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Using a representative survey of 801 employers across Atlantic Canada, we empirically test various factors associated with employer hiring attitudes towards international migrants. Our results indicate that employers who hired international immigrants in the past 12 months exhibited more positive attitudes towards them, consistent with the contact theory. We also find provincial variations in hiring attitudes in that employers in Nova Scotia, Newfoundland, and PEI had more positive attitudes than those in New Brunswick. In addition, employers in the public sector organizations held more positive perceptions than those in the private sector. Although the coefficients for rural-urban divide and organizational sizes have the expected signs but most of them are statistically insignificant. There are no clear patterns cross industries. Interpretations for our main findings are offered, along with policy and practice implications.

JEL Classification: J23, J61, J63, J68
Keywords: international immigrants, labour and skill shortages, employer hiring attitudes, employer survey, Atlantic Canada

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I. Introduction

The need to examine what attracts and retains Canadian immigrants has increased in importance for a number of reasons. First, the coronavirus pandemic has resulted in an economic and fiscal downturn across Canada; achieving strong economic growth – of which immigration is a key driver – may be necessary to deal with large deficits and debts and the erosion in tax bases across the country (Government of Canada 2020; Agopsowicz 2020). Second, with an aging population and declining fertility, increased immigration has been touted as a potential way to fill anticipated labour and skill shortages associated with reduced population growth (Adès et al. 2016). Third, it has been recently proposed that Canada should aim for a population of 100 million Canadians in 2100 to ensure economic prosperity, social inclusion, and global influence (Century Initiative 2019) and this would necessitate increased immigration. Recently, Canada’s major federal parties have all expressed support for an open immigration system, and a new immigration record was set in 2021 despite pandemic related obstacles (Ibbitson 2021). Thus, it is important to understand how large increases in immigration can be absorbed by the Canadian labour market, and how employers can facilitate the integration process.

Within Canada, there are persistent regional differences in demographics, economics, and levels of success attracting and retaining immigrants. Atlantic Canada has significant demographic deficits and labour and skill shortages. Immigrants can potentially fill such labour gaps and grow the regional population and economy. Yet, this region has the lowest immigration rates, with the exception of PEI, as well as the lowest immigrant retention rates. In this paper we explore the
major factors influencing employer hiring attitudes towards immigrants. Employers’ hiring attitudes are crucial determining factors in immigrants' employment, and their economic and social integration. Immigration policy innovations in Canada, such as the Provincial Nominee Program (PNP), and more recently, the Atlantic Immigration Pilot Program (AIPP), have increasingly emphasized the role of employers. We build on this line of thinking by examining the various determining factors of employers’ attitudes towards hiring newcomers, paying particular attention to regional and industrial disparities, the rural and urban divide, and public and private sector differences. The goal is to better understand the employment relationship between various employers and immigrant employees so that policies and practices can then be better targeted to improve the integration of newcomers and to fill job vacancies.

A significant amount of research to date has explored the advantages and disadvantages of hiring immigrants (Almeida and Fernando 2017; Almeida, Waxin, and Paradies 2019; Auer et al. 2019; Kubiciel-Lodzińska and Maj 2020; Lundborg and Skedinger 2016; Tartakovskiy and Walsh 2016; Walsh and Tartakovskiy 2021). However, there are two knowledge gaps in this area. First, there is no integrated theoretical framework to answer questions regarding immigrant hiring. Second, there is insufficient empirical evidence using representative employer samples in the extant literature.

The current study attempts to fill both gaps. To the best of our knowledge, we are the first to examine the determinants of employer attitudes towards hiring newcomers and international students by using a representative survey of employers in Atlantic Canada. Drawing on the relevant literature in Canada and beyond, we aim to better understand how the following have influenced employers’ attitudes towards hiring immigrant workers: past experiences hiring international
immigrants; organization size; the rural-urban divide; regional specificity; public/private sector differences; and industrial variations.

The paper begins with a brief review of the literature on recent skilled immigrants’ unsatisfactory labour market outcomes. We then provide a contextual background for the unique features of the Atlantic region and its recent policy work of attracting and retaining international immigrants, which motivates us to set up a conceptual framework for our analyses. Next, we hypothesize relevant factors that are associated with employers’ hiring attitudes towards immigrants. Equations for estimating the determinants of employers’ hiring attitudes are outlined and results are reported in sections III and IV, respectively. The paper ends with concluding observations and a policy discussion.

II. Literature Review

Labour Market Discrimination against Immigrants

Canada’s long-term economic sustainability and prosperity is understood to hinge on international immigration. A 2020 Government Canada report finds that immigration accounts for 100 percent of Canada’s labour force growth, and projects that immigrants will represent 30 percent of Canada’s population by 2036, up from 20.7 percent in 2011 (Immigration, Refugees, and Citizenship Canada [IRCC] 2020a). In the competition for global talent, Canada continuously improves its policies and practices to bring in more economic immigrants. The Express Entry system, implemented in 2015, for example, has sped up the immigration application process and responded to regional labour market needs more effectively (IRCC 2017).

