# STEM Immigrants: The New Mobile Labour

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# **Primary Principles of Immigration Policy**

- 1. Reunification of Diaspora (Israel, Germany, Japan)
- 2. Family Reunification (United States)
- 3. Providing Refugee Status (Sweden)
- 4. Economic Contribution (Canada, Australia, New Zealand)

# High-Skilled Immigrants (STEM Workers)

Fields: Scientific, Technical, Engineering, and Mathematics

#### Skills: Multidimensional

Formal Schooling – Degrees and licenses

**Occupational Experience/Training** 

Language Proficiency

Age – Not too young and not too old

#### Canada: Combine into a point system

US: Reliance on Employer Petitions

Special Treatment for those with PhDs and other advanced training in the US and Canada

## Visa Category, Permanent Resident Status

Canada and the United States, 2011

Visa	Canada		United States	United States	
<u>Category</u>	Number*	<u>Percent</u>	Number* Perc	<u>ent</u>	
Family	56.4	22.7	688.1 64	4.8#	
Economic	156.1	62.8	139.3 1	3.1	
Refugee	27.9	11.2	169.5 <i>1</i>	6.0	
Diversity		—	50.1	4.7	
<u>Other</u>	<u>8.3</u>	<u>3.3</u>	<u>14.9</u>	<u>1.4</u>	
TOTAL (% of population)	248.7 (0.7 %)	100.0	1,062.0 <i>10</i> (0.3%)	0.0	

\* Number in Thousands

# Immediate relatives of citizens, 42.7%. Other family-sponsored, 22.1%.

#### Legal Immigrants by Region of Origin

Canada (2009/10) and the United States (2011)

(Percent Distribution)

<u>Origin</u>	<u>Canada</u>	<u>US</u>
Africa	12.5	9.5
Asia	56.7	42.5
Europe	15.6	7.9
Canada/US	3.6	1.2
Other America	10.8	38.3
Oceania	0.7	0.5
Other and Unknown	<u>0.2</u>	<u>0.2</u>
TOTAL	100.0	100.0

#### Foreign-Born as Proportion of Population

<u>Canada</u> (2006) – 20 percent (Highest level in 75 years)

<u>United States</u> (2013) – 13 percent (Up from the low point of 4.7 percent in 1970)

#### **Immigrant Workers**

## Early 20th Century

1. Low-skilled workers

Expanding industrial and mining sectors

2. Little Public Concern about Income Distribution Little income redistribution

## Early 21<sup>st</sup> Century

1. High-skilled workers

High-technology sectors, Universities, Health Professionals

- 2. Low-skilled workers Elder care and child care Some agricultural sectors
- 3. Much income redistribution to help the poor

## **STEM Worker Impacts**

- 1. <u>Capital Stock</u> Augment Native Human Capital
- 2. <u>Inequality</u> Narrow wage differentials
- 3. <u>Fiscal</u> Pay more in taxes than use in Public Services
- 4. <u>Entrepreneurial</u> Decision-making skills facilitate entrepreneurship
- 5. International Trade Often with foreign connections, networks
- 6. <u>Innovation</u> Use skills to create new products or use existing products in new ways. (e.g., Silicon Valley)

#### Points System – Canada

- 1. Points System
  - Evaluates formal schooling, English/French language proficiency, age, etc.
- 2. Schooling and Language Proficiency
  - Enhance occupational status and earnings
- 3. BUT are workers "correctly matched" in the labor market?
  - High rate of return to correct matching
  - Mismatch if workers have more schooling and proficiency than required by occupation
  - Over-qualified: lower earnings, lower morale
- 4. Will the worker be able to practice his/her occupation?
- 5. Will there be information, networks, training opportunities to reduce extent of "over-qualified" workers?

#### **Immigrant Enclaves**

- 1. Enclaves
  - Blessing: Facilitate Initial Adjustment
  - Curse: Slow long-term Adjustment and Create Tensions with Natives
- 2. More likely in more populous regions
  - Difficult in thinly populated areas
- 3. Enclaves can attract immigrants with lower-cost ethnic goods.
- 4. Policy can help create/enhance enclaves
  - Provincial advertising and recruiting
  - Subsidizing/Facilitating ethnic-specific goods
    (e.g., social clubs, houses of worship, cultural events)

## STEM Workers Highly Mobile

1. International Transferability of Skills

Increasingly STEM workers across the globe read/study the same technical books and articles.

#### 2. Lingua Franca

Increasingly STEM workers across the globe have some proficiency in English or French.

#### 3. Dual/Multiple Citizenships

Increasingly countries are allowing dual and multiple citizenships.

#### 4. International Competition for STEM Workers

Countries are modifying immigration and temporary worker policies to attract STEM workers.

(Even the US has its H1-B visa program!)

#### **Two Public Policy Issues**

#### 1. How to attract STEM workers?

What policies will bring immigrant STEM workers?

## 2. <u>How to keep Immigrant (and Native) STEM workers from leaving?</u>

Once attracted to a destination, how are they retained?

What is the effect of immigrant STEM workers on departure or retention of native-born STEM workers?

Items:

Quality of technological environment? Quality of schooling and cultural life? Quality of ethnic goods?