Longitudinal Immigration Database (IMDB)

Prepared by

Pranit Sanghavi
Jacinta Gonsalves

Agenda

- Introduction to the IMDB

- Methodology and data sources

- Overview of IMDB data available through CDP

- Components of IMDB

- Definitions

- Example analyses of available IMDB data acquired through CDP

- Cautions working with data

- Comparison of IMDB data with other immigration data sources

- References

Introduction to the Longitudinal Immigration Database (IMDB)

- **The Longitudinal Immigration Database (IMDB) …**
    - Combines immigration and tax records
    - Longitudinal design (several observations of the same subjects (people) over a period of time)
    - A census of all immigrants within the reference years
    - The only annual Canadian dataset that allows users to study the characteristics of immigrants to Canada at the time of admission and their economic outcomes and regional (inter-provincial) mobility over a time span of more than 35 years
    - Provides data on the performance and impact of immigration programs

- **The IMDB includes data on the following subjects …..**
    - Education, training and skills
    - Ethnic diversity and immigration
    - Labour market and income
    - Mobility and migration
    - Population and demography

COUNTY OF SIMCOE

Methodology and Data Sources

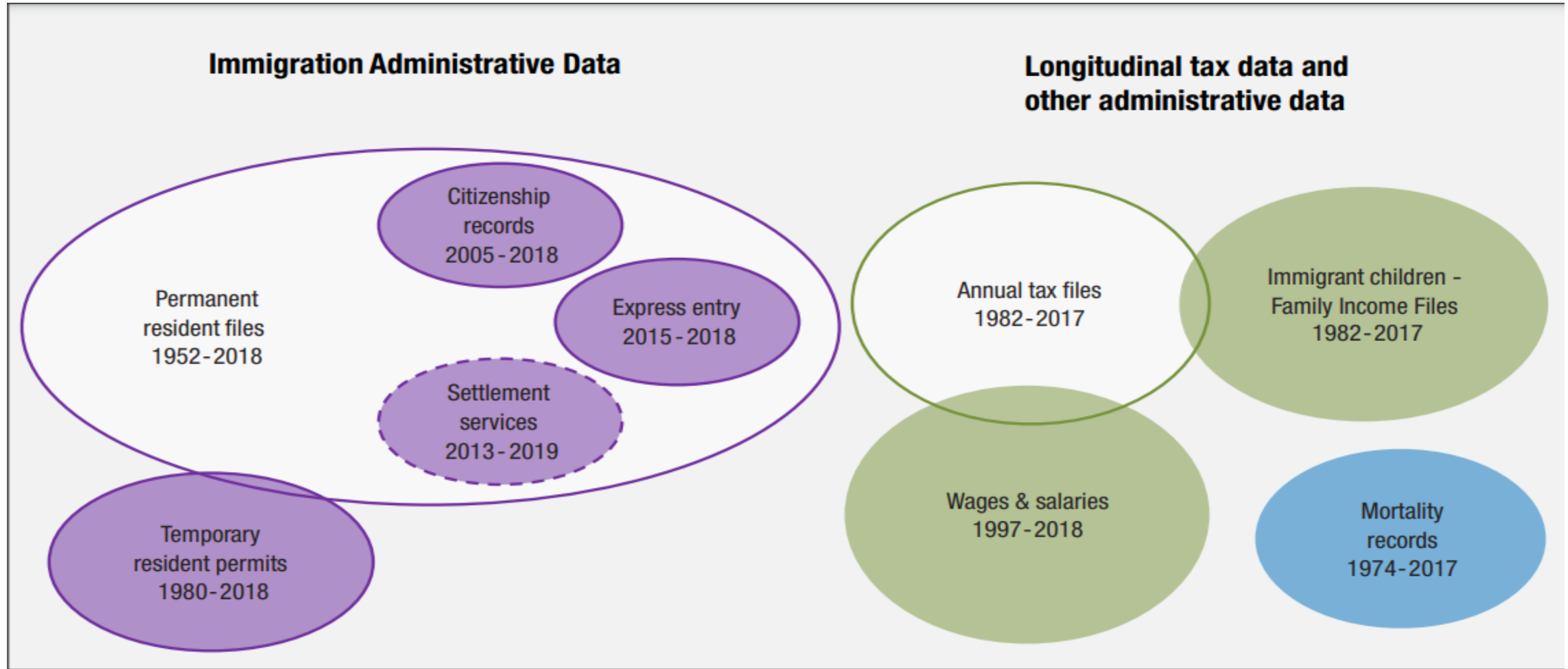- **Target Population and Coverage Period:**
    - All immigrants admitted to Canada since 1952
    - All non-permanent residents since 1980
    - All tax files since 1982
- **Methodology:**
    - Combines immigration information from Immigration, Refugees and Citizenship Canada, taxation data from the Canada Revenue Agency, and the date of death from the Canadian Mortality Database.
    - Via probabilistic record linkage:
        - Process of matching records between or within databases
        - Comparisons done field-by-field using comparison rules with outcomes such as exact match, string proximity, missing information or fields disagreement
        - Each pair of records is assigned a comparison result pattern and that pattern is evaluated to classify pairs as linked, possibly linked or not linked
        - In 2018 overall linkage rate was 97.4%

