personal communication, 2011; L. Alec, personal communication, 2012).

5. PIB LAND TENURE AND MANAGEMENT ADAPTATIONS

The land management challenges faced by PIB associated with CPs are products of, to varying degrees, PIB's history, culture, and environmental

context; specific aspects of the federal reserve land tenure system; constraints on local reserve land management authority; and PIB's local land management decisions. For the remainder of this paper, we discuss some of the local adaptations that PIB has made in attempts to reduce or mitigate CP land management challenges.

5.1. Planned Subdivisions

To help manage the need for land and housing in a sustainable and cost-effective way, PIB has developed several housing subdivisions. Lots are standardized and laid out to facilitate efficient use of space and community infrastructure and plan for future growth and expansion. Some members are dissatisfied with the subdivision approach, expressing concerns about being so close to neighbours, not being able to choose the location of one's house, and not being able to choose one's neighbourhood. The explanation offered by Band staff is that subdivision development is necessary for long-term housing availability and protection of the Band's collective interests (T. Kruger, personal communication, 2012). One issue for accessing subdivision lands for some members is that allotment of a house lot is conditional upon building a house on it, using either your own funds, a Band mortgage, or paying rent to the Band, and not all members are able to do this (E. Alec, personal communication, 2011; PIB member, personal communication, 2011). Otherwise, members share housing with family or seek more affordable options off-reserve.

5.2. Community Land Allotment Policy

PIB's history of individual land allotments and registrations differs from many other Bands because of a community policy adopted in the early 1980s that restricted land allotments to small house lots in the Band's planned subdivisions. This was, in part, a reaction to concerns about inequality of land distribution. Another motivation was to ensure that future members would always be able to have a home on the reserve (E. Alec, personal communication, 2011; C. Eneas, personal communication, 2011). The policy has been effective at preserving large areas of reserve land as Band land, especially when compared to nearby reserves like Westbank where Band land is very restricted (L. Vanderburg & R. de Guevara, personal communication, 2011). The PIB policy has also reduced infrastructure costs because compact sub-divisions are most cost-effective to service with roads and utilities than more dispersed lots.

There is strong support for PIB's allotment restrictions from Band leadership, staff, and many community members, but the restrictions do create some challenges. Band staff and members expressed concern that restrictions on allotments are restricting housing availability on the reserve. The costs associated with subdivision house lots (discussed above) mean that not everyone who needs a house can afford a subdivision house. The potential alternative of building a less expensive house elsewhere on the reserve, outside of the Band subdivisions, requires that another member (typically a family member) with a large enough CPs lot subdivides a parcel or grants them permission to build a house on their land. However, not everyone has that option. To help address these concerns, potential reforms to the policy are being explored as part of PIB's current land use planning process.

5.3. Education and Incentives for Registering Leases

PIB has taken steps to discourage informal "buckshee" leases, including a by-law that requires that a lease be registered before the Band will allow utility companies to extend servicing to the site. As well, PIB Council and the PIB Lands department are encouraging locatees to work with Lands staff and educating landholders about the benefits of legal, registered leases and the risks of not registering (G. Gabriel, personal communication, 2011; T. Kruger, personal communication, 2011). A PIB Lands staff member reported that over the past 20 years, buckshee leases have decreased dramatically, from "almost all" leases to just "a handful" (PIB Lands staff member, personal communication, 2011).

5.4. Sharing Benefits and Costs

Developments and leases on CP lands create benefits and costs for individual landholders and the Band. However, benefits are primarily private while many costs, such as investments into infrastructure or increased traffic on reserve, are

borne by the Band collectively. PIB and other Bands are adapting mechanisms used in off-reserve contexts to help balance the distribution of benefits and costs of land developments and leases, primarily property taxation and community benefit agreements.

Property taxation is conventional in most Canadian communities but relatively new to many reserves. Under s. 83 of the *Indian Act* and the 2006 *First Nations Fiscal Management Act*, Bands can choose to adopt their own property taxation policies, without which tax monies collected from non-member lessees and developers go to provincial or federal governments, not the Band. PIB adopted taxation of leased lands and non-member residents in 2007. While there was initial opposition from some community members, today most have accepted this limited taxation scheme and implementation is going smoothly (T. Kruger, personal communication, 2012). As an alternative to taxation, some Bands collect a percentage of the revenue CP owners received from tenants, but this can be seen as discouraging individual development efforts (L. Vanderburg & R. de Guevara, personal communication, 2011).

PIB staff are also promoting community benefit agreements as a way to address costs and benefits to the Band in potential leases or developments (T. Kruger, personal communication, 2012). Tools like this are standard practice in many cities and communities in Canada, where municipal planners negotiate with developers to include community amenities in development design, such as landscaping, sidewalk improvements, or recreational space. PIB hopes that community benefit agreements in both Band-led and CP holder developments will help share costs more equitably and create tangible benefits for all members.

5.5. Locatee Lands Project

PIB's Locatee Lands Project is an innovation in reserve land management and environmental conservation on CP landholdings (or "Locatee lands'). The En'owkin Centre, a cultural and ecological education organization located on the PIB reserve, is working with neighbouring CP landholders to develop voluntary conservation agreements that protect endangered habitat on their lands. In exchange, the En'owkin Centre provides annual payments (currently funded by grants) to compensate the landholders for the loss of the use of their land and provide incentives for conservation (J. Armstrong, personal communication, 2011). The project is essentially a hybrid between a conservation easement and conservation payments, two mechanisms that are regularly used off-reserve. This initiative is unique in the context of reserves in Canada, both in its legal mechanism of a locatee easement but also in that it generates a sustainable income to the landholders in exchange for preserving the land, something that outright purchase or regulation of the land would not do (J. Armstrong, personal communication, 2011). PIB Band staff members are reluctant to consider more forceful conservation regulations both out of respect for individual landholders and because regulations could be changed by subsequent administrations if they became a political issue. Some interviewees also explained that there is sensitivity around forcing Bands and landholders to bear the cost of species protection when it is the lack of protection off-reserve that is endangering many species and habitats. The Locatee Lands Project has met with support from the locatees involved, other community members, and Chief and Council, who are looking into ways to further support and expand the program. Approaches like the Locatee Lands Project may prove attractive to Bands operating within the *Indian Act* lands system that want to address local conservation without relying upon command-and-control conservation regulations or external authorities.

5.6. Collaborative Community Land-Use Planning

Finally, PIB staff and members identified the importance of land-use planning for addressing challenges in the use and management of all reserve lands (Band land and CPs). For several decades, PIB has been building local planning capacity and its recent Comprehensive Community Plan and ongoing Land Use Plan process demonstrate commitment to participatory, inclusive, and collaborative community planning. Some of the expected outcomes of these planning efforts are local land use laws and policies, including by-laws and land-use regulations that will apply to CP lands. Members and staff antici-

pate that these tools will improve the clarity and consistency of Band and federal land management decisions and approvals.

PIB leadership and staff stress the importance of building collaborative relationships with and among all members, including CP landholders. Working closely with CP holders is critical for avoiding conflicting land uses and optimizing development opportunities. Especially in large-scale infrastructure projects and other developments, PIB Council and staff have a central role to play as facilitators of arrangements that numerous landholders can agree upon. At the same time, while specific collaborations with landholders are needed, PIB leadership and staff are sensitive to the inequalities of power that exist between landholders and other members, and the importance of designing planning processes to include and empower all community members. This approach to planning goes beyond regulations and emphasizes partnerships between landholders and the Band to further everyone's interests, individual and collective.

6. CONCLUSIONS

The history of PIB's transition from a local, customary tenure system to the federal system of registered individual landholdings brought and coincided with many changes in local land management. Over many decades, PIB's local and collective management of reserve lands was displaced by centralized federal policies and oversight processes. While the federal system has improved over time and does address some local land management needs, it lacks comprehensiveness, local knowledge and experience, and social and cultural sensitivity. The experiences of PIB suggest that increasing Bands' authority and capacity for local land management can be a more effective, equitable, and sustainable approach to reserve land management. This is especially so on reserves where the CP system exists because these permanent, externally protected, individualized landholdings have increased the powers of individual landholders without a corresponding increase in a Band's land management powers. Bands need to be empowered to use their own, locally appropriate and legally defensible land regulations and other mechanisms that will match their land management system with their land tenure system.

Today, some First Nations are choosing to opt out of the *Indian Act* land management system entirely through self-government agreements and modern treaties, the *First Nations Land Management Act*, or other proposed legislation. For a Band or First Nation, the development of a comprehensive local land tenure and management system is a formidable challenge and requires significant political, technical, and legal resources over the long term. Many Bands, including PIB, are instead making local adaptations to the *Indian Act* and CP systems, building their own internal land management capacity, and gradually reclaiming land management powers. To be sustainable, equitable, and effective, efforts to strengthen First Nations' local land management must be holistic, community-led, culturally and historically sensitive, and informed by local experience. PIB, along with many other Bands, is championing this approach by adopting land management tools and authorities on its own terms and defined by its own community values and goals.

There are many ways that the current *Indian Act* land tenure system could be reformed to address reserve land management challenges. However, potential reforms and policies need to consider and accommodate the wide range of needs, goals, and local capacity of Bands. As the history of Location Tickets and CPs illustrates, a narrow emphasis on individual rights and empowerment without due consideration of wider collective rights and management authorities can cause a host of new and expanded land management challenges. The experiences of PIB illustrate the importance of identifying and addressing local challenges of individual landholdings. As PIB is discovering, through local reform, there are ways that First Nations can transform their current individual landholdings system from an imposed colonial system intended to undermine and divide communal land traditions, into a locally defined system that provides strength and opportunity for both individuals and communities.

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PROPERTY, INFORMATION AND INSTITUTIONAL DESIGN

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INTRODUCTION

First Nations in Canada confront a growing menu of property law options on their reserve and treaty lands. Some of these options recognize substantial community autonomy to develop localized property institutions that differ noticeably from existing statutory and common law regimes outside those communities. First Nations' emerging choices over their property institutions, however, are considerably more complex than perennial debates about private-individual versus communal rights would tend to suggest. One way to embrace that complexity is to investigate the quality and quantity of *information* generated through and conveyed by localized property systems. This perspective usefully moves the conversation about property law and institutional design beyond unhelpful binaries, by raising the following questions: How much precision should First Nations strive to achieve when they codify community property laws and what kinds of information should these laws seek to convey? How broadly and to what audiences?

"Information-cost theory" has become a popular theme among lawyers and economists who are interested in the various functions of property law and keen to understand how and why property norms change over time.[1] One of the key features of property as a legal, social and political institution is that it mediates relationships between individuals or groups who might very well be strangers to one another. In this aspect, property relations differ from other legal relationships, such as those structured by personal or commercial contracts, which normally arise between known parties who have ample opportunity to articulate the precise terms of their mutual arrangements (Hansmann and Kraakman 2002). Influential strands of contemporary legal scholarship have built on this basic insight to argue that an important function of most, if not all, property is to reduce the costs of generating and disseminating information about rights to resources. For example, the right to exclude others from a piece of land is viewed by information-cost scholars as useful precisely because it reduces the amount of knowledge that non-owners need to acquire about owners and resources in order to participate in property transactions (Smith 2002). Complex rules around entitlements to use or manage specific resources

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[1] For foundational works in this area, *see* Merrill & Smith (2000, 2001); Smith (2002). Professor Smith has also extended this framework to the study of customary property, *see* Smith (2008), identifying the informational demands that local custom places on those expected to abide by and enforce it outside of the community.

tend raise these costs and arguably make such transactions less efficient in some circumstances. Such a view has reinforced the idea that a small number of formal and relatively simple rules are the *sine qua non* of property law, at least in modern common law systems. Information-cost theorists often come to prescriptions for institutional design similar to those of "privatization" proponents, but they arrive through a different — and often considerably more nuanced — set of reasons.

This type of "less is more" perspective on real property represents a substantial challenge for First Nations who aim to craft localized land laws that can balance or reconcile their unique needs and objectives, which may include demands for greater market integration and improved capital investment. More precisely, the information-based perspective suggests: (i) that First Nations should prioritize simple, bright line property rules that eschew the uncertainties of community-based interpretation and context; and (ii) that First Nations should work to harmonize their local property systems with a uniform set of norms familiar to Anglo-Canadian common law.[2] My purpose in this Essay is to question these two basic prescriptions and offer some alternative ways of thinking about property, information, and institutional design.

In Part I, I address the first prescription by distinguishing between two different strategies that First Nations might pursue in delineating property, drawing on comparative experiences from communities under the First Nations Land Management Act (FNLMA) regime. One strategy is for First Nations to use "property rules," by which I mean harder, bright-line norms that provide a clear description of property rights *ex ante*, within property legislation itself. A second or alternative strategy is to employ "property standards", which refer to softer, open-ended norms in the form of broad principles or purposes, whose full content is shaded in *ex post* by designated decision makers or dispute resolvers. These two categories of "rules" and "standards" are ideal types and certainly blended categories (Kaplow 1992: 557),[3] but distinguishing between them helps to frame a basic question that often arises for First Nations: how precise should lawmakers attempt to be as they engage in the process of legislating land codes and local property law?

In Part II, I describe a second implication of the information-based approach — namely, the idea that communities should seek to reduce local variation in their property regimes. Because local divergence from widely used common law property norms is thought raise the costs of transactions across community boundaries, recent research suggests that there may be substantial incentives for communities to move toward harmonization or convergence, at least over the long run. I examine this logic, challenge some of its underlying assumptions, and raise a number of outstanding questions about its application to the design of First Nation property laws.

I. TWO PROPERTY DESIGN STRATEGIES

Conventional wisdom and much economic intuition suggests that First Nations should aim to design clear and predictable property rules to govern their lands and promote economic investment. For several reasons, investors will demand *secure* property — i.e., well defined and broadly agree upon norms with predictable and enforceable consequences.[4] Using uncertain legal standards to delineate property rights appears to cut against this accepted logic by undermining real and perceived security and discouraging economic investment. Moreover, because uncer-

[2] While this perspective does not necessarily endorse private property rights *per se*, the fact that freehold estates dominate property holdings at common law likely creates a strong bias in the private rights direction.

[3] I adopt this criterion as the primary difference between rules and standards generally. For a good overview of the benefits and drawbacks of rules versus standards, see Sullivan (1992: 57); Kennedy (1976); and Schlag (1985: 379). A seminal article on rules and standards in property law is Rose (1988). For more recent discussions in the property context see Lehavi (2011); and Singer (2013).

[4] "Property" in this Essay refers to the legal institution that defines how a group allocates, governs, and enforces relationships among persons or groups with respect to resources. Security of property is of course also important to realize other values — some deeply related to and others independent of or in tension with economic development — such as equity and social justice, maintaining social and cultural connections to land and place, and strengthening democratic participation and political autonomy. Moreover, all of these values are unlikely to be commensurate with each other in all circumstances.

tainty around property can effectively delegate important legal and political decisions to non-majoritarian institutions and third-party decision-makers from outside local communities, it seems that this strategy might also be unattractive from the perspective of strong, autonomous First Nations governance.

There is, however, no single answer to the question of how precisely First Nations might specify their property laws to reconcile goals for improving economic investment with demands to retain control over important aspects of community development, further community values, and respond to evolving circumstances such as increasing land scarcity, demographics, and other aspects of socio-economic change. To explore this problem below, I draw on examples from current land codes and laws designed as part of the First Nations Land Management Act regime (S.C. 1999, c. 24) — an optional sectoral governance initiative established in the late 1990s as one means for communities to escape from the restrictive, anachronistic lands provisions of the federal Indian Act (R.S.C. 1985, c. I-5).

In order to keep the discussion concrete, I also limit my arguments to one facet of institutional design: how First Nations might delineate the public powers of their governments with respect to the expropriation of property interests in land and the regulation of land uses. A main rationale behind governments' powers to expropriate property and regulate its use is to overcome the collective action or bargaining problems between affected parties — problems that prove too difficult for those parties to resolve on their own because of high transactions costs (Kelly 2011). The resolution of these coordination problems by government can improve overall social wealth, either by designating lands to build infrastructure developments and facilities such as roads, hospitals and schools; by reallocating property for commercial developments; or by regulating the externalities that actors impose on others through competing land uses. Those objectives, in turn, are likely central to nation building and strengthening communities (Rose 1989). As First Nations build their capacities for self-governance, gain stronger recognition of their jurisdictions over lands and take the lead in the provision of social services, the legal basis of their authority to provide public goods will be increasingly significant, as will be the conflicts and controversies that follow from the use of these powers. But while governments' powers over property can serve important community goals, they can also generate some level of insecurity for private investors if it is difficult to predict the scope of those powers and how they might be exercised going forward. Land laws that generate or contribute to this kind of uncertainty may scare off desirable investors and projects, or attract undesirable ones.

One strategy to confront this challenge is for First Nations to adopt a clear rule that identifies all circumstances in which it is permissible for government to reallocate property rights. For example, a community might attempt to list each type of public project for which the exercise of government's expropriation power is permissible. This is the approach taken by the Tsleil-Waututh Nation, whose land code allows the government "to expropriate an interest in Tsleil-Waututh Lands, including an Easement or [to] cancel a Permit for a Community Purpose" (Tsleil-Waututh Nation Code, 2007, s. 23.1). "Community Purpose" is defined narrowly in the code as "a purpose which is intended to provide a facility, benefit or support for the Members or persons residing on Tsleil-Waututh Lands, and is limited to transportation and utility corridors and requirements related to transportation and utility corridors" (Tsleil-Waututh Nation Land Code, 2007, s. 2.1). The rule in this case is very clear: land can only be expropriated by government if its use relates to transportation and utility corridors. No other purposes are permitted. A related rule-like strategy is to reserve certain rights to government under specific conditions. This is the strategy adopted in the Kitselas Land Interests Law (2007). The community's Council reserves (i) a right to resume any part of land deemed necessary for making roads canals, bridges or other public works, but not more than 1/20 part of the whole land and not of any land on which a building has been erected or in use as a garden or otherwise; (ii) a right to take and occupy water and to carry water over, through or under any part of the land as may be required for a public purpose in the vicinity of the land; and (iii) a right to take gravel, sand, stone, lime, timber or other material that is not available on other community lands that may be required for the construction, maintenance or repair of a road, ferry, bridge or other public work (Kitselas

Land Interests Law, K.B.C. 2007, No. 1, s. 7.01). This rule is noticeably more complex than the one employed in the Tsleil-Waututh Nation, but similarly confines the exercise of government power to a limited set of circumstances.

An alternative design strategy is to establish a broad legal standard that identifies the general purpose or purposes for which land might be expropriated by government.[5] The method behind this strategy is to place a more general restriction on the exercise of public power, to disallow the reallocation of property rights only in ways that do not align with the stated purpose or background principle. Specific actions by government must therefore be interpreted and evaluated continuously, in light of the objectives to which they are directed. This approach has been used by several First Nations under the FNLMA, usually by establishing that lands may be taken only for a general "community purpose or public works" and sometimes accompanied by an open-ended list of examples such a school, fire hall, community center, road, etc.[6] These lists are clearly not exhaustive, but offer some degree of guidance as to purposes for which an expropriation is deemed legitimate. Other land codes require a "*necessary* community purpose"[7] or define "community purpose" to mean "a purpose which is intended to provide a facility, benefit or support for the Members."[8]

First Nations have also adopted standards in other areas that establish public authority over property, such as to regulate land uses through zoning and business licensing legislation. For example, businesses licences on Nippissing Nation lands may be denied or revoked by Council if, among other reasons, "[t]he business is deemed not to be in the best interest of the members of the Nippissing Nation" (Nipissing Nation Business Licensing Law, Law No. 2, IA-2010-11-16, s. 9.1(l)). Likewise, rezoning and land use change applications in the Tzeachten Zoning and Land Use Law are assessed based on a multi-factor balancing of "principles and factors", including "the promotion of health, safety, convenience, and welfare of Tzeachten members and of residents and occupants and other persons who have a lawful interest in Tzeachten lands" and "compatibility with Tzeachten and Sto:lo culture" (Tzeachten First Nation, Law No. 10-01, s. 8.12(a)–(o)).

In order to weigh rules against standards as competing design strategies under the FNLMA, I aim to evaluate a relatively straightforward baseline assumption: that investors will prefer clear and simple rules because they tend to make the exercise of government action more predictable and because they represent credible, up-front commitments about the scope of permissible public authority. Rules, in other words, are presumed to generate the kind of security of property demanded by private interests and thus required for strong economic investment. I suggest that this assumption may not hold very well in some cases under the FNLMA regime. This is true especially in the case of investors from outside of communities, who can be an important source of capital inflows but who generally lack some of the rights or entitlements to formal political participation that often make rules and rulemaking legitimate in the eyes of property claimants (although some may wield considerable, sometimes disproportionate, informal political and economic influence compared to individual community members or interest groups).[9] By comparison, property standards raise their own challenges, but I argue that some these challenges can plausibly be overcome — at least, in my case study of government powers over property — and that standards can be an important tool for First Nations to strike

[5] The most cited example in this context is probably the Takings Clause of the United States Constitution's Fifth Amendment, which requires that the exercise of expropriation powers by government be limited to a "public use", U.S. Const. amend. V, s. 4.

[6] See, e.g., Anishinaabeg of Naongashing Land Code, October 2010, s. 17.02; Henvey Inlet First Nation Land Code, September 2009, s. 16.03; We Wai Kai Land Code, 2008, s. 23.1.

[7] See, e.g., Kinistin Salteaux Nation Land Code, November 2004, s. 25.3; Mississauga First Nation Land Code, June 2009, s. 15.2; Tswout First Nation Land Code, s. 14.2.

[8] See, e.g., Sema:th First Nation Land Code, ss. 2, 15.2.

[9] See Part I.A.ii, below. For a more comprehensive discussion of the perspectives of different economic actors from the standpoint of on-reserve property rights, see Jamie Baxter and Michael Trebilcock, "'Formalizing' Land Tenure in First Nations: Evaluating the Case for Reserve Tenure Reform" (2009) 7.2 *Indigenous Law Journal* 45.

a balance when private interests diverge from community development goals.

A. Property Rules

Rules are generally thought to be more certain and predictable than standards (Sullivan 1992: 62; Kennedy 1976: 688–89; Rose 1988: 590–92). It follows that rules should produce more secure property, enabling actors to order their affairs productively and thus generate more efficient levels of economic investment (Sullivan 1992: 62). The idea that property must be secure in order to encourage investment in land seems intuitive enough, and has been a centrepiece of modern land reform movements that emphasize the formalization, standardization and commercialization of property rights in development contexts (De Soto 2000).[10] But what does tenure security itself depend on? This question too is a complicated one, and scholars have suggested that the answer relates to both formal and informal aspects of legal norms, including the perceptions of different resource users (J.-L. V. Gelder 2010). Two specific claims about how formal rules generate security of property are directly relevant here: first, that rules increase the predictability of government action, mainly by reducing the costs of prediction, and second, that rules constrain governments in ways that enable them to make credible commitments over time. I examine each of these rationales in turn.

(i) Rules as Good Predictors

It is easy to see why investors might favour clear rules that identify precisely when government has the power to take up or regulate property. Rules seem much more predictable — in the sense that they post markers for and help to preserve investors' expectations — making it possible for individuals to confidently allocate resources to capital projects (Rose-Ackerman 1988: 1700). Standards, by comparison, are thought to leave open or even work to diffuse those expectations, increasing the risk of mismatch once judges or other third parties determine the actual content of the legal norm. As Susan Rose-Ackerman argues in the American context, "[i]f takings jurisprudence is both ad hoc and ex post ... investors may have a very difficult time knowing whether a particular predictable state action will or will not be judged to be a taking" (Rose-Ackerman 1988: 1700). Anticipating this risk of unaligned expectations, investors will react in undesirable ways — either by underinvesting because they lack confidence about realizing the gains from investment, by shying away from investing in novel land uses, or by overinvesting in the short term because they are induced to engage in rent-seeking behaviour.

Another way to see this argument is to focus on how rules can reduce information costs. According to a view most developed by Henry Smith in the case of property relations between individuals, "[i]f resources are collections of attributes measurable at some positive cost, then those setting up property rights will — subject to informational constraints and political feasibility — tend to set them up in ways that economize on measurement" (Smith 2002). Hard-edged norms such as the right to exclude fulfill this economizing function, especially when the audience is large and diffuse. Blunt rules of exclusion that leave further decisions about property uses to individual owners reduce the information costs that would otherwise accrue to non-owners if they had to expend resources to understand more nuanced interests, such as rights to particular resources and land uses. On this view, "governance strategies" that require the specification of proper uses and involve greater refinement over time are relevant, but largely supplement hard-edged rules (Smith 2002: 454; Smith 2004: 1753).

By analogy, clear rules that delineate governments' powers to take and regulate property may also reduce the information costs that accrue to investors when they try to predict the permissible scope of government action. A rule that identifies precisely why government can expropriate lands to develop public works pro-

[10] De Soto (2000) discusses more generally the connection between secure property rights and economic investment. See Fitzpatrick (2005) for description of "best practices" for formal recognition of customary rights and emphasizing that the nature and degree of formalization should be determined by how reforms address the causes of tenure security. For key discussions of tenure security in theory, see Besley (1995) and Brasselle, Gaspart & Platteau (2002). There is also a earlier vein of property scholarship which argued that security, in the sense of clearly delineated *private* property rights improves investment incentives: see Demsetz (1967); De Alessi (1980); and Feder & Feeny (1991).

jects, for example, can dramatically reduce the costs of predicting when and where it is safe to invest. Standards, by comparison, make prediction relatively costly, because they force investors to expend greater resources to anticipate when government might act, or whether a particular government action is authorized. Of course, this is not to say that investors never want governments to exercise their authority over property. Indeed, investors may frequently be the direct beneficiaries of infrastructure projects or attempts by government to regulate land use with the goal to bolster commercial activity or provide for the long-term sustainability of development. The point is that investors would like to predict those actions in inexpensive ways and without having to wait for government to act.[11] Rules tend to fulfill this desire by reducing the costs of prediction.

Or do they? Notice first that the effectiveness of a rule's predictive function will vary, inversely, with the complexity of that rule.[12] Very simple rules, such as a "no expropriation" rule,[13] will make prediction easy, as will narrowly couched rules, such as the one used by the Tsleil-Waututh Nation ("expropriation only for transmission and transportation corridors"). But more detailed and complex rules, such as the one designed by the Kitselas Salteaux Nation, above, reduce the predictive value of the legal norm. Simple rules therefore appear preferable. There is, however, another basic trade-off between the complexity of a rule and the likelihood that the rule will need to be changed or amended in the future. When very simple rules fail to account for changing circumstances — such as when growing resource scarcity increases the need to take land for community uses or ratchets up competition between land uses — these rules will inevitably need to be modified or amended. The simpler the rule, the more likely it is to change.

A further but related point is that the processes involved in changing rules can generate their own uncertainty by making it more difficult to predict what rule will apply in the future. In general, when political processes require higher decision costs, they produce more uncertainty. In her study on the supply of tradable fishing quotas in the United States, Katrina Wyman notes that collective choices about the form of property rights take one of three archetypical forms: unanimity among members of the relevant community, majoritarian vote, or a unitary decision made by a single actor. Processes that fall closer to a unanimity requirement will tend to generate higher decision costs compared to processes that look more unitary (Wyman 2005: 134). In turn, processes with higher decision costs will tend to generate changes in rules more slowly than those at the lower end, because parties are assumed to have different preferences that interact and compete to create "friction" in resolving mutually beneficial outcomes. A second determinant of decision costs — one not discussed by Wyman — is the degree of openness, transparency and public participation built into the decision process. If, for example, adopting a new rule requires extensive community input and consultation before the decision is made, these processes may also dramatically increase the costs of changing the rule.

The lawmaking requirements established by the FNLMA land codes therefore come into play here. For example, rules appear relatively easy to enact and modify under the Sliammon Nation Land Code, where draft land laws are first adopted by Council, provided to the community for comments at an open meeting, and then enacted, modified or rejected by a subsequent Council resolution (Sliammon Nation Amended Land Code, July 2011, s. 7) but any amendments to the Land Code itself must be approved by a majority vote of Community Members (Sliammon Nation Amended Land Code, July 2011, s. 12.1).

[11] Based on parallel logic, governments might also be assumed to hold a strong preference for rules. If a community is unable to predict in advance whether or not its activities will be judged permissible because norms are too open-ended, then it will tend to shy away from otherwise efficient public projects and regulatory measures. Rules, on this view, help to realize an efficient level of public as well as private investment. Moreover, the *ex ante* predictability of rules gives government — and by extension, the community as a whole — more direct control over how specific objectives for economic development are translated into practice.

[12] Commentators frequently observe that the up-front economic costs of designing rules can be very high, depending mainly on the degree of detail built into the rule, see Kennedy (1976); C.S. Diver (1983); and Ehrlich & Posner (1974).

[13] See, e.g., Chippewas of Georgina Island First Nation Land Management Code, 2000, s. 28; Mississauagas of Scugog Island First Nation Land Management Code, s. 29.1; and T'Souke Nation Land Code, 2006, s. 15.1.

By comparison, the decision costs associated with changing rules are relatively high under the We Wai Kai Nation Land Code, where land laws need to undergo at least two rounds of review and comment by the community, and final laws can only be approved by secret ballot of a majority of eligible voters (at least 30 community members must be present) (We Wai Kai Nation Land Code, 2008, Part IV). In the latter case, the decision costs will be higher due to the extended period of review and the greater number of participants.

The problem facing communities with respect to the predictive function of rules is thus: a simple rule has more predictive power, but this feature also makes the rule itself unstable — especially where the process of land reform creates or contributes to periods of rapid social and economic change. Relatively low-cost political decision-making processes will minimize the uncertainty involved in changing a rule, but this too leads to instability because politicians may be too willing — and able — to generate change.

