## NEW ESTIMATES OF INTERNATIONAL MIGRATON FOR CANADA

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### **PRESENTATION TOPICS**

#### BACKGROUND

ESTIMATING INTERNATIONAL MIGRATION FOR 1671-2006. MOST TIME WILL BE DEVOTED TO THE 1811-2006 PERIOD.

CONCLUDING REMARKS

## CLASSIC APPROACH FOR ESTIMATING INTERNATIONAL MIGRATION

- Estimate fertility and mortality: calculate net immigration from difference between population change and natural increase
- Estimates can be made by age and sex
- Makes strong assumptions about the accuracy of the population counts as well fertility and mortality
- Unless other data are available, estimates are for net immigration (not immigration and emigration)

NEW INTERNATIONAL MIGRATION ESTIMATES 1. "OFFICIAL" HISTORICAL ESTIMATES HAVE WELL-KNOWN PROBLEMS. MCINNIS HAS MADE NEW ESTIMATES FOR LATE 1800S

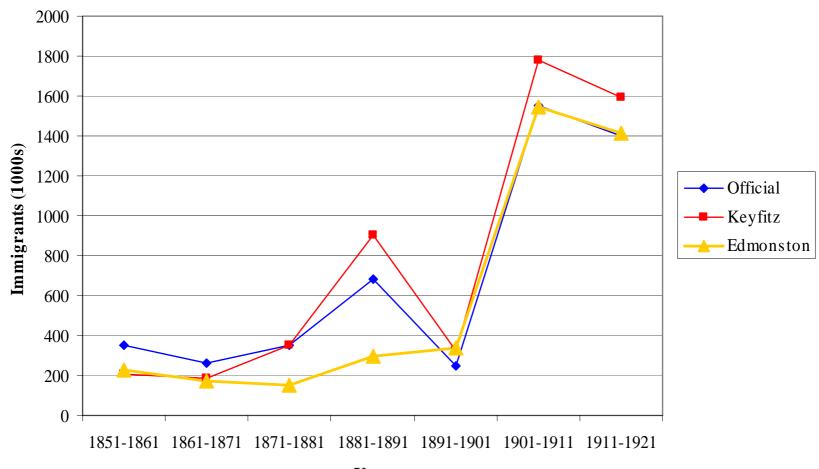
2. USE CONSISTENT CENSUS CORRECTION METHODS

3. MAKE USE OF NATIVITY DATA FOR ESTIMATES FOR IMMIGRANT GENERATION POPULATION PROJECTIONS

# INTERNATIONAL MIGRATION FOR LATE 1800S

- SEVERAL PROBLEMS FOR OFFICIAL IMMIGRATION DATA FOR 1871-1901
- LARGE NUMBER OF IMMIGRANT ARRIVALS WHO WERE EN ROUTE TO USA
- SUBSTANTIAL MOVEMENT BETWEEN CANADA AND USA THAT WAS NOT RECORDED AT LAND BORDERS

# COMPARIONS OF IMMIGRATION ESTIMATES



Year

# CONSISTENT CENSUS CORRECTION (CCC)

- ONE CHALLENGE IN ESTIMATING PERIOD EFFECTS OF IMMIGRATION ARE DATA LIMITATIONS
- NORMAN LUTHER'S (1987) CCC METHOD
  - With caution, can be used if reasonable birth, death, and census data are available
  - Provides adjusted net immigration estimates

# CCC METHOD

#### BASED ON INTERCENSAL POPULATION CHANGE WITH:

- Demographic balancing equations
- Estimates of preliminary correction factors
- Estimates for correction weights