COUNTY OF SIMCOE

Data Sources

Immigration Administrative Data

- Permanent resident files 1952-2018
  - Citizenship records 2005-2018
  - Express entry 2015-2018
  - Settlement services 2013-2019
- Temporary resident permits 1980-2018

Longitudinal tax data and other administrative data

- Annual tax files 1982-2017
- Immigrant children - Family Income Files 1982-2017
- Wages & salaries 1997-2018
- Mortality records 1974-2017

Overview of IMDB Data available through CDP

There are a total of 10 Longitudinal Immigration Database products available.

8 products contain	2 products contain

Geography:
    Province and Territory
    Census Division
    Census Subdivision
	Geography:
	    Province and Territory
	    Local Immigration Partnership

Variables:
    Cultural Identity
    Immigration
    Language
    Demographics (age, sex etc.)
    Mobility
    Tax filers
	Variables:
	    Cultural Identity
	    Immigration
	    Demographics (age, sex etc.)
	    Tax filers

Admission Year:
    1980-2017
	Admission Year:
	    1980-2016

COUNTY OF SIMCOE

Components of the Longitudinal Immigration Database (IMDB)

Corresponds to Admission Year/Landing Year	Corresponds to Tax year
■ World area of birth	■ Mobility (retention rates, in and out migrations etc.)
■ Destination LIP*	■ Tax age groups
■ Knowledge of official languages	■ Residence LIP*
■ Admission category	■ Income related stats
■ Pre-admission experience	■ Citizenship status