(ii) Rules as Credible Commitments

There is also a second reason why rules might offer more security, based on the idea that they can help bind governments to their commitments about future action. Because rules stand as bold and public claims about government intentions and policy approaches, they may help to reassure investors that legislated norms are intended to remain stable over time.[14] Rules, as compared to standards, cause governments to bind their own hands when they perceive that the benefits from stable norms are likely to outweigh the advantages of greater flexibility, at least in the moment.

But, while rules might offer credible commitments to guide investor expectations while those rules are in force, there is little to guarantee that they will remain stable over time. What prevents government from changing a rule after an investor has committed her resources? The basic problem here is that third-party enforcement mechanisms for government commitments are largely absent.[15] This leads to a second way to understand the commitment function of rules, not as one-way promises by government, but as vehicles that help to produce credible relationships in practice. Assuming that rules will inevitably need to change over time, the political processes that structure that change will determine credible outcomes. From the perspective of community members, decision processes that generate high costs — such as those requiring a community-wide vote and/or extensive community consultation — might actually be seen as more legitimate because they are inclusive, transparent, and representative of collective interests. And, to the extent that public consultation and other modes of participation facilitate the convergence of individual views and generate consensus among the community of resource users, rule-making itself is not only perceived as more credible, but may actually help to build legitimacy in practice.

The problem is more complicated, however, from the perspective of non-community members who lack standing to participate directly in rule-making processes. Because land "ownership" in First Nations does not equate with community "membership" (Graben, forthcoming), outside investors might be skeptical of rule changes when they feel that their interests are not well represented, and will perceive their property to be substantially less secure as a result. Naomi Lamoreaux has underscored the significance of this relationship between political participation and security of property in her study of how the American governments during the colonial era and afterwards were able to successfully balance the need for widespread reallocation of property rights against landowners' inevitable anxieties about the security of their own claims (Lamoreaux 2011). Despite popular attention to the American "success story" of making real property secure for investment (De Soto 2010), Lamoreaux points out that the appropriation and

[14] Again, there is a parallel logic from the perspective of government. Rules reserve to First Nation governments important decisions about setting these commitments, in that they, rather than third party adjudicators, will assess and balancing priorities for development.

[15] Schelling (1956: 283) describes the role of third-parties in making commitments credible "whether the buyer can find an effective device for committing himself may depend on who he is, who the seller is, where they live, and a number of legal and institutional arrangements".

reallocation of property by government for public works such as dams and railroads has been a prominent feature throughout American history. This raises the question: "if putting assets in service of economic development meant reallocating the rights to them ... how could property rights be considered secure?" (Lamoreaux 2011: 277). Lamoreaux's answer to this "mystery" is that Americans' security in their property "owed to circumstance that made these [formal] institutions largely self-enforcing — in particular to the widespread ownership of property that was already well established during the colonial era" (Lamoreaux 2011: 278). On her account, because most American citizens already owned property, they formed a suitably powerful constituency that was comfortable in delegating the power to make reallocations that improved societal wealth. Individuals felt that they could discipline the exercise of public authority if it was co-opted by special interests or if it disproportionately advantaged those outside of the middle class.

When these insights are applied to the First Nations context, it seems that a disconnect between participatory political rights and property rights, at least for non-community members, could cause rulemaking and rule-changing to lack a credible self-enforcing mechanism that constrains the exercise of public power. On the one hand, this could mean that investors will prefer appropriately narrow rules combined with relatively low-cost decision processes because they have better chances to exercise informal influence, such as by lobbying directly to Council members or other important players. This of course raises the specter of political capture by special interests and undermines the credibility of rulemaking in its own way. When investors are large corporate interests with sophisticated lobbying and public relations capacities, imbalances in power may be particularly acute. On the other hand, when barriers to political participation in the legislative process diminish the predictive and credibility benefits of rules too much, property standards may emerge as a more attractive alternative.

B. Property Standards

Proponents of standards emphasize their flexibility and ability to adapt to changing conditions, patterns and circumstances, whereas "rules tend toward obsolescence" (Sullivan 1992: 66). The background principals and purposes that motivate standards take their precise shape over time, in response to specific cases with concrete facts.[16] Standards are thus thought to be less predictable and less stable over time when compared to rules. Moreover, because standards afford a wide zone of discretion to government decision makers about when and for what aims they choose to exercise their authority over property, and because these decisions are evaluated *ex-post* by non-majoritarian institutions such as courts, they appear to lack a structure that provides credible commitments in either of the ways discussed above. It follows, on this view, that investors should feel less secure and thus considerably more skeptical of an investment environment formed by First Nations who choose to use standards to govern the exercise of public authority.

These arguments might be approached from two related angles. One set of responses asserts that standards are in fact more stable than rule-proponents normally assume, because adjudicators have developed their own set of tools and techniques to make the content of standards predictable, especially as this work carries on over time. In light of challenges for promoting the security of property through rules, as discussed above, investors may find that their security is actually enhanced under standards-type approaches. A second set of responses emphasizes the advantages of balancing multiple, complex goals and interests, and points to the nature of institutions themselves as being an important factor in determining the ultimate trade offs between rules and standards. As Amnon Lehavi notes, "when we normatively aim at creating a more balanced set of property rights and duties to achieve complex or multiple goals, we are also often unable to crystallize in advance all the

[16] It is possible that non-adjudicatory bodies can also contribute to giving standards content. One example is the supplementation of standards by a Lands Advisory Committees, which may issue recommendations or opinions that help to shade in the normative content of standards, if they have such powers: see, e.g., Shxwhá:y Village Land Code, 2006, s. 19.2(d) ("The purpose of the Land Management Advisory Committee is to ... hold Meetings of Members and other meetings to discuss issues related to Shxwhá:y Village Land and make recommendations to Council on the resolution of such issues").

contingencies that may result" (Lehavi 2011). Recognizing these aspects of incompleteness goes beyond simply acknowledging that the world itself is uncertain, it also recognizes that governments, groups and individuals will inevitably need to respond to changes in social, economic and technological circumstances as they arise.

In order to track the discussion of rules, above, I first consider arguments that standards offer substantial predictability because adjudicators have developed useful techniques to guide expectations, and then move on to compare standards as an alternative form of commitment device.

(i) Standards and Predictability

Drawing on his broad survey of American property law, Joseph Singer argues that standards, in practice, tend to generate legal norms that are considerably more predictable than one might think (Singer 2013). The underlying reason is that people will base their legitimate expectations about property on both formal and informal sources. When informal expectations diverge from the content of a formal rule, the nominal "clarity" of rules actually generates highly uncertain results. By comparison, standards go hand-in-hand with a set of legal techniques that can better help to align legal norms with, as well as shape, these expectations.

More specifically, Singer identifies two mechanisms that adjudicators use to ground the stability of standards over time by helping to guide, adjust and react to expectations. He refers to these mechanisms as "exemplars" and "presumptions". Exemplars are tacit models or core cases that develop as stylized stories to anchor shared expectations about the meaning of a standard. Exemplars also post easily accessible reference points against which to measure anticipated scenarios in the future (Singer 2013: 1388–89). Rather than providing one-way directives that might fail to consider important informal expectations, these models help to connect and confront those expectations by elaborating explicit patterns of reasoning behind broader principals — although the success of this process depends crucially on the actors and other institutions involved, as I describe below.

This approach does not ensure that investors' expectations will always prevail over what First Nation governments' perceive to be their legitimate role in exercising public authority over property. Nor is that the intention. But standards may be particularly useful when parties from different backgrounds and experiences attempt to align their goals and shape mutual understandings. Exemplars aid in this process by making expectations more explicit for future cases.

For example, whether or not a First Nation government has legitimately exercised its power to expropriate lands for a "community purpose" in any given case will be determined in large part by how one understands government's core functions. Those expectations, in turn, are framed by tacit models of active or reactive local authority, or likewise by models an activist or reactive state (Ackerman 1982). Parties anticipate future action, and adjudicators reason about an instant case, based on this type of an exemplar. Take a useful example from the Canadian case law. In *Fouillard v. Ellice (Rural Municipality)* (2007) [*Fouillard*], a local municipality in Manitoba exercised its authority to expropriate approximately 288 acres of the Fouillards' private land because it contained the remaining structures of a historically significant trading post, Fort Ellis, built in 1831. Controversially, the goal of the this government action was not only to preserve the heritage site, but because the municipality intended to develop the lands as a local attraction with an interpretive center and fairground. The government claimed that it was authorized to do so pursuant to provincial statute, which allowed expropriations if the municipal council "considers [it] necessary or advisable to acquire [lands] for a municipal purpose" (Municipal Act, C.C.S.M., c. M225, s. 254(1), authorizing expropriation under the Expropriation Act, C.C.S.M., c. E190). Council made clear that it was taking up the lands in question for the purpose of economic development — in particular the expansion of local tourism — and the Fouillards challenged the decision claiming that this objective did not fall within the standard.

The statute at issue in *Fouillard* also provided some further detail to the standard, defining the purposes of the municipality as being (i) to provide good government; (ii) to provide services and facilities that are necessary or desirable for all or part of the municipality; and (iii) to develop and maintain safe and viable communities (Municipal Act, s. 3). The trial judge found that the pursuit of economic devel-

opment fell within the "municipal purposes" standard. The Manitoba Court of Appeal agreed, reasoning that the overarching purposes of the statute and the direct role of the municipality in providing "good government" pointed to a norm authorizing expropriation when council acted to improve the economic welfare of the community as a whole (*Fouillard*, para. 49). Crucially, the Court recognized that this interpretation of "municipal purpose" was based on an exemplar of "modern" local governance, which endowed municipalities with an "active and direct role" to stimulate economic development. Whatever the parties' normative positions on whether this was or was not an appropriate interpretation of the role of government, the Court's reasoning provides a strong model for future investors and other economic actors within the municipality to guide and stabilize their expectations.

Singer's second argument is that standards also develop implicit "presumptions", which function as default allocations and favour particular outcomes (Singer 2013: 1390). Sometimes the presumptions are implied, but they can also be explicit. Business licencing laws, for example, may presume authorized use unless public officials can show that the proposed business contravenes certain criteria such as community health and safety, or specific cultural norms. These presumptions can make standards more predictable by narrowing the range of circumstances in which government discretion is exercised.

The problem with both exemplars and presumptions as stabilizing mechanisms to make standards more concrete is that they depend heavily on well-developed and widely available precedent, and in this sense Singer's arguments are highly contingent on common law experience. For new land regimes under the FNLMA, this poses a challenge — at least in the short term, where investors will be left either with little information about the substantive content of standards, or will turn to the exemplars and presumptions developed in the Canadian common law, which may not be sufficiently sensitive to First Nations' contexts or to their diversity to yield accurate predictors. Standards in their early stages will inevitably be less stable and predictable compared to those that have developed over time.

(ii) Standards as Credible Commitments

Concerns about the development of precedent may, however, be offset by the benefits that standards offer in establishing credible commitments on the part of government. As we have seen, the presumption that rules offer a good mechanism to hold governments to their promises may not materialize in practice when credible third-party enforcers are absent and when rules can be easily changed. Using standards, by contrast, delegates a certain degree of authority over legal change to arms-length adjudicators who are not subject to the pressures or the division of interests that make political rulemaking processes potentially unattractive from the standpoint of secure property. While the commitments offered by governments through standards are necessarily open-ended, their ability to constrain the exercise of government discretion through delegation to third-parties may grant investors considerable security while leaving room for appropriate norms to develop as circumstances evolve.

What factors will determine whether or not this holds true? Independence of dispute resolution bodies from government will be one important consideration. When governments are responsible for controversial decisions about the expropriation of lands or the regulation of land uses, investors are likely to be skeptical of any adjudicatory mechanism that is too closely associated with public officials. The forms of dispute resolution under the FNLMA land codes vary widely and range from mediation, arbitration, adjudication by an individual officer, or court-like hearing procedures before a dispute resolution panel established by the First Nation. First Nations have employed a number of mechanisms to promote the independence of these bodies, including fixed terms for adjudicator appointments and prohibitions against conflict of interest with Council affairs. The Sliammon, Shxwhá:y Village and Sema:th Nations have each identified an Office of the Adjudicator, which is occupied by a lawyer with specific technical expertise (Sliammon Nation Land Code, 2011, s. 40.1; Shxwhá:y Village Land Code, 2006, s. 37.4; Sema:th Nation Land Code, 2010, s. 46.4). The Mississauga First Nation appears to have been the most aggressive in codifying structural independence by requiring a rigorous application and vetting process for members of its Appeals

Board, by listing specific qualification requirements for appointments, and by fixing terms for a period of three years (Mississauga First Nation Land Code, June 2009, s. 40). The Mississauga First Nation has also taken the additional step of requiring that all members be appointed from outside the community, but among the membership of other First Nations that are part of the Anishnabek Nation. Alternatively, some communities, such as the Songhees First Nation, have opted to outsource dispute settlement to bodies such as the British Columbia Arbitration and Mediation Institute, although this decision may also be driven by resource constraints as much as concern about adjudicatory independence (Songhees First Nation Land Code, 2011, s. 34.1).

Presumably, dispute resolution bodies also need sufficient powers to enforce commitments, but this function should not be construed too narrowly. Some arbitrators and dispute panels envisioned in the land codes appear to have strong enforcement powers, such as the power to issue orders. But other bodies have been established with an emphasis on alternative dispute resolution. Although they lack powers to directly enforce outcomes, these bodies can help to build credible commitments in much the same way that open and transparent political processes do, by taking into account a broad array of interests and resolving outcomes that are perceived as legitimate by all parties.[17] Standards, however, offer a distinct advantage to rules in this respect, because dispute resolution will specifically include participation by outside investors as well.

Ultimately, some investors are likely to prefer the common law courts to community-based dispute resolution — a reality acknowledged in some of the land codes that offer courts either as an alternative forum or as a means of appeal. Some also delegate all dispute resolution to courts directly, bypassing local processes,[18] and only the Mississauga First Nation appears to disallow any direct appeal to the common law courts altogether (Mississauga First Nation Land Code, June 2009, s. 50). Outside investors in particular might favour common law courts, because they perceive them to be more independent, but also because they have greater familiarity with these institutions and see them as more likely to be aligned with their interests. A more general argument in favour of courts is that they have an available body of precedent to draw from, thereby promoting the predictability of norms. It is not clear however, as noted above, that the common law will be sufficiently flexible and sensitive to First Nations contexts to yield real predictability in practice.

C. Property Outside the Public Context

I have argued so far that standards can be a promising strategy for First Nations to chart their public authority over property in ways conducive to attracting economic investment. Much of that argument depends on the specific concerns that arise when governments exercise their public "rights" but also have a direct say as legislator in establishing their bounds. The situation likely looks somewhat different, however, where First Nations aim to delineate the property rights of non-government parties. Distinguishing between these cases therefore raises the question of how rules and standards compare as strategies in this second set of circumstances.

I intend to leave the resolution of this question to future research, but will offer a few preliminary thoughts here to motivate further work. It is worth noting that contemporary scholarship on the role of standards in property law has by no means been confined to the case of public authority — indeed, this is treated as relatively peripheral issue in studies that are primarily concerned with how standards are used at the conventional core of the common law, including trespass, adverse possession, servitudes, and leaseholds (Singer 2013). First Nations may therefore find useful insights here as they turn their attention to related issues.

One of those issues is the question of how to delineate community members' use and occupancy rights in First Nation lands. The FNLMA requires each First Nation to "set out the general rules that apply to the use and occupancy of

[17] See, e.g., Shxwhá:y Nation Land Code, 2006, s. 37.2: "Shxwhá:y Village further intends that wherever possible, a dispute in relation to Shxwhá:y Village Land that is not resolved by informal discussions by the parties to the dispute be resolved through voluntary participation of the parties to the dispute in a tribal or other alternate justice forum."

[18] For a discussion of some of the few specialized First Nations courts, see Whonnock (2011).

First Nation land", including lands granted to individual community members and those held "pursuant to the custom of the First Nation" (FNLMA, s. 6(1)(b)). These rights might vary substantially from common law property rights off reserve or they might be designed to look quite similar.[19] Interestingly, communities thus far appear to be pursuing different approaches to defining these rights. Scugog Island First Nation, for example, has adopted a fairly clear rule-like strategy that makes provision for "the exclusive use and occupancy of [lands] for residential purposes", but also enables individuals to earn revenue from the sale of resources on these lands (Mississaugas of Scugog Island First Nation, s. 16). By comparison, other communities employ property strategies that look considerably more standard-like. Members of the Songhees First Nation, for example, are eligible to "benefit from the resources arising from the land" (Songhees First Nation Land Code, 2011, s. 25.2), while some property interests afforded to members of the Kinistin Saulteaux First Nation preclude them from "benefitting" from the resources located on, in or under residential lots (Kinistin Saulteaux First Nation Land Code, November 2004, s. 16.2).[20]

It is too early to speculate much about these approaches, but the emerging variation raise important questions. What has motivated First Nations to adopt standard versus rule-like strategies to delineate community members' land use rights? How will open-ended concepts such as "benefit" be interpreted over time (for example, does this include the right to commercial benefit, or is it restricted to personal or subsistence needs)? While the form of these interests may not have much bearing on large commercial developments — where lands are more likely to be leased directly from the community — they may have important implications for the development of member-run businesses and other entrepreneurial activity. Certainly, because the "credible commitments" rationale for standards, described above, is inapplicable where the question is how to delineate property rights between non-government parties, the case for standards might be somewhat weaker here.

However these and other emerging questions might be resolved, the distinction between rules and standards as alternative strategies for property law design provides one useful framework for thinking about the many decisions facing First Nations as their property systems continue to evolve. Despite the presumptive benefits of clear rules in promoting the security of property to attract capital investment, this essay helps to explain why such a view is overly simplistic. By giving some attention to the processes by which both rules and standards change over time, the latter appear to offer some unique benefits for delineating the public authority of First Nation governments over property. And while standards can help to promote the security of property in some circumstances, assessing this strategy in comparison to rules also highlights the tradeoffs inherent in both approaches, as well as the fact that both strategies will be employed to some degree. Rules have the benefit of being simple, *ex ante* directives, but this means that they are especially vulnerable to manipulation by politics. Standards can help to insulate the evolution of legal norms from these political processes, but require First Nations to delegate some decision-making authority to institutions in ways that present their own challenges. As well, the real benefits of standards may only emerge slowly, over time. Hopefully, future research can refine the analysis and help to clarify how communities can better assess these trade-offs in context.

II. "LOCAL" PROPERTY

First Nations also face a set of important questions about the relationship between localized property regimes and legal systems external their communities. Just as an information-cost approach to institutional design tends to favour bright-line rules, it also prioritizes *uniform* ones, suggesting that communities may face steep economic costs when they create local institutions that deviate from the property norms familiar to

[19] Graben (forthcoming) for a discussion of how the Nisga'a Nation has opted for a form of title that closely resembles fee simple.

[20] "The allocation of an Interest in a residential lot does not entitle the Member to benefit from the resources located in, under or upon the affected Kinisting Saulteaux Nation Land."

the Anglo-Canadian common law. The general message, according to this view, seems to be that First Nations should find ways to reduce local variation in their property regimes and/or to promote integration with broader legal "networks" that structure predominant markets and commercial transactions. This perspective may therefore represent a substantial challenge to those who envision a more diverse and pluralistic landscape for First Nation property laws — and for property in Canada more generally.

While a comprehensive evaluation of questions about resistance and convergence in local property regimes is beyond the scope of this Essay, below I briefly outline the emerging information-based framework that addresses these issues and identify some key assumptions that underpin this approach. By way of a preliminary assessment, I argue that emerging research contains substantial gaps and has failed to seriously engage with some of the important benefits of localized property regimes. I conclude by raising some questions in this line of scholarship going forward.

A. An Information-based Perspective on Local Property

In a wide ranging study of property arrangements from indigenous Sámi communities in Norway to kibbutzim in Israel, property scholars Abraham Bell and Gideon Parchomovsky have recently offered a forceful theory that describes how the value of localized property can be "lost in translation" when group members seek to deploy local resources beyond community boundaries (Bell & Parchomovsky 2013). By emphasizing the information and related costs associated with maintaining property laws outside "dominant" legal regimes — i.e., regimes with a large number of adherents and which underpin widespread economic and financial markets — this work offers a relatively skeptical perspective on the capacity of different communities to maintain localized property regimes over time.

The authors' central argument is that communities will eventually face a choice between (i) adopting "standardized" — i.e., conventional common law — property forms or (ii) developing suitable mechanisms to translate local rights for external recognition and enforcement. According the theory, there are two primary information cost considerations that are relevant whenever local rights-holders attempt to deploy resources beyond community boundaries, such as when homeowners on reserve lands seek collateralize their real estate through outside financial institutions (to use a much cited example). First, it may be onerous for parties who are unfamiliar with the local regime to gather and confirm information about its content (Bell & Parchomovsky 2013: 544). Large national banks that issue mortgages primarily off reserve, for example, may need to expend considerable resources locating and researching all relevant features of the many property systems now being developed by First Nations. This activity may be especially costly where information is highly dispersed and expensive to access. Second, after formulating a *prima facie* understanding of a local property regime, additional expenditures are likely required to translate local rights such that they can be used, and consequently enforced, outside the community (Bell & Parchomovsky 2013: 545).[21]

To help describe their theory, Bell and Parchomovsky analogize market-dominant property regimes to technical standards that display "network effects" — such as computer operating systems or wireless telephone infrastructure — whose value tends to increase along with the total quantity of users or participants (Bell & Parchomovsky 2013: 548). Reasoning from the available literature on technical standards, the authors argue that local property regimes will face strong pressures either to adopt external property norms wholesale so that they are accessible to a broader constituency of potential rights-holders, or to develop systems that are "interoperable" with the common law. The capacity to translate local property rights therefore becomes a defining factor in the ongoing viability of local systems.

[21] The authors also note that there is a third dimension, labeled "enforcement costs", which accrue from the need to enforce local rights through external institutions.

B. Early Assessment of the Theory

The information-cost framework described above usefully highlights some of the challenges that First Nations might face as they continue to cultivate localized property regimes, underscores that property norms are contingent on the networks in which they operate, and helps to focus attention on effective means of translation between distinct legal systems. The theory, however, quite likely overstates or misinterprets communities' incentives to converge on common law property norms in the long run, for several reasons.

First, the theory appears to rest on an implicit assumption that local property is more of a historical artifact and less of a dynamic institution capable of adaptive design. Granted, information-cost scholars acknowledge that communities have important reasons for creating context-specific property regimes and for resisting convergence over time (Bell & Parchomovsky 2013: 540–42) — for example, because they strive to cultivate property law as an affirmation of community needs, values and autonomy; because they wish to signal a rejection of colonial institutions; and/or because they are keen to avoid some of the rigid strictures of common law property systems. But the theory fails to recognize that local property systems may yield comparative benefits for non-community actors as well as for communities, rather than simply raising the costs of doing business or participating in community development projects. One potential benefit is that processes of institutional design themselves can help to shape First Nations-led market expectations and may forge relationships between community members, governments and outside investors in productive ways. Some local property laws will no doubt be designed with specific resources and projects in mind, and can be structured in consultation with relevant third parties.[22] The result can be property regimes that are both well suited to local circumstances and actually reduce the total informational burden, at least on some participants.

Second, information-cost arguments ignore any possibility that market-dominant property systems can and may need to adapt. Bell and Parchomovsky assume that the network effects of property are driven exclusively by the size of the network or user group, creating a one-way pull toward the regime with the largest number of adherents. By focusing entirely on the size of the user group, this view fails to account for any imbalances in the market power or other relevant features of network participants. In other words, it is reasonable to expect that the centre of gravity between intersecting property regimes depends not only on number of adherents (which determines the available opportunities to transact) but also on *who* they are (which may determine the value of particular transactions). An emphasis on network size may be warranted in certain scenarios, such as in the case of First Nations housing and commercial mortgages, where the value of transactions to large financial institutions is likely to be comparatively small. But it is not clear that First Nations lack substantial market power in other contexts, such as natural resource developments, where some communities might control or assert legal claims to considerable resources. Under these circumstances, it is conceivable that legal systems external to communities will be under pressure to change or adapt. Of course, this logic cuts both ways and there are no doubt examples of powerful private interests who are well positioned to exert market pressure on local property regimes to harmonize or converge.

Finally, the concept of "translating" local property rights for external recognition and enforcement is a compelling element of Bell and Parchomovsky's theory, but one that needs further elaboration. For example, who bears the onus to translate local property? The authors state unequivocally that "[t]he burden of achieving legal interoperability lies squarely with ... local communities" (Bell & Parchomovsky 2013: 553) but given the fraught history of First Nations property in Canada and the broader legal frameworks that shape fiduciary relationships and principals of reconciliation, there are likely strong arguments to be made that the onus lies on the Canadian legal system to achieve or facilitate translation. In any event, the objectives and mechanisms of translating local property warrant further study — both in theory and as a reflection of evolving practice.

[22] See Part I for a discussion of some possibilities and challenges for this type of consultation and political participation.

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INSTITUTIONAL CHANGE ON FIRST NATIONS
Examining Factors Influencing First Nations' Adoption of the Framework Agreement on First Nation Land Management

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ABSTRACT

In 1999 the Canadian Federal government passed the First Nations Land Management Act, ratifying the Framework Agreement on First Nation Land Management signed by the government and 14 original signatory First Nations in 1996. This Agreement allows First Nations to opt out of the 34 land code provisions of the Indian Act and develop individual land codes, and has been promoted as a means of increasing First Nation autonomy and facilitating economic growth and development on reserve lands. There are currently 77 First Nation signatories to the Agreement, 39 with operational independent land codes. This paper is the first to empirically examine factors that may influence a First Nation's decision to become signatory to the Framework Agreement. A unique dataset characterizing each First Nation by socio-economic and demographic characteristics is used with a probit model to determine the effects of these characteristics on the probability of First Nation adoption of the Agreement. The results of this study indicate that proximity to an urban centre positively affects the probability that a First Nation will adopt. However, the statistical strength of this finding is sensitive to the inclusion of an education variable in the regression.

INTRODUCTION

This paper examines factors that influence a First Nation's decision to adopt the Framework Agreement on First Nation Land Management in Canada. (Hereafter we refer to this agreement as the *Framework Agreement* or "FA".) The FA (discussed in detail below) allows each First Nation to develop a unique set of rules and regulations regarding use of the First Nation's reserve land. Importantly, these rules may differ from the set of rules and regulations set forth in the *Indian Act*,[1] which currently apply to most First Nations in Canada. Specifically, adoption of the FA allows First Nations to opt out of the 34 sections of the Indian Act that govern land use and develop their own individual land codes (Alcantara 2007). Hence, the adoption of the FA reflects an institutional[2] change.

The reasons for adopting the FA vary, but prominent arguments for adoption include economic development and allowing greater autonomy for First Nations (Alcantara 2007; LABRC 2012). The motivating factors behind institutional change remain an important area of inquiry. Some economists suggest that institutional change is motivated towards an efficient outcome: i.e., increasing net-benefits to society (Demsetz 1967; North and Thomas 1970). Others point out that institutional change may not be efficient but may reflect asymmetric distributions of power and wealth (Acemoglu, Johnson, and Robinson 2002). For example, Benson (1981) argues that lobbying from special interests groups may induce institutional change along an inefficient path.

Our examination of the factors motivating adoption may provide some insight into whether there are expected economic gains to adoption, though we are not able to draw conclusions about the benefits or the beneficiaries of the FA. We hypothesize that First Nations near urban areas may be more likely to adopt the FA than First Nations in more remote areas. Our hypothesis is based on two assumptions. First, we assume that the adoption of the FA allows a First Nation to develop land codes that better enable it to take advantage of investment opportunities. Second, we assume that the magnitude of potential land investment opportunities is higher for First Nations in closer proximity to urban areas.

The paper proceeds as follows. The next section provides background on the Framework Agreement on First Nation Land Management and describes some differences between land codes under the Indian Act and those land codes adopted by some First Nations. The following section outlines the data and empirical model used to examine factors that influence FA adoption. The subsequent section — i.e., results — provides regression estimates of a number of factors including the distance from each First Nation to an urban area with a population greater than 100,000 persons. The results suggest that as the distance between a First Nation's reserve(s) and urban areas increases, the likelihood of FA adoption decreases. This negative relationship is robust across all models in our paper, though the statistical significance of the effect is sensitive in one model that includes an educational variable which, in turn, also limits the sample size available for assessment.