#### CCC OPTIMIZES DIMENSIONAL VECTOR SPACE OF BALANCING EQUATIONS

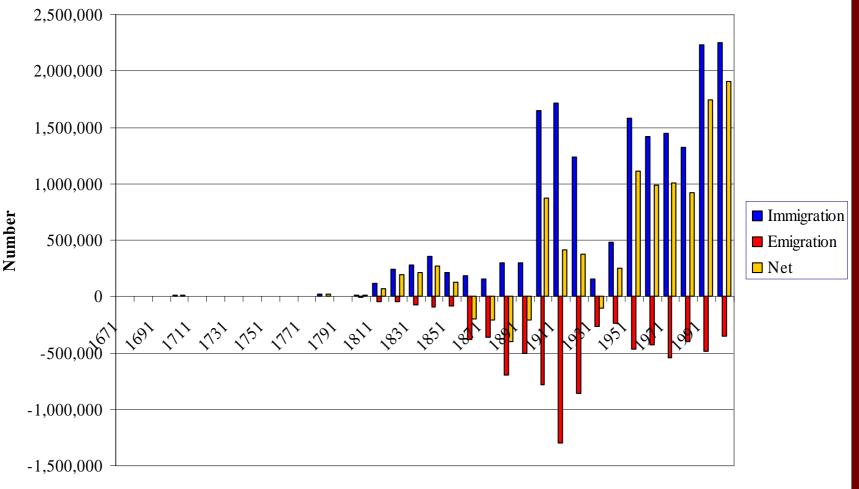
- Provides adjusted, consistent estimates for births, deaths, migration, and census age-sex distribution
- Many possible solutions for balancing equations. CCC methods finds one consistent solution, given the initial correction factors and correction weights

## IMMIGRANT GENERATION POPULATION PROJECTIONS

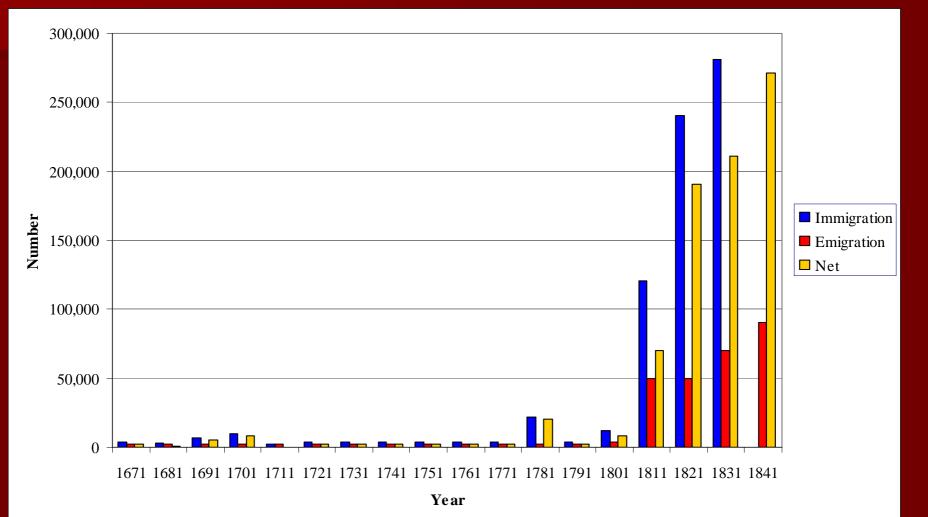
- APPROACH PROPOSED BY EDMONSTON AND PASSEL IN EARLY 1990S
  - Example for U.S. Latino population from Lee and Edmonston (2006)
- CHARACTERIZE THE POPULATION BY AGE, SEX, AND IMMIGRANT GENERATION
  - 1<sup>st</sup> Generation: Immigrants
  - 2<sup>nd</sup> Generation: Sons and daughters of immigrants
  - 3<sup>rd</sup>+ Generations: Subsequent descendants