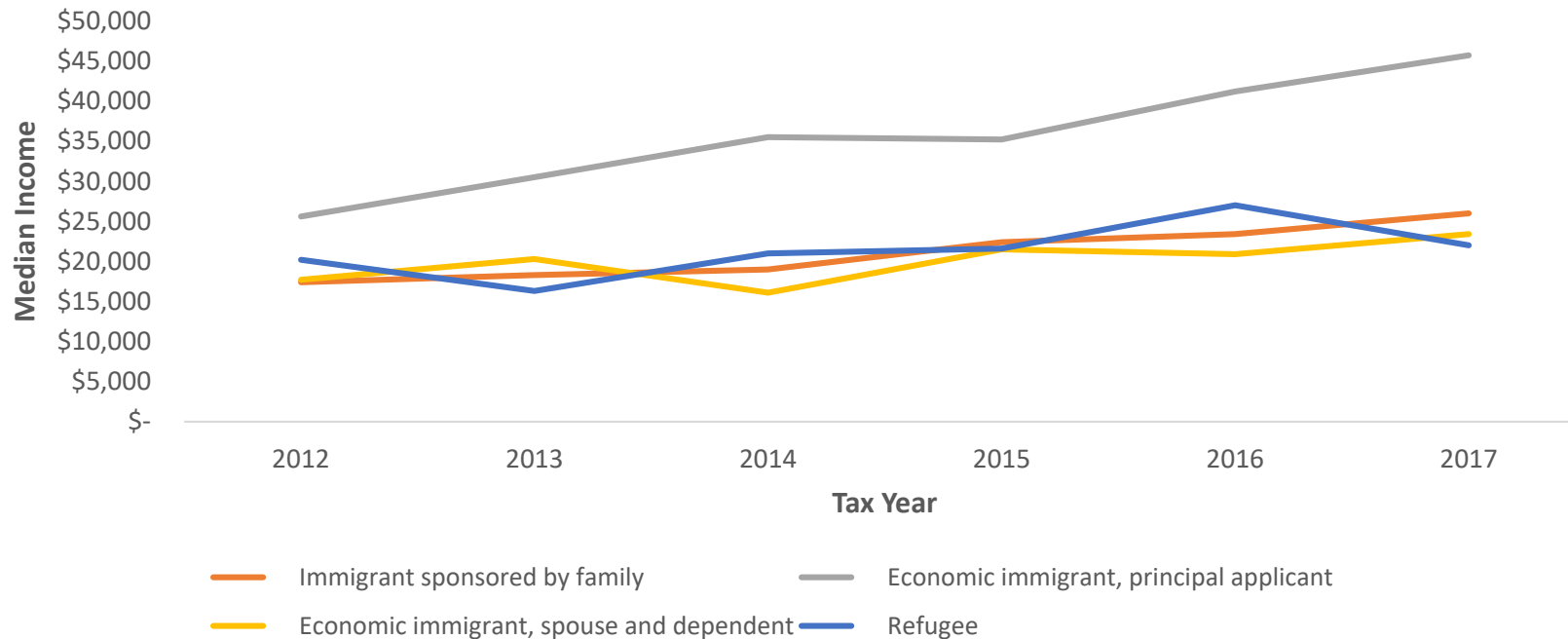*LIP-Local Immigration Partnership

Definitions

- **Tax year:** The tax year is the tax filing year.

- **Immigrant:** It refers to persons who are, or who have been at any time, landed immigrants or permanent residents.

- **Landing year/admission year:** Landing year/admission year is the year in which the immigrant first obtained his or her landed immigrant/permanent resident status. This may or may not be the same as the year of arrival.

- **Immigrant admission category:** Immigrant admission category refers to the category under which immigrants are admitted to Canada by immigration authorities.

- **Retention Rate:** Proportion of immigrant tax filers maintaining their residence in their intended geographical area of destination (economic region, province or territory)

- **Incidence of social assistance:** Incidence is the proportion of immigrant tax filers with type of income. Social assistance benefits are family level financial assistance/benefits provided by federal and/or provincial programs.

- **Median Income:** The median income is the income amount that divides a population into two equal groups, half having an income above that amount, and half having an income below that amount.

Long-Term income tracking for immigrants admitted in Simcoe County in 2011 by admission category and tax year