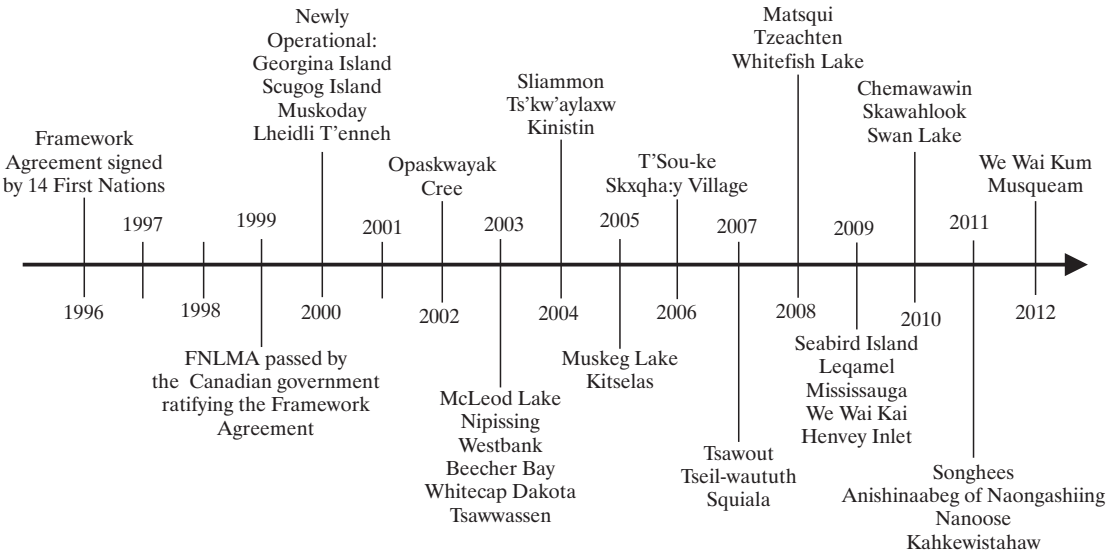
BACKGROUND

The Framework Agreement on First Nation Land Management (FA) was developed by 14 First Nations in the mid-1990s in response to perceived constraints to land use imposed by the Indian Act. Figure 1 provides a timeline of First Nations operational under the FA. The timeline begins in 1996 when the FA was first signed by 14 First Nations and goes until 2012 when We Wai Kum and Musqueam became operational under their own land codes. The federal government passed the First Nations Land Management Act (FNLMA) in 1999, officially ratifying the FA. Since then, 77 First Nations have become *signatory* to the FA (a more exact definition of signatory is defined below). Thirty-nine of the 77

[1] A Canadian federal statute that governs First Nations. The Indian Act was first passed in 1876 and has subsequently been revised. Under the Indian Act, reserve land use is jointly governed by the elected band councils and the federal Minister of Aboriginal Affairs.

[2] North (1990) defines institutions as the rules of the game. Commons (1931) defined institutions as collective action in control, liberation and expansion of individual action.

FIGURE 1
Timeline of First Nations Operational under the Framework Agreement with individual Land Codes by Year



are currently operating under their own land codes (LABRC 2012), identified in Figure 1.

There are a number of steps that must be taken before a First Nation is able to develop its own land code under the FA. Initially a First Nation must pass a band council resolution (BCR) seeking entrance to the FNLMA. If successful, the BCR is submitted to the Lands Advisory Board.[3] Subsequently, a second BCR is required, which commits the band to the community approval process. The Lands Advisory Board then makes a recommendation to Aboriginal Affairs and Northern Development Canada (AANDC) to add the First Nation to the schedule of the FNLMA, at which point the First Nation becomes a signatory to the FA. Finally, the First Nation enters the community approval process, during which time it develops its own land code and the individual agreement to be adopted by the First Nation and AANDC. (Becoming a signatory to the FA does not ensure that a First Nation will ultimately develop its own land code.) Of the 77 First Nations who are signatory, 30 are in the developmental stage of adoption and have not yet voted on their land code. Though only a small percentage of First Nations are operational under the FA, interest has grown since its inception. According to Chief Robert Louie, approximately one in six of Canada's 617 First Nations have adopted or expressed interest in adoption (Deaton and Louie 2012).

The land codes developed by individual First Nations under the FA may differ. However, a common element of the reformed land codes is that the First Nation has greater autonomy over the approval process for altering *land uses* and certain land tenure arrangements.[4] These reforms

[3] The Lands Advisory Board was established under Part VIII of the Framework Agreement, for the purpose of assisting signatory First Nations in establishing their agreements with the Canadian government (LABRC 2003).

[4] Under the FA, the fiduciary relationship between the federal government and participating First Nations continues, but the role of the federal government as a fiduciary is reduced. Land use decisions and tenure arrangements (such as the allocation of leases and certificates of possession) are up to the First Nation band to administer, and no longer require federal oversight.

stand in contrast to the Indian Act which requires approval from the Minister of Aboriginal Affairs for many changes in land use: e.g., leasing land (Department of Justice 1985). In some cases the new land codes may strengthen the property rights associated with various forms of land tenure, such as customary tenure rights. These changes may have economic benefits if they reduce the transaction costs associated with allocating land to alternative uses with higher economic value, or promote investment.

Alcantara (2007) recently investigated the consequences of newly implemented land codes in two First Nations that have adopted the FA: the Mississaugas of Scugog Island and the Muskoday First Nations. He found that both First Nations put in place more efficient systems for allotting permits, leases and certificates of possession than the systems that previously existed under the Indian Act. Moreover, in the case of Mississaugas of Scugog Island, he argued that the new land codes strengthened customary tenure rights through formal documentation, registration, and protection from band expropriation.

FACTORS INFLUENCING ADOPTION

The general model of institutional change proposed by Demsetz (1967) and North and Thomas (1970) hypothesizes institutional changes will emerge when the benefits of change exceed the costs. The extent to which these changes are beneficial to society or are captured by a subset of individuals rather than the whole of society is an ongoing question of debate in the institutional change literature. For a recent in-depth discussion of this issue see Acemoglu and Robison's book, *Why Nations Fail* (2012).

A common feature of both arguments is that institutional change is motivated by an increase in expected net-benefits to some group of individuals. In our study of FA adoption we are not able to explore the expected magnitude of the benefits or the distribution thereof. However, we do use this "net-benefit" concept to motivate our primary research question regarding adoption of the FA. Specifically, we hypothesize that a First Nation in close proximity to large urban areas will be more likely to adopt the FA than more remote First Nations.

The "proximity hypothesis" is motivated by a number of key ideas or assumptions. The first assumption is that one[5] motivating factor behind FA adoption is to support increased investments and new uses of First Nation land. The second assumption is that First Nation expectations regarding future investments on land are positively influenced by proximity to urban areas.

Urban areas have long been associated with enhanced economic opportunity (Moretti 2012). Large populations associated with urban regions may, for example, provide market opportunities for goods and resources produced on a First Nation reserve. First Nations with a more flexible system of land governance may be in a better position to take advantage of these opportunities. Moreover, urban areas may support new and growing employment opportunities for First Nation people who then seek out residential opportunities on First Nation land. In addition, proximity to urban areas may incentivize investors from outside the reserve to invest in businesses. These new investments may require greater flexibility and security with respect to First Nation land. For these reasons we expect a spatial pattern to emerge in the adoption of the FA. The empirical challenge, as we discuss in the next section, is to assess this spatial pattern — i.e., our "proximity hypothesis" — while controlling for a variety of other factors that may also influence FA adoption.

EMPIRICAL MODEL

The probability that a First Nation will adopt the Framework Agreement is represented by the following equation:

$$P(FA|X,Y) = G(a_0+\alpha X+\beta Y)$$

where $P(FA|X)$ represents the probability that a First Nation adopts the Framework Agreement, G is the cumulative distribution function of the normal distribution, X is a vector of variables of reserves and nearby area (e.g., the distance of a First Nation's reserve(s) to the nearest urban centre with a population of 100,000 people or more), and Y is a vector of First Nation popula-

[5] As mentioned in the introduction, there are likely to be a number of motivations behind FA adoption.

tion variables. A probit regression estimates the effect of the covariates (X and Y) on the probability of adoption. This effect is represented by the coefficients alpha and beta (α, β). The distance variable is hypothesized to have a negative coefficient, indicating that as distance between a First Nation's reserves and urban areas increases, the likelihood of adoption decreases. Put another way, First Nations in closer proximity to urban areas are expected to be more likely to adopt the Framework Agreement. In addition, we examine the statistical significance of this effect.

DATA

The empirical model is applied to our data set in order to estimate the influence of the variables on First Nation adoption of the FA. The data set consists of a subset of First Nations in Canada. The data include distances of First Nation reserve(s) to the nearest urban areas as well as socio-economic characteristics. The distance variables were calculated using GIS and information about the location of First Nation reserve(s) and urban areas. The socio-economic variables that describe each First Nation come, primarily, from the 2006 census. The remainder of this section provides greater detail about the data set.

The data set is comprised of 287 First Nations. This is a subset of the 617 recognized First Nations in Canada. We limit our analysis to 287 First Nations for the following reasons. First, we do not include First Nations in northern Canada[6] (Yukon Territory, Northwest Territories, and Nunavut). This reduces the potential sample size from 617 to 588 First Nations.

Furthermore, we limit our dataset to include First Nations comprised of 1 or 2 reserves. This simplified the construction and assessment of the measure of distance between urban area and First Nation. We also did not include reserves that are associated with multiple First Nations (the association between First Nations and their reserves are described on the AANDC website[7]). For example, the Blue Quills First Nation reserve in Alberta has six First Nations[8] listed. Reserves such as these (of which there were 52, making up a very small proportion of total reserves at approximately 1.7%) were eliminated from the dataset. In summary, the current data set is limited to First Nations with only 1 or 2 reserves for which they are the only First Nation residing, as listed by AANDC. This results in a sample size of 287 from the 588 First Nations in the 10 Canadian provinces.[9]

There are well known limitations associated with Canadian census data. One such limitation is that only a subset of First Nations participated in the 2006 census. Hence, First Nations for which data are not available are excluded from the set of regressions that include population characteristics. Additionally, data for First Nation communities with fewer than 40 people or First Nations with non-response rates of 25% or greater are suppressed by Statistics Canada. These First Nations are also excluded from regressions in which population data are included. These data limitations further limit the First Nations available for analysis. In the regression analysis we analyze the 287 First Nations and then a subset of First Nations (152) with data on population characteristics.

The dependent variable in the regression is adoption of the Framework Agreement by a First Nation. In Table 1 this variable is identified as *FA*. First Nations operational under the Agreement and those in the developmental stages of adopting it at the time of this study received a 1, i.e., $FA = 1$. First Nations that have not adopted the Framework Agreement received a zero, i.e., $FA = 0$. The non-adoption category includes signatories to the FNLMA that are listed as inactive and/or those whose vote to adopt the Framework Agreement did not pass. Summary information on the categorical variable FA is provided in Table 1. Of the 287 FN in

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6 First Nations are subject to the Yukon First Nations Self-Government Act of 1993 in the Yukon, the Nunavut Land Claims Agreement of 1993 in Nunavut, and various settlement agreements in the Northwest Territories.

7 <http://pse5-esd5.ainc-inac.gc.ca/FNP/Main/Search/SearchRV.aspx?lang=eng>

8 Beaver Lake Cree Nation, Cold Lake First Nations, Frog Lake, Heart Lake, Kehewin Cree Nation, and Saddle Lake Cree Nation.

9 Restricting the First Nations included in this analysis also limited the number of First Nations operational under the Framework Agreement or in developmental stages of adopting from a possible 69 to 28.

TABLE 1
Summary Statistics for Variables Included in the Probit Model

Variable	*Mean*	*Std. Dev.*	*Minimum*	*Maximum*	*N*
Distance to Urban Centre (km)	252.66	211.07	5.52	1076.69	287
Reserve Area (km^2)	71.6922	139.74	0.02915	1412.461	287
CD Cost of Living ($)	586.12	141.90	250.00	1042.00	287
CD Population Density	23.6437	93.8860	0.0340	957	287
Band Population	1403.64	1561.57	42	10430	280
% on Reserve	55.52	21.37	0	98.77	280
% without High School	59.83	16.31	30.00	97.83	152

the final data set, 28 are categorized as having adopted the FA.

The distance between each First Nation's reserves and urban areas is the main variable of interest in this study. The distance variable measures the straight-line distance between the centre of each reserve and the centre of the nearest urban area with a population of 100,000 people or more. For First Nations with two reserves, a weighted average of the distances of each reserve was calculated.[10] In our regression analysis the distance variable is logged to reduce the effect of outliers in the data. Table 1 indicates that the mean of the distance variable was approximately 253 kilometres.

The land area of each reserve was determined using geographic information system (GIS) software. The area of reserves associated with each First Nation is included as a measure of the land administered by and the potential resources available to the First Nation. For First Nations with two reserves, the sum of the area of both reserves is included as a single variable. The average reserve area was 71 square kilometres.

The cost of living (average gross rental rate[11]) and population density (measured in people per square kilometres) in the census divisions surrounding First Nation reserves were obtained from the 2006 Canadian Census. For First Nations with multiple reserves, a weighted average of these variables was calculated (employing the same method described above).

The total band population for each First Nation was obtained from the 2006 Registered Indian Population by Sex and Residence, published by Indian Affairs and Northern Development Canada. The proportion of each First Nation residing on its reserve(s) was calculated from the numbers of band members living on reserve and crown land as a proportion of the total band population, also obtained from the 2006 Registered Indian Population by Sex and Residence. On average the band population was approximately 1403 members.

The proportion of the First Nation population who did not receive a high school diploma was calculated from numbers obtained from the Aboriginal Peoples Profile of the 2006 census. The number of the Aboriginal identity population who had no certificate, diploma, or degree was divided by the total Aboriginal identity population 15 years and over to obtain the proportion of those without a high school education. On average, approximately 60% of the reserve population did not have a high school diploma.

[10] The distance of each reserve to the nearest urban centre was weighted by the proportional area of each reserve to the total reserve area of the First Nation, such that if a First Nation's reserves had an area of 25 and 75 km^2 for a total area of 100 km^2, the distance of the first reserve would be given a weight of 0.25 and the second a weight of 0.75.

[11] Defined by Statistics Canada, the average monthly total of all shelter expenses paid by tenant households, including monthly rent and costs of electricity, heat and municipal services.

TABLE 2
Probit Results for First Nations with One and Two Reserves, Reporting Marginal Effects and Robust Standard Errors

Dependent Variable: Framework Agreement (FA = 1 if FN adopts the FA).

	Model 1		*Model 2*		*Model 3*	
Variable	*Marginal Effect*	*Robust SE*	*Marginal Effect*	*Robust SE*	*Marginal Effect*	*Robust SE*
Ln Distance (100 km)	–0.0647***	0.0000	–0.05783***	0.0000	–0.0311	0.0191
Reserve Area (km^2)	–4.8e-5	9.0e-5	–2.53e-5	1.2e-5	–0.0002	0.0001
CD Cost of Living ($100)	0.0220**	0.0088	0.0221***	0.0079	0.0058	0.0061
CD Population Density	–0.0002**	0.0001	–0.0002**	0.0001	–0.0001	0.0003
Band Population	—		–1.61e-6	0.0000	7.68e-6	1.0e-5
% on Reserve	—		–0.0008*	0.0005	–5.9e-5	0.004
% without High School	—		—		–0.0011	0.0007
Constant[a]	–2.5444***	0.6850	–2.232***	0.7328	–0.5795	1.4892
Pseudo R^2	0.2676		0.2829		0.3741	
Number of Observations	287		280		152	
Framework Agreement Adopters	28		28		14	

Statistical significance at the 1% (***), 5% (**), and 10% (*) levels.
[a] Reporting constant term from probit regression rather than the marginal effect.

RESULTS

The results of the empirical analysis are presented in Table 2. Three models are provided. The models differ with respect to the set of variables included in the data set and the associated number of available observations. Model 1 includes all 287 First Nations but does not include band population, percentage of band on reserve, or percentage of those with a high school education. Model 2 examines 280 First Nations. The reduced number of First Nations results from the inclusion of two additional variables. The third model examines 152 First Nations; the size of this model is limited due to the inclusion of the educational covariate.

With regards to the distance variable, the coefficient on the variable describing distance to an urban centre is negative in all regressions. This implies an inverse relationship between distance and the probability that a First Nation will adopt the Framework Agreement. Put simply, a First Nation in closer proximity to an urban area is more likely to adopt the Framework Agreement than a First Nation located further from an urban area, all else equal.

The marginal effect (estimated at the means of the data) is statistically significant in Models 1 and 2. The marginal effect of the distance variable can be interpreted as the decrease in percentage likelihood that a First Nation will adopt the Framework Agreement resulting from a one-percent increase in its distance from an urban centre.[12] Using model 1, for example, a 1% increase in distance from an urban center results in a .06% decline in the likelihood that a First Nation will adopt the Framework Agreement. Put simply, relatively more remote First Nations are less likely to adopt the Framework Agreement.

[12] Measured in 100 km.

The marginal effect of distance is not significant in Model 3 which includes an education variable: i.e., the proportion of the First Nation population without a high school education. Because this variable is not available for many First Nations, the inclusion of this variable significantly reduces the number of observations in the regression. (The number of observations falls from 287 to 152.) The results presented in model 3 — i.e., where the distance variable is statistically insignificant — raises the possibility that model 1 and model 2 suffer from an omitted variable bias. After all, education may affect the likelihood of adoption and it is positively correlated with our distance measure (i.e., Pearson correlation of .547). Omitting the education variable, as in models one and two, can result in biased coefficient estimates. However, note that none of the coefficients are statistically significant in model 3. The change in statistical significance may also be attributable to the reduced number of observations.

The marginal effect of the cost of living in the census division(s) surrounding reserves is positive and statistically significant in Models 1 and 2. This indicates that the probability of Framework Agreement adoption increases as the rental rate in the area surrounding reserves increases. The marginal effect of the population density is negative and statistically significant in Models 1 and 2, suggesting an increase in population density has a negative effect on Framework Agreement adoption. Neither of these results are statistically significant in Model 3 (after inclusion of the education variable).

The effects of the other variables included in the regression (reserve area, band population, proportion living on reserves, and educational attainment) are not statistically significant,[13] suggesting that these variables have no effect on the probability that a First Nation adopted the Framework Agreement.

CONCLUSIONS

The proximity of a First Nation's reserves to urban areas influences the likelihood of adoption of the FA. More specifically, controlling for other factors, First Nations in closer proximity to urban centres with a population of 100,000 people or more are more likely to adopt the FA. As discussed above, the statistical strength of this finding is sensitive to sample size and the inclusion of an education variable.

The finding that proximity to urban area positively increases the likelihood of adoption of the FA is consistent with our expectation that First Nations in close proximity to urban areas expect greater net-benefits from the reduced transaction costs associated with adopting the FA. This finding is also consistent with the theory of institutional change posed by Demsetz (1967), who argues that institutions change if the expected benefits of instituting the change are greater than the expected costs of doing so.

This study is one of the first to empirically examine the factors that influence First Nation adoption of the FA. Throughout the paper we have emphasized a number of empirical limitations in the hopes of supporting future research in this area. Going forward researchers can seek out ways of expanding the observations available for empirical research, and including additional factors such as a characterization of the land tenure arrangements on each reserve. Our study also has implications for future research that sets out to assess the economic benefits of FA adoption. Specifically, future efforts to assess the economic consequences of FA adoption should compare adopters and non-adopters by controlling for proximity to urban areas as well as other factors.

In our discussion of factors influencing adoption we emphasized the potential for economic benefits. However, we are fully aware that this explanation is limited. The Indian Act is seen by many First Nations as an outdated and patriarchal document that gives too much control to the federal government over First Nations and their reserves. First Nations are likely to see adoption of the Framework Agreement as a step towards greater autonomy over their reserve lands, taking administrative responsibilities out of the hands of the Canadian government. In this regard, adoption of the FA may strengthen the

[13] With the exception of percentage of the First Nation living on reserve, which was –0.0008 and statistically significant at the 10% level in Model 2.

capacity of First Nations to address future issues that cannot be fully anticipated at the time of adoption.

The motivations of particular groups within a First Nation also play a role in its decision to adopt the Framework Agreement. Variation in leadership qualities and political power may also influence the band council's decision to seek entrance into the FNLMA and the subsequent voting of band members. In this process, as in most types of institutional change, "... asymmetric information parallels asymmetric interests, as some economic agents have focused interests and others diffuse interests in what is going on" (Deaton et al. 2010: 107).

The FA is a relatively new and important pathway towards a new set of property rights for First Nations in Canada. The FA has the potential to influence the well being of First Nations people and Canadians throughout Canada. Economic motivations are likely to explain adoption decisions and economic consequences are most certainly used to justify adoption. Our focus on the spatial pattern of adoption contributes directly to the former point and is useful to assessing the latter.

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LAND MANAGEMENT ON FIRST NATIONS RESERVES
Lawful Possession and Its Determinants

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ABSTRACT

Much debate concerning property rights on reserves in Canada focuses on socio-economic impacts and the potential for individualized land tenure to support economic development, thereby reducing poverty. Study of existing forms of individual property on reserves is needed to inform these debates. In this article, we examine data on the lawful possession (Certificate of Possession) system that is currently used on reserves across Canada. We provide descriptive statistics regarding the variability of lawful possessions across First Nations and using regression analysis we assess which socio-economic, demographic, and locational variables influence the use of lawful possessions instead of communal land or other customary land holding systems. We show that use of the lawful possession system is surprisingly low and very uneven. As well, our regression results suggests that using the system requires a relatively educated community with low levels of poverty, with a favourable geographic location. Overall, the results are consistent with the view that lawful possessions are not primarily used to foster economic development.

We wish to thank an anonymous referee for helpful comments. We are also grateful to Fernando Aragon for his thoughtful input, and making his data on socio-economic indicators of Indian Reserves in Canada available to us. Special thanks go to Christoph Eder for research assistance, and the AANDC Geomatics Services office and ILRS staff for help with extracting data. Anke Kessler wishes to acknowledge financial support by the Canadian Institute for Advanced Research (CIFAR) and by Simon Fraser University through Vice President's A4 Grant Program. The usual disclaimer applies.

1. INTRODUCTION

Many researchers have argued that private property is critical for reducing poverty and improving standards of living, both in developing countries and in Indigenous communities (Anderson & Parker 2009; De Soto 2000; Flanagan 2000). First Nations Bands across Canada struggle with poverty and lower well-being measures than the rest of Canada (Mchardy & O'Sullivan 2004) and some point to the communal nature of reserve land as being a major contributor to these challenges (Fiss 2005a, 2005b; Kline 2012).[1] However, forms of individualized property do already exist on many reserves, including individual land holdings created under the *Indian Act* (R.S.C. 1985) termed "lawful possessions" and evidenced by "Certificates of Possession" (CPs). The socio-economic, political, legal, and practical impacts of this property system have not been widely studied. Some researchers have suggested that there are significant benefits, both for individual Band members and overall community well-being and development, of using the lawful possession system, though further reforms to the system are still needed (Alcantara 2003; Baxter & Trebilcock 2009; Flanagan, Alcantara & Le Dressay 2011).

The lawful possession system presents many compelling and challenging questions for practitioners, researchers, and policy-makers who are working on questions of land management and community economic development on First Nations reserves in Canada. This article uses data on existing lawful possessions on reserves across Canada to describe the current use of this tenure system, as well as document statistical relationships between lawful possessions and socio-economic, demographic and locational factors. We provide information regarding the variability of lawful possessions across First Nations. Using regression analysis, we also study the determinants of lawful possession usage, assessing which variables cause First Nations to favour lawful possession over communally held land or customary holdings, and which variables have no influence. We first show that the majority of reserves in most provinces have no lawful possessions, and that the distribution is very uneven. Our regression results suggests that using the certificate of possession system requires a relatively educated community with low levels of poverty. Furthermore, we find no evidence of a strong link between a Bands' proximity to a major population centre and the amount of land under lawful possession once other Band characteristics are controlled for, indicating that CPs are currently not being viewed as a tool to foster economic development. Our findings are of interest to First Nations leaders and land managers, policy-makers, researchers, and other practitioners working on First Nations lands issues and property rights systems more generally.

2. CERTIFICATES OF POSSESSION IN CANADA

We begin with a brief overview of the *Indian Act* land tenure system on reserves and descriptive statistics on current lawful possessions.

2.1 First Nations Reserves

First Nation communities are officially referred to as Bands and are typically governed by a Band Council government as structured in the *Indian Act* or according to a customary governance arrangement as negotiated with the federal government. Under the *Constitution Act, 1867* and *Indian Act*, title to reserve land is held in trust for Bands by the federal government. Official jurisdiction over First Nations reserve lands is divided between federal and local Band governments. Recently, some authority over land management has been devolved to a selection of Band Councils through federal legislation such as the *First Nations Land Management Act* (S.C. 1999) (FNLMA) or under Sections 53/60 of the *Indian Act*.[2]

As of February 2013, Aboriginal Affairs and Northern Development Canada (AANDC) reports 617 officially recognized First Nations

[1] We use the term "reserve" to denote land that has been set apart for the use and benefit of an Indian Band, as defined in Section 2(1) of the federal *Indian Act*, R.S.C. 1985, c. I-5 [*Indian Act*], the legal title to which is vested in the federal government (under Canadian law). First Nations themselves often use alternative definitions for their communities and lands.

[2] These delegations are typically part of the RLAP (Regional Lands Administration Program) or RLEMP (Reserve Land and Environment Management Program), see Aboriginal Affairs and Northern Development Canada (2012).

Bands in Canada and 3,003 reserves[3] with a combined area of over 3.8 million hectares (Geomatics Services AANDC 2012). 534 of these reserves are classified as remote or special access (no year-round road access), 694 are urban, and 1660 are rural (14 are unclassified) (Geomatics Services AANDC 2012).[4] The current First Nations population[5] in Canada is estimated at 530,000 and the 2006 census estimated that 40% of this population lives on reserves (Statistics Canada 2010). Reserve populations vary widely, ranging from multiple thousands to less than 50 permanent residents, or only seasonal use for some hunting or fishing reserves.

2.2 The Indian Act Land Tenure System

There is no single land tenure system that applies to all reserves. Reserve land tenure systems are categorized into those that follow the *Indian Act* regime; those based on Land Codes under the FNLMA; those established under other self-governance regimes (modern treaties or self-government agreements); or locally determined customary land tenure systems.[6] Customary systems are not formally recognized or enforced by the government or Canadian courts (Alcantara 2008: 423; Bartlett 1990: 138). Customary allotments are made at the discretion of the Band Council and not formally registered with the federal government, and thus offer less legal protection and tenure security if the Band Council decides to change the allotment or direct the use of that land (Bartlett 1990: 138). Even so, many First Nations have preferred customary systems as a way to localize control over their lands and avoid the federal supervision and approvals required by the *Indian Act* (Bartlett 1990: 138; Kydd 1989: 11; Rakai 2005: 117).

This paper presents data on the *Indian Act* land system, under which several forms of land tenure can exist (*Indian Act*, s. 20; Imai 2011; INAC 1982: 2):

- Collectively held Band land that is managed by the Band government;
- Land allotted as individual land holdings (lawful possessions), evidenced by Certificates of Possession (CPs), typically held by individuals but can also be held by the Band;
- Conditional or temporary forms of CPs known as Certificates of Occupation;[7]
- Locatee leases, leaseholds of CP lands;
- Leases of designated Band land;
- Various leases or permits for specific activities (agriculture, timber harvesting, mining, oil and gas extraction, etc.)

The CP system was introduced by the federal government in 1951 to replace earlier instruments for registering individual holdings (Location Ticket, Notice of Entitlement, and Cardex holdings) and to increase individuals legal rights to their land allotments (Alcantara 2003). These reforms and encouragement of registration by federal officials increased use of the system significantly as can be seen from Figure 1, which plots the annual number of lawful possession registrations in the time period 1880 2011.

A CP is permanent[8] and, if Ministerial approval is granted, a CP can be transferred to other Band members (in whole or subdivided), leased to members or non-members, and used as collateral in specialized Band-backed mortgages or housing loans (Alcantara 2003: 408; Alcantara

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3 Reserves with the same Administrative Land Identifier were removed from the data as duplicates. With duplicates included, there are a total of 3,185 reserves.

4 AANDC uses a Band classification system of four geographic zones based on distance to nearest service center with year-round road access: Urban (< 50 km), Rural (50–350 km), Remote (> 350 km), and Special Access (no year-round road access to nearest service center). A service center is a municipality where First Nations individuals can access to social services and living supplies (Wassimi 2009: 34). See (INAC 2005).

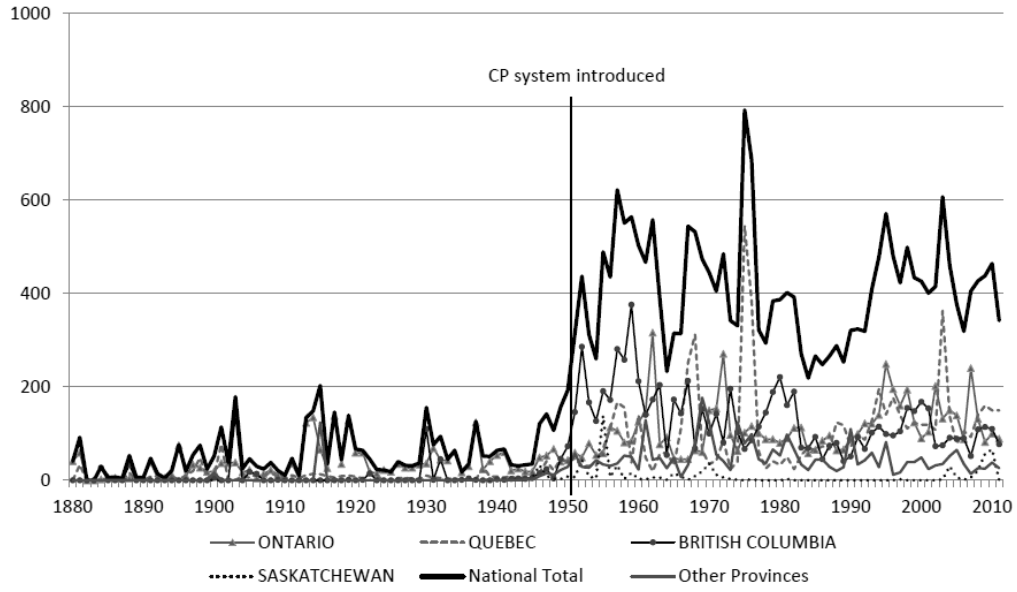
5 Registered Status Indians.

6 See Ballantyne & Dobbin (2000) for details on these various land tenure models.

7 Certificates of Occupation are issued when the Minister withholds a full CP for the time being and so might have conditional requirements, such as the cultivation of the land or the building of a house, before the land is allotted as a full CP. Certificates of Occupation may also be used for time-limited allotments of land, though this appears less common. For more on Certificates of Occupation, see Kydd (1989).