However, international immigrants’ labour market outcomes, especially with respect to landing a job matched with their qualifications, or even securing a job interview, tend to lag behind
native-born workers in Canada (e.g., Banerjee, Reitz, and Oreopoulos 2018; McDonald and Worswick 1997; Oreopoulos 2011; Sweetman and Warman 2013; Warman, Sweetman, and Goldmann 2015). Economists attribute these gaps to taste-based and statistical discrimination. International immigrants are not able to transfer their human capital fully to the host country’s labour market because: a) their education and work experience outside Canada are heavily discounted (e.g., Li 2001; Wald and Fang 2008; Warman, Sweetman, and Goldmann 2015); and b) they lack language proficiency, cultural understanding, and social ties (e.g., Imai, Stacey, and Warman 2019; Warman, Sweetman, and Goldmann 2015). Recent empirical studies, using audit and correspondence studies methods, support the idea that international immigrants, on many occasions, have been discriminated against based on their “foreignness” (Banerjee, Reitz, and Oreopoulos 2018; Oreopoulos 2011; also see Fang et al. 2013 and for other countries, see Rich 2014; and Zschirnt and Ruedin 2016). Economic studies tend to explain these findings by pointing to hiring managers’ biases or organizational discriminatory practices (Banerjee, Reitz, and Oreopoulos 2018; Oreopoulos 2011). Research in other fields suggests that such discrimination “reflect[s] the dominant role of culture and ethnicity in comparison to immigrant status” (Esses 2021, 10).

Social identity theory (SIT) refers to the tendency of people to categorize themselves into social groups (in-groups) and then interact with members of other groups (out-groups) based on perceived group differences; this can encompass an array of factors, such as politics, ethnicity, nationality, gender, hobbies, interests, and even style of dress (Almeida et al. 2015). This theory can be used to explain the assimilation challenges faced by immigrants. The concept of cultural distance (see Lundborg 2013; Mahfud et al. 2018), effectively a scale of cultural similarity and thus linked with SIT, can affect the perceptions of out-groups. Those who are culturally very
different can be judged by being contrasted negatively with the supposedly favourable in-group (Mahfud et al. 2018). Native-born individuals may also discriminate against highly skilled immigrants in an attempt to safeguard their own status (Dietz et al. 2015). Literature in other fields, such as industrial/organizational psychology and human resources management, notes the micro level dynamics that lead to the disadvantaged outcomes of international immigrants. Managers are substantially more likely to hire workers from the same ethnic origin (Åslund, Hensvik, and Skans 2014), and cultural distance tends to associate with discrimination in hiring (e.g., Kang et al. 2016; also see a review in Quillian and Midtbøen 2021). Although not directly focused on employers’ attitudes towards immigrants, studies emphasize that cultural distance between majority and minority groups can manifest at different levels of team, occupational, social, and organizational contexts, and affects hiring discrimination at all levels (e.g., Adamovic 2021).

**Atlantic Canada: Challenges to Attract and Retain International Immigrants**

Labour and skill shortages are more severe in Atlantic Canada than other parts of the country. The region’s labour force shrank by 3.3 percent between 2012 and 2019, mainly due to retirement (Statistics Canada 2019), and is projected to continue its decline (IRCC 2020a). In 2019, people aged 65 and above comprised 21.0 percent of the Atlantic Canadian population, higher than the rest of Canada (Statistics Canada 2019). Outmigration has been an ongoing problem as well; this is especially the case for highly educated youth (Government of Prince Edward Island 2017; Sano et al. 2020; Thornton 1985). According to an Atlantic Canada Opportunities Agency (ACOA) report (2019), more than 800 thousand workers will be needed, accounting for about 6.8 percent of the workforce in the region.

Immigration could be a crucial tool in reversing the negative effects of these trends on regional economic growth (Akbari and Haider 2018). Policies such as PNPs and the AIPP have
gained traction in Atlantic Canada, as they give provincial governments increased autonomy over immigration. From 1999 to 2007, Newfoundland and Labrador admitted a significantly higher percentage of newcomers through its PNP than traditional immigrant destinations like Ontario (Sano, Kaida, and Swiss 2017). Based on calculations from IRCC (2022a) data, the percentage of permanent resident immigrants arriving to Atlantic Canada through the AIPP has risen from 13.7 percent in 2018, the first year in which the program was operational for all four quarters, to 25.9 percent in 2021. In New Brunswick, the provincial government has recently perceived the attraction and retention of new Canadians as “crucial” to “meet the needs of New Brunswick employers” (Government of New Brunswick 2019, 3).

However, Atlantic Canada has faced significant challenges in immigrant retention: 30 percent of the region’s recent arrivals have already relocated elsewhere one year after landing (Graham and Pottie-Sherman 2021; IRCC 2020b). The PNP retention rate in Atlantic Canada ranged between 27 percent and 57 percent, while for provinces such as Ontario and British Columbia, it was higher than 90 percent (IRCC 2020b).

The Atlantic Provinces are geographically isolated, with small populations and resource-dependent economies, often making them less attractive destinations for workers from other countries and provinces. Unique cultures, and cultural and linguistic homogeneity, make this area a difficult place for newcomer integration. The Atlantic provinces tend to have a strong ethnocultural identity, referring to locals as “Islanders.” A PEI government document includes “Islanders” as a category of population (Government of Prince Edward Island 2017, 2). Tourism marketing grounds the “real” Newfoundland experience as that of the outports, while the “essential” experience of Nova Scotian “innocence” is captured in the fishing villages of the “folk” (Overton 1996, 61; McKay 1994, 31). This strong ethnocultural social identity leads to an insider-outsider
divide. The social divide in Newfoundland between “Newfoundlanders” and “Come-From-Aways” seems to be a permanent fixture. Local media in 1989 advised the public that “the term ‘Newfoundlander’ should be confined to the native-born, and did not include immigrants and ‘mainlanders’ (Bassler 1992, 66).