Long-term income tracking for immigrants admitted in Simcoe County in 2011 according to admission category
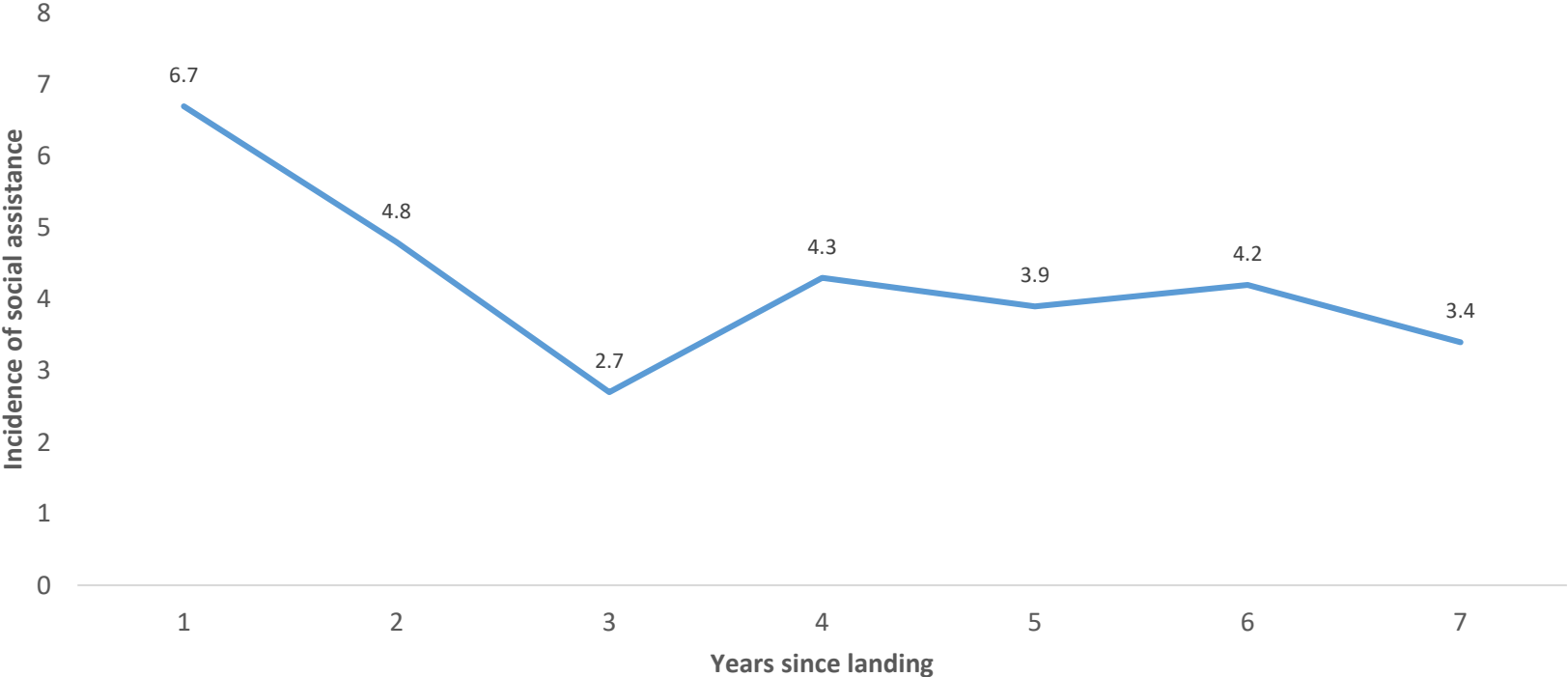

Highlights
- Immigrant incomes in Canada directly proportional with time (the longer immigrants reside in Canada, the higher is their income)
- Considerable difference in incomes between economic immigrant and other categories
- Programs can be tailored to target the immigrant categories which have relatively lower incomes

Source: Community Data Program, IMDB, SCS-292_Table_09

Incidence of social assistance comparison for immigrants admitted in Simcoe County since 2010 (tax year 2017)

Incidence of Social Assistance for Immigrants - Simcoe County (Tax year 2017)