8 Bands cannot cancel CPs. A CP can only be cancelled with consent in the case of an error or without consent in the case of fraud, a Band surrender of the land, or an expropriation by the Minister. However, you may be required to sell your CP if you become a non-Band member or if you are a non-member who inherit a CP.

FIGURE 1
Annual Number of Lawful Possession Registrations, 1880–2011



2005; Baxter & Trebilcock 2009: 91). Revenue from a CP lease goes to the individual holder(s), though some nominal amount may be paid to the Band (Cowichan Tribes 2011). A CP interest functions almost like fee simple title[9] (Alcantara 2003; Ballantyne 2010: 41; Place 1981; Yuen 2009), except it cannot be alienated to non-Band members and legal land transactions require Ministerial approval. Also, CPs, like all reserve lands, are exempt from legal seizure and taxation (except for Band taxation policies).

Individuals can secure a lawful possession in several ways: requesting a new allotment, or through the sale, transfer, or inheritance of an existing CP. The creation of a new lawful possession through allotment is decided by the local Band Council, followed by federal approval and registration in the federal Indian Lands Registry System (ILRS). Band Councils determine the location and size of an allotment, however AANDC does exercise certain controls over how much land can be allotted and how lots are arranged (particularly if the lots are to be used for housing developments and require road access and servicing) and these requirements have increased since the initial reform of the system in the 1950s (Brinkhurst 2013). For example, today AANDC and the Canadian Mortgage and Housing Corporation (a major funder of on-reserve housing developments) require that house lots be under a quarter of an acre and be spatially planned for cost-effective access and servicing infrastructure, whereas historically house lots were typically between 1–5 acres and more spatially dispersed (Brinkhurst 2013). Once an individual has a lawful possession, he or she can use the land exclusively and as he or she chooses (e.g., build a house, business, or other development) provided that uses do not conflict with local Band land regulations that may exist and provided that Ministerial approval is granted where required (such as for a lease).

[9] Fee simple is a legal term used to refer to freehold tenure; it is also used to refer to private ownership as is commonly conceptualized in Western land tenure systems (Bruce 1998).

2.3 Descriptive Statistics on Current Lawful Possessions under the *Indian Act*

We obtained data on lawful possessions in November 2012 from the Geomatics Services Office of AANDC. These data are based on records in the Indian Lands Registry System (ILRS) and the Canada Lands Survey System[10] and contain information on reserve lands and the surveyed parcels on reserves, as well as the status of each parcel (Band Land, Lawful Possession, Leased Land, Designated Land) and the date on which an Evidence of Title was issued.

According to data from the ILRS, 414 reserves currently have at least some lawful possessions created under the *Indian Act* (Geomatics Services AANDC 2012), up from 301 in 2003 (Alcantara 2003: 393). In the ILRS individual holdings are modified or transferred over time and the certificate is reissued for the same parcel, or a holding may be subdivided and two new certificates issued in place of the previous one. This means that data reporting the number of Evidences of Title issued does not equate to the number of distinct, current parcels held under lawful possessions. This detail is sometimes overlooked when reporting on the CP system. For instance, Flanagan et al. (2011: 91) reported that since 1951, over 140,000 CPs had been issued across the country,[11] with 40,000 in 2002–2004 alone, which could be seen as a dramatic increase. However, many of those CPs were for already existing lots so this data alone does not necessarily show an equivalent increase in the total number of current lawful possessions, or land parcels under them. To assess the total number of distinct, current lawful possession holdings, additional data is needed. When past CPs and duplicate CPs for the same parcel of land are removed, there remain 40,841 current lawful possessions in existence in 2012,[12] each representing a distinct parcel of land (Geomatics Services AANDC 2012). The total acreage of land held under these current lawful possessions was 113,032.76 hectares , or 2.93% of the total reserve area in Canada (Geomatics Services AANDC 2012).[13]

Table 1 shows the national data by province. We see that land under lawful possessions are relatively concentrated in a few provinces, namely British Columbia, Ontario and Quebec. Within province, the extent to which different First Nations use lawful possessions is also variable and surprisingly low. Even in Ontario and PEI, the two provinces with the highest share of reserve land under lawful possession, the corresponding number is less than 7.5%. In many provinces, the lawful possession system has been adopted minimally or not at all. These observations are also illustrated in Figure 2, which documents the share of lawful-possession land on reserves across Canada in 2006. The red dots represent Bands whose land under lawful possession exceeds 50% of the total area of their reserve(s). The white dots are Bands whose share of lawful possession land as a percentage of the total reserve land is between zero and 50%. Finally, the blue dots represent Bands with no lawful possession land at all.

Taking this first slice at the data, the most eye-catching observation from Figure 2 is that the majority of reserves have no lawful possessions, and that the distribution is very uneven. However, these descriptive statistics, while interesting, are challenging to interpret, particularly because it is unclear why there is such an uneven use of lawful possessions across reserves. Applying regression analysis techniques can help to illuminate some of the potential relationships that influence this descriptive data.

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[10] The Indian Lands Registry System is database of instruments registered in the Indian Lands Registry relating to Reserve Lands and Crown Lands. An Instrument is a formal legal document dealing with transactions relating to interests in Indian land: the document specifies the type of transaction, the parcel of land, the parties to the transaction, and any legal details and specifications required.

[11] As of February 2013, 160,600 CPs have been issued since federal records began, along with 74,658 other EOTs (Evidences of Title) (ILRS AANDC, personal communication, 2013).

[12] The same data reports a total of 43,633 if parcels that are classified as retired and unresolved are included.

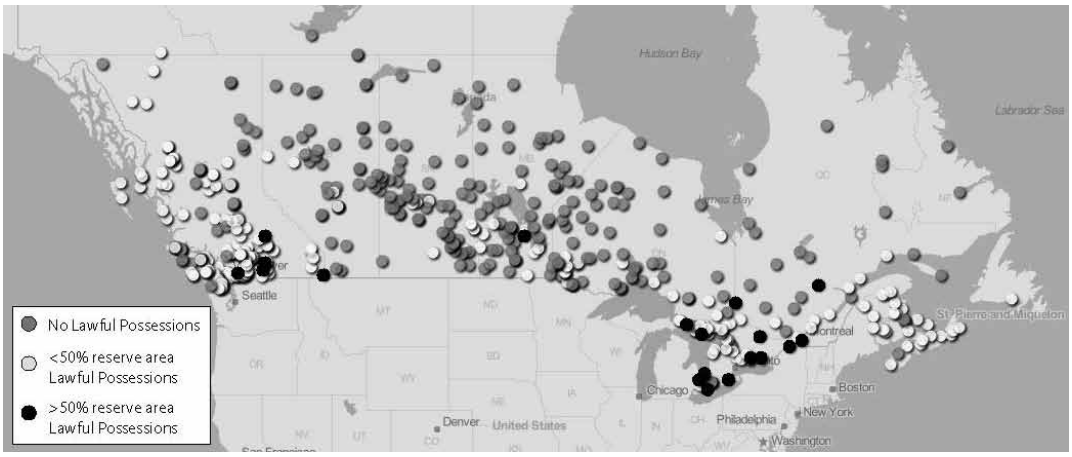
[13] Note that this includes lawful possessions that are registered in a Bands name as well as lands held by individual members.

TABLE 1
Registered Current Lawful Possessions (LPs) by Province

Province	*Reserve Land in Province (hectares)*	*Number of Current LPs*	*% of National Total Number Current LPs*	*Area under LPs (hectares)*	*LPs as % of All LPs*	*Provinces Share of All LP Land Nationally*
ON	812,807.42	22,003.00	53.87	60,839.63	7.49	53.82
PEI	781.01	80.00	0.20	56.46	7.23	0.05
BC	351,820.57	7,688.00	18.82	22,193.34	6.31	19.63
QC	415,425.00	9,002.00	22.04	14,230.99	3.43	12.59
NB	16,340.80	903.00	2.21	280.08	1.71	0.25
MB	480,462.06	505.00	1.24	6,460.75	1.34	5.72
NS	12,197.55	273.00	0.67	115.03	0.94	0.10
NF	6,641.93	164.00	0.40	47.04	0.71	0.04
SK	949,318.27	142.00	0.35	6,702.57	0.71	5.93
AB	763,252.82	76.00	0.19	2,094.55	0.27	1.85
YT	2,826.18	4.00	0.01	3.60	0.13	0.00
NT	52,339.77	0.00	0.00	0.00	0.00	0.00

Data source: Geomatics Services AANDC, 2012. (Retired, Unresolved, and Easement class registrations removed.) One current LP that with missing data on which reserve it was located within was also removed.

FIGURE 2
Lawful Possession across Canada



3. DATA AND METHODS

3.1 Description of the Data

This study uses data from a variety of sources. Data on lawful possessions was provided by the Geomatics Services Office of AANDC, as described in the previous section. This information was combined with geographic data relating to Reserve location from Google Earth and a host of socio-economic information on First

Nations Reserves, both from the Canadian Census (years 1991, 1996, 2001, and 2006) and AANDC. Our primary dependent variable is the share of reserve lands held under lawful possession. We created this variable by adding up the area of all parcels registered as being held by members of a Band under the title of Certificates of Possession (CPs), divided by the aggregated area of all registered parcels of land of the same Band.[14]

Our first set of explanatory variables includes a range of geographic indicators. Using Google Earth and the location address of a Band's reserves, we obtained the latitude and the longitude of the reserve, and took the mean in case of multiple reserves. To account for remoteness, we also calculated the (mean) distance to the nearest city. The nearest city location is provided in the ILRS data and is used by the AANDC to calculated a Geographic Zone Index and Environmental Index designed to capture remoteness and climate.[15] Rather than using those categorical variables, we prefer continuous variables as they do not involve a loss of information. The geo-location is a Band's (average) latitude and longitude, while remoteness is directly measured by the geodesic distance between (mean) reserve location and nearest city, where the latter is defined as "a major population centre where various economic indices can be defined for calculating a Band's operation and maintenance running requirements".[16] To the extent that geography bears on commercial land value, cost of living in general and housing in particular, as well as alternative traditional uses of the land, we expect the spacial distribution of lands under lawful possession to be uneven.

We augment those geographical factors with other socio-economic and demographic Band-level factors that are likely to relate to the incentives of individuals to acquire Certificates of Possession (CPs) and to the incentives of Bands to grant them. Those are measures of population, age structure, income, unemployment rate, human capital (education), and poverty. We capture educational achievement by the fraction of the population with a high-school degree.[17] To measure poverty, we use the fraction of the population with no recorded income. All demographic and socio-economic variables are drawn from the Canadian Census for the years 1991, 1996, 2001, and 2006, aggregated at the census subdivision (CSD) level. Using information from AANDC, we then matched these data to First Nations reserves.[18] We also use information on Band governance and treaty status, which are publicly available through the AANDC's First Nations Profiles and other information drawn from the AANDC website.[19] The summary statistics of the variables used in the regression analysis can be found in Table 2.

Table 2 also confirms the low number of actual CPs that we pointed to earlier. The median share of land under lawful possession is zero. In other words, more than half of all Bands do not make use of this land tenure instrument at all. The bar chart in Figure 3 illustrates this point by breaking the distribution of land holdings under CP up into percentiles of the distribution of Bands. Even among those Bands who have issued CPs, the majority has

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14 As a base to calculate the individual land holdings per Band, we used the sum of the registered parcels of a Band, rather than the total area of all reserves of that Band as recorded by the ILRS. The two figures do not always match perfectly. For roughly 82% of all Reserves, the ratio of sum of parcels in a reserve to the reported area of the reserve is between 0.99 and 1.01.

15 Those indicators are part of the AANDC's reserve classification system and are employed to determine the level of funding for Indian Government Support, Education and Social Development.

16 See AANDC, First Nation Profiles (Definitions). We also ran robustness checks replacing our measures with the AANDC indices, and the results were qualitatively similar.

17 Our results are robust to using alternative measures, such as the fraction of the population with no degree, or the fraction of the population with a post-secondary degree.

18 The census data are freely available through Abacus (data from CSDs with very small populations are missing). Since we track reserves over time we first identified CSDs comparable over time. AANDC provides information of which CSDs are considered Indian reserves. This information was then to used identify CSDs that are Indian reserves, and CDSs that were suppressed for lack of information or small sample.

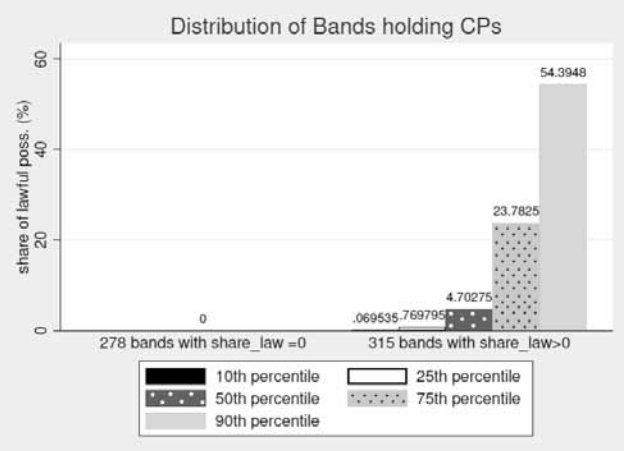
19 We wish to thank Fernando Aragon (SFU) to make and Ross Hickey (UBC) for making their data on treaties and First Nations Profiles available to us.

TABLE 2
Summary Statistics

Variable	*Obs.*	*Median*	*Mean*	*St. Dev.*	*Min.*	*Max.*
Land under Lawful Possession (%)	3,968	0	5.33	12.77	0	81.25
Lean Latitude	597	50.39	50.84	3.52	42.57	60.82
Mean Longitude	597	–103.2	–102.56	19.55	–133.69	–55.71
Distance to Nearest City (km)	498	151.89	196.21	163.67	0.38	1,079.97
Median Income ($)	1,064	24,906.50	26,204.12	9,490.09	6,672.00	83,812.00
Unemployment Rate (%)	1,532	25	25.67	14.21	0	106.25
Population No Income (%)	997	6.86	7.68	5.12	0	33.33
Population High School Degree (%)	1,548	7.84	9.21	7.77	0	50
Population Aged 65+ (%)	1,569	3.75	4.83	6.59	0	69.44
Aged 14– (%)	1,569	33.33	32.57	8.99	0	60
Population Male (%)	1,569	51.35	51.54	3.4	36.84	73.81
Total Population	1,751	370	583.62	725.72	40	6,215
Treaty Implementation Status (0–1)	1,569	0	0.18	0.39	0	1
Electoral System (1–3)	491	2	1.56	0.54	1	3

Note: Observational Units are Bands in the years 1991, 1996, 2001, and 2006. For lawful possession, we also have observations for the years 1971, 1976, 1981, 1986. If a Band is located on more than one reserve, all information has been averaged across reserves whenever possible using relative population weights (if data on particular reserves were missing, those reserves (not the Band to which they belong) were dropped from the analysis.

FIGURE 3
Usage of Lawful Possession across Bands



less than 5% of their land under this title. Only roughly 10% of all Bands have more than 50% of their reserve land allotted in this way. In very few cases, almost the entire reserve Band base has been allotted. Some of these, it should be noted, are very small reserves that have been

TABLE 3
Band Characteristics by Share of Lawful Possession

Variable (mean)	*Share_Law = 0*	*Share_Law > 0*
Total Area	9289.07	3643.87
Total Population	727.86	593.57
Distance to Nearest City (km)	249.38	143.03
Median Income ($)	29,448.21	29,667.31
Unemployment Rate (%)	23.65	22.91
Population High School Degree (%)	13.81	19.04
Treaty Implementation Status (0–1)	16.83	22.05
Indian Act Elect. System	32.25	49.19

Note: Observational units are Bands in the year 2006

allotted to a family or single member because it is a particular family's fishing site (C. Walton, personal communication, June 15, 2012).

In Table 3, we report the means of some key geographic and socio-economic measures depending on whether the Band in question has some land under lawful possession (share_law > 0) or not (share_law = 0). We see that Bands that make use of CPs are quite distinct from those that do not: on average, the former are smaller both in population size and reserve area, their location is less remote, they tend are better educated, have slightly higher median incomes, and a lower unemployment rate. They are also more likely to use the *Indian Act* electoral system (as opposed to customary electoral system, or self governance) and either already have a modern treaty agreement, or be currently engaged in negotiations. These descriptive statistics, however, tell us little about the relations underlying these patters. For example, it does not allow us to answer the question whether education and income are intrinsically related to the usage of lawful possession. For example, the observed positive association could simply be a by-product of the fact that the purported benefits of lawful possession are arguably more pronounced for Bands located close to urban centres, and that those Bands also happen to be wealthier and better educated, on average, than their counterparts in more remote areas. Those questions are better addressed with a regression analysis, to which we turn next.

3.2 Methods

In our empirical estimation, we will make use of the fact that our dataset is a panel, that is, it contains successive observations over time for the same Bands. As a first step, however, will use ordinary least squares (OLS) regressions in a pooled cross-section. Pooling the data for a Band over several years and using OLS increases the number of observations and therefore, increases efficiency in estimation and power in hypothesis testing. The model we estimate is

$$\text{share\_law}_{it} = \alpha + \beta \text{X}_{it} + \theta_t + \varepsilon_{it} \qquad (1)$$

where share_law is the total share of land under lawful possession of Band i at time t, aggregated over all the Band's reserve land, X_{it} is a vector of Band characteristics, β is the vector of coefficients of interest, and ε_{ijt} is a Band and time specific error term. To account for possible differences across time, we also include a time fixed effect δ_t. OLS will yield consistent estimates of β under the assumption that the unobserved error term is uncorrelated with the explanatory variables, i.e., $\text{E}(\varepsilon_{it}|X_{it}) = 0$.

In a second set of results, we will exploit the fundamental advantage that a panel has over a cross-section in capturing fundamental differences across Bands (fixed effects). To this end, we write the error ε_{it} as

$$\varepsilon_{it} = \theta_i + \upsilon_{it} \quad (2)$$

where θ_i represents an unobserved Band characteristic and υ_{it} is a Band-level error term. For instance, θ_i can be thought of as a Band level "shock" that affects all observations of a Band equally. The random effects model assumes that θ_i is uncorrelated with the explanatory variables, but — unlike OLS — has the error υ_{it} for the same Band to be correlated across time.[20] The fixed effect model allows θ_i to be correlated with X_i, and is the most general formulation. It enables us to account for unobserved confounding factors, provided those factors do not vary over the time span we consider.

4. RESULTS

4.1 OLS Regressions

Table 4 below shows the results when equation (1) is estimated by ordinary least squares.[21] The regression in column (1) is our most parsimonious specification, which only includes geographic controls and time effects.[22] We see that the share of land under lawful possession has increased over time, and is larger for Bands whose reserves are located in the South (respectively, West) than for Bands with reserves in the North (respectively, East). Importantly, since the regression includes provincial fixed effects, those results need to be interpreted as within province variation, i.e., as deviations from the provincial mean of land under lawful possession. As expected, we also see that remoteness has a negative effect: the further away a Band's reserves are from the nearest city, the less land is held under lawful possession, all else equal.

The second specification (2) adds a number of demographic and socio-economic controls. The first important observation is that this reverses the time trend: accounting for demographic and socio-economic change, the uptake of lawful possession has slowed down in recent years. Next, note that Bands with better educated members tend to have relatively more land under lawful possession, possibly reflecting the fact that individual members that are better educated are more likely to perceive the benefits of ownership. The same is true for Bands with a more balanced age structure.[23] Interestingly, and somewhat unexpected given the raw correlation in Table 3, we also find that median income has a negative and strongly significant coefficient, suggesting that wealthier Bands do not necessarily face increased incentives to make use of lawful possession. We will return to this finding when we estimate the fixed effects model below. Finally, the population size on reserve and the share of the population with no income (a measure of income inequality) do not add explanatory power to the model.

The third specification (3) adds two variables that aim to capture the institutional framework in which the Band operates, as well as proxy for unobserved governance quality. The first of these gives a Band's treaty implementation status. The estimated coefficient is positive and significant: Bands who have initiated or completed a treaty process have more land under lawful possession. On the other hand, the coefficients for the electoral system variables are both negative: Bands who have opted out of the *Indian Act* electoral system have a larger share of land under communal (Band) ownership, or at least not registered as lawful possessions (it could be held by individuals under customary allotments that are not registered with the federal government) possibly indicating that non-registered ownership is perceived a lesser

[20] Under the assumptions of the random effects model, OLS yields consistent estimates, but OLS standard errors are inconsistent because of the group-level errors are serially correlated.

[21] We also ran all specifications as Tobit regressions, to account for the limited dependent variable. The results are qualitatively similar.

[22] Specification (1) has almost four times as many observations because it does not make use of census data, which are only available for the years 1991, 1996, 2001, and 2006. The data from the ILRS are available from 1976 onwards.

[23] Most Bands in the sample have a disproportionately low share of population aged 65 and older. The mean figure in our sample is 4.8 %, while the same figure for Canada as a whole was 13.7%. Conversely, the average share of children aged 0 to 14 of the Bands in our sample is 32.5% compared to 17.7% national average (2006 Census).

Table 4
OLS Regressions

Dependent Variable	*Share of Land under Lawful Possession*				
Independent Variable	*(1)*	*(2)*	*(3)*	*(4)*	*(IV)*
Latitude (Mean)	–1.206***	–1.118***	–0.955***	–0.819***	–0.164
	(0.075)	(0.172)	(0.193)	(0.183)	(0.356)
Longitude (Mean)	0.432***	0.355***	0.332**	0.322**	0.248
	(0.054)	(0.136)	(0.149)	(0.149)	(0.246)
Distance Nearest City	–0.828***	–0.851*	–0.606	–0.425	–1.066
	(0.180)	(0.446)	(0.478)	(0.469)	(0.886)
Median Income		–2.970*	–3.700**	–4.214**	–16.425***
		(1.661)	(1.772)	(1.793)	(5.948)
Unemp Rate		–0.054*	–0.071**	–0.053*	–0.219***
		(0.031)	(0.031)	(0.031)	(0.081)
Share of Population No Income		0.084	0.005	0.040	–0.135
		(0.090)	(0.094)	(0.095)	(0.216)
Share of Population High School		0.448***	0.465***	0.389***	0.315*
		(0.105)	(0.111)	(0.109)	(0.186)
Share of Population 65+		43.494***	45.632***	32.502**	24.485
		(13.924)	(14.188)	(15.103)	(23.814)
Population (Log)		0.570	0.938	0.776	2.441*
		(0.705)	(0.751)	(0.753)	(1.395)
Treaty Implementation Status			3.264**	2.478	1.958
			(1.465)	(1.522)	(2.245)
Custom Elect			–1.710*	–1.468	–1.745
			(0.982)	(0.985)	(1.650)
Self Govern. Elect.			–10.157***	–8.671***	–9.057**
			(2.497)	(2.546)	(4.497)
Share of Population 14–				–25.151***	–41.218**
				(7.834)	(16.131)
Share Males				–43.180**	–66.548
				(21.371)	(43.098)
Year 1996	2.739***	–1.430	–1.760	–0.944	
	(0.707)	(1.164)	(1.178)	(1.232)	
Year 2001	3.352***	–0.602	–1.063	–0.506	2.437
	(0.744)	(1.231)	(1.271)	(1.313)	(1.982)
Year 2006	4.191***	–4.298***	–4.674***	–4.193***	
	(0.799)	(1.326)	(1.385)	(1.382)	
Observations	3,624	909	839	839	351
R-squared	0.189	0.319	0.326	0.336	0.294

Note: All regressions include a provincial fixed effect. The standard errors reported in parentheses are heteroscedasticity–robust. The IV specification instruments median income with its 10-year lag as well as the 10-year lag of the share of the population who has a high-school degree.
***, and * indicate significance at 1%, 5%, and 10%, respectively.

problem in Bands where the leadership is elected by community-designed process.[24]

Specification (4) includes two further demographic variables of interest. The first is the fraction of the population aged 15 or younger, which is another proxy for the quality of life in a community; it is strongly negatively correlated with income, and the composite community well being index provided by the AANDC. As expected, the estimated coefficient is negative and highly significant. The second variable is the share of the population that is male, and although this figure is not correlated with measures of well being, the estimated effect is once again negative and significant at the 5% level. One possible explanation for this finding is the link between land tenure and gender inequality that emerges because the current *Indian Act* provides no protection for the division of matrimonial real property on reserves following the dissolution of marriage. Alcantara (2006) argues that the adverse consequences of the missing provision are borne disproportionately by First Nations women, demonstrating that the courts have consistently issued rulings that lead to a bias against women when matrimonial property is divided.

One concern with the estimates presented so far is that the median income variable is endogenous if Bands who have embraced the CP system subsequently experienced higher economic growth; after all, the purported incentives to acquire CP's are to increase investment in property, foster entrepreneurship, and encourage resource use. To address the issue of endogeneity, the final specification (IV) employs an instrumental variable strategy, instrumenting for community median income today with its 10-year lagged value, as well as the 10-year lagged share of the population with a high school degree. Both variables are strongly correlated with contemporaneous median income. Given the length of the elapsed time period, this procedure eliminates concerns of reverse causality.[25] We see that the negative coefficient on median income more than triples in size, suggesting that there indeed was a spurious positive correlation between income and share of lawful possession land that biased the estimated effect upward.[26] The other estimates are largely unaffected but some lose their significance, which is not surprising as the procedure introduces additional noise and reduces the number of observations by a large margin.

Overall, however, a fairly robust picture emerges: the Bands that tend to make most use of lawful possession certificates are located further in the South, are better educated, and have a more balanced age structure than their counterparts who do not have any land under lawful possession. One obvious interpretation of this finding is that First Nations communities who do better overall in socio-economic measures are also the ones that are most in favour of registered individual land holding systems. Interestingly, however, they are not more wealthy on average. Indeed, controlling for other community characteristics, members of First Nation communities with higher median income are *less* likely to hold a Certificate of Possession. The magnitude of the corresponding estimate is quite large: an increase in median income by one standard deviations reduces the share of land held under lawful possession by on average 1.5 percentage points, all else equal.

4.2 Panel Regressions

One potential issue with the Ordinary Least Squares regressions is that unobserved confounding factors may not be adequately controlled for. One important such factor is governance.

[24] Roughly 40% of Bands hold elections in accordance to the election provisions of the *Indian Act*, while about 55% have community-designed election processes under custom codes developed by their Bands and approved by their membership. The remaining 5% elect leaders pursuant to the provisions of their self-government agreements. Many First Nations have been critical of the electoral process under the *Indian Act*, stating that it is paternalistic and does not promote accountability.

[25] Using lags as instrumental variables does not necessarily eliminate concerns of omitted variable bias, though. IV would only yield unbiased estimates if the effect of income 10 years ago on today's share of lawful possession would solely be going through today's income. An important unobserved Band characteristic, however, would also be correlated with lagged income. We will address Band-fixed effect in the subsequent section.

[26] In fact, a robust version of the (Durbin-Wu) Hausman test indicates that the hypothesis that the OLS estimates are not significantly different from the IV estimates can be rejected at the 1% level. Since the model is overidentified, we can also whether the overidentification restrictions are satisfied. Using a Hansen-Sargan test, the null hypothesis that the instruments are jointly valid cannot be rejected ($p = 0.99$).

Scholars, practitioners, and First Nations themselves have noted that the governance structures imposed on communities by the *Indian Act* often results in a dysfunctional government. At the same time, the Band Council plays a key role in determining Indigenous tenure security under the *Indian Act*. A politicized or otherwise dysfunctional Band Council will lead to greater insecurity since land tenures on reserve are tied to social networks and authority distinct from the Band Council, thus undermining incentives to apply for CPs. At the same time, a low-quality local government will also negatively impact school attendance, income, and other socio-economic measures of well-being.

More generally, omitted variables that are correlated with the explanatory variables as well as the unexplained error term will cause OLS estimates to be biased. Making usage of the panel structure in our data can help alleviate these concerns, provided the unobserved variable is time invariant. To this end, we estimate a fixed-effects model, where the error term ε_{it} in (1) is replaced by (2). Intuitively, the regression solely uses the variation in the dependent variable and the explanatory variables *within the same Band over time*: the effect of each variable is identified by deviations from the within-Band average of that variable. Again, we include year fixed effects to account for the time trends in the data.

The corresponding results are shown in the first column (FE) of Table 5. As before, the estimated effects of education and the share of population above age 65 are positive and significant. The coefficient on the poverty measure (share of population with no income) is negative and also highly significant: Bands who experienced a drop (respectively, increase) in poverty over a 5-year period relative to their all-time average saw their share of land under lawful possession rise (respectively, fall) over the same period, taking into account nation-wide time trends. While these results are to be expected, we also find that median income is no longer negatively associated with the share of land under lawful possession; the corresponding coefficient is positive but not significant. In other words, *across Bands*, Bands with higher income tend to have fewer lands under lawful possession, all else equal, whereas *within the same Band*, this relation no longer holds. This finding indicates that there is a Band-specific, unobserved, and positive income determinant, which is negatively correlated with the benefits of private property. One possible such determinant may be informal governance quality (i.e., a Band's cohesive structure), which is positively associated with income but reduces the need for formal property rights. Note that this argument stands in contrast to our earlier conjecture that good governance creates land tenure security, which would increase the incentives of individuals to apply for Certificates of Possession. A final noteworthy result that differs from the cross-section is that the share of children under 15 has a positive effect on the amount of land under lawful possession. Since we are now focusing on within-Band variation and since the time horizon is relatively short, a change in the share of children likely reflects an increase in the birth rate (as opposed to a long-term demographic change). Again, this finding is consistent with CP's being primarily granted for residential purposes, as an increase in the number of families with young children will naturally increase the need for housing.[27]

One important limitation of the fixed-effect model is that we cannot identify the effects of variables that do not vary over time. For this reason, we also estimate a random-effects model, which assumes that the unobserved Band characteristic is uncorrelated with the explanatory variables, but allows for error terms to be correlated over time. The results are presented in the second column (RE) of Table 5. The picture that emerges for the time-varying variables is quite similar to the fixed-effect model; indeed, a Hausman specification test for fixed effects against random effects shows that the respective coefficients jointly are not significantly different at the 5% level, i.e., a random effects model fits the data equally well. The coefficients on the time-invariant variables also remain qualitatively similar to those in the OLS regression, and we therefore omit a discussion here for brevity.