These cultural, political, linguistic, and social contexts shape the immigration and integration experience (Guo, Hakak, and Al Arris 2021; Thornton, Ocasio, and Lounsbury 2012). Immigrants find it hard to blend into the local community because of the fixed and absolute nature of Atlantic Canada’s sociocultural landscape. Tapping into the social networks of the native-born remains an obstacle in the labour market for them (Lepawsky, Phan, and Greenwood 2010, 341).

The federal and provincial governments noticed the retention issues in Atlantic Canada and established a new targeted program. The Atlantic Immigration Pilot Program (AIPP) was piloted between 2017 and 2021 and became a targeted economic immigration pathway for immigrants and international students planning to reside in Atlantic Canada. Unlike other federal immigration programs, AIPP is a completely employer-driven program (IRCC 2020b). Immigrants “must receive a job offer from a designated employer in Atlantic Canada” (IRCC 2020b), and employers, sponsored by the federal and provincial governments, are also responsible for the settlement of immigrants’ families (IRCC 2020b). Retention of immigrants through this program has improved significantly compared to the other economic immigration programs. Although only 57 percent of principal applicants worked for their AIPP employers two years after landing, an additional 19 percent continued to work for a different employer in the same province (IRCC 2020b). Due to the relative success in immigrant attraction and retention, AIPP became a permanent immigration program in 2022 and was renamed as the Atlantic Immigration Program (AIP, IRCC 2022b).
Employers have played a major role in the success of the AIPP/AIP program because they provide employment opportunities and integration support. Despite support from government and settlement services, employers need to develop a joint integration plan for the immigrant employees and their families with a local immigrant settlement agency (IRCC 2018). The success of such programs hinges on employers’ willingness to participate. Hence, it is imperative for employers to believe in the idea that international immigrants are valuable to their businesses, local communities, and the provincial economy.

**Possible Mitigating Mechanisms: The Contact Theory**

The contact theory suggests interacting with out-groups, such as immigrants, can mitigate negative attitudes and discrimination toward these groups. It also suggests that negative attitudes towards out-groups will diminish over time given increasing contact with out-group members (Lashta, Berdahl, and Walker 2016), if both in- and out-groups have shared interests, the community will support the contact, and such contacts will not be superficial (Kaufmann and Harris 2015). Higher levels of contact with immigrants have been found to correlate with more positive attitudes among the general public (Almeida et al. 2015; Walsh and Tartakovksy 2021), and among employers specifically (Kubiciel-Lodzińska and Maj 2020).

Employers may not actively engage in close contact with international immigrants through employment for several reasons. They may lack the means or resources to verify immigrants’ foreign credentials and experience, so they may not have sufficient information to evaluate their qualifications. Without experience working with immigrants, employers are commonly risk averse and resort to group stereotypes as signals in their hiring decisions. Thus, they are likely to avoid hiring immigrants (Birkelund et al. 2020). However, employers assess foreign work experience
and education more favourably with increased exposure to immigrant employees (Almeida, Waxin, and Paradies 2019).

The contact theory also argues that, given limited contact with a group, attitudes toward a social group can be conjectured from experience with a specific individual. Positive experiences with an immigrant worker from a certain background may lead to more positive perceptions of people with that background more generally (Birkelund et al. 2020). However, the opposite is also true for negative experiences, as these reinforce preexisting biases, lead to more negative perceptions, and increase risk aversion.

The extent to which contact results in more positive attitudes is dependent on how deeply embedded the biases/stereotypes/negative attitudes are (Birkelund et al. 2020). Furthermore, there are two dimensions of contact: breadth and depth (Dias, Zhu, and Samaratunge 2017). “General contact” only reduces old-fashioned racism (e.g., blatant discrimination and hate), whereas “personal ties” reduce old-fashioned racism, as well as “new racism” (Lashta, Berdahl, and Walker 2016). The latter concept manifests in ways such as receiving relatively less acknowledgement for completion of the same task as a coworker with a different ethnic background, or being unsupportive of racial equity policies (Lashta, Berdahl, and Walker 2016; Rajendran, Farquharson, and Hewege 2017).

In sum, personal ties established through employment in the workplace may increase the accuracy of employee quality signals and mitigate taste-based discrimination, leading to more positive attitudes towards immigrants. This leads to our first hypothesis:

*H1: Employers who have hired immigrants in the past are more likely to have positive attitudes towards international immigrants than employers who have not.*
Although labour market discrimination against international immigrants is well documented in the literature, the magnitude of discrimination is not homogeneous. Moreover, the ostensibly homogeneous cultural context of Atlantic Canada does not necessarily lead to homogeneous attitudes towards international immigrants among the population. Preliminary findings of a public opinion survey collected by the research team show that while the majority of respondents in all provinces have favourable opinions about immigration, PEI residents have consistently more negative attitudes. This calls for an examination of regional variation in employers’ attitudes toward hiring international immigrants, as these could explain some variations in the unequal labour market of international immigrants across provinces in Atlantic Canada. Accordingly, we hypothesize that:

**H2: There are regional differences in employers’ attitudes towards hiring immigrants.**

**Factors that Affect the Unequal Labour Market Outcomes of International Immigrants**

Organizational practices are embedded in and influenced by higher-order social contexts (Thornton, Ocasio, and Lounsbury 2012). We therefore argue that the political, economic, and cultural context of Atlantic Canada influences employers’ perceptions of the value of international immigrants. In this section, we review several characteristics of organizations, correlating these with the level of contact with immigrant workers. Together, they shape employers’ attitudes towards immigrants, which subsequently influence employers’ hiring behaviors.