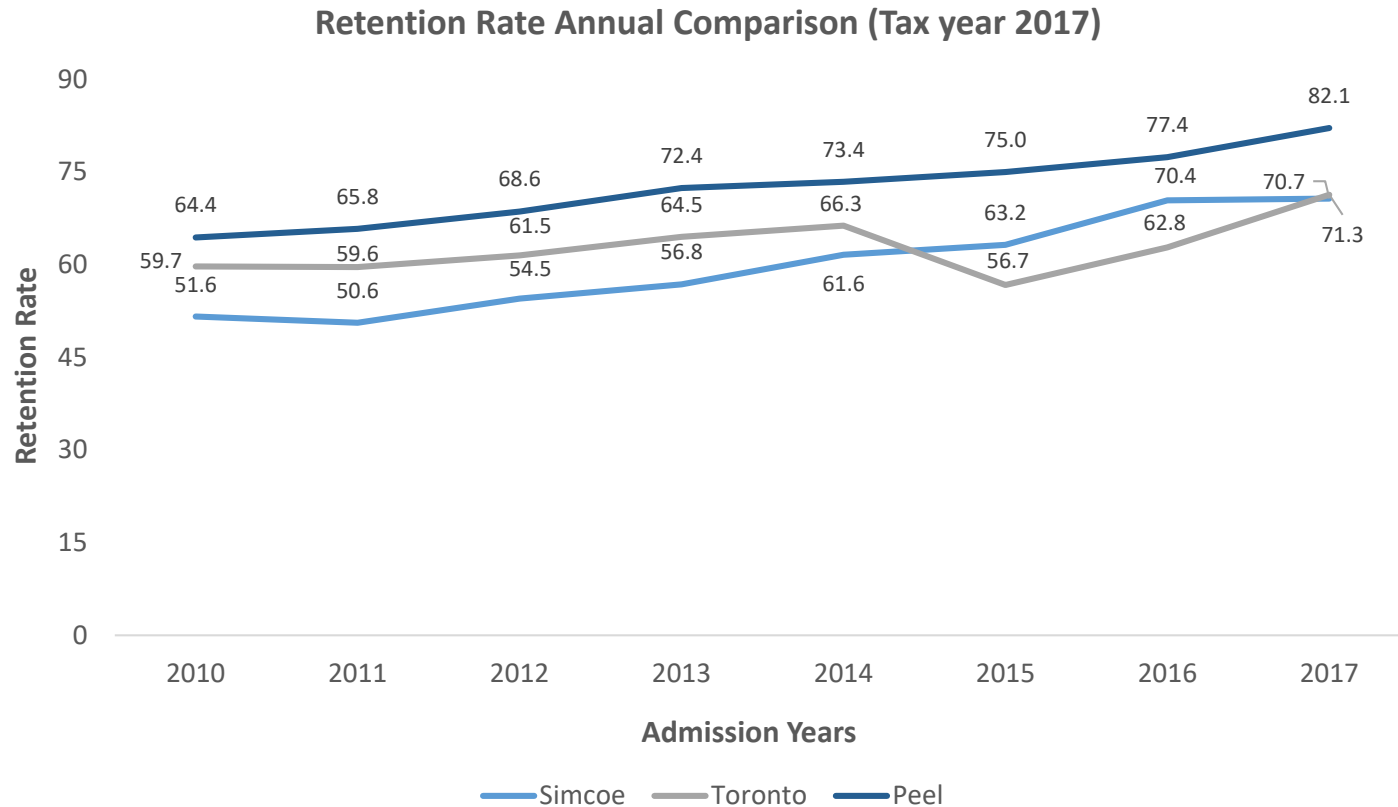**Highlights**

- Social assistance for immigrants is inversely proportional to the time spent by immigrants in Canada (the longer the immigrants reside in Canada, the less likely they are to require social assistance)

Source: Community Data Program, IMDB, SCS-292_Table_09

Retention Rate Long-Term Comparisons between Census Divisions (tax year 2017)

Retention Rate Annual Comparison (Tax year 2017)