[27] The measured effect of share of male population is no longer significant, but since this share varies very little within Bands, the corresponding estimate is bound to be very noisy.

TABLE 5
Panel Regressions

Dependent Variable	*Share of Land Under Lawful Possession*		
Independent Variable	*(FE)*	*(RE)*	*(RE-IV)*
Latitude (Mean)		–1.467***	–1.256***
		(0.367)	(0.436)
Longitude Mean)		0.554**	0.296
		(0.262)	(0.255)
Distance Nearest City (Log)		–0.483	–0.834
		(0.809)	(1.004)
Median Income (Log)	0.580	0.451	–0.7469
	(0.430)	(0.425)	(7.369)
Unemployment Rate	–0.002	–0.003	–0.777
	(0.01)	(0.010)	(5.123)
Share of Population No Income	–0.063***	–0.063***	–0.089*
	(0.022)	(0.022)	(0.071)
Share of Population High School	0.082**	0.089***	0.106***
	(0.033)	(0.034)	(0.053)
Share of Population 65+	38.510***	38.609***	24.262***
	(11.422)	(11.580)	(6.485)
Population (Log)	0.260	0.288	2.829
	(0.257)	(0.229)	(1.864)
Treaty Implementation Status		4.661	1.346
		(2.849)	(2.657)
Custom Elect		–1.769	–2.783
		(1.748)	(1.891)
Self Govern. Elect		–8.689**	–10.187*
		(4.234)	(5.656)
Share of Population 14–	7.735**	6.816**	1.458
	(3.328)	(3.117)	(6.236)
Share Males	1.062	0.078	6.304
	(6.271)	(6.523)	(10.152)
Observations	839	839	351
R-squared	0.098	0.296	0.309
Number of Bands	265	265	212

Note: All regressions include provincial and year fixed effects. The standard errors reported in parentheses are heteroscedasticity–robust and clustered at the Band level. The IV specification instruments median income with its 10-year lag as well as the 10-year lag of the share of the population who has a high-school degree.
Superscripts ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Finally, because the concern that income is endogenous is not fully alleviated by the panel structure, we ran a IV regression, similar to the OLS case. We see most coefficients are unchanged. The coefficient on median income itself turns negative again, but the standard error is too large to draw any definite conclusions. Instead, we would argue that the results confirm the previous panel findings, which suggest that income has *no* causal effect on the incentives to apply for Certificates of Possessions, while education does.

5. DISCUSSION

Our analysis yields several interesting findings that warrant further discussion. In interpreting these results, one needs to exercise caution as there are limitations to our data and to what we accomplish with our methodology. Unobserved factors that are correlated with the dependent variable and the independent co-variates will cause our estimated coefficients to be biased, and will make causal inferences difficult. However, we have taken steps to address these issues; in particular, using panel data that filters out time-invariant unobserved differences between Bands (such as historical differences or variations in natural resource abundance). Our panel regressions uncover evidence of a positive effect of education on the degree to which a Band uses the lawful possession system, suggesting that Bands with more educated members are more likely to use the system. This effect could be operating at the individual level if education means that an individual is more likely to apply for and secure a lawful possession. Alternatively, it could operate at the Band level if education influences Band leadership and members to be more favourable to using the system. In the panel, we also see a strong association between reductions in poverty and incidence of lawful possession. Holding the average income constant, an unusually low level of poverty (for a particular Band) is associated with an increase in the share of land under lawful possession (for the same Band). This result is fairly intuitive: allotting, registering and administering land through the federal system is likely not a priority for Bands or individuals struggling with poverty, given costs and effort involved, both on the Band and individual level. This dynamic may be amplified by AANDC's current policy that federal funds cannot be used to develop housing or other community infrastructure on individual-held land, creating an incentive for Bands that rely heavily upon federal funding to retain lands as Band land (Chawathil First Nation 2010; Brinkhurst 2013).

Another point of interest is that in the panel analysis we found no causal effect of median income on use of lawful possessions. An increase in income does not seem to prompt individuals or Bands to seek more CPs, all else equal. This is significant because one of the major purported benefits of private property is that it is a necessary institution to support economic growth, that as individuals secure economic resources they will seek tenure security to protect their investments in land. As CPs are currently the most legally secure form of land holding for individuals on reserves under the *Indian Act*, one would expect individuals to apply for, and Bands to grant, more CPs as their income grows. The absence of a strong link suggests that the security and benefits provided by CPs may be less than expected, or that there are Band-level controls operating that restrict increases in lawful possessions even in cases where individuals desire them (as is profiled in research by Brinkhurst 2013).

Our OLS analysis of the cross-section data also generates several findings of interest. As expected from the distribution of lawful possessions across the country (recall Figure 2), latitude and longitude variables were strongly linked to lawful possession usage. The North–South location of a reserve also helped us to control for economic viability differences between communities, as land values in northern reserves are expected to be much less than in southern reserves, given the distribution of population densities in Canada. A second finding of interest from the OLS results is that there was no statistically significant relationship between the remoteness classification of a reserve and how much of its land is held as lawful possessions. Remoteness was only significant if no other variables were controlled for; as soon as others were included the significance disappeared. This was an unexpected result, as we had anticipated that more urban reserves would have more incentive to allot lands given the value of land and potential for agriculture or other business develop-

ments by individual members. This finding is consistent with Bands and individuals favouring CPs for residential purposes, rather than to facilitate business development. This may be a reflection of the relatively low level of economic activity on most reserves, and the low level of financial capital that individuals can access to support on-reserve business ventures (Baxter & Trebilcock 2009: 92). Another factor may be that Bands with economically valuable lands and development opportunities are choosing to retain the land as Band land to enable Band-led developments rather than individual developments (Brinkhurst 2013). This may also be linked to AANDC policies that encourage, or in some cases require, allotments be small and planned for residential uses, as discussed previously.

A final noteworthy result that the relationship between median income and lawful possessions is not consistent across specifications. In the cross-section, income and lawful possession are strongly negatively correlated, whereas there is no significant correlation in the panel. This implies that there is some unobserved confounding factor that is causing income and CP usage to be negatively linked *across* Bands but not *within the same* Band. In other words, Bands that use lawful possession are systematically different — in a way that we cannot observe in our dataset — from Bands that do not, and this systematic difference is negatively correlated with income, but positively correlated with lawful possession usage, all else equal. One plausible explanation could be that other Band characteristics, such as governance effectiveness, or community cohesion, underlie this effect. Effective and trusted Band governance or an otherwise cohesive community could mean that a Band has ways of increasing income without seeing the need to use the federal land tenure system. Another possibility is that Bands wider land management regimes may exert important influences on income. Between two Bands that use lawful possessions, economic development and incomes may differ significantly as a result of having reserve land management systems and supports in place, such as adequate surveying, comprehensive land use planning, planned community infrastructure, regulation of land uses, or taxation of landholders or leases. These types of land management authorities may be formalized with the federal government under the *Indian Act* or may operate locally and informally but effectively. As explained by Larry Pardy, Manager of Lands, Environment and Natural Resources in AANDCs Atlantic region, by looking only at CPs, we may see no correlation between CPs and community/economic development but when we consider the overall land management framework — formal or informal — the picture is far different (Pardy, personal communication, 2012). Further research is needed to determine whether factors such as these are causing the statistical relationship we identified.

6. CONCLUSIONS AND NEXT STEPS

To summarize, there are far fewer lawful possessions currently used than would be expected if most Bands and individuals actually perceived them as a beneficial tool. More than half of all reserves have no land under lawful possessions, and of those that do use the system, the majority only have a small percentage (less than 5%) of their land area as CPs. There are larger contextual factors to consider when trying to explain this situation, such as the history of the lawful possession system and socio-cultural considerations, as described by Nemoto (2002), Alcantara (2003), Baxter & Trebilcock (2009), Rakai (2005), and Brinkhurst (2013) as well as limitations of the current system, as described by Alcantara (2008), Baxter & Trebilcock (2009), Flanagan et al. (2011), and others. However, the point remains that the current system of individualized property on reserves has not been widely adopted and further investigation of the reasons for this would be beneficial for informing efforts to reform or replace the system. If many Bands and individuals are not in support of the limited form of private property that the lawful possession system provides, this raises serious questions about the suitability and effectiveness of proposed efforts to increase privatization of reserve lands.

Our findings also show that Bands who are already advantaged in terms of reduced poverty and education, and are located in more densely populated and climatically more favourable areas, are the ones that tend to make more use of the lawful possession system. This suggests that only members of those Bands that are doing comparatively well are taking up the opportunity to further improve their well-being, while the

opportunity is lost on those Bands who struggle. From this it seems likely that any benefits from further formalization of the reserve land tenure system would be not be equally accessible for all Bands. While our findings have linked some positive factors to the uptake and use of the lawful possession system, the lack of strong link between remoteness and CPs also indicates that lawful possessions are not currently being used to support economic development; instead the evidence is consistent with CPs being predominantly used for providing members with residential lots. It may be that in practice, the transaction costs associated with the system (Alcantara 2008), limited access to capital (Baxter & Trebilcock 2009), or a lack of land use planning and other development supports (Brinkhurst 2013) mean that the current lawful possession system, and the larger *Indian Act* reserve land management framework, does not yet provide effective tools for encouraging local economic development.

Many questions remain. Some individual Bands who are enjoying strong local economic development have credited individual land holding and the lawful possession system as encouraging entrepreneurship, improving housing quality, and support an overall better quality of life for their members and are putting their support behind efforts to reform the system to allow for further privatization (Fiscal Realities Economists 2007, 2010; Flanagan et al. 2011; FNTC 2010). However, national level data on the lawful possession system suggest that many Bands are experiencing a different story. It is important to continue research on the practical social, economic, political, cultural, and environmental impacts of the lawful possession system at the local level for Bands across the country. In an upcoming extension of this research, we will explore in more detail the causal relationships between adoption and use of the lawful possession system and community well-being indicators (Aragon, Brinkhurst, and Kessler, forthcoming). There is also a need for more research on other reserve land tenure systems, such as customary land holdings, tenure forms under FNLMA land codes, and other unique types of tenure created by self-governing agreements such as the Nisgaa Final Agreement (2000) and the Tsawwassen Final Agreement (2007). First Nations and policymakers across Canada need more information on the empirical impacts and implications of various land tenure systems, particularly as efforts to reform the *Indian Act* lands system continue.

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POLITICAL STABILITY AND THE WELL-BEING OF FIRST NATIONS IN SASKATCHEWAN
Implications for the Proposed First Nations Elections Act

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ABSTRACT

This paper provides an empirical analysis of the relationship between the political stability of First Nations in Saskatchewan and a number of measures of social and economic well-being. Our results show that among First Nations in Saskatchewan the average term of elected leadership is 4.5 years. Simple descriptive statistics support the basic hypothesis that more stability, represented as less frequent changes in elected Chiefs, is associated with better socio-economic outcomes for First Nation communities. Our findings also show evidence that there are limits to how much more socio-economic gains can be achieved by increasing political stability of First Nation governments. At some point the positive contribution of greater stability to socio-economic outcomes decreases, such that it may eventually reduce, rather than improve positive socio-economic outcomes. With this paper we hope to inform the current debate of the merits or risks associated with any future changes in First Nation elections and their resulting systems of governance.

INTRODUCTION

As discussed by the contributors to this special issue, reforms to the current on-reserve land tenure system are being advocated on the grounds that individual property rights will "unlock" the economic potential of First Nations by providing secure and enforceable land title. Flanagan and his colleagues (2010) suggest that such land reforms, operationalized through a proposed First Nations Property Ownership Act, would lead to increased home ownership, entrepreneurial investment, higher on-reserve employment, and reduced transaction costs for First Nation, provincial and federal governments. Whether these potential benefits outweigh the risks remains debatable (see Tough in this issue). Yet what is important to keep in mind is that in addition to First Nation land reforms, there are a plethora of other legislative changes, either being drafted our progressing through the federal government, all of which are intended to enhance the economic conditions of Canada's First Nations. One such piece of legislation is Bill S-6, the First Nations Elections Act. Similar to the arguments made in support of the First Nations Property Ownership Act, advocates of the First Nations Elections Act see political stability as a necessary condition for the economic development of First Nation communities.

Responding to long-standing criticisms of the current election system administered under the Indian Act, Bill S-6 has been championed by the Honourable John Duncan, former Minister of Aboriginal Affairs and Northern Development, as an "historic piece of legislation ... that will help First Nations create the political stability necessary for solid business investments and long term planning that will lead to increased economic development, job creation, and improved quality of life" (AANDC 2011a). These sentiments have been shared by some First Nation leaders who view Bill S-6 as an important step towards building confidence in First Nation governance (Chief Lawrence Paul of Millbrook First Nation, Nova Scotia) and providing a viable legislative alternative to the Indian Act election system (Chief Candice Paul of St. Mary's First Nation of New Brunswick) (AANDC 2011a).

Among the changes found in the Bill is a call to increase the term of elected office from two to four years for First Nation Chiefs and Councils. This change was considered necessary to help First Nations create the political stability necessary for long term planning, and for building relationships that lead to increased economic growth. The current two-year term under the Indian Act has been criticized for fostering economic uncertainty, reducing long-term investment, and propagating short-term planning horizons among elected leaders.

It seems reasonable that greater political stability within First Nation governments will contribute to producing conditions conducive to economic growth, while instability will retard long-term planning and investment. However, to date no research has been conducted that supports or refutes these relationships. Research can be found on the economic effect of constitutional and unconstitutional (*coups d'états*) transitions of national governments, yet no systematic investigation has been conducted at more "local" levels of governance regarding the contribution of political stability to local economies. Rather it is simply assumed that based on higher levels of political order, stability necessarily lends to economic development. It is this assumption that has in part influenced the changes found in the First Nations Elections Act.

With this paper we offer an empirical analysis of the relationship between the political stability of First Nations in Saskatchewan and a number of measures of social and economic well-being. We set out to answer two questions: What can simple descriptive statistics tell us about the relationships between political instability and a range of socio-economic indicators of First Nations? And more specifically, what is the relationship between political instability amongst First Nations in Saskatchewan and their Community Well-being Indices? The starting point for our empirical investigation is with our hypothesis that political instability would be negatively related to socio-economic outcomes of First Nations in Saskatchewan. If this hypothesis is valid, we expect to find the more politically stable First Nation governments to have higher Community Well-being scores, and be generally associated with more positive socio-economic indicators than their less politically stable counterparts.

Following this introduction we present a brief review of the relevant literature that informed our analysis. This is followed by a description of our methods and primary data

sources. Our results are then presented, followed by a discussion of some of the relevant factors that may influence political stability among First Nation governments in Saskatchewan. Our conclusion summarizes our main findings. We hope that the results of this research will inform the current debate of the merits or risks associated with any future changes in First Nation elections and their resulting systems of governance.

BACKGROUND

Political instability has generally been examined within a multi-country cross sectional framework (e.g., Morrison and Stevenson 1974; Olson 1982; Alesina et al. 1996; Traynor and Gyimah-Brempong 1999). A survey of the literature identifies two main categories of political instability (PI). The first treats PI as a result of forceful or involuntary removal of established authority (Traynor and Gyimah-Brempong 1999). Otherwise referred to as "elite" PI (Morrison and Stevenson 1974), this form of political instability is limited to changes that occur in the form of unconstitutional transitions of government, such as military coups d'états and other means of takeover. Others such as Deaton and Miller (1995) and Alesina et al. (1999) provide a broader definition of PI to include constitutional transitions in governance. Unlike the former, this definition accounts for changes in governance within pre-existing and agreed to processes for governmental transitions.

The approaches to analyzing the impacts of political instability on economic growth have varied. Traynor and Gyimah-Brempong (1999) use a simultaneous equations model, pooled time-series data, and dynamic estimation methodology to estimate the impact of political instability on economic growth in Sub-Saharan Africa. Fosu (1992) on the other hand uses an augmented production framework to undertake a similar analysis of the same Sub-Saharan region. Like Traynor and Gyimah-Brempong (1999), Alesina et al. (1999) accounted for endogeneity between economic performance and political instability by using a system of simultaneous equations and relied on a large sample of "developed" and "developing" nations. Despite the various approaches used, common to all of the above studies is the finding that political instability has a negative effect on national economic growth.

DATA AND METHODS

Data on the socio-economic conditions on Saskatchewan First Nations reserves were derived from the Census of Population 2001 and 2006. Reserves are unique Census Subdivisions (CSD's), the basic geographic building block for Statistics Canada. A range of demographic and economic variables from the Censuses was included in our analysis. Since our "unit" of observation for the analysis is the CSD or Reserve, where a First Nation has multiple Reserves, the First Nation characteristics are attributed to all held reserves.

Political stability data for Saskatchewan First Nations were acquired through the Access to Information Act. These data indicate the election results for 65 First Nations from 1945–2009, although the majority of the election data are from 1960–2008. From this information a "frequency of change" variable, Pchange, was computed. Over the observation period the number of Chief-changes was divided by the number of total years. If a new Chief was elected every year, the Pchange would have a value of 1 (or 100% of the years) for that respective First Nation. The less frequently the Chief is changed, the smaller the Pchange value. We consider Pchange to be an indicator of the political instability of leadership, with smaller values (less frequent changes) representing more stability.

First Nation election systems data were obtained online from Aboriginal Affairs and Northern Development. Of the 617 First Nations in Canada, 239 hold elections under the Indian Act system, 342 First Nations select their leadership according to their own community or custom election codes, and 36 are self-governing. In our sample of 65 Saskatchewan First Nations, 24 hold elections according to the provisions of the Indian Act and 41 First Nations hold Custom elections.

It is important to clarify the differences between Indian Act and Custom election systems. Sections 74–80 of the Indian Act set out the general framework for First Nation elections. The provisions of the Act establish basic election rules, including the size of councils and the rights of voting members. In addition, Subsection 78(1) sets a two-year term limit for First Nation Chiefs and councilors. Accompanying the Act is the Indian Band Election Regulations that

provides more detailed election rules, including the compilation of voters' lists, administration of polling stations, procedures for casting of ballots, and processes for appealing elections.

The Indian Act does not, however, remove the opportunity for First Nations to develop their own election processes. The right of First Nations to implement to their own election processes by way of custom is recognized as the default selection process (St. Germaine and Dyck 2010). Further, the term "custom" does not denote the application of any "traditional" method of leadership selection. Rather, "custom" simply distinguishes elections established by the First Nation from those pursuant to the Indian Act (St. Germaine and Dyck 2010). In practice, Custom elections may differ very little from those administered under the Indian Act, for example, a four- rather than two-year term for elected leadership. Yet in other cases Custom elections may combine traditional aspects of First Nation governance (Elders councils) with contemporary governance structures (elected chief and council) (St. Germain and Dyck 2010). Custom elections systems are therefore quite heterogeneous with no two necessarily being the same.

Data from the 2006 First Nations Community Well-Being Index (CWBI) were obtained from AANDC. The CWBI is a measure of the well-being of individual communities based on four component indicators derived from Statistics Canada's Census of Population — employment, education, income, and housing. Each of these four indicators is assigned scores ranging from zero (lowest) to 100 (highest). In this analysis we rely on the aggregate CWBI score for each First Nation, which is the simple average of its four components.

According to O'Sullivan and McHardy (2004), the CWBI serves four purposes: (i) identifies prosperous First Nation communities which could serve as role models and sources of best practices for those less prosperous; (ii) identifies those First Nations whose socio-economic difficulties demand immediate attention; (iii) allows comparisons to be made between the well-being in First Nations communities relative to other Canadian communities; and (iv) can be used in a myriad of other research projects to assess the determinants and correlates of well-being in First Nations communities, as is the case here.

We first provide some descriptive statistics for ranges of values for CWBI, as a broad measure of economic outcomes. We compute the mean CWBI score (for 65 Saskatchewan First Nations), and one and two standard deviations above and below, to generate 4 categories: one group that lies within one standard deviation below the mean CWBI score; a second more than one standard deviation below the mean; a third above and within 1 standard deviation; the fourth group consists of communities that are more than one standard deviation above the mean. For these four groups the average (and standard deviation) values for political instability (Pchange) are computed, as well as for selected political, demographic, economic and geographic variables.

Second, we construct the full range of descriptive statistics for specific ranges of political instability, our Pchange variable of primary interest. Again we group First Nations into four groups — those that have Pchange values that lie within 1 standard deviation above and below its mean, and those that lie more than 1 standard deviation above and below the mean. The two groups with Pchange values below the mean have below average instability (more stability) and the groups with Pchange values above the mean have above average instability (less stability) For the sets of First Nations communities that fall into each of these ranges of Pchange values we report the mean and standard deviation for a number of demographic, socio-economic and geographic variables that describe these communities.

The descriptive statistics are loosely indicative of potential associations with the CWBI and Pchange. Ideally a multiple regression analysis would allow us to hold constant the full range of control variables while investigating the influence of political instability on economic outcomes. Because of the very small number of First Nations in our study (65), and a fairly high degree of correlation among potential explanatory variables, we limit ourselves to two basic explanatory variables in our three simple multiple regressions. One of our explanatory variables is our government stability measure, Pchange, and its square. The squared term is added to allow for the possibility that, while increased stability may be associated with better economic outcomes, there is a limit to this relationship.

That is, greater stability where the Chief rarely changes, may no longer contribute to more economic benefits. We would expect a negative relationship with the Pchange term and then, due to the decreasing returns, a positive association with its square.

In addition to the political instability variables (Pchange and its square), our variable of primary interest, we also include a control variable in our regressions to hold constant other influences on the CWBI, and our other two dependent variables. Our control variable is the percentage of the population that is over the age of 15. We consider this an appropriate control variable as it is the result of long-term trends in the First Nation populations and thus is not likely caused by the economic outcome variables.[1]

For our regression analysis, three dependent, or outcome, variables are regressed on the political stability variable (Pchange) and the control variable. These three outcome variables are the CWBI aggregate score, the employment rate, and the percentage of income that is derived through employment.[2] Testing the influence of the political stability variable on more than one economic outcome variable allows for the possibility of different impacts on different outcomes. The CWBI is the broadest measure of economic outcomes, though the employment rate is arguably the most indicative of economic vitality. The third outcome variable, the percentage of income that originates from employment (rather than transfers, for example), is also a strong indicator of economic independence and vitality.

RESULTS

Based on elections data acquired via the Access to Information Act, we constructed a political instability variable for the 65 First Nations in Saskatchewan. The Pchange value ranged from a low of 0.06 to a high of 0.39. As noted above, if a change in leadership (Chief) occurs every year, the Pchange value would be 1 (or 100% of the years). The less frequent leadership changes occur, the smaller the Pchange value will be, indicating increased stability. The mean Pchange value for our sample of 65 Saskatchewan First Nations is 0.22. This indicates that on average, over the period for which we have data, First Nation chiefs change every 4.5 years (1/.22).

Tables 1 and 2, present the descriptive statistics as a first approximation to depicting underlying patterns in the relationship between political instability and socio-economic outcomes. The columns of Table 1 represent 4 groups of communities organized around the average value (48.83) of the CWBI for Saskatchewan First Nations.[3] There are 37 First Nations with CWBI values below the mean; 28 of these fall within one standard deviation (8.13) below the mean (CWBI scores between 40.7 and 48.83), and 9 that have CWBI scores less than 40.7 (more than 1 standard deviation below the mean). The remaining 38 First Nations have CWBI scores above the average: 29 fall within one standard deviation above the mean (CWBI scores between 48.83 and 56.96), and 9 have CWBI scores greater than 56.96. For each of these four groups, the mean and standard deviations of the variables in the left-hand column are presented as a first approximation to establishing relationships between these variables and the CWBI.

Across the four CWBI groups, average Pchange values (0.1775) are the lowest, indicating the least political instability (greatest stability), for the group of First Nations with the highest CWBI (greater than 56.96). This is consistent with more political stability being associated with better socio-economic outcomes. However, the average Pchange value for the lowest CWBI group (< 40.70) is not much higher (0.1950). This suggests that very high political stability may be associated either with the best

[1] In early estimations, a number of alternative control variables were employed, including distance and other economic outcome variables. However, we chose the single control variable because the degrees of freedom do not permit more explanatory variables and also for theoretical reasons as this demographic variable is expected to be broadly associated with the potential for positive economic outcomes.

[2] We experimented with a number of other dependent variables, but these three were chosen for theoretical and methodological reasons. To the extent that working age population moves off Reserve in response to poor economic conditions on the Reserve, we will have bi-directional causation. Again it is important to treat the estimated coefficient as a representation of the degree of association. Further it should be noted that there is also the potential for reverse causality for the political instability variable, our variable of primary interest.

[3] Available from AANDC <http://www.aadnc-aandc.gc.ca/eng/1100100016600/110010001664>.

TABLE 1
Political Stability, Election Type, Demographic, Remoteness and Economic Characteristics of Saskatchewan First Nations by Community Well-Being Indexes, Means and (St. Dev.)

	CWB<40.70 *9 FNs*	*40.70<CWB<48.83* *28 FNs*	*48.83<CWB< 56.96* *29 FNs*	*CWB>56.96* *9 FNs*
Pchange, Average	0.1950 (0.0619)	0.2396 (0.0779)	0.2232 (0.0801)	0.1775 (0.0716)
% Custom Election	55.60 (52.70)	57.14 (50.40)	69.00 (47.08)	68.75 (47.87)
Avg. Dist., Nearest Urban Centre, km	79.60 (68.96)	140.81 (113.57)	127.75 (91.93)	105.88 (88.26)
Total Population Size, 2006	578.89 (355.34)	729.46 (369.16)	564.31 (306.90)	449.38 (357.50)
Population Growth Rate, 2001–2006	2.41 (12.52)	14.95 (20.61)	11.98 (15.74)	13.38 (23.65)
Employment Rate, Females, 2006	30.80 (9.52)	27.63 (6.07)	31.68 (7.00)	46.91 (6.60)
Employment Rate, Males, 2006	25.28 (7.03)	28.21 (6.82)	33.18 (6.85)	48.83 (18.18)
Employment Rate, 2006	23.32 (5.01)	27.78 (5.75)	33.10 (5.40)	47.99 (12.07)
Per Capita Total Income (Average)	$5,140.68 (2,269.04)	$6,301.78 (1,467.22)	$6,895.55 (2,745.05)	$8,407.94 (8,014.94)
Per Capita Employment Income, 2006	$2,708.83 (1,524.67)	$3,836.61 (1,128.47)	$4,431.49 (2,036.24)	$6,227.15 (6,302.25)
% Population <15, 2006	39.99 (5.34)	39.33 (4.29)	35.38 (3.59)	33.62 (6.96)
% Population >15, 2006	60.01 (5.34)	60.67 (4.29)	64.62 (3.59)	66.38 (6.96)
% of Total Income from Employment	50.98 (9.77)	60.34 (6.78)	63.36 (6.52)	72.46 (4.70)
Highest Education, 2006				
% High School	6.23 (2.58)	8.70 (3.39)	10.75 (3.46)	14.41 (3.39)
% Trades Diploma	4.76 (2.93)	8.38 (3.92)	10.84 (4.91)	17.26 (5.62)
% University Degree	2.19 (1.48)	3.01 (1.69)	4.36 (2.60)	5.49 (1.17)

Notes: CWB is the Community Well-Being Index, with the ranges indicated showing the distribution that lies within, and beyond, one standard deviation (8.13) above and below the mean CWB of 48.83. The numbers in parentheses are the number of communities that fall into each range.

and the worst CWBI outcomes for First Nations. The highest average Pchange value, that is, the greatest political instability is found in the group of First Nations that has a CWBI below, and within one standard deviation of, the average CWBI. It would seem that a change in Chiefs once every 4–5 years (Pchange values of .20–.25) is associated with near average CWBI scores. Turnover of less than once every 5 years (substantially above average stability) could be associated with either very good (CWBI > 56.96) outcomes or very bad (CWBI < 40.7).

With respect to the use of Custom rather Indian Act elections, the descriptive results in Table 1 show First Nations with CWBI scores above average had higher percentages of Custom elections (rather than elections administered through the Indian Act system) than those with below average CWBI scores. This finding may be consistent with the expectation of more stability leading to better socio-economic outcomes since Custom elections will not be restricted by the two-year term limit found in the Indian Act electoral system. It should be noted that this does not mean that having Custom elections results in better socio-economic outcomes, as this cannot be determined from these data. For example, it could be that First Nations with better socio-economic outcomes (higher CWBI) may be more likely to choose Custom elections. Further, there may be some other intervening factor that gives rise to both the choice of Custom elections and a better CWBI.

Population size and growth rates within the four CWBI value groups show that the highest CWBI score group (> 56.96) has the smallest average population size (average 449), though a relatively high growth rate between 2001 and 2006 (13%). The group within one standard deviation *below* the average CWBI value of 48.83 has the largest average population at 729 and the highest population growth rate of 15%. Large populations and high growth rates appear to be associated with below average CWBI values.

The pattern implied by the other variables, across the CWBI groups, reflects the way in which the CWBI is calculated. Employment rates (employed/population 15+) are higher in higher CWBI groups, generally for both males and females as well as for the combined population. Both total income per capita and employment income per capita are higher in higher CWBI groups. The proportion of the population over the age of 15 is higher in higher CWBI groups, as is the percentage of total income that is employment income and each of the 3 measures of education attainment.