Research suggests that most international immigrants prefer to land in urban areas because of possible job opportunities and ethno-cultural diversity (Carter, Morrish, and Amoyaw 2008). Empirical evidence, mostly coming from qualitative work using interviews, focus groups, and case studies, shows that although employers in smaller cities and rural areas may be eager to hire immigrants, skilled immigrants have difficulty integrating in rural areas because they are unable
to find suitable employment (e.g., Wilson-Forsberg 2015). Thus, those in rural areas have lower possibility of contact with immigrants.

Rural residents usually put a premium on immigrants acculturating to local cultural values and traditions (Zahl-Thanem and Haugen 2019). This disparity holds after controlling for sociodemographic factors (Crawley, Drinkwater, and Kausar 2019). Differences in social identity and political leanings account for a portion of the attitudinal gap (Garcia and Davidson 2013). The low contact and high cultural distance are associated with more negative attitudes towards hiring international immigrants, but discrimination against an ethnic minority decreases when there are more positive attitudes towards cultural diversity (Carlsson and Rooth 2012), or a critical mass of immigrants resides in the local community (Booth, Leigh, and Varganova 2012; Kaufmann and Harris 2015). Hence, we hypothesize that:

**H3: Employers in urban areas hold more positive attitudes towards international immigrants than rural employers.**

The size of the organization plays an important role as well. Despite notable labour and skill shortages – 39 percent of small and medium-sized enterprises (SMEs) reported difficulty finding new hires – SME business owners are less likely to hire immigrants (Business Development Bank of Canada 2018). Empirical evidence of employers’ attitudes towards immigrants by company size is rare. However, while large employers still display discriminatory actions when hiring immigrants, they discriminate less frequently than smaller ones (Banerjee, Reitz, and Oreopoulos 2018; Carlsson and Rooth 2007; Wood et al. 2009).

Canadian racialized minorities also are reported to perform better in rule-governed work environments (Fang and Heywood 2006). Large organizations typically have more standardized recruitment and hiring practices, better structured diversity and inclusion policies, more resources
to provide anti-discrimination training, and better trained professionals who are more aware of the implicit biases in their decision-making process and review applicants’ credentials more objectively (Banerjee, Reitz, and Oreopoulos 2018; Dobbin, Kim, and Kalev 2011). Businesses with more employees are also more likely to encounter immigrant job applicants, hire immigrants, and hence, have more interaction with immigrants than small businesses. Their frequent and deep personal interactions, combined with more frequent use of objective and formal workplace practices, are more likely to mitigate individual biases and the stereotyping of immigrants. Based on the contact theory, we hypothesize that:

**H4: Employers in large organizations tend to have more positive attitudes towards international immigrants than employers in small and medium-sized organizations.**

Shares of immigrants vary significantly across industries and/or occupations. New arrivals will obviously be attracted to locations where they can find relevant employment. Those seeking work in health care will relocate to places with those particular job opportunities, while immigrants planning to work in arts and culture will seek destinations with the conditions that foster creativity (Grant and Kronstal 2010). In addition, although evidence suggests discrimination in hiring is relatively uniform across white collar jobs (Oreopoulos 2011), immigrants are more likely to work for businesses in fields with higher shares of immigrant workers (Dostie et al. 2021; Hall and Sadouzai 2010). They may gravitate, for example, towards high-tech: Economic immigrants account for approximately 35 percent of the workforce in the Canadian information and communications technology sector while only accounting for 20 percent of Canada’s population (IRCC 2020b). Studies also show that immigrant workers experience less discrimination when applying for jobs in which recruiting workers is more difficult (Baert et al. 2015).
Some industrial differences could be systematic, such as occupational regulations that prohibit immigrants from practicing in certain fields without a proper work credential or licence(s) (e.g., Gomez et al. 2015). Others are more related to business practices and employers’ perceptions. Language skills required on the job could impact how open a specific industry is towards hiring immigrants (Derous, Pepermans, and Ryan 2017; Dwertmann and Kunze 2021; Oreopoulos 2011). Another factor is whether the job requires high or low skill levels. Immigrants may be more likely to be discriminated against in occupations requiring sophisticated communication and networking skills, as employers may feel uncertain about their skill level, and denied job opportunities because they lack culturally specific skills and hence are deemed unfit for the job (e.g., Almeida and Fernando 2017; Tews and Tracey 2008). This can be heavily influenced by pre-existing biases (Krings and Olivares 2007), and used as “a post hoc justification for discrimination” (Esses 2021, 514). Immigrants may also be excluded from high-skill positions by native-born managers who perceive them as threats to their status (see Dietz et al. 2015).