INTRODUCING NEW ESTIMATES FOR INTERNATIONAL MIGRATION

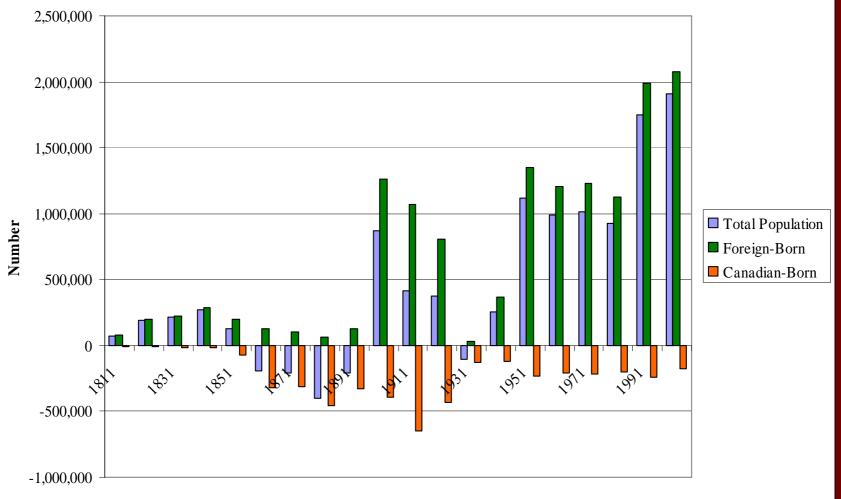
### NEW ESTIMATES, 1671-2006



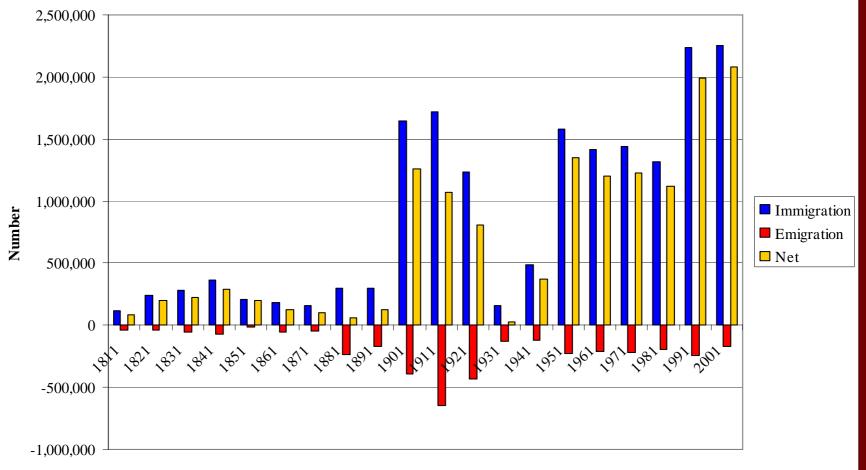
## NEW ESTIMATES FOR EARLY COLONIAL PERIOD, 1671-1841



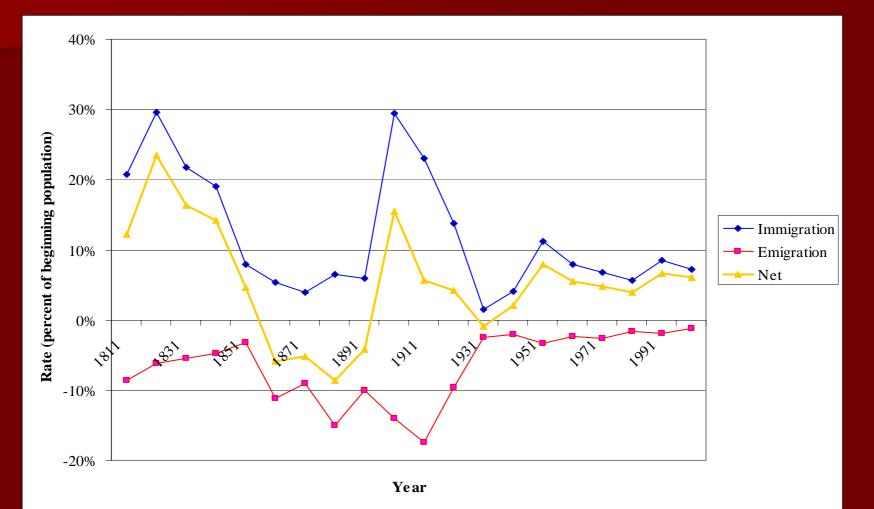
## NET IMMIGRATION BY NATIVITY, 1811-2006



## NEW ESTIMATES FOR FOREIGN-BORN RESIDENTS, 1811-2006



### NEW ESTIMATES FOR RATES OF INTERNATIONAL MIGRATION, 1671-2006



# **CONCLUDING COMMENTS**

The main purpose of this paper is to present new estimates of international migration for Canada

They demonstrate the useful of recent revised historical data and two methods to provide international migration estimates with nativity information If there are questions: Barry Edmonston be@uvic.ca