Table 2 reports average and standard deviations of First Nation characteristics where First Nations are grouped into 4 Pchange value groups — within, and beyond, one standard deviation above and below the average. The average Pchange across all First Nations is 0.22 which means that there is a turnover in Chiefs on average every 4.5 years (1/.22). Given the standard deviation of .08, the range of Pchange values for the 20 First Nations within one standard deviation *above* the average is .22–.30 (change in Chiefs once every 3.3–4.5 years); the Pchange range for the 30 First Nations within one standard deviation *below* the average is .14–.22 (change in Chiefs once every 4.5–7 years). The group of 8 First nations with Pchange values that are more than one standard deviation below the average (less than .14) would have a change in Chief less frequently than once every 7 years, and the group of 11 First Nations with Pchange values more than one standard deviation above the mean (> .30) would have a turnover in Chiefs more frequently than once every 3.3 years. The set of characteristics for which we report averages for each of the 4 Pchange groups begins with CWBI values in Table 2. The lowest Pchange group (greatest stability) has the highest average CWBI, though high standard deviations suggest caution in interpretation. This is consistent with our expectation of a positive relationship between stability and CWBI (a negative relationship between Pchange and CWBI).

Among the other variables compared across political instability groups in Table 2, the higher the instability (Pchange value), the lower is the employment rate[4], the higher is income and the

[4] The negative relationship with the employment rate is not monotonic, in that the employment rate for the highest Pchange group is higher than the second-highest Pchange group, though still lower than for the communities in the first two Pchange groups.

TABLE 2
Election Type, Demographic, Remoteness and Economic Characteristics of Saskatchewan First Nations by Political Stability Groups, Means and (Standard Deviations)

	0.14<Pchange	*0.14<Pchange<0.22*	*0.22<Pchange<.30*	*Pchange>0.30*
	8 FNs	*30 FNs*	*20 FNs*	*11 FNs*
Average CWB, 2006	51.43	49.62	48.53	47.73
	(7.83)	(11.03)	(6.11)	(5.30)
% Custom Election	0.75	0.77	0.35	0.47
	(0.46)	(0.43)	(0.49)	(0.52)
Avg. Distance, Nearest Urban Centre, km	79.12	162.94	85.17	133.16
	(29.67)	(108.33)	(45.99)	(130.57)
Total Population Size, 2006	425.63	575.17	566.75	749.00
	(330.52)	(340.84)	(267.88)	(382.09)
Population Growth Rate, 2001–2006	10.18	(8.39)	17.21	11.53
	(24.36)	(16.94)	(23.39)	(15.17)
Employment Rate, Females, 2006	34.27	32.35	29.60	29.57
	(10.67)	(10.66)	(7.02)	(7.47)
Employment Rate, Males, 2006	39.23	32.71	29.75	31.55
	(21.26)	(10.57)	(8.42)	(9.18)
Employment Rate, 2006	37.77	32.65	29.34	31.22
	(15.45)	(10.10)	(7.94)	(7.77)
Per Capita Total Income (Average)	$3,678.65	$6,844.78	$6,828.15	$7,321.62
	(3,521.50)	(4,643.78)	(2,309.60)	(2,607.70)
Per Capita Employment Income, 2006	$2,213.28	$4,433.03	$4,202.98	$4,824.18
	(2,222.78)	(3,669.71)	(1,861.73)	(2,073.89)
% Population <15, 2006	37.29	37.78	35.61	35.69
	(2.84)	(6.99)	(4.74)	(3.90)
% Population >15, 2006	62.71	62.22	64.39	64.31
	(2.85)	(6.99)	(4.74)	(3.90)
% of Total Income from Employment	59.22	61.58	59.85	64.83
	(7.82)	(9.10)	(9.40)	(6.93)
Highest Education, 2006				
% High School	11.62	10.62	9.38	9.57
	(3.15)	(4.28)	(4.18)	(3.85)
% Trades Diploma	11.65	10.65	11.05	8.44
	(4.93)	(6.33)	(4.94)	(5.05)
% Univ. Degree	5.70	3.55	3.99	3.17
	(4.11)	(1.75)	(2.29)	(1.56)

Notes: Pchange refers to the percentage of all the years for which we have observations that there was a change in the Chief of the First Nation. If the Chief were to change every year, Pchange would have a value of 1 (or 100%). The less frequently the Chief changes the smaller is the value of Pchange. The mean Pchange is .22 and the standard deviation is Pchange is .08. At the mean, the Chief changes about every 4.5 years (1/.22). The CWB overall index is defined above.

higher the percentage of the population over the age of 15. Education completion rates, on the other hand, are lower the higher the instability (Pchange). In the case of population growth rates, there is no clear pattern across Pchange groups. The lowest population growth rate (8.39) is observed for the second-lowest Pchange group (just below the Pchange average), the highest (17.21) for the communities in the third Pchange group (the one just above the average), while the lowest and highest Pchange groups have population growth rates of 10.18 and 11.53 respectively. Overall the descriptive statistics support the expectations that better socio-economic outcomes will be associated with lower instability (higher stability)

Table 3 presents the results of our simple multiple regressions testing the association of political instability (Pchange) with the 3 socio-economic outcome variables of interest. Panel 1 shows the results where the CWBI is our outcome (dependent) variable; Panel 2 replaces the CWBI score with the employment rate; and Panel 3 shows the percentage of the total income that is employment income as the outcome variable. For each of these 3 outcome variables, Model 1 includes the instability measure (Pchange) as the explanatory variable of primary interest, along with a control variable (% of population >15). Model 2 adds to Model 1 the square of Pchange, considering that although stability (low Pchange) may have a positive influence, there may be diminishing returns to stability. That is, at some point additional stability (longer terms in office) may no longer have additional positive effects.

Starting with Panel 1 of Table 3, Model 1 shows the results of regressing the CWBI on only political instability, controlling for the percentage of the population over the age of 15. The results show the expected negative relationship, significant at the 1% level. That is, the greater the instability (lower stability), the lower is the CWBI. At the average value for Pchange (.22 or a change in Chiefs every 4.5 years), a decrease of .08 (one standard deviation) from .22 to .14, would result in an increase in CWBI 2.5 points. While this is not a very large impact, it is statistically significant. Adding the squared term does not improve the fit, and the Pchange coefficient, though still positive, would now be significant only at the 12% level. The squared term has the expected positive sign but it is not statistically significant.

Moving to Panels 2 and 3 of Table 3, we show the results of Models 1 and 2 for 2 alternative dependent variables. Panel 2 shows the results when the employment rate is the outcome or dependent variable. The employment rate, the number employed as a percentage of the population aged 15+ is one of the more common, and simple, indicators of the economic health of a community. Model 1, in Panel 2, shows the expected negative and significant role of political instability (positive influence of stability). In this case the coefficient is interpreted as follows. A Pchange value that is one standard deviation (.08) below the mean (0.22) would result in an employment rate that is 2 percentage points higher, say 32% instead of 30%. This would represent a noticeable difference. When the squared term is added in Model 2, the model's goodness of fit improves slightly and the Pchange coefficient increases fourfold. A Pchange value that is 1 standard deviation (.08) below the average would now represent an increase in the employment rate of 8 percentage points. However this would need to be moderated by the fact that there are diminishing returns to increasing stability. Applying the coefficient of 1.7782 to the squared 1 standard deviation would mean that the 8 percentage point increase s would need to be reduced by one percentage point, leaving a net 7 percentage point increase in the employment rate.[5]

Finally in Panel 3, the dependent, or outcome, variable is the percentage of total income that is employment income. While Model 1 does not reveal a statistically significant role for stability, Model 2 shows that when both Pchange and its square are included, both are statistically significant and of the expected sign. More stability improves the economic outcomes, though there are limits to how much improvement may be gained from reduced turnover.

[5] It should be noted that the coefficient on the squared term is statistically significant only at the 15% level of significance. This should be borne in mind in drawing inferences.

TABLE 3
Regression Models of Socio-economic Outcomes on Government Stability

	Model 1 *Pchange Linear*	*Model 2* *Pchange Non-lin*
Panel 1: Dependent Variable is Community Well-Being Score		
Pchange	–24.5912***	–59.4095
	(–3.05)	(–1.59)
Pchange^2		76.1906
		(0.99)
Proportion of the Population 15+, 2006	107.4057***	107.1276***
	(7.04)	(6.89)
R^2	0.4838	.4873
N	71	71
Panel 2: Dependent Variable is 2006 Employment Rate		
Pchange	–0.2563 *	–1.0689 *
	(–1.89)	(–1.82)
Pchange^2		1.7782
		(1.48)
Proportion of the Population 15+, 2006	0.6173 ***	.6108***
	(3.12)	(2.97)
R^2	0.1390	0.1534
N	71	71
Panel 3: Dependent Variable is % of Total Income that is Employment Income		
Pchange	–0.0722	–1.0850 *
	(–0.59)	(–1.77)
Pchange^2		2.1540 *
		(1.67)
Proportion of the Population 15+, 2006	0.6928 ***	0.7058 ***
	(3.52)	(3.47)
R^2	0.1544	0.1765
N	63	63

Notes: In Model 1, Government Instability is represented by Pchange. This variable is the percentage of all the years for which we have observations that there was a change in the Chief of the First Nation. If the Chief were to change every year, Pchange would have a value of 1 (or 100%). The less frequently the Chief changes the smaller is the value of Pchange. A negative coefficient suggests that more stability (lower turnover) is associated with better outcomes. In Model 2, for each of the Dependent Variables, the squared term of Pchange is included to allow for a non-linear relationship. That is, even if turnover is negatively related to economic outcomes, we may nevertheless hypothesize that some turnover is good (or too much stability is undesirable). Numbers in parentheses below the coefficients are t-ratios. All models also include a constant term, not shown.
*** denotes significance at the 1% level, ** 5% and * 10%.

Our estimates of the influence of political stability on economic outcomes offers some evidence that more political stability has positive outcomes, though probably with diminishing returns. A follow-up question then is what leads to political stability. Table 4 presents the results of exploring one potential determinant of Pchange — election type. While there are likely many factors, we examine the relationship between political stability and the type of electoral system utilized by First Nations.

Table 4 shows the results of regressing Pchange on the use of a Custom versus Indian Act electoral system. A control variable, total population size of the First Nation in 2006, is also included. This control variable is included because there may be turnover characteristics that are simply a matter of population size, such as the number of families in the First Nation. The *ex ante* expectation is that Custom elections will be associated with greater stability as First Nations are more likely to identify with, and take ownership of, a Custom elections process than in the prescribed Indian Act system. That is, choosing a Custom election is likely to lead to more stable government with fewer changes in Chiefs.

The results of our estimation show that having Custom elections is indeed negatively associated with instability (positively associated with stability). That is, moving from Indian Act to Custom elections is associated with a .07 decrease in the Pchange value. At the average Pchange value of .22, this would represent, for example, moving from .22 (change in Chiefs every 4.5 years) to .15 (change in Chiefs every 6.6 years). Having Custom elections is therefore associated with greater stability, as expected.

DISCUSSION

The conceptual framework of what constitutes political instability is more complicated than what can be represented by a single indicator. Political instability differs in scale, nature, and impact across communities and situations, and using a single indicator is a very incomplete representation. For example, the impact of forced removal of leadership may be different from that of a democratic transition or a succession type of political change. Even within democratic transitions significant differences in political ideologies and in the underlying conditions could have far reaching implications for economic growth.

TABLE 4
Government Stability (Pchange) Influences: Election Type

Explanatory Variables	*Coefficient (t-ratio)*
Customary Elections	–0.0743*** (–4.60)
Total Population Size, 2006	0.00006** (2.47)
R^2	0.2562
N	78

Notes: Pchange (the Dependent variable) is the number of years before the Chief changes. If the Chief were to change every year, Pchange would have a value of 1 (or 100%). The less frequently the Chief changes the smaller is the value of Pchange. The mean Pchange is .22 and the standard deviation is Pchange is .08. At the mean, the Chief changed about every 4.5 years (1/.22).
Elections for First Nations can occur in one of two ways. One is the format mandated by the Indian Act, while the other is a "Custom" form chosen by the First Nation.
Numbers in parentheses below the coefficients are t-ratios. All models also include a constant term, not shown.
*** denotes significance at the 1% level, ** 5% and * 10%.

Similarly, the outcome variables of interest are likely to be complex and multidimensional. We have used the CWBI and a small number of other simple indicators. Yet to adequately assess the impact of political instability on broad socio-economic outcomes would require a more complete representation of well-being. While the outcome variables we have used are believed to be generally indicative of outcomes of interest, other measures may lead to other interpretations.

Apart from the difficulty in choosing an objective estimator of political instability, and choosing the relevant outcome variable(s), the paucity of data is also an acknowledged limitation in this study, as is the case when dealing with community level governance. It is not surprising that all the studies cited in our literature review were multi-country level studies where data on governance is relatively accessible. For community level studies such as ours, limited data on governance and key socio-economic indicators is a challenge that limits the empirical depth of analysis. Broadening the analysis to more First Nations, ideally Canada-wide would improve the efficiency and accuracy of our empirical estimates.

A further limitation to be acknowledged is the difficulty of determining the scope of influence that elected leaders actually have and the extent to which leadership influences the socio-economic development of their respective communities. For example, the Default Prevention and Management Policy came into effect in June 2011, replacing the Intervention Policy. The DFMP affects those First Nations who have defaulted in their funding agreements with the Federal government. The DFMP is used to prevent financial default and default recurrence. There are three levels of Federal intervention: (i) Recipient Managed where the First Nation develops a plan, acceptable to AANDC, to remedy and recover from a default, to address the default and prevent its recurrence; (ii) Expert Resource Support where an external financial expert is contracted by the First Nation as part of their Management Action Plan to address the default and prevent its recurrence; and (iii) Third-Party Management where a financial manager is contracted by AANDC to administer funding for the delivery of First Nation programs and services and works to remedy the underlying causes of the default (AANDC 2011b). At the time of writing, 31 of the 65 Saskatchewan First Nations included in our sample were under some form default management. This includes 18 First Nations in Recipient Management, 12 receiving Expert Resource Support, and one in Third Party Management. In these cases the boundaries between the Federal government and First Nations are difficult to clearly delineate as they are undeniably adjoined through financial and administrative dependencies.

It is also possible that the legacies of First Nation amalgamation may to this day affect the political stability and socio-economic conditions of some Saskatchewan First Nations. This was found to be true among the forcefully amalgamated tribes of the United States whose per capita incomes are nearly 30% less than non-amalgamated tribes and who continue to be challenged by factional conflicts over representation (Dippel 2010). In our sample of 65 Saskatchewan First Nations, 9 were historically amalgamated (13.8%). If Saskatchewan First Nations are similar to the amalgamated tribes in the US, historical amalgamation may cause some Nations to be less politically homogeneous and disinclined towards cooperation.

Lastly, we must not discount the possibility that what we characterize as political instability is in fact an outward reflection of Aboriginal leadership customs. For example, Braroe (1975) found that within the Nekaneet First Nation (southwest Saskatchewan) the position of Chief was passed among all male heads of household every two years. In this system the Chief exercised negligible authority and when a decision did need to be made that would affect the entire community, it was made by consensus. According to Braroe (1975) this systems of governance reflected pre-contact forms of decision-making, where no one individual had the authority to arbitrarily commit members of the Nation to any given course of action. While the cultural and political conditions of First Nations have undoubtedly experienced change since the time of Braroe's research, with leadership being both a political as well as economic opportunity, we should not dismiss the possibility that political instability remains a cultural mechanism used by some First Nations for consensual decision-making and a means of avoiding social tensions within communities.

CONCLUSION

Our results show that among First Nations in Saskatchewan the average term of elected leadership is 4.5 years. Simple descriptive statistics support the basic hypothesis of more stability, represented in this paper as less frequent changes in elected Chiefs, is associated with better socio-economic outcomes. Simple groupings show that for those First Nations who experience a turnover in leadership greater than the average of 4.5 years, the average CWBI score is on average 2 points lower than those First Nations with leadership changes less frequently than the average. Our regression analysis, though limited by small numbers of observations confirms this expected relationship and establishes that it is strongly statistically significant.

However, one cannot simply conclude that political stability and economic growth go hand in hand. Our findings show evidence that there are limits to how much more socio-economic gains can be achieved by increasing political stability. At some point the positive contribution of greater stability to socio-economic outcomes decreases, such that it may eventually reduce, rather than improve positive socio-economic outcomes. This finding is similar to those of Olsen (1982) who found that governments that remain in office for relatively long durations risk falling prey to interest groups or factions who lobby for favourable decisions that advance their own interests at the expense of others (Alesina et al. 1996). Similarly Murphy et al. (1991) found that governments that fear losing office may cater to pressure groups or influential community factions. This institutional behaviour then affects social and economic policies through various forms of nepotisms or favouritism. Shleifer and Vishney (1993) found that in such cases, governments more susceptible to rent seeking behaviour that are deleterious to economic growth.

Bearing in mind these qualifications, our results nevertheless point to important relationships between political stability and socio-economic outcomes worthy of further exploration. For example, political stability appears associated with the choice of Custom rather than Indian Act electoral systems of First Nations. Election reforms may be more appropriately focussed on facilitating a greater range of choices that are made by First Nations. Fundamentally, even though we find the expected positive relationship between stability and outcomes, we note that our stability indicator, while being a statistically significant influence is only one of very many reasons for poor outcomes on First Nations in Saskatchewan. Increasing stability alone will make a statistically significant improvement, though it is likely to be of relatively small practical importance. Clearly many other policies and local initiatives will also be required.

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Editor's Introduction

Robert J. Oppenheimer

In this issue of the Journal, The State of the Aboriginal Economy section focuses on employment. Phillip Lashley and M. Rose Olfert in their article "Off-Reserve Employment Options for On-Reserve First Nations in Canada" identify factors that facilitate employment off-Reserve. Robert J. Oppenheimer, in his article "Aboriginal Employment: Continuing to Improve in 2012" examines the employment rates of Aboriginals and non-Aboriginals in 2012 and 2011. Lashley and Olfert report that Community Well Being is positively affected when there is a larger proportion of off-Reserve employment. Negative influences to off-Reserve employment include the distance from urban centres as well as higher population growth rates. In contrast, positive influences to off-Reserve employment include a tighter provincial labour market as represented by a higher provincial employment rates and to high school completion rates.

This latter finding is consistent with the results reported by Oppenheimer, that the higher the educational level the higher the rate of employment. These results should further reinforce the importance of taking actions to increase high school graduation rates and provide support for post-secondary education. Oppenheimer also reports that the Aboriginal employment rates and participation rates continued to improve in 2012, and that the gaps between these rates for Aboriginals and non-Aboriginals decreased in Canada.

OFF-RESERVE EMPLOYMENT OPTIONS FOR ON-RESERVE FIRST NATIONS IN CANADA

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ABSTRACT

Alternative land management options for First Nations are intended to improve their well-being through on-Reserve economic development. Another means by which First Nations are increasing their participation in the economy is through migration off Reserve, primarily urban centres. A third, to date neglected, means by which First Nations participate in the economy is through accessing off-Reserve employment while retaining Reserve residence. While positive urban agglomeration spillovers in the form of employment opportunities for rural populations are well established for the general population, this has not been investigated for Reserve populations. This paper examines the incidence and determinants of off-Reserve employment by Reserve residents in Canada. We find that along with distance, population growth rates and a higher percentage of the population over the age of 15, out-commuting rates from Reserves are influential in Community Well-Being Scores. Out-commuting is, in turn, facilitated by high school completion rates and negatively affected by distance. We conclude that improved access to off-Reserve employment for Reserve residents is an important means of improving the well-being of Reserve populations, and that a high school education is associated with off-Reserve employment.

INTRODUCTION

Canada's *Federal Framework for Aboriginal Economic Development* of 2009 (AANDC 2009), and the *Update* of 2012 (AANDC 2012), identifies both the development of Reserve lands and assets, and the development of human capital, as the means to First Nations participating fully in the Canadian Economy. These new initiatives are set against a backdrop of long-standing appalling socio-economic outcomes for many First Nations' Reserves. The Aboriginal Affairs and Northern Development Canada (AANDC) Community Well-Being (CWB) Index study of 2011 indicated that CWB scores were 35% lower for First Nations[1] Reserves than for non-Aboriginal[2] communities. Of the "bottom 100" Canadian communities in 2006, all but four of them were First Nations Reserve Communities (AANDC 2011).

Among the initiatives of the federal government to assist and support economic development of First Nations on reserve lands have been the *First Nations Commercial and Industrial Development Act*, the *Indian Oil and Gas Act*, work to reform income assistance, and most notably, the *First Nations Land Management Act* (FNLMA) (AANDC 2012). At the same time, First Nations populations in pursuit of economic opportunity and quality of life are rapidly urbanizing, not unlike the non-Aboriginal population (Howard and Proulx 2011; Norris and Clatworthy 2010). Given the rapidly growing Aboriginal population (19% increase between 2006 and 2011, compared with 7% for the non-Aboriginal population over the same time period) and the dire economic circumstances on many Reserves both on-Reserve improvements and migration to off-Reserve destinations likely represent necessary ways of greater economic participation and improvements in well-being.

A somewhat neglected channel by which First Nations may achieve improved economic outcomes resides at the intersection of improving conditions on Reserves and participation in off-Reserve employment. That is, Reserves may continue to be places of residence for First Nations while their labour force members "commute" to places of employment off-Reserve, either daily or by way of longer term stays at the employment sites. Retaining on-Reserve residence may permit continued participation in traditional culture and lifestyles, while allowing for greater off-Reserve employment opportunities. It is important then, to examine the extent to which First Nations living on Reserves in Canada participate in off-Reserve employment, and the determinants of this participation. This will be useful both for understanding this particular path for economic integration and for strategic policy design. Improving access to the off-Reserve labour market and finding novel ways of engaging in employment away from home, as well as improving the attractiveness of Reserves as place of residence may be strategies that improve well-being.

This paper seeks to fill this gap in the literature by examining the role of out-commuting in community well-being on Reserves, as measured by the Aboriginal Affairs and Northern Development Canada (AANDC) Community Well-Being Index (CWB). In addition the key determinants of out-commuting are estimated. We find that out-commuting is positively related to community well-being, controlling for a range of other demographic, economic, and geographic factors, and that high school completion facilitates out-commuting. Remoteness and demographic characteristics are also important.

This paper is structured as follows. Following the Introduction is a review of Selected Literature and the Conceptual Framework. Section 4 contains a description of the data and the empirical implementation with the results following in Section 5. Section 6 contains conclusions and policy implications.

SELECTED LITERATURE

Relevant empirical literature may be found both in a small developing literature concerned directly with Canadian Aboriginal communities,

[1] "First Nations" is a Canadian term, which came into common usage in the 1970s, used to replace the words band or Indian (the latter with the associated negative connotations).

[2] Aboriginal peoples of Canada are defined in the Constitution Act, 1982, Section 35(2) as including the Indian, Inuit and Métis peoples of Canada. Statistics Canada defines Aboriginal ancestry as referring to whether a person reported ancestry associated with the Aboriginal peoples of Canada.

and a much larger regional economic literature that examines the patterns of concentration of economic activity in urban areas, with implications for rural or peripheral areas like Reserves. The latter includes findings on the nature and consequences of commuting — that is, where the place of residence is rural and the place of work is urban (or other rural). In addition, the policy literature on place-based versus people-based approached is relevant. A selected and brief overview of each of these major areas is presented below.

ABORIGINAL ECONOMIC INTEGRATION

Evident throughout the developing literature on the economic integration of Aboriginal communities in Canada is the very marked and persistent wage and income gaps between Aboriginal and non-Aboriginal populations (de Silva 1999; George & Kuhn 1994; Patrinos & Sakellariou 1992; Pendakur & Pendakur 1998, 2002, 2007, 2011). The size of the gap varies among Aboriginal communities in Canada and though it remains large, there is some evidence that it is narrowing.

In spite of the pervasive poverty and low incomes of Aboriginal populations, Chokie and Partridge (2008) find that initial higher shares of Aboriginal populations do not contribute to long term higher poverty levels in communities once other geographic, demographic and labour market characteristics are controlled for. This is consistent with other findings that education gaps account for at least part of the differential incomes, and also that there is a high return to education among the Aboriginal populations (Mendelson 2006; Richards and Vining 2004; Sharp et al. 2009).

There has also be some investigation of the differences between Aboriginal populations remaining on their Reserves and those who have moved off-Reserve, primarily to urban centres. These studies have found that off-reserve populations are faring better than those remaining on-Reserve in terms of labour market participation, income and educational attainment (Drost and Richards 2003; Pendakur and Pendakur 2011; Richards et al. 2010). Not unlike rural-to-urban migrations of the general population, there is consistent geographic migration from Reserves (largely small, rural and remote) to urban locations with greater quantity and diversity of economic opportunity. Between 1996 and 2006, for example, the percentage of First Nations living off Reserve increased from 58% to 60% (Statistics Canada 2009).

RURAL–URBAN SPILLOVERS

Global and long-standing concentration of economic activity and population in urban centres can be attributed to the presence of agglomeration economies, or productivity advantages of urban areas, and to the preferences for proximity to urban amenities, goods and services (Krugman 1991; Ferguson et al. 2007; Florida et al. 2008; Glaeser et al. 2001; Jacobs 1969; Word Bank 2009). Firms seek out urban locations to realize the productivity advantages arising from economies of size and scale, concentrations of skilled labour and knowledge spillovers, as well as urbanization economies due to urban infrastructure. Individuals seek out urban centres because of the job opportunities but also because of urban amenities, such as access to a full range of public and private services, variety and cultural amenities. While both firms and individuals concentrate in urban centres it is not clear whether the migrations are led by firms or by household preferences (Partridge and Rickman 2003).

Rural areas benefit from spillovers from urban concentrations through input–output linkages and access to employment opportunities and goods and services through commuting (Barkley et al. 1996; Henry et al. 1997; Partridge et al. 2007a; Partridge et al. 2007b). Rural regions with strong linkages to urban areas through close proximity or transportation/communication access are in an ideal position to benefit from urban growth. This is especially true for those rural regions reliant on natural resources that depend to be very capital intensive and increasingly so as their ability to support a rural labour force is limited. Greater distances from urban centres can thus be a significant detriment to the retention and attraction of population in rural areas.

The interdependency between rural and urban economies is especially evident in patterns of rural labour force commuting to urban centres of employment (Green and Meyer 1997; Partridge et al. 2010; Ali et al. 2011). Rural areas deficient in job opportunities face having their labour force migrate to urban areas, or if avail-

able, commute to jobs in accessible urban or other rural areas. Attractive rural areas that are located near urban centres may in fact become their "bedroom communities". For the Aboriginal labour force members living on-Reserve, access to employment in a rural or urban community within commuting distance may be an important source of income. Given the cost of commuting, the distance over which an employed individual will commute to earn income is limited. Urban centre size or the "tier" to which the labour force members commute is also important. Larger, more diverse centres induce longer commutes, as they offer more diverse and more lucrative employment opportunities.

PLACE-BASED VERSUS PEOPLE-BASED POLICY

Canadian First Nation's Reserves are located mainly in rural areas. In the dataset used in this analysis, the average distance of the Reserves from the nearest large (500K) urban centre was 458 km (284 miles). Rural communities are generally not able to directly realize the economies associated with concentrations of economic activity and are often dependent on primary sectors where productivity improvements are won through increasingly labour-saving technologies (Green and Myer 1997; Partridge et al. 2010). The typical outcome of this process is that labour and population increasingly concentrate in urban centres while rural areas become more sparsely populated. Individuals migrate or commute in order to improve their expected well-being, including considerations of both economic opportunity and quality of life. From a policy perspective, people-based policies such as education, health, information and communication will improve the mobility of the individuals, thus facilitating the migration from rural to urban areas.There are instances, however, where the mobility of the labour force and population may not be possible or desirable. In these cases, there may be a need for place-based policy in addition to people-based policies. Conceptually, place-based policies involve the type of intervention where the resulting assets and/or the increased capacity cannot leave the community/region. Examples would be infrastructure, local organizational innovation, governance reform and support for business development in specific places (Bolton 1992; Olfert et al. forthcoming; Partridge and Rickman 2003). The 2009 World Bank report suggests that the potential candidates for place-based policy are places which are "are economically distant from places that are doing well" (World Bank 2009), as is the case with most Canadian First Nations Reserves. In addition to remote locations, historical, language and cultural factors may make the population and labour resources relatively immobile. In the absence of local policy interventions, pockets of poverty can be persistent (Chokie and Partridge 2007; Olfert et al. forthcoming).Broadly, there is a growing connectedness of rural and urban places, in terms of workers in urban areas being resident in rural areas (Green and Myer 1997; Partridge et al. 2007a; Partridge et al. 2007b). The extent to which this is an option is strongly influence by the cost of travel and wage differentials (Hoover and Renkow 2000). Within the context of rural Aboriginal Reserves, investigating the commuting interdependencies should be informative for future Federal expenditures in infrastructure and transport planning.

CONCEPTUAL MODEL OF COMMUNITY WELL-BEING

Based on the literature, we hypothesize that socio-economic well-being (CWB) of Reserve populations will be a function of their demographic characteristic including human capital, access to urban employment through commuting and local conditions that may be captured through provincial fixed effects. Our expectations regarding the influential factors for the CWB can be expressed as:

$$CWB = f(DEMOG, HUMCAP, GEOG, OUTCOM, PFE) \quad (1)$$

Influential demographic characteristics (DEMOG) include the percentage of the labour force that is of potential labour force age, as well as population size and growth rates. Higher population growth is often seen as indicative of vibrant economic growth where the increase is the result of net in-migration. However, where high population growth rates are the result of natural increase, it can also lead to population pressures in the absence of a vibrant local economy. Local

population growth along with language, cultural or other barriers to geographic mobility, may lead to pockets of poverty. A higher proportion of the population of working age (15+) would be expected to improve economic well-being through the capacity to earn income.