However, for industries that do not require strong Canadian-specific skills (e.g., cultural understanding, communication skills, and regulatory compliance), employers may feel more comfortable hiring immigrants, especially when a large share of such immigrants provide a more accurate productivity signal and allow employers to change their pre-existing notions about international immigrants.

We do not intend to uncover the exact reasons underlying complex industry-level variations, but we do want to probe the public-private divide. Following the conceptual discussion of large organizations, we argue public sector employers are more likely to have positive attitudes towards immigrants because of the more formal practices adopted by their workplaces. These include less usage of hires through referral (Behtoui 2008; Lang 2021) and greater likelihood of
implementing diversity programs and training (Peters and Melzer 2022). There may also be more public and political pressure exerted on the public sector to adopt best practices and reduce discrimination (Peters and Melzer 2022).

Most of the studies in the literature indicate public sector employers possess more positive attitudes toward immigrants (Carlsson and Rooth 2007; Midtbøen 2015a, 2015b). While Villadsen and Wulff (2018) find negligible differences between public and private sector discrimination, they acknowledge that their findings contradict the literature. In Canada, however, immigrants are least represented in public administration of all sectors (Yssaad and Fields 2018). This could imply that the abovementioned formalized practices and scrutiny of the public sector outweigh employers’ limited exposure to immigrants in that sector. The public administration also does not include all public sector positions, so there could be something particular to that subsector which explains the employment gap. This can be attributable to a number of factors such as: a premium on official language skills, or equitable hiring practices focusing on groups who may be more likely to be Canadian born, such as Indigenous peoples and military veterans. Studies show that immigrants (Ansah and Mueller 2021) and Canadian-born racial minorities (Hou and Coulombe 2010) experience better employment outcomes in Canada’s public sector compared to the private sector.

This leads to our final hypothesis, that:

\[ H5: \text{Employers in public sector organizations have more positive attitudes towards international immigrants than employers in private sector organizations.} \]

III. Data and Methods

Data
We conducted a phone survey of 801 employers with at least five paid employees from the Canadian Atlantic Provinces (New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador) between August and October 2019. The sample was representative based on the number of businesses registered in the province, urban and rural distribution, size of the business (measured by the number of employees), and North American Industry Classification System (2018). Survey respondents were owners/senior executives in smaller organizations, or human resources managers with authority over hiring decisions in larger organizations. We collected information such as the type of organization, number of full-time equivalent employees, and postal code. We also asked questions about their business practices related to hiring immigrant workers, and their individual reactions to specific statements related to immigrant workers and/or international immigration.

Methods

We used the following ordinary least square (OLS) model to explore whether employers’ perception of immigrant workers in general was associated with certain characteristics of the business:

\[
Y_i = \alpha + ER\_Size' \beta + \delta \ast Rural_i + Prov' \phi + Industry' \eta + C_i + \varepsilon_i \tag{1}
\]

In the model, \(Y_i\) denotes employer \(i\)’s perception of immigrant workers and the perceived challenges to hiring international immigrants. These are the key dependent variables. To determine \(Y_j\), we asked employers how they felt about seven statements describing the impact of immigrant workers on businesses across the Atlantic provinces. The statements included: “A multicultural workforce enhances creativity in the workplace;” “International immigrants are more productive than local workers;” “International immigrants will leave for another part of the country...
within a short period of time;” and “International immigrants will work for less pay than local workers.” Responses were scored on a five-point Likert scale ranging from one, “strongly disagree,” to five, “strongly agree.” We also included a residual category of “Don’t know/no answer,” but dropped respondents who chose this answer in the regression analyses. The Likert answers are standardized. $\varepsilon_i$ is the usual error term. Standard errors were clustered at the industry and province level.

$ER\_Size'_{i}$ is a vector of variables indicating the size of the business measured by number of full-time equivalent employees. We categorized the size of business based on the number of full-time equivalent employees: small (five to nine employees), medium (ten to 49 employees), and large (50 or more employees). The medium-sized workplace with ten to 49 employees is selected as the reference group.

$Urban_{i}$ corresponds to an indicator variable equal to one if the primary location of the business is in an urban area and zero otherwise. We code the rural/urban binary variable based on the postal code of the establishment.

$Prov'_{i}$ is a vector of variables indicating Atlantic provinces (New Brunswick is selected as the reference group).

$Industry'_{i}$ represents the industry categories. We aggregate the detailed 20 industry grouping in our survey into eight categories: 1) service sector industries (i.e., retail trade, accommodation and food services, and real estate rental and leasing); 2) natural resource production industries (i.e., agriculture, forestry, fishing and hunting, mining, quarrying, oil & gas extraction, and utilities); 3) primary sector industries (i.e., construction, manufacturing, wholesale trade, and transportation and warehousing); 4) arts and cultural industries (i.e., information & cultural industries, and arts and entertainment & recreation); 5) public service industries (i.e.,
public administration, educational services, administrative & support, and waste management and remediation services); 6) healthcare and social assistance; 7) technical and professional sector (i.e., finance and insurance, professional, scientific, technical services, and management of companies and enterprises); 8) a residual category called “others”. In our models, we used the service sector as the reference group.