Retention Rate

90

75

64.4   65.8   68.6   72.4   73.4   75.0   77.4   82.1

59.7   59.6   61.5   64.5   66.3   63.2   70.4   70.7

51.6   50.6   54.5   56.8   61.6   56.7   62.8   71.3

45

30

15

0

2010   2011   2012   2013   2014   2015   2016   2017

Admission Years

Simcoe   Toronto   Peel

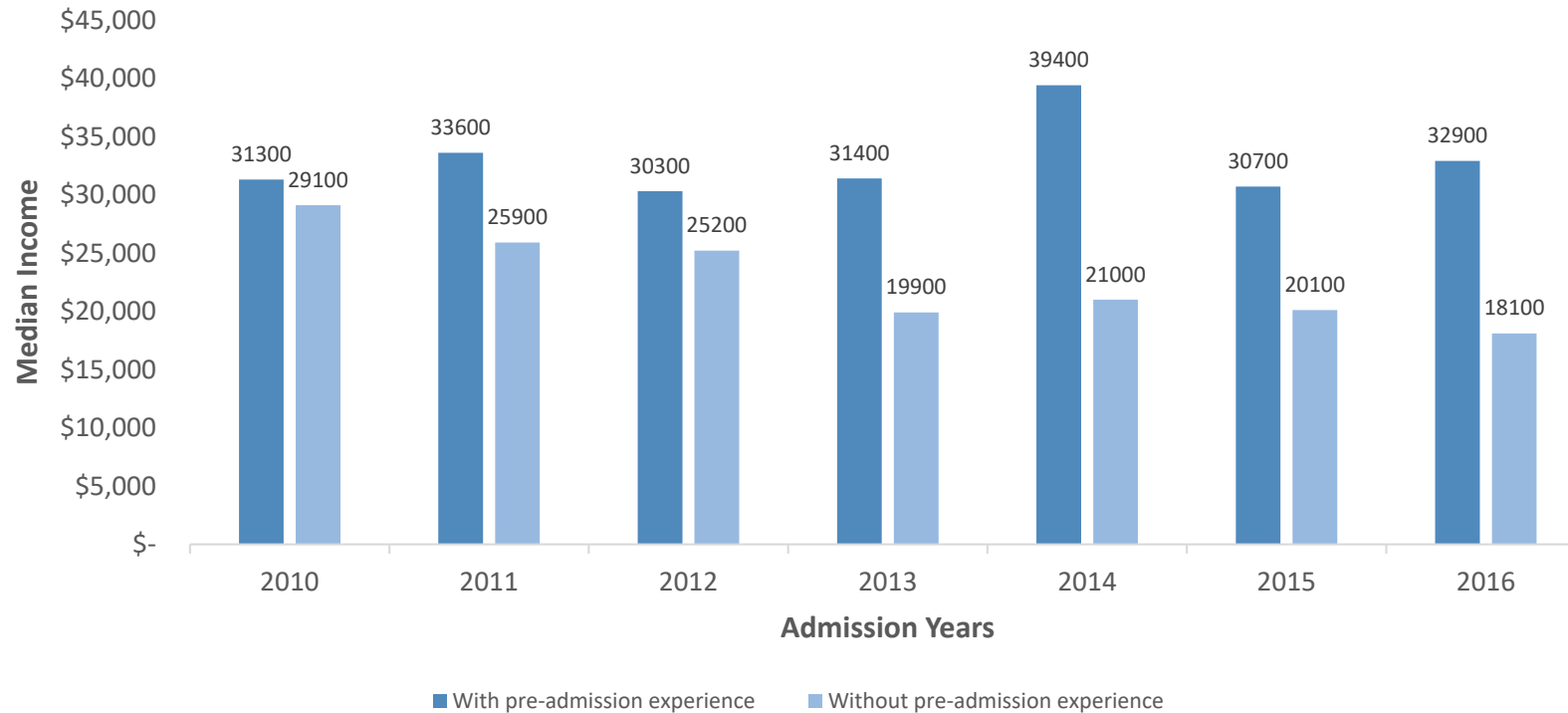Source: Community Data Program, IMDB, SCS-292_Table_08

Highlights

- Lower retention for Simcoe County compared to other regions but increasing consistently.
- Lower retention rate compared to other regions could trigger questions such as
  - Does the County lack employment opportunities and other resources?
- Increasing retention rates over time could trigger questions such as:
  - Is the County gaining resources that are attracting immigrants?