Human capital (represented by the vector of variables HUMCAP) is generally seen as essential to the economic health and growth of any community as human capital levels will determine the long term productivity of the region. Further, the presence of high levels of human capital will attract firms and more human capital. In this paper human capital will be measured by educational attainment variables as indicated below.

Our GEOG vector contains distances from the Reserve to urban centres of various sizes. Remoteness from larger urban centres will reduce access to jobs and also to markets for local entrepreneurs, as well as access to a full range of public and private goods and services. Distance from markets will typically disadvantage a region in terms of input–output linkages with other firms, access to final markets, access to jobs, to information and knowledge and access to goods and services. Distance is thus hypothesized to exert a negative influence on CWB.

The out-commuting behavior of the Reserve labour force (OUTCOM) may be expected to influence the CWB in two ways. On the one hand, participation in the off-Reserve labour market provides a means of accessing income-earning opportunities off-Reserve. In addition to, commuting to off-Reserve jobs will also bring in knowledge and experience that will improve the competitiveness of the labour force. Both of these influences are positive in terms of CWB. However, commuting to off-Reserve employment may also have negative effects because the labour force is absent from the Reserve (for example, through work arrangements such as a "fly-in" work force for a week or two at a time to remote resource exploitation opportunities such as mining or work in oil and gas fields). Further the cost of commuting reduces net earnings. For these reasons the expected direction of influence of the out-commuting rate, our variable of primary interest, is ambiguous.

Finally provincial fixed effects (PFE) are important because of varying provincial institutions, policies and economic conditions. The general economic health and growth of the province would be expected to influence the ability of Reserve members to access opportunities, and thus affect their CWB. To control for a range of influences that may be associated with the province where the Reserve is located, we include provincial dummy variables. The remaining coefficients can then be interpreted as the influence of each variable, over and above the influence that the province itself may exert. It is hypothesized that more positive provincial level outcomes will lead to higher CWB on the Reserves. The influence of each province, will be indicated relative to a reference (omitted) province.

DATA AND EMPIRICAL IMPLEMENTATION

Data Sources

Four main data sources are used in this analysis: Census of population, a special tabulation from the census of the Population on commuting patterns (place-of-residence, POR and place-of-work POW), geographical data (distances), and Aboriginal Community well-being measures. Because Reserves are unique Census Subdivisions (CSD's)[3] the Census data were retrieved at the CSD level, the observations for this analysis.

The 2001 and 2006[4] Census of Population provides data on demographic (population size, growth and age structure), employment (labour

[3] Census subdivision (CSD) is the general term for municipalities (as determined by provincial/territorial legislation) or areas treated as municipal equivalents for statistical purposes (e.g., Indian Reserves, Indian settlements and unorganized territories) (Statistics Canada 2011). Reserves are considered any of eight CSD types: Indian Reserve (IRI), Indian settlement (S-É), Indian government district (IGD), Terres réservées aux Cris (TC), Terres réservées aux Naskapis (TK), Nisga'a village (NVL), Nisga'a land (NL), Teslin land (TL). as well as selected CSDs of various other types that are northern communities in Saskatchewan, the Northwest Territories and the Yukon Territory.

[4] The 2006 Census is the most recent complete Census and the most recent year for which the Community Well-Being Index is available. The 2011 Census did not collect data on the labour force and economic characteristics of the population because that information was part of the discontinued long form. The National Household Survey that is to replace the long form will not provide directly comparable data and the economic/labour force characteristics from that survey will first be availably in late 2013.

force and participation rates), income characteristics (total and employment income) and educational attainment (percentages completed high school and with a Bachelor's degree or higher.[5]

In addition to the standard Census data, custom tabulations were acquired for the POR (place-of-residence) and POW (place-of-work). These data tell us, for each Reserve, the number of people who are employed[6] on the Reserve. Total employment minus on-Reserve jobs is our definition of out-commuting, which we express as a rate. For 2001 we have information regarding whether the off-Reserve jobs were in rural or urban areas, and gender of the commuters. One limitation, however, is that the Statistics Canada does not indicate where people may be living both on and off Reserve, only primary residence.

There were 396 Reserve CSD's in the 2006 census dataset and 384 in 2001. Only those Reserve CSD's from the Census of population for which both the commuting (POW and POR) data were also available for both 2001 and 2006 were used in the study.

This resulted in 312 usable CSD's for the analysis.

Geographical data from the C-RERL database[7] was used to for the distances from the centroid of the Reserve to the centroid of urban centers differentiated by size. There are three distances used for each Reserve:

- The distance (km) to the *nearest* urban center, regardless of whether it is a CMA[8] or CA[9]
- The incremental distance in km to the nearest medium urban center (defined as population between 100,000 and 499,000)
- The incremental distance in km to the nearest large urban center (population > 500,000)

Our structure of distances results in a non-linear structure, representing the urban hierarchy, consistent with other representation of distances in commuting studies (Partridge et al. 2010; Ali et al. 2011).

Our main dependent variable is the Community Well-Being (CWB) Index provided by AANDC.[10] We use the calculated aggregate CWB score for each of the Reserve CSDs, based on Census data for labour force, income, education and housing characteristics. The disadvantage of using this index is that because it is such a broad composite measure it removes our ability to include explanatory variables such as education and employment rates in our models. We thus limit ourselves to independent variable that will be more exogenous. These variables were available for all of the 312 "Reserve" CSD's in the study, but due to a change in how the index was calculated between 2001 and 2006, only information for the year 2006 will be used.

Descriptive Statistics for the main variables in the study are shown in Table 1.

EMPIRICAL IMPLEMENTATION

Main Model

Our basic empirical model to be estimated is:

$$CWB_t = \alpha + \beta_1 DEMOG_{t-1} + \beta_2 GEOG + \beta_3 OUTCOM_{t-1} + \beta_4 PFE + \varepsilon \quad (2)$$

Our dependent variable is the CWB described above. Vectors of demographic, geographic and out-commuting variables comprise our explanatory variables, along with provincial fixed effects. Note that we use lagged explanatory variables to avoid direct statistical

5 Note that for 2001, the education variables were available for the population aged 20+ while for 2006 for 25+.

6 Employed persons are those who, during the reference week: did any paid work at all at a job or business, or are self-employed. It also includes unpaid family work, or had a job but were not at work (Statistics Canada 2006).

7 The C-RERL data base is part of the Canada Rural Economy Research Lab, a Canadian Foundation for Innovation-funded lab at the University of Saskatchewan; its Geographic Information Systems provide distance estimates.

8 CMA is Statistics Canada's Census Metropolitan Area, consisting of one or more adjacent municipalities situated around a major urban core with a population of at least 100,000.

9 CA is Statistics Canada's Census Agglomeration, where the urban core must have a population of at least 10,000.

10 The Community Well-Being (CWB) Index is a means of measuring socio-economic well-being in First Nations, Inuit and other Canadian communities. <http://www.aadnc-aandc.gc.ca/eng/1100100016600/1100100016641> The index and its components are constructed using data from the Canadian Census of Population.

TABLE 1
Selected Descriptive Statistics, 2001 and 2006

Variable (all $ values are nominal)		*Mean*	*Min.*	*Max.*
Community Well-Being Score 2006		57.2	0	89
Out-commuters/Total Employed (15+)	2001 (%)	13.00	0.00	100.00
	2006 (%)	12.90	0.00	92.30
Dist. to the Nearest Urban Centre (CA/CMA) km		142.12	1.42	793.48
Dist. to the Nearest Med. Urban Centre (100–499,000 Pop.) km		144.60	1.42	793.48
Dist. to the Nearest Lge. (>500,000) Urban Centre km		458.90	21.82	2061.89
Population 15+/Total Population	2001 (%)	65.53	49.00	97.22
	2006 (%)	68.93	50.14	97.14
Total Population on Reserve, % Chg. 2001–2006 (%)		10.50	–31.50	233.00
Total Population on the Reserve in	2001	732.39	60	5020
	2006	811.10	45	5175
Percentage of 25+ Population with High School, 2006 (%)		5.11	0	36.84
Percentage of 25+ Pop. with Bachelor Degree, 2006 (%)		14.96	0	43.75
Percentage of Population < Age 4	2001 (%)	10.55	0	20.4
	2006 (%)	9.93	0	18.64
Provincial Percapita Employment Income Change (%)		22.37	16.21	36.40
Provincial Employment Rate 2006 (%)		63.72	47.95	70.85
CWB Housing Component 2006		59.1	0	100
Average Employment Income on Reserve in	2001 ($)	14,589.82	0	44,017.00
	2006 ($)	17,609.36	0	48,054.00
Avg. Employment Income on Reserve, % Chg. 2001–2006 (%)		18.70	–100	196.30
Per Capita Employment Income on Reserve in	2001 ($)	3,924.81	0	24,093.52
	2006 ($)	5,133.75	0	30,612.18
Per Capita Total Income on Reserve in	2001 ($)	8,018.61	0	30,786.44
	2006 ($)	9,807.27	0	50,946.60
Employment Rate (Employed 15+/Population 15+)	2001 (%)	40.00	16.70	78.60
	2006 (%)	41.10	14.30	85.70
Percentage of Out-commuters Going to Rural CSD's	2001 (%)	69.20	0.00	100.00
	2006 (%)	72.13	0.00	100.00
Percentage of Out-Commuters Going to Urban CSD's	2001 (%)	30.80	0.00	100.00
	2006 (%)	27.10	0.00	100.00
Participation Rate (Labour Force 15+/Pop. 15+)	2001 (%)	54.00	23.80	89.00
	2006 (%)	54.00	16.90	86.00

Source: Statistics Canada, Census of Population, 2001 and 2006; Census of Population, Custom Tabulations for POR and POW; C-RERL (distances); AANDC, 2006.

endogeneity.[11] The ECON vector of variables identified in the conceptual model above is not included in the empirical model because virtually all employment, labour force and income data are already represented in the CWB index.

The DEMOG vector includes the total population on the Reserve in 2001, population growth between 2001–2006, and the proportion of the population over the age of 15 in 2001. The 15+ population represents the labour resource on the Reserve, those of income-earning age. The estimated β_1's will show how each demographic variable is related to the CWB. The expectation is that larger total population and a higher proportion in the 15+ age group will exert positive influences on CWB, such that those βs will have a positive sign. The direction of influence of population growth is ambiguous as described above.

GEOG is comprised of the distances to the nearest urban centre, the incremental distance to the nearest medium urban center (where the nearest is smaller than medium) and the incremental distance to the nearest large urban centre (where the nearest is not a large centre). The estimated β_2's will show the relationships, expected to be negative, between each of the distance variables and the CWB.

The variable of primary interest is the out-commuting rate of Reserve residents, OUTCOM. This rate is constructed as the (total number of Reserve residents employed minus the jobs on Reserve)/total number employed. The estimated β_3 will show the direction and nature of how the out-commuting rate influences CWB

Finally, provincial dummy variables are included to control for differences that are due to provincial conditions, government policies and programs. In some specifications, provincial per capita employment growth and the employment rate are used as alternate representations of provincial fixed effects. The coefficients represented by β_4 will, in each case, show the direction and influence of that variable on CWB, holding all else constant.

Each estimated equation has an error term represented by ε that captures all the forces nfluencing CWB, that are NOT explicitly included as variables in the regression. It is assumed that the error term is normally distributed.

Out-Commuting Model

While our main interest is how out-commuting affects CWB, a secondary question arises as to what, in turn, influences the out-commuting rate. Our commuting model is consistent with the basic gravity model commonly applied to rural-to-urban commuting (Partridge et al. 2010; Thorsen and Gitlesen 1998; Ubøe 2004). The expected primary determinants of out-commuting include distance, economic conditions in the commuting destinations (in this case off-Reserve) approximated by provincial level characteristics, human capital of the Reserve labour force, and the on-Reserve labour constraints. We also include consideration of the quality and quantity of the housing stock on-Reserve to represent the attractiveness of living on-Reserve while commuting to off-Reserve employment, as opposed to migrating off-Reserve. Our commuting model is:

$$\%\text{Out-Com}_t = \delta + \lambda_1 \text{GEOG} + \lambda_2 \text{HUMCAP}_t + \lambda_3 \text{DEP}_t + \lambda_4 \text{HSG}_t + \lambda_5 \text{PFE} + \varepsilon \quad (3)$$

where GEOG contains the same set of distance variables described above for the main model, and as above, distance is expected to negatively affect the out-commuting rate resulting in a –ve sign for λ_1. HUMCAP contains two education measures, % high school completion and % with a Bachelor's degree or higher; both λ_2 and λ_3 are expected to have positive values. DEP contains the % population <4 years to represent the childcare constraints on out-commuting and thus λ_3 is expected to be negative. It is expected that better housing would translate into higher out-commuting rates. Provincial fixed effects will be represented by the provincial employment rate, expected to positively influence the out-commuting rate (λ_5 is expected to have a positive sign).

[11] If we used 2006 out-commuting rates to explain 2006 CWB, there could be some reverse causation (CWB influencing the out-commuting rate) and further there would not have been enough time elapsed to allow commuting behaviour to have an effect on CWB. Lagging the explanatory variables avoids this problem to some extent.

RESULTS

We present results in two main parts, first the models for the determinants of Community Well-Being, followed by results for the determinants of out-commuting.

Main results: CWB determinants

Our main results for the CWB determinants are presented in Table 2. As discussed above, we use 2001 values of explanatory variables that are time variant to explain 2006 levels of CWB, to avoid direct statistical endogeneity and to allow time for adjustments. This includes the out-commuting rate, our variable of primary interest, as well as controls. In addition, we include provincial dummies to control for variations in CWB that are peculiar to the Reserve being located in a particular province. These province-specific effects include things like the transportation network, policies with respect to natural resources exploitation, affirmative action policies and policies related to the provision of public services to Aboriginal people. Finally, we include distance to the nearest urban centre, as well as incremental distances to medium and large size urban centres, to represent the cost of remoteness. This cost will be reflected in the cost of commuting as well as in the access to a range of public and private goods and services including higher levels of education and information.

We begin with Model 1 including only the out-commuting rate from the reserve. Model 2 then adds the strictly exogenous variables such as distances and the provincial fixed effects. In Model 2 the out-commuting rate remains positive and significant at the 1% level while distance to the nearest urban centre exerts a negative influence as expected. The two incremental distance variables to larger size centres are not significant. The provincial dummies indicate that except for Manitoba and Alberta all provinces have significantly higher CWB scores than Saskatchewan the omitted province.[12] Saskatchewan and Manitoba have the highest percentages of their population of Aboriginal origin, 15.3% in Saskatchewan and 16.7% in Manitoba. Thus provinces with the highest concentrations of Aboriginal populations have the lowest CWB scores, controlling for other determinants.

Model 3, our Full Model adds to Model 2, three control variables — total population size, the 2001-2006 population growth rate and the percentage of the population over the age of 15. The out-commuting rate remains positively associated with CWB and statistically significant. The out-commuting coefficient of 6.6 indicates that at the mean out-commuting rate of 13% (Table 1), an increase of 10 percentage points, to 23%, for example, would lead to an increase in the CWB of 0.66 points. To put this in perspective, at the mean CWB of 57 (Table 1), this represents a relatively small increase. So while there is a positive statistically significant relationship between more out-commuting and higher CWB, there are clearly many other factors contributing to a community's CWB score. Distance to the nearest urban centre remains negative and significant, though now only at the 10% level.

Total population size is conventionally expected to be positively related to CWB because it would represent the scope for realizing some economies of size and scale that should translate into productivity and income gains. Further in the context of small remote communities threshold population size would be required to support a range of public and private services. However, all this presupposes a more organic process than is represented by the allocation of Reserve lands to particular populations, with entitlements related to continued attachment to that reserve. In the estimated model, the sign of the coefficient is negative, though it is not statistically significant, so no inferences can be made.

The expected effect of population growth rates for Reserves also is unclear. Where population growth is the result of net in-migration, higher growth rates identify a community/region as having attractive economic and/or quality of life attributes. In the case of Reserves, population growth is likely to be primarily the result of natural increase because of high fertility rates

[12] Saskatchewan is, of course, included in the analysis and all the coefficients reflect the relationships evident across provinces. In the set of provincial "dummies" a reference province is chosen as the omitted province so that all other province coefficients are interpreted relative to that reference province. The sign on the coefficients for the other provinces shows how the CWB in each province compares with that of the reference province (Saskatchewan), given that all the other factors in the equation have been controlled for.

TABLE 2
Determinants of 2006 CWB Index

Independent Variables	*Model 1 Coefficient (t-ratio)*	*Model 2 Coefficient (t-ratio)*	*Full Model Coefficient (t-ratio)*
Out-Commuting Rate, 2001	**17.5621 *** (4.99)**	**10.4069 *** (3.52)**	**6.6056 *** (3.16)**
Distance to Nearest Urban Centre		–0.0127 *** (–3.06)	–0.0072 ** (–2.03)
Incr. Distance to Nearest Med. Urban Centre		0.0159 (0.36)	0.0051 (0.12)
Incr. Distance to Nearest Lge. Urban Centre		–0.0025 (–0.87)	–0.0005 (–0.2)
Total Population, 2001 ('000)			–0.4309 (–0.91)
Pop. Growth Rate, 2001–2006			–0.4617 *** (–3.2)
Percentage Pop. 15+, 2001			78.0141 *** (10.54)
Provincial Dummy Variables			
Newfoundland & Labrador		21.5882 *** (9.89)	6.4665 *** (2.71)
Prince Edward Island		22.0703 *** (17.79)	16.5073 *** (13.61)
Nova Scotia		12.9084 *** (5.43)	10.1918 *** (4.35)
New Brunswick		14.6029 *** (7.94)	8.8248 *** (5.36)
Quebec		12.3412 *** (6.55)	8.1526 *** (5.2)
Ontario		12.7861 *** (7.57)	6.5545 *** (3.95)
Manitoba		0.0539 (0.03)	–0.6414 (–0.54)
Alberta		1.6350 (0.93)	1.8695 (1.37)
British Columbia		12.2748 *** (6.88)	2.2533 (1.26)
Constant	54.1385 *** (82.31)	50.5762 *** (33.74)	3.4785 (0.75)
N	289	289	287
Adj. R^2	0.1366	0.4866	0.6752

Note: The Yukon, Northwest Territories and Nunavut are excluded from all Models. All models are estimated with robust standard errors. An Urban Centre as a Census Agglomeration Area (CA) or a Census Metropolitan Area (CMA), essentially a place with a core area population of 10,000 or more. The Adjusted R^2 (with Robust standard errors) are an approximation to the adjusted R^2 statistic that would occur if the (conditional) variance were constant.
*** indicates significance at the 1% level, ** at the 5% and * at the 10% level.
For the provincial dummies, SK is the omitted province.

and also because in-migration is not really an option. Given the fixed land resource size, and the population pressures represented by rapid growth, the estimated negative sign on this coefficient is not unexpected. Higher population growth rates have a negative influence on CWB statistically significant at the 5% level.

The proportion of the population that is in the labour force ages (15+) is positively related to CWB as expected. The coefficient of 78.0141 may be interpreted as follows. A 10 percentage point increase in the % of the population over the age of 15, would translate into an increase in the CWB of 7.8 points (10 × 78). Given that the mean value of the CWB is 57 (Table 1) and the standard deviation 10.8, this represents a substantial impact.

In the Full Model our provincial dummies are smaller in size, though most retain their statistically significant superiority to Saskatchewan, the reference province, at the 1% level. The exception is British Columbia where the coefficient is no longer statistically significant.

Interprovincial Differences

So far simple provincial dummies have been used to control for provincial differences. In Table 4 we exploit more specific information about the economic conditions in the provinces. The Full Model from Table 2 is replicated in the first column of Table 3. Understandably the set of economic descriptors for the provinces are strongly related to each other, so we utilize in our final specifications one level variable, the provincial employment rate and one change variable, the growth in provincial per capita employment income in alternative models, Model 1 and 2 in Table 3 respectively. Surprisingly both of these variables are negative and strongly statistically significant. The opposite sign would be expected if the Aboriginal labour force is integrated into the provincial labour market. A tighter labour market in the province and/or more robust growth should translate into higher CWB indices for Reserves. The opposite seems to be the case. These results are driven in large part by the relatively robust conditions in Alberta and to a lesser extent in Saskatchewan, provinces where the CWB indices are lower than other provinces. The implication is that the Aboriginal population is not sharing in the good economic fortunes of the provinces, perhaps due to a segmented or dual labour market.

Out-commuting and Education on Reserve Communities

Our results are generally supportive of the hypothesis that out-commuting contributes positively to community well-being on Reserves. We thus explore what factors may contribute to higher out-commuting rates. In addition to distance from urban centres, a potential determinant of out-commuting is the education levels of the Reserve populations, to the extent that higher education levels will increase the ability of Reserve residents to participate in off-Reserve employment. Indeed as the literature, and the theoretical models suggest, education is frequently seen as a major influence in the economic success of Aboriginal populations. While education is the variable of main interest, we control for a range of other influences. The results are presented in Table 4.

Model 1 includes only completely exogenous variables (distances and provincial dummies), along with two measures of education attainment, the percentage of the population ages 25+ that has a high school certificate as the highest level of education attainment, and the percentage of the population that has a University Degree or higher.[13] The explanatory variables are not lagged as reverse causality is not expected to be a problem. Both of the education variables are positive in sign though only high school completion is statistically significant. The coefficient implies that for every 10 percentage points higher high school completion, the out-commuting rate would increase by 8 percentage points, a large effect. The provincial dummies indicate that the out-commuting rate is significantly lower in Nova Scotia and significantly higher in British Columbia.

Model 2 in Table 4 is a re-estimation of Model 1 but with the provincial dummies being replaced by the provincial employment rate.

[13] A number of other variables, including lagged values were examined. These two were selected as the most informative for conceptual and practical reason.

TABLE 3
Determinants of 2006 CWB Index, Province-Level Effects

Independent Variables	*Full Model Coefficient (t-ratio)*	*Model 1 Coefficient (t-ratio)*	*Model 2 Coefficient (t-ratio)*
Out-Commuting Rate, 2001	**6.6056 *** (3.16)**	**4.9177 ** (2.43)**	**4.6558 ** (2.30)**
Distance to Nearest Urban Centre	–0.0072 ** (–2.03)	–0.0077 ** (–2.00)	–0.0086 ** (–2.09)
Incr. Distance to Nearest Med. Urban Centre	0.0051 (0.12)	–0.014 (–0.29)	–0.0134 (–0.28)
Incr. Distance to Nearest Lge. Urban Centre	–0.0005 (–0.2)	–0.0001 (–0.05)	0.0027 (1.31)
Total Population, 2001 ('000)	–0.4309 (–0.91)	–0.2996 (–0.60)	–0.2544 (–0.50)
Pop. Growth Rate, 2001–2006	–0.46167*** (–3.2)	–0.5786 *** (–4.12)	–0.5648 *** (–3.76)
Percentage Pop. 15+, 2001	78.0141 *** (10.54)	82.1992 *** (13.36)	85.3496 *** (13.89)
Provincial Employment Rate, 2006		–50.0880*** (–3.78)	
Provincial Per Capita Employment Income Change			–16.0751* (–2.41)
Provincial Dummy Variables			
Newfoundland & Labrador	6.4665 *** (2.71)		
Prince Edward Island	16.5073 *** (13.61)		
Nova Scotia	10.1918 *** (4.35)		
New Brunswick	8.8248 *** (5.36)		
Quebec	8.15256 *** (5.2)		
Ontario	6.5544 *** (3.95)		
Manitoba	–0.6414 (–0.54)		
Alberta	1.8695 (1.37)		
British Columbia	2.2533 (1.26)		
Constant	3.4785 (0.75)		
N	287		
Adj. R^2	0.6752		

Note: The Yukon, Northwest Territories and Nunavut are excluded from all Models. All models are estimated with robust standard errors. An Urban Centre as a Census Agglomeration Area (CA) or a Census Metropolitan Area (CMA), essentially a place with a core area population of 10,000 or more. The Adjusted R^2 (with Robust standard errors) are an approximation to the adjusted R^2 statistic that would occur if the (conditional) variance were constant.
*** indicates significance at the 1% level, ** at the 5% and * at the 10% level.
For the provincial dummies, SK is the omitted province.

TABLE 4
Determinants of 2006 Out-Commuting Rates

Independent Variables	*Model 1 Coefficient (t-ratio)*	*Model 2 Coefficient (t-ratio)*	*Model 3 Coefficient (t-ratio)*	*Model 4 Coefficient (t-ratio)*
Distance to Nearest Urban Centre	–0.0001 (–1)	–0.0001 (–1.07)	0 (–0.37)	–0.0001 (–0.66)
Incr. Distance to Nearest Med. Urban Centre	–0.0007 (–0.64)	–0.0005 (–0.54)	–0.0008 (–0.91)	–0.0012 (–1.39)
Incr. Distance to Nearest Lge. Urban Centre	–0.0001 (–1.4)	–0.0002 *** (–3.15)	–0.0001 ** (–2.33)	–0.0001 ** (–2.39)
% Pop. (25+) with High School, 2006	0.8422 *** (3.67)	1.0681 *** (5.38)	0.6658 *** (3.16)	0.6294 *** (2.97)
% Pop. (25+), Bachelor's Degree +, 2006	0.4824 (1.35)	0.4198 (1.18)	0.3149 (0.93)	0.3661 (1.05)
Provincial Employment Rate, 2006		0.2659 (0.76)	0.7494 ** (2.32)	0.6583 ** (2.03)
Percentage Population < 4, 2006			–1.9177 *** (–4.15)	–1.8461 *** (–3.94)
CWB Housing Score				–0.0003 (–0.48)
Provincial Dummy Variables				
Newfoundland & Labrador	–0.056 (–1.04)			
Prince Edward Island	–0.0467 (–1.39)			
Nova Scotia	–0.1054 ** (–2.4)			
New Brunswick	–0.0724 (–1.14)			
Quebec	–0.0045 (–0.11)			
Ontario	–0.0161 (–0.41)			
Manitoba	0.0199 (0.43)			
Alberta	0.0447 (0.91)			
British Columbia	0.1067 ** (2.54)			
Constant	–0.0029 (–0.05)	–0.1623 (–0.66)	–0.229 (–1.03)	–0.1557 (–0.69)
N	290	290	288	287
Adj. R^2	0.2056	0.1773	0.2465	0.2315

Note: The Yukon, Northwest Territories and Nunavut are excluded from all Models. All models are estimated with robust standard errors. An Urban Centre as a Census Agglomeration Area (CA) or a Census Metropolitan Area (CMA), essentially a place with a core area population of 10,000 or more. The Adjusted R^2 (with Robust standard errors) are an approximation to the adjusted R^2 statistic that would occur if the (conditional) variance were constant.
*** indicates significance at the 1% level, ** at the 5% and * at the 10% level.
For the provincial dummies, SK is the omitted province.

While the latter is not statistically significant, it is positive, unlike the sign in the models for CWB. In Model 2, high school completion has an even larger coefficient and remains significant at the 1% level. In addition, while distance to the nearest urban centre is not significant, distance to a large urban centre (population 100,000+) is negative and statistically significant. Access to employment in a metropolitan centre is important for the out-commuting rate, consistent with other finding that in the Canadian setting access to the range and variety of employment opportunities in large metropolitan areas is an important influence in commuting behaviour (Partridge et al. 2010).

In Model 3, an additional demographic variable, the percentage of the population under the age of 4 years, is added to reflect the impact of at-home obligations on out-commuting rates. Indeed including this variable adds substantially to the explanatory power of the model and has the expected negative sign, significant at the 1% level. The provincial employment rate is now significant and positive, while distance to the nearest large urban centre remains negative and significant. High school completion remains positive and significant, though with a somewhat reduced coefficient signaling some correlation (.52) between the percentage under 4 years and high school completion rates.

Finally Model 4 represents our Full Model of out-commuting where we add an additional consideration to reflect the attractiveness of the Reserve in terms of the housing stock quantity and quality. From a policy perspective, if out-commuting were considered a desirable strategy for First Nations on Reserve to access off-Reserve employment, housing on the Reserve may be very important. Along with the CWB score computed by AANDC, separate component scores are calculated, including a Housing score that reflects both quantity and quality of housing.[14] The Housing score in the Full model is not statistically significant. Most of the other variables retain their signs and significance. It is likely that the measure of housing does not adequately reflect attributes that may increase the desirability of the Reserve as a place to live.

SUMMARY

Our empirical estimations provide support for the hypothesis that CWB is positively affected by a higher proportion jobs held by Reserve residents being off-Reserve employment. Distance from urban centres exerts a negative influence as expected, as do higher population growth rates. A strongly positive influence on CWB is the percentage of the population 15+. Out-commuting to urban areas is somewhat more positively related than out-commuting to rural areas. Provincial differences show that with the exception of Alberta and Manitoba, most provinces have higher CWB scores relative to Saskatchewan. Using provincial employment rates, and provincial employment income growth rates instead of provincial dummies yields the counter-intuitive result that better provincial economic outcomes are not associated with higher Reserve CWB scores, indicating other barriers to participation in the economy for First Nations.

The out-commuting rate is positively related to high school completion rates, confirming the anticipated high returns to education. In addition a tighter provincial labour market as represented by a higher provincial employment rate positively influences out-commuting from Reserves. Negative influences are exerted by the proportion of the population less than 4 years old, and remoteness from a metropolitan area. Housing is not found to influence out-commuting rates, though additional research is required.