Finally, our focal estimated coefficients are $\beta$, $\delta$, $\phi$, and $\eta$. Because we standardize the dependent variables, the estimated coefficients can be interpreted as the magnitude of standard deviation shift associated with having a specific characteristic. For example, if the estimated value of $\delta$ was 0.3, we interpreted the results as follows: having the business located in an urban area was correlated with a 0.3 standard deviation shift of the dependent variable.

IV. Results

We report the descriptive statistics of our sample in Table 1. The province with the most respondents in that time frame was Newfoundland and Labrador (37.4 percent), followed by New Brunswick (25.6 percent), Nova Scotia (24.8 percent), and Prince Edward Island (12.2 percent). Almost two thirds (63.5 percent) of our sample said they were located in an urban area. One third were small organizations, more than half were medium-sized organizations, and 12 percent were large organizations. The majority were private businesses (84.4 percent).

[insert Table 1 here]

The industry distribution of our sample matched the composition in Atlantic Canada. The service sector, including both retail, and accommodation and food services, accounted for a significant number of organizations (39.6 percent). The second largest share of organizations were those in natural resource production (21.1 percent), followed by organizations in health care and
social assistance (11.4 percent), other services (7.6 percent), and technical and professional services (7.4 percent). Other groups accounted for approximately 12.9 percent of the sample.

About one third of respondents said they had hired immigrants in the past 12 months. Overall, employers in Atlantic Canada had a positive impression of international immigrants, but they reacted differently to various statements measuring their attitudes to immigrants (Table 1). They overwhelmingly agreed that “a multicultural workforce enhances creativity in the workplace” and disagreed that “international immigrants take jobs away from locals.” They slightly favoured such statements as: “having employees from other countries can improve export opportunities;” “international immigrants are harder working than local workers;” and “international immigrants are more productive than local workers.” On average, they were more likely to believe that “international immigrants will leave for another part of the country within a short period of time,” and less likely to believe that “international immigrants will work for less pay than local workers.”

Table 2 presents the estimates of the determinants of Atlantic Canadian employers’ general impression of international immigrants. Our analyses revealed differences in certain perspectives among employers across provinces. Employers in all four provinces reported similar impressions of the pay disparities and job competition between international immigrants and local workers, and they had similar opinions about the challenges of immigrant retention. They also expressed a similar belief that immigrants’ stays will be transitory and they will move to other parts of the country soon after landing. New Brunswick employers had the least positive impression of international immigrant workers. Employers in other provinces expressed more endorsement of the statements that international immigrants bring more creativity to the business ($\beta= 0.206$, $SD=0.076$, $p<0.01$ for Nova Scotia, $\beta= 0.153$, $SD=0.068$, $p<0.01$ for Newfoundland, $\beta= 0.183$, $SD=0.090$, $p<0.01$ for PEI) and are more hardworking ($\beta= 0.279$, $SD=0.090$, $p<0.01$ for Nova
Scotia, $\beta = 0.150$, SD=0.083, $p<0.1$ for Newfoundland, $\beta = 0.185$, SD=0.092, $p<0.05$ for PEI). Compared to New Brunswick and PEI, employers in Nova Scotia and Newfoundland were more likely to think that international immigrant workers are more productive ($\beta = 0.302$, SD=0.110, $p<0.01$, and $\beta = 0.192$, SD=0.100, $p<0.1$, respectively) than local workers. Employers in PEI were more optimistic about the statement that international immigrants can improve export opportunities than their counterparts in other provinces were ($\beta = 0.224$, SD=0.123, $p<0.1$).

Surprisingly, we did not find significant urban-rural differences in terms of employers’ overall attitudes towards immigrants, with the exception that employers in urban areas agreed more with the statement that “a multicultural workforce enhances creativity in the workplace” than their rural counterparts ($\beta = 0.177$, SD=0.098, $p<0.1$). Contrary to common understanding, operating a business in an urban area was also associated with some mixed opinions about international immigrants measured by other aspects, but the estimated coefficients were statistically insignificant.

To our surprise, we did not find much variation in terms of employers’ hiring attitudes across different business sizes. Compared to medium-sized businesses, small businesses tended to show slightly more negative attitudes towards immigrants, while large businesses tended to have slightly less negative attitudes. However, the general pattern of estimated coefficients was mostly statistically insignificant, with two exceptions. Small businesses exhibited statistically significant negative perceptions of immigrants regarding compensation; compared to medium-sized businesses, small businesses more strongly believed that international immigrants are willing to work for lower pay than local workers ($\beta = 0.170$, SD=0.081, $p<0.05$). In their evaluation of immigrants’ creativity, compared to the medium-sized businesses, large businesses more strongly...
believed that a multicultural workforce enhances creativity in the workplace ($\beta= 0.243, \text{SD}=0.100, p<0.05$).

Organizations in public and not-for-profit sectors tended to have a more positive opinion of international immigrants. Those employers were more likely to agree that hiring international immigrants enhances creativity ($\beta= 0.390, \text{SD}=0.129, p<0.01$) and creates more export opportunities ($\beta= 0.321, \text{SD}=0.112, p<0.01$). Notably, they did not think international immigrants are less attached to Atlantic Canada and will move to another part of the country soon after landing ($\beta= -0.379, \text{SD}=0.125, p<0.01$), or that these immigrants will compete against the domestic-born workers for jobs ($\beta= -0.183, \text{SD}=0.107, p<0.1$). There were no significant differences between public and private sector employers in perceptions of immigrant workers’ characteristics, elevated productivity, work ethics (hardworking), and willingness to take lower pay than comparable native-born workers in exchange for a job.