COUNTY OF SIMCOE

Pre-admission experience and median income comparison for immigrants admitted since 2010 in Barrie (tax year 2017)

Comparison of pre-admission and median income for immigrants admitted in 2010-Barrie

Highlights

- Immigrants in Barrie admitted since 2010 that have pre-admission experience earn higher than immigrants not having pre-admission experience

Source: Community Data Program, IMDB, SCS-292_Table_07

Cautions working with data

- The IMDB allows for analysis of tax filers and non tax filers. Readers should keep in mind that the profile of tax filers can be completely different to that of non-filers.
  - Example: One would expect a higher percentage of males to file a tax return, because males have higher labour force participation rates than females
- Data are suppressed or rounded to prevent direct or residual disclosure of identifiable data
- Yearly updates of the IMDB are independent from one another. From year to year, there have been changes to data processing, including updates to the unique person identifier (IMDB_ID)
- Contains over 35 years' worth of data on immigrants admitted to the country and policies and programs have undergone many changes during this time.
  - Ex: A person admitted as a skilled worker in 1980 was not necessarily assessed on the same criteria as a skilled worker admitted in 2000. Be aware of these differences when drawing conclusions about various admission cohorts.
  - It may take a few years for the impact of an administrative change to be observed in the database

Comparison of IMDB data with other immigration data sources

- **The Longitudinal Administrative Databank (LAD):**
    - Useful for comparing immigrant tax filers to the Canadian tax filer population
    - Is linked to the IMDB to include a sample of 20% of the IMDB record and to add immigrant-specific variables, such as landing year, immigration category, and marital status at admission
    - Contains fewer immigration variables than the IMDB* for ex:.
        - Pre-admission information, such as the number of work permits and study permits, is not available Admission information, including the intended occupation and the destination province, is also not available.
- **Census:**
    - Holds no record of information at admission
    - The Census does not allow longitudinal study of the economic outcomes or long-term mobility of immigrants.
- **Longitudinal Survey of Immigrants to Canada (LSIC):**
    - Designed to provide information on how new immigrants adjust to life in Canada during their first four years of settlement and to understand the factors that can help or hinder this adjustment
    - The IMDB contains characteristics such as education and language only at admission, whereas the LSIC* allows for the evaluation of changes through time.

References

- Evra, R., & Prokopenko, E. (2016). Extending the Content of the Longitudinal Immigration Database (IMDB). Presentation, The Pathways to Prosperity Annual Conference.
- Longitudinal Immigration Database (IMDB) – Immigration Data Dictionary 2016. Social and Aboriginal Statistics Division, Statistics Canada
- Longitudinal Immigration Database (IMDB) Technical Report, 2018. (2020). Retrieved 9 November 2020, from https://www150.statcan.gc.ca/n1/pub/11-633-x/2019005/sec3-eng.htm
- Longitudinal Immigration Database tables (IMDB) | Community Data Program. (2020). Retrieved 9 November 2020, from https://communitydata.ca/content/longitudinal-immigration-database-tables-imdb
- Surveys and statistical programs - Longitudinal Immigration Database (IMDB). (2020). Retrieved 9 November 2020, from https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5057
- The Daily — Changes in outcomes of immigrants and non-permanent residents, 2017. (2020). Retrieved 9 November 2020, from https://www150.statcan.gc.ca/n1/daily-quotidien/191216/dq191216b-eng.htm
- What is the Longitudinal Immigration Database (IMDB)? What information can we draw from the IMDB?(2018). Retrieved 9 November 2020, from https://cyrrc.org/wp-content/uploads/2020/07/IMBD-for-CYRRC

COUNTY OF
SIMCOE