CONCLUSIONS AND POLICY IMPLICATIONS

Improving the socio-economic outcomes for First Nations in Canada is on the policy agenda of all levels of government. And among First Nations, populations on Reserves are the most urgently needing improvements. Clearly a complex and challenging problem, it is likely that no single or simple solution will be found. To some extent

[14] The AANDC Housing Score is based on Census information where Quantity is defined on the basis of overcrowding, and Quality is defined based on the need for major repairs. For further details, see AANDC at <http://www.aadnc-aandc.gc.ca/eng/1100100016585/1100100016598>.

the migration of First Nations people to urban centres is likely to result in improved economic outcomes since economic opportunities are more readily available in urban centres and off-Reserve locations, though the adjustments are slow. Where populations are highly geographically mobile they will respond to differences in well-being between locations, by moving to locations where their income-earning potential is higher (in this case from Reserves to off-Reserve). In the case of First Nations in Canada, clearly the problem is not solving itself, at least not in an acceptable time frame.

Policy interventions in the form of improving education and health of the populations are having some success, mostly in improving the geographic and occupational mobility of First Nations populations. In addition the federal government's *Framework for Aboriginal Economic Development* emphasizes on-Reserve economic development. While this may be a productive strategy for some Reserves, there are many with very limited potential.

A third strategy may then be to facilitate and support initiatives that allow First Nations to reside on Reserves and at the same time access employment off-Reserve. Transportation and communication, as well as other explicit policies may be required. Importantly, for this strategy to be viable, Reserves must be attractive places to live.

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ABORIGINAL EMPLOYMENT
Continuing to Improve in 2012

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ABSTRACT

The employment rate for Aboriginals living off-reserve in Canada continued to improve in 2012. It increased to 56.9%, a rate of two percent (2%) over 2011. This is impressive when compared to the zero growth rate for non-Aboriginals. The participation rate for Aboriginals living off-reserve in Canada also increased. It grew from 64.1% to 65.2%. In addition, the gap between Aboriginals and non-Aboriginals for employment rates and participation rates continued to narrow in 2012. When employment is examined by educational level, there is no meaningful difference between Aboriginals and non-Aboriginals. There is also a clear relationship that increased levels of education are associated with higher employment rates and participation rates. Aboriginal employment in 2012 increased the most in Ontario. It is also the province with the largest Aboriginal as well as non-Aboriginal populations. The sectors in which the largest increases in Aboriginal employment in 2012 occurred were in construction, manufacturing, health care and social assistance and information, culture and recreation.

INTRODUCTION

Unemployment rates are commonly referred to as an economic indicator. The lower the unemployment rate, the better things supposedly are. However, alternative measures that may provide better indicators of both the economy and the employment picture are the employment rates (those working divided by the working age population) and the participation rates (those employed and those seeking work, divided by the working age population). The working age population is considered 15 years of age and older. These measures provide a clearer picture that employment has improved for Aboriginals living off-reserve in Canada. Table 1 shows that the unemployment rate for Aboriginals declined from 12.9% to 12.8% in 2012. This marginal improvement does not reveal the increases in the number of people employed and those seeking employment, both of which show meaningful gains. These increases are even more meaningful when compared to those for non-Aboriginals, who experienced a lack of growth in their employment rate and a decline in their participation rate. The participation rate is an important measure. When it increases, a greater percent of the working age population is either working or seeking to work. The more people working and seeking to work, the greater the potential number of people who may be employed. Larger numbers of people employed implies greater income and the economic benefits associated with it. The employment rate is the percent of the working age population that is employed. In this article we further examine these rates by age, gender, educational level, province and territory and industrial sector in order to obtain a clearer understanding of Aboriginal off-reserve employment in Canada. The data available is limited to those living off-reserve.

EMPLOYMENT BY AGE AND GENDER

The gain in Aboriginal employment was obtained by an increase in employment by men. Aboriginal women experienced a decline in their employment rate. The critical 25 to 54 years of age group, consisting of 55% of the population

TABLE 1
Labour Force Estimates for Canada
2010, 2011, and 2012 Annual Averages, in Thousands (Except the Rates)

	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
Population	26997.5	27316.6	27635.1	660.6	670.5	**679.4**
Labour Force	18110.3	18268.7	18436.0	413.8	430.1	**443.0**
Employment	16684.5	16931.9	17124.9	354.8	374.5	**386.4**
Full-time Employment*	13452.0	13696.2	13906.0	283.8	297.6	**310.1**
Part-time Employment	3232.5	3235.7	3218.9	71.0	76.9	**76.3**
Unemployment	1425.8	1336.8	1311.1	59.0	55.7	**56.6**
Not in Labour Force	8887.2	9047.9	9199.1	246.8	240.4	**236.4**
Employment Rate	61.8	62.0	62.0	**53.7**	**55.8**	**56.9**
Unemployment Rate	7.9	7.3	7.1	**14.3**	**12.9**	**12.8**
Participation Rate	67.1	66.9	66.7	**62.6**	**64.1**	**65.2**

Note: Data based on 10 provinces, 15 years and older, and living-off reserve.

Employment rate is Employment/Population
Labour force (age 15 plus) is Employment + Unemloyment
Unemployment rate is Unemployment/Labour Force
Participation rate is Labour Force/Population

Source: Statistics Canada, Labour Force Survey.

TABLE 2
Labour Force Estimates for Canada
Employment Rates by Age and Gender

	Percent Unemployed					
	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
Both Sexes						
15 Years and Over	61.8	62.0	62.0	53.7	55.8	**56.9**
15–24 Years	55.3	55.8	54.8	45.0	47.3	**45.9**
25–54 Years	80.9	81.3	81.7	65.8	67.8	**69.5**
55 Years and Over	33.7	34.1	34.7	30.3	33.3	**35.2**
Men						
15 Years and Over	65.6	66.0	66.0	**56.0**	**59.1**	**61.6**
15–24 Years	53.7	54.7	53.6	**45.3**	**48.4**	**48.3**
25–54 Years	84.3	85.1	85.0	**69.8**	**71.7**	**74.6**
55 Years and Over	39.5	39.7	40.2	**30.4**	**37.7**	**41.9**
Women						
15 Years and Over	58.1	58.0	58.1	51.6	52.8	**52.5**
15–24 Years	57.0	56.9	56.1	44.7	**46.3**	**43.4**
25–54 Years	77.4	77.6	78.0	62.1	64.2	**64.7**
55 Years and Over	28.6	29.1	29.8	30.3	29.3	**29.3**

Source: Statistics Canada, Labour Force Survey.

over 15 years of age, increased their employment rate from 67.8% in 2011 to 69.5% in 2012, an increase of 2.5%. Most of this increase, however, was achieved by the men, increasing from 71.7% to 74.6%, a gain of 4.0%, while the women moved from 64.2% to 64.7%, a gain of 0.8%. Employment rates for those 15 to 24 years of age, who make up 25% of the population over 15 years of age, declined from 54.8% to 45.9%, with the decline being experienced almost entirely by the women. Those over 55, which constitute 20% of the population over 15 years of age, increased their employment rate from 33.3% to 35.2%. This was achieved by the men, as the women's employment rate held steady at 29.3%.

UNEMPLOYMENT BY AGE AND GENDER

When we examine the data in terms of unemployment rates we are better able to see the negative aspects of the employment picture for Aboriginals in general and for the youth in particular. Unemployment declined marginally from 12.9% to 12.8% in 2012 for Aboriginals. However, the picture is more encouraging for the men and more discouraging for the women. The unemployment rate for men declined from 2010 to 2011 to 2012, from 15.8% to 14.7% to 12.8%. For these three years the unemployment rate for women went from 12.7% to 11.0%, but then back up to 12.7%. Women in the 15 to 24 year old age group, suffered the worst increase in their unemployment rate, rising in 2011 from 16.1% to 21.9% in 2012, an astonishing 36% increase. This compares with a decline in the unemployment rate for men in this 15 to 24 year old age group from 22.2% to 20.0% from 2011 to 2012, which was a 10% improvement. Decreases in unemployment rates occurred in all of the three age groups for the men. However, the 20% unemployment rate for the men in the 15–24 year age group and the 21.9% for the women in this group are unacceptable. Specific action should be taken to address this.

TABLE 3
Labour Force Estimates for Canada
Unemployment Rates by Age and Gender

	Percent Unemployed					
	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
Both Sexes						
15 Years and Over	7.9	7.3	7.1	14.3	12.9	**12.8**
15–24 Years	14.6	14.0	14.1	21.1	19.2	**20.9**
25–54 Years	6.8	6.1	5.9	12.3	11.0	**10.7**
55 Years and Over	6.3	6.3	5.9	12.4	11.4	**9.1**
Men						
15 Years And Over	8.6	7.7	7.3	**15.8**	**14.7**	**12.8**
15-–24 Years	16.9	15.6	15.8	**23.8**	**22.2**	**20.0**
25–54 Years	7.2	6.2	6.1	13.3	12.5	**10.9**
55 Years and Over	7.0	6.6	6.2	14.9	12.7	**10.5**
Women						
15 Years and Over	7.1	6.9	6.6	12.7	**11.0**	**12.7**
15–24 Years	12.2	12.2	12.3	18.3	**16.1**	**21.9**
25–54 Years	6.3	5.9	5.6	11.3	9.5	**10.6**
55 Years and Over	5.4	5.8	5.6	9.9	9.8	**7.4**

Source: Statistics Canada, Labour Force Survey.

EMPLOYMENT AND EDUCATIONAL LEVEL

The higher the level of education the higher are the employment rates and the participation rates. The only exception applies to those who achieved some level of post-secondary education, but did not obtain a post-secondary certificate, when compared with those who graduated high school. This applies to both Aboriginals and non-Aboriginals. Further, when we compare the employment levels as well as the participation levels of Aboriginals and non-Aboriginals by educational level, there is almost no difference. This finding makes a strong case for the argument that education is the great equalizer. The old adage of "stay in school, graduate" appears to be some of the best advice we can give to our youth.

The contrast between those who did not graduate from high school and those who have graduated from high school (or have higher levels of education) is extraordinary. Aboriginals who did not graduate from high school had an employment rate of 35.3% in 2012, while those who graduated high school or who have a higher level of education had an employment rate of 66.9%. The corresponding employment rates for non-Aboriginals are similar, with rates of 33.3% and 68.6%.

If we look at this data from a somewhat different perspective we see that the 2012 employment rate for Aboriginals who graduated from high school was 61.8%, but those with only grade 9 or 10 had an employment rate of 34.6%. Therefore those who graduated from high school were close to twice as likely to be employed as those who dropped out in the 9th or 10th grade. The data for non-Aboriginals is similar. Clearly, more needs to be done to facilitate the retention and graduation of our youth.

The difference between the 2012 employment rates for Aboriginals of 56.9% and the rate for non-Aboriginals of 62% may be mostly accounted for by the level of education obtained. This difference may be better understood by recognizing that the percent of Aboriginals with less than high school was 31.7% in 2012, compared

TABLE 4
Labour Force Estimates for Canada by Highest Level of Educational Attainment
2010, 2011, and 2012 Annual Averages — Population in Thousands

	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
Total, All Education Levels						
Employment Rate	61.8	62.0	62.0	53.7	55.8	**56.9**
Participation Rate	67.1	66.9	66.7	62.6	64.1	**65.2**
Population	26997.5	27316.6	27635.1	660.6	670.5	**679.4**
Percent of Total Population	100.0	100.0	100.0	100.0	100.0	**100.0**
0–8 Years						
Employment Rate	19.8	19.7	**20.0**	17.5	15.9	**20.2**
Participation Rate	23.3	23.3	**23.1**	24.8	21.3	**26.7**
Population	1763.9	1715.2	1641.1	46.1	46.6	**46.3**
Percent of Total Population	6.5	6.3	5.9	7.0	7.0	**6.8**
9 to 10 Years						
Employment Rate	35.7	35.8	**34.8**	31.5	34.2	**34.6**
Participation Rate	43.0	42.6	**41.1**	41.9	44.7	**45.1**
Population	2219.6	2161.7	2184.5	103	103.5	**100.5**
Percent of Total Population	8.2	7.9	7.9	15.6	15.4	**14.8**
11 to 13 Years Non-graduate						
Employment Rate	48.1	47.4	**47.2**	42.8	44.7	**46.6**
Participation Rate	56.2	55.2	**54.7**	54.7	56.1	**58.2**
Population	1379.7	1359.3	1351.1	70.4	63.1	**68.6**
Percent of Total Population	5.1	5.0	4.9	10.7	9.4	**10.1**
High School Graduate						
Employment Rate	61.7	61.7	**61.1**	59.9	62.7	**61.8**
Participation Rate	67.4	66.9	**66.1**	70.0	72.2	**71.1**
Population	5321	5412.3	5505.8	126.1	132.6	**138.5**
Percent of Total Population	19.7	19.8	19.9	19.1	19.8	**20.4**
Some Post-secondary						
Employment Rate	60.8	60.5	**60.7**	58.4	54.9	**56.2**
Participation Rate	67.5	66.9	**66.9**	66.9	64.3	**65.6**
Population	2222.6	2166.3	2042.4	69.9	71.0	**60.1**
Percent of Total Population	8.2	7.9	7.4	10.6	10.6	**8.8**
Post-secondary Certificate						
Employment Rate	70.9	71.0	**70.6**	66.2	69.1	**70.3**
Participation Rate	75.5	75.4	**74.9**	74.3	76.0	**76.8**
Population	8350.7	8541.3	8684.6	195.2	200.4	**205.3**
Percent of Total Population	30.9	31.3	31.4	29.5	29.9	**30.2**
University Degree Bachelor and Above						
Employment Rate	75.3	74.8	**75**	77.0	80.3	**77.8**
Participation Rate	79.7	78.6	**78.9**	81.3	84.0	**82.8**
Population	5739.9	5960.4	6225.2	49.9	53.3	**60**
Percent of Total Population	21.3	21.8	22.5	7.6	7.9	**8.8**
Less than high school						
Employment Rate	33.7	33.6	**33.3**	32.2	33.3	**35.3**
Participation Rate	39.9	39.5	**38.9**	42.4	42.9	**45.3**
Population	5363.2	5236.3	5177	219.5	213.3	**215.4**
Percent of Total Population	19.9	19.2	18.7	33.2	31.8	**31.7**
High School and Above						
Employment Rate	68.8	68.7	**68.6**	64.4	66.4	**66.9**
Participation Rate	73.8	73.4	**73.1**	72.7	74.0	**74.4**
Population	21634.3	22080.3	22458.1	441.1	457.2	**464**
Percent of Total Population	80.1	80.8	81.3	66.8	68.2	**68.3**

Source: Statistics Canada, Labour Force Survey.

with 18.7% for non-Aboriginals. The data contained in Table 4, reinforces the message that we should be doing all that we can to ensure our youth graduate from high school and obtain the highest level of education that would be appropriate for them.

EMPLOYMENT BY PROVINCE AND TERRITORY

The examination of employment by each province and the three territories identifies some major differences. Ontario is the province with the largest Aboriginal as well as non-Aboriginal population. It experienced the greatest increase in the employment rate for Aboriginals. Ontario also had the largest increase in the percentages and numbers of Aboriginals employed in 2012 compared with 2011 and with 2010. The employment rate increased from 49.9% in 2010 to 54.7% in 2011 and to 57.1% in 2012 (increases of 9.6% in 2011 over 2010 and 4.4% in 2012 over 2011) and employment increased from 81,300 to 90,100 to 94,800 from 2010 to 2011 to 2012. British Columbia had the next largest percentage increase in its employment rate, going from 54.3% in 2011 to 56.1% in 2012, an increase of 3.3%. Alberta, which has the highest employment rate of any province for

TABLE 5
Labour Force Estimates for Canada, by Province and Territory
2010, 2011, and 2012 Annual Averages — Aboriginals Living Off-reserves
Population in Thousands

	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
Canada (Ten Provinces)						
Employment Rate	61.8	62.0	62.0	53.7	55.8	**56.9**
Population	26997.5	27316.6	27635.1	660.6	670.5	**679.4**
Employed	16684.5	16931.9	17124.9	354.8	374.5	**386.4**
Newfoundland and Labrador						
Employment Rate	51.8	52.8	54.4	46.6	53.1	**52.4**
Population	408.9	409.1	407.6	19.2	19.9	**20.1**
Employed	211.8	216.1	221.6	9.0	10.4	**10.5**
Prince Edward Island						
Employment Rate	60.4	60.5	60.4	49.7	48.3	**61.7**
Population	116.1	118.3	119.5	0.9	0.9	**1.0**
Employed	70.1	71.5	72.1	0.5	0.5	**0.6**
Nova Scotia						
Employment Rate	58.3	58.2	58.4	56.5	58.0	**58.4**
Population	762.9	764.7	765.6	14.1	14.4	**14.7**
Employed	444.9	444.9	447.3	8.0	8.4	**8.6**
New Brunswick						
Employment Rate	57.8	56.9	56.7	49.2	52.6	**54.1**
Population	607.8	610.3	611.3	9.0	9.1	**9.1**
Employed	351.5	347.2	346.4	4.4	4.8	**4.9**
Four Atlantic Provinces						
Employment Rate	56.9	56.8	57.1	50.7	54.4	**54.9**
Population	1895.7	1902.4	1904	43.2	44.3	**44.8**
Employed	1078.3	1079.7	1087.3	21.9	24.1	**24.6**

Continued....

TABLE 5 (continued)

	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
Quebec						
Employment Rate	60.3	60.2	**60.1**	45.0	48.7	**48.5**
Population	6449.5	6515.1	6576.5	60.8	60.8	**61.0**
Employed	3884.1	3921.7	3952.5	27.4	29.7	**29.6**
Ontario						
Employment Rate	61.4	61.7	61.4	**49.9**	**54.7**	**57.1**
Population	10627.4	10761.4	10903.4	162.8	164.7	**166.2**
Employed	6530.3	6642.0	6692.0	**81.3**	**90.1**	**94.8**
Manitoba						
Employment Rate	66.6	66.2	66.2	58.5	58.9	**58.0**
Population	848.4	858.6	866.5	92.6	94.7	**96.5**
Employed	564.9	568.7	573.8	36.6	39.2	**56.0**
Saskatchewan						
Employment Rate	67.2	66.5	67.2	53.6	56.2	**55.8**
Population	722.5	730.2	739.8	68.4	69.8	**71.2**
Employed	485.6	485.9	497.0	36.6	39.2	**39.7**
Alberta						
Employment Rate	68.4	70.0	**70.4**	60.9	**60.2**	**61.8**
Population	2839.9	2882.6	2943.1	120.9	124.0	**126.8**
Employed	1942.9	2018.7	2070.7	73.6	74.6	**78.4**
British Columbia						
Employment Rate	60.8	60.4	60.8	53.6	54.3	**56.1**
Population	3617.2	3666.3	3701.7	111.9	112.4	**112.9**
Employed	2198.5	2215.3	2251.6	60.0	61.0	**63.6**
Yukon						
Employment Rate	72.9	76.6	**75.0**	46.2	51.1	**54.1**
Population	20.7	21.8	20.8	5.2	4.7	**6.1**
Employed	15.1	16.7	15.6	2.4	2.4	**3.3**
Northwest						
Employment Rate	83.1	84.1	**83.6**	50.6	54.1	**54.5**
Population	16.0	17.6	17.7	16.2	14.6	**14.3**
Employed	13.3	14.8	14.8	8.2	7.9	**7.8**
Nunavut	*Non-Inuit*			*Inuit*		
Employment Rate	89.5	89.2	**89.7**	46	46.2	**46.2**
Population	4.6	4.7	4.7	16.3	16.4	**16.4**
Employed	4.2	4.2	4.2	7.5	7.6	**7.6**
Yukon, Northwest, Nunavut	*Non-First Peoples*			*First Peoples*		
Employment Rate	78.9	81.0	**80.1**	48.0	50.1	**50.1**
Population	41.31	44.1	43.2	37.7	35.7	**36.8**
Employed	32.6	35.7	34.6	18.1	17.9	**18.7**

Source: Statistics Canada, Labour Force Survey.

both Aboriginals and non-Aboriginals, was the province with the third largest employment rate percentage increase for Aboriginals in 2012. It went from 60.2% in 2011 to 61.7% in 2012, an increase of 2.7%.

Quebec had the lowest Aboriginal employment rate of any province at 48.5% in 2012. In Quebec non-Aboriginals had an employment rate of 60.1% in 2012, making Quebec the province with the largest employment rate gap between Aboriginals and non-Aboriginals. The data is shown for each of the four Atlantic Provinces and the three territories; however, they have also been summarized together because of the relatively small population in each of those areas. In each of the three territories the 2012 employment rates for non-First Nations Peoples is the highest in Canada at 80.1%, ranging from 75% in the Yukon to 89.7% in Nunavit. In contrast Nunavit has the lowest employment rate for the Inuit, with a rate of 46.2%.

EMPLOYMENT BY INDUSTRY

Industrial sectors are divided between goods-producing and services-producing sectors. Aboriginal and non-Aboriginal employment has been gaining in both sectors. However, the percent of Aboriginals employed has increased from 2010 to 2011 to 2012 in the goods-producing sector (23.3, 24.1 and 25.4%) and decreased in the services-producing sections (76.7, 75.9 and 74.6%). They have been relatively stable for non-Aboriginals. The largest increases for Aboriginals have occurred in construction and manufacturing in the goods-producing sector. In the services-producing sectors the increases have been in health care and social assistance and in information, culture and recreation. The largest decreases for Aboriginals have occurred in retail trade, accommodation and food services and other services.

TABLE 6
Employment for Canada by Industry
2010, 2011, and 2012 Annual Averages, in Thousands

	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
TOTAL EMPLOYED	16684.5	16931.9	17124.9	354.8	374.5	**386.4**
Goods-producing Sector	3657.2	3713.7	3774.4	**82.6**	**90.3**	**98.0**
• Agriculture	296.9	300.8	305.2	3.4	4.4	**4.1**
• Forestry, Fishing, mining, Oil and Gas	312.0	319.0	350.8	17.6	18.5	**18.5**
• Utilities	144.8	135.6	137.1	3.6	4.2	**3.6**
• Construction	1183.1	1225.6	1225.3	**34.7**	**36.4**	**41.8**
• Manufacturing	1720.5	1732.7	1756.0	**23.2**	**26.8**	**29.9**
Services-producing Sector	13027.4	13218.2	13350.5	272.1	284.1	**288.5**
• Educational Services	1196.8	1197.5	1264.2	21.7	22.0	**23.8**
• Health Care and Social Assistance	1983.4	2043.6	2075.7	46.6	**48.1**	**53.0**
• Public Administration	925.9	942.3	925.8	31.1	29.5	**30.3**
• Wholesale Trade	618.7	623.8	601.3	9.8	8.7	**10.9**
• Retail Trade	2007.3	1988.8	1988.2	41.0	**48.6**	**43.9**
• Transportation and Warehousing	786.6	823.9	830.3	18.9	19.3	**19.0**
• Finance, Insurance, Real Estate and Leasing	1080.2	1070.2	1078.7	15.3	13.4	**14.9**
• Professional, Scientific and Technical Services	1255.3	1297.0	1287.2	11.2	12.3	**12.5**
• Management of companies and Other Support Services	655.8	660.5	672.5	16.5	16.8	**17.9**
• Information, Culture and Recreation	752.2	769.2	773.1	**13.6**	**15.6**	**18.0**
• Accommodation and Food Services	1028.1	1060.7	1071.7	30.4	**32.2**	**30.7**
• Other Services	737.3	740.7	781.8	16.1	**17.6**	**13.6**

Source: Statistics Canada, Labour Force Survey.

TABLE 7
Percent of Employment for Canada by Industry
2010 and 2011 Annual Averages

	Non-Aboriginal			*Aboriginal*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*
TOTAL EMPLOYED	100.0	100.0	100.0	100.0	100.0	100.0
Goods-producing Sector	21.9	21.9	22.0	**23.3**	**24.1**	**25.4**
• Agriculture	1.8	1.8	1.8	1.0	1.2	**1.1**
• Forestry, Fishing, Mining, Oil and Gas	1.9	1.9	2.0	5.0	4.9	**4.8**
• Utilities	0.9	0.8	0.8	1.0	1.1	**0.9**
• Construction	7.1	7.2	7.2	9.8	9.7	**10.8**
• Manufacturing	10.3	10.2	10.3	6.5	7.2	**7.7**
Services-producing Sector	78.1	78.1	78.0	**76.7**	**75.9**	**74.6**
• Educational Services	7.2	7.1	7.4	6.1	5.9	**6.2**
• Health Care and Social Assistance	11.9	12.1	12.1	13.1	**12.8**	**13.7**
• Public Administration	5.5	5.6	5.4	**8.8**	**7.9**	**7.8**
• Wholesale Trade	3.7	3.7	3.5	2.8	2.3	**2.8**
• Retail Trade	12.0	11.7	11.6	11.6	**13.0**	**11.4**
• Transportation and Warehousing	4.7	4.9	4.8	5.3	5.2	**4.9**
• Finance, Insurance, Real Estate and Leasing	6.5	6.3	6.3	4.3	3.6	**3.9**
• Professional, Scientific and Technical Services	7.5	7.7	7.5	3.2	3.3	**3.2**
• Management of Companies and Other Support Services	3.9	3.9	3.9	4.7	4.5	**4.6**
• Information, Culture and Recreation	4.5	4.5	4.5	**3.8**	**4.2**	**4.7**
• Accommodation and Food Services	6.2	6.3	6.3	8.6	**8.6**	**7.9**
• Other Services	4.4	4.4	4.6	4.5	**4.7**	**3.5**

Source: Statistics Canada, Labour Force Survey.

CONCLUSION

The employment picture for Aboriginals living off-reserve has continued to improve in 2012. Employment rates and participation rates have increased, unemployment rates have decreased and the gaps in these rates with non-Aboriginals narrowed in 2012 over 2011, as they did in 2011 over 2010. These improvements could justify a positive outlook, seeing the glass as half-full. Yet, on closer examination more needs to be done. The gaps are narrowing, but they are still significant. The youth unemployment rate for Aboriginals aged 15 to 24 is at an unacceptable rate of close to 21% and non-Aboriginal unemployment, although considerably better at just over 14%, is also problematic. Identifying the reasons why unemployment for Aboriginal men decreased, but for women increased in this age group, may provide insights as to what actions could be taken to increase employment.

The data for 2012 reconfirms that as educational levels increased, employment rates and participation rates increased for both Aboriginals and non-Aboriginals. Further when we compare Aboriginals and non-Aboriginals by the level of education obtained, we see that there is very little difference in their employment or participation rates. A reasonable conclusion is that as individuals' educational levels increase their probability of employment increase. Achieving high school graduation is the most critical demarcation for employment purposes. This holds for both Aboriginals and non-Aboriginals.

Where one looks for work makes a difference. The province with the highest employment rate for Aboriginals as well as for non-Aboriginals in 2012 was Alberta. This was also the case in 2010 and 2011. Ontario, which has the largest population of both Aboriginals and non-Aboriginals, experienced the greatest growth

in Aboriginal employment in 2012 as well as 2011. Quebec is the province with the lowest Aboriginal employment rate. It is also the province that has the greatest gap in employment rates between Aboriginals and non-Aboriginals. The largest increases in Aboriginal employment from 2011 to 2012 occurred in construction, manufacturing, health care and social services and information, culture and recreation. The industries experiencing the greatest declines in Aboriginal employment in 2012 were retail trade, accommodation and food services and other services.

Identifying employment trends gives us a better picture of what is happening and where. It also points out opportunities and needs. These would include increasing student retention and graduation in high schools, promoting higher education and providing the competencies and opportunities to succeed in post-secondary studies and creating programs that facilitate the employment of youth. The challenge is building upon our knowledge and taking the actions needed.

REFERENCE

Statistics Canada, Labour Force Survey. 2013, personal correspondence.

Journal of Aboriginal Economic Development

Call for Papers
Volume 9, Issue 1

Published jointly by the Council for the Advancement of Native Development Officers (Cando) and Captus Press, the *Journal of Aboriginal Economic Development* (JAED) is a peer-reviewed journal for practitioners and scholars working and researching in areas relevant to Aboriginal economic development. Published yearly, the Journal is a unique resource for anyone interested in Aboriginal community economic development. Its intent is to explore ideas and build knowledge in the field of Aboriginal economic development theory and practice. The journal prefers a broad interpretation of research and knowledge and encourages a wide variety of contributions in this area.

Volume 9, Issue 1 of JAED will be published in fall 2014 in preparation for the Cando 21st Annual National Conference & AGM. Papers should relate to one of the following areas:

- Aboriginal Community Economic and Enterprise Development
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Please send three copies of your manuscript. Contributions may vary in length, depending on the section they are written for. We are looking for submissions in the range of 15–20 pages, or about 4,000 words for research papers, about 1,000 words for book reviews, about 1,000 to 4,000 words for the state of the Aboriginal economy section, and about 2,000 to 3,000 words for the experience section. Manuscripts submitted should be single spaced with 1.5 inch margins all around and page numbers at the bottom middle. The title page should indicate the section for which you are submitting. All identifying information should be restricted to this one page. Review for publication will take approximately 8–12 weeks from time of receipt. Academic papers will be subject to the usual double-blind peer-review process.

SUBMISSIONS MAY BE FORWARDED TO

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Submissions by e-mail are welcomed, in fact preferred. Please send the paper as an attachment to the e-mail address above. **The deadline for receipt of submissions for Volume 9, Issue 1 is January 31, 2014**. If your paper is not included in this issue due to space or deadlines, or needs extra work, it will be considered for publication in Volume 9, Issue 2. Should you require further information please contact Svitlana Konoval, Cando Executive & Administrative Services Coordinator at 1-800-463-9300 or skonoval@edo.ca. Research submissions should conform, where practical, to the Publication Manual of the American Psychological Association (APA, 6th edition); however, the Journal is flexible in its format and encourages creativity and innovation.

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