More importantly, our findings support the contact theory: employers who hired international immigrant workers in the past 12 months reported more positive attitudes towards international immigrants. Compared to employers who did not hire international immigrants, those employers agreed more with the statement that “a multicultural workforce enhances creativity in the workplace” ($\beta= 0.287, \text{SD}=0.077, p<0.01$), and disagreed more with the statements that “international immigrants take jobs away from locals” ($\beta= -0.274, \text{SD}=0.081, p<0.01$), “international immigrants will leave for another part of the country within a short period of time” ($\beta= -0.245, \text{SD}=0.100, p<0.05$), and “international immigrants will work for less pay than local workers” ($\beta= 0.328, \text{SD}=0.079, p<0.01$).

Last but not least, employers’ view of the impact of international immigrants was more similar than we expected; the estimated coefficients varied across industries, but most of the
estimated coefficients were statistically insignificant, especially with respect to job competition, productivity, and work ethic differences between immigrants and domestic-born workers, and immigrants’ post-landing mobility. One of the more surprising yet consistent results in our study was that employers in five out of seven industry categories perceived that they could pay lower wages to international immigrant workers than local workers: primary sector (β= 0.205, SD=0.096, p<0.05), natural resource production industry (β= 0.450, SD=0.150, p<0.01), public and education services (β= 0.505, SD=0.201, p<0.05), technical and professional sector (β= 0.280, SD=0.144, p<0.1), and arts and cultural industries (β= 0.572, SD=0.159, p<0.01).

There were several residual differences as well. Compared to employers in service sectors, employers in the technical and professional sectors disagreed more with the statement that international immigrant workers will take jobs away from the locals (β= -0.222, SD=0.123, p<0.1) and were more likely to embrace the idea that having employees from other countries can improve export opportunities (β= 0.244, SD=0.133, p<0.1). However, they disagreed more with the statement that international immigrant workers are more hardworking than local workers (β= -0.254, SD=0.147, p<0.1). Employers in both primary and natural resources production sectors were more pessimistic about whether having a multicultural workforce enhances creativity in the workplace (β= -0.202, SD=0.086, p<0.05 and β= -0.667, SD=0.244, p<0.01, respectively). Finally, employers in natural resource production sectors disagreed more with the statement that “having employees from other countries can improve export opportunities” (β= -0.357, SD=0.183, p<0.1).

V. Conclusion and Policy Implications
The findings of this study mostly support our contact theory. There is a noticeable trend of provinces, areas, and large businesses with more opportunities to hire or interact with international immigrant workers being more likely to have a positive attitude about those immigrants.

This paper makes four major contributions. First, to the best of our knowledge, this is the first representative data to capture employers’ perceptions of the value and impact of international immigrants and organizational hiring practices. Statistics Canada provides several administrative datasets or population surveys that include information relevant to our research question. The Labour Force Survey covers detailed labour market activities and outcomes of Canadian workers, and includes an immigrant indicator, but lacks some subjective measures of employer hiring attitudes towards immigrant workers. Similarly, the longitudinal administrative Canadian Employer Employee Dynamic Database (CEEDD) 2001-2017, linked with the Longitudinal Immigration Database (IMDB) and the Temporary Foreign Worker administrative data file, provides rich information on firm characteristics and performance indicators but lacks subjective measures of employer hiring attitudes and detailed labour market outcome information. Thus, none of those datasets suit our study.

Second, our findings highlight the importance of studying regional differences. Canada has successfully attracted skilled immigrants, but the success stories are mainly concentrated in certain provinces and major metropolitan areas. However, other areas, such as Atlantic Canada, desperately need to attract and retain skilled immigrants. Despite the government’s effort to establish “cure-all” programs such as AIPP, the region still experiences retention challenges. Our study points out possible causes of those challenges. Our findings also show that although Atlantic Canada is generally considered to have a strong ethno-cultural identity, there are significant differences in employers’ attitudes across the four provinces in the Atlantic Canada; the regional
differences could be influenced by multiple factors, such as public policies; public opinions and narratives; cultural, demographic, economic, and geographic differences; business characteristics, and the prevalence of interaction between native-born and immigrant residents. Variations within the Atlantic Canadian provinces, and their relation to immigration in the region, are an understudied but worthwhile topic for further research.

Third, and more importantly, we use the contact theory to construct a comprehensive theoretical framework that pulls together cultural, institutional, and organizational determinants of employers’ attitudes towards hiring international immigrants. This framework not only explains the variations in employers’ attitudes, but also provides a theoretical foundation for our policy recommendations. More specifically, we argue that creating a deep, personal contact between employers in regions of relatively more homogenous social identities and international immigrants of high cultural distance could mitigate the negative perceptions of immigrants and improve immigrant retention in the region.

Fourth, we shed light on a potential divergence between the opinions of employers and the general public on the subject of immigration. For example, while PEI employers expressed the most positive attitudes toward immigrants on average, our earlier survey found PEI residents consistently have more negative attitudes than other Atlantic Canada provinces. This conflicting finding seems to contradict our contact theory argument, as PEI has the highest immigration rate of all Canadian provinces (Conference Board of Canada 2019). However, we argue that this incongruent employer versus general population attitude towards immigrants supports the idea that the quality of contact matters. Contacts with the outgroup, such as immigrants, through employment are deeper and more genuine than other forms of contact, especially in a more ethno-culturally homogenous community. Employers are likely to be more accustomed to immigrant
workers and aware of the benefits they bring to the province. This observation emphasizes the importance of employment services in the early settlement stage.

Our findings have a number of important policy implications. First of all, it is clear from our survey data that employers who hired international migrants in the past had more positive attitudes towards hiring them and were more likely to hire them in the future, highlighting the importance of employer exposure to such a workforce and creating a critical mass for the Atlantic Provinces. While it is encouraging that all Atlantic Provinces have embraced aggressive plans to increase immigration, it is imperative to develop a robust strategy to attract and retain immigrants in the region. Employment bridge programs could potentially help international immigrants assimilate into the local labour market more effectively. The provincial governments could provide more effective settlement services to connect employers who have a shortage of labour and skills with new immigrants who have limited knowledge of the local labour market. Tax breaks could incentivize employers to actively participate in such employment bridge programs as well.

Employers in the public sector exhibited more favorable attitudes towards hiring international immigrants, suggesting the need for cross-cultural training and education in shaping employers’ perceptions and hiring attitudes. Many employers in our survey also reported a lack of understanding of immigration policies and programs, and a lack of timely labour market information to ensure high-quality matching of immigrant job candidates to fill labour and skill shortages, especially in the rural, remote areas. The federal and provincial governments should step in, filling the information gap and providing support and training to employers, especially to small- and medium-sized enterprises that typically lack HR capacity and expertise.

Admittedly, our study has some limitations. Although our survey targeted organizational decision makers, there is reasonable doubt that their perceptions and attitudes can influence the
hiring decisions, especially in larger organizations. We want to point out that the overwhelming majority of the organizations we surveyed are small-medium enterprises by Statistics Canada’s definition (500 or less paid employees; Innovation, Science and Economic Development Canada 2021). We did not adopt this definition for analytical purposes, as close to 80 percent of private sector employees in the Atlantic Provinces work in companies with fewer than 99 paid employees (Innovation, Science and Economic Development Canada 2021). We argue that business owners’ perceptions carry a lot of weight in this setting. There are potential self-reporting biases in our survey as well, and our findings are more correlational. We suggest future research should employ a more advanced research design including panel data analysis to address those potential limitations. Finally, our data were collected in 2019, and employers’ attitudes towards international immigrants could have changed significantly due to the global pandemic, although the impacts of COVID-19 may not be as dire in Atlantic Canada as other provinces or countries. We need further research to better understand the impacts of the pandemic and subsequent economic dynamics, as well as the evolution of employer attitudes over time.
References


Krings, F., and Olivares J.O. 2007. “At the Doorstep to Employment: Discrimination Against Immigrants as a Function of Applicant Ethnicity, Job Type and Raters’ Prejudice.”


Table 1. Descriptive Statistics (N=801)

<table>
<thead>
<tr>
<th>Category</th>
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<th>Std. Dev.</th>
</tr>
</thead>
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<td></td>
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<tr>
<td>Medium</td>
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<td>0.498</td>
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<tr>
<td>Large</td>
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<td>0.325</td>
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<td><strong>Urban</strong></td>
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<td>0.482</td>
</tr>
<tr>
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<td>0.482</td>
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<td></td>
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<td>0.363</td>
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<tr>
<td>Technical &amp; professional services</td>
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<td><strong>Hired immigrants in the past 12 months</strong></td>
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<td>0.471</td>
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<td><strong>A multicultural workforce enhances creativity in the workplace</strong></td>
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<td>International immigrants take jobs away from locals</td>
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<td>Having employees from other countries can improve export opportunities</td>
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<td>International immigrants are more productive than local workers</td>
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<td>International immigrants are harder working than local workers</td>
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<td>International immigrants will work for less pay than local workers</td>
<td>2.530</td>
<td>1.321</td>
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Source: 2019 Employer Attitude Survey, Narrative Research and Memorial University
Table 2. Estimated Coefficients of Determinants of Atlantic Canadian Employers’ General Attitudes of international immigrants

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<th>creativity</th>
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<th>export</th>
<th>productivity</th>
<th>mobility</th>
<th>hardworking</th>
<th>low pay</th>
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<td>(0.081)</td>
<td>(0.089)</td>
<td>(0.100)</td>
<td>(0.091)</td>
<td>(0.079)</td>
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[Medium sized organization as the reference group]

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<td>(0.082)</td>
<td>(0.097)</td>
<td>(0.082)</td>
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<td>(0.081)</td>
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<td>(0.115)</td>
<td>(0.110)</td>
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<tr>
<td>Rural</td>
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[NB as the reference group]

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Government/non-profit

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<th>mobility</th>
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<td>0.390***</td>
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[Service sector as the reference group]

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Notes: Clustered standard errors at province and industry level are in apprentices.
*** p<0.01, ** p<0.05, * p<0.1.
Source: 2019 Employer Attitude Survey, Narrative Research and Memorial University