## The Impact of Canadian Immigrant Selection Policy on Future Imbalances in Labour Force Supply by Broad Skill Levels

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. L'espace s'inscri

Population Change and Life Course Cluster Conference on Income, health, and social programs in an aging population Ottawa, March 27-28, 2013

Vidus produisent du lien social et les sociétés prer







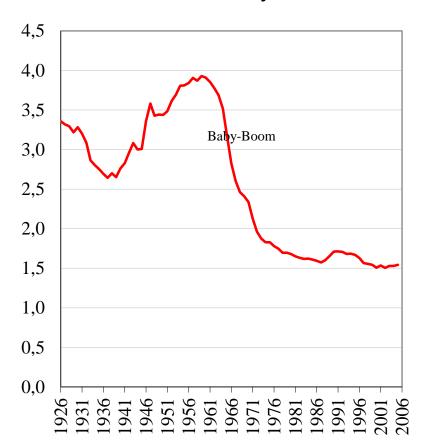
### Context

- Fertility below replacement for the last 40 years.
- Because of demographic inertia, demographers can foresee with reasonable accuracy changes in future population size and structure.
- The first Boomers reached the age of 65 in 2011.
- Population aging and possible labour force shortages.
- Importance of Canadian immigration in the demographic balance.
- An immigration that is increasingly diversified.
- Significantly lower activity rates among recent immigrants and particularly among some visible minority groups (Arabs, Blacks).

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### The cause of population aging



**Total Fertility rate** 





### **The solution: Replacement Migrations?**

UN 2000 Replacement Migrations : Is it a solution to declining and aging population?

- Study 8 countries and regions, but not Canada
- Conclusion is that immigration cannot be a solution to population aging
- How is it for Canada?

### Annual Net Migration (,000) according to different scenarios (2005-2056)

Statistics Canada Main Scenario	211.0
Maintain total population	75.0
Maintain working age pop.	161.5
Maintain the support ratio (15-64/65+)	3 386.4



## High immigration is almost a religion in Canada

 According to the Economic Council of Canada (1991) periods of high immigration were not directly linked to periods of high growth. In the 19th and early 20th centuries, the fastest growth in per capita real incomes occurred at times when net immigration was nil or negative. More recently, there is no significant correlation. However, the same report found that a high rate of immigration was good for Canada's future, and recommended expanding immigration rates to bring Canada's population to 100 million..

Economic Council of Canada (1991), Economic and Social Impacts of Immigration (Ottawa: Supply and Services Canada

 Les Québécois vieillissent, prennent leur retraite. Devant cette désertion du marché du travail, le Québec est forcé de s'en remettre à sa main-d'oeuvre immigrante. Il n'est d'ailleurs pas de question qui fasse davantage consensus, tant dans les partis politiques que dans les syndicats et autres groupes de pression.

April 10, 2010, Le Devoir

 A recent study by Canadian professor Tony Fang recommends that <u>Canada</u> should increase its immigration levels to bolster investment in housing and boost the nation's gross domestic product. <u>Canada already has the highest immigration rate per capita out of all major</u> <u>countries</u>. Fang says that Canada needs an additional one million immigrants. This would be an extra 100,000 immigrants a year during the period 2012 to 2021. This would also help the Canadian economy which is yet to recover fully from the Global Financial Crisis of 2008.

April 2011. http://www.workpermit.com/news/2011-04-12/canada/study-says-canada-should-increase-immigration.htm

• The Immigrant answer - Canada ready to open its door to more immigrants



# We barely never second-guess the supposedly virtous effects of our high immigration rates

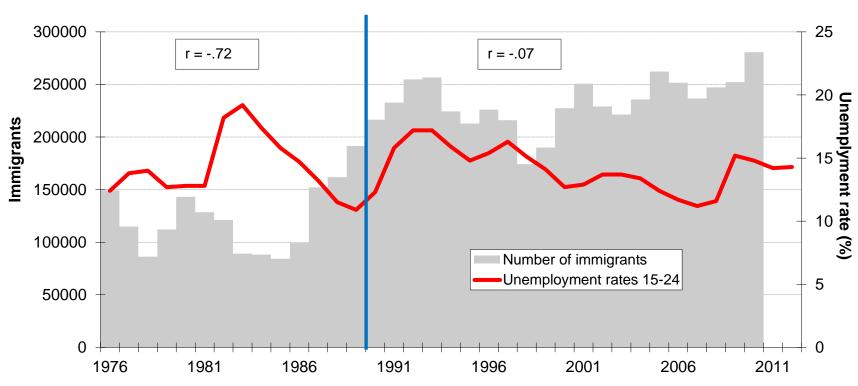
"While domestic production of innovation workers is an imperative, demographic realities dictate that this is not sufficient to meet the expected industry demand; by some estimates, within 20 years there could be almost two million vacancies for skilled knowledge workers in Ontario alone (Miner 2010). An immigration system that targets necessary skill sets presents Canada with an opportunity to leverage the skills, insights and entrepreneurial talents of those born in other countries who come to Canada."



Jenkins, Tom et al.(2011). Innovation Canada - A Call to Action; Review of Federal Support to Research and Development. Expert Panel Report



# Was it a good idea to increase immigration rates starting in 1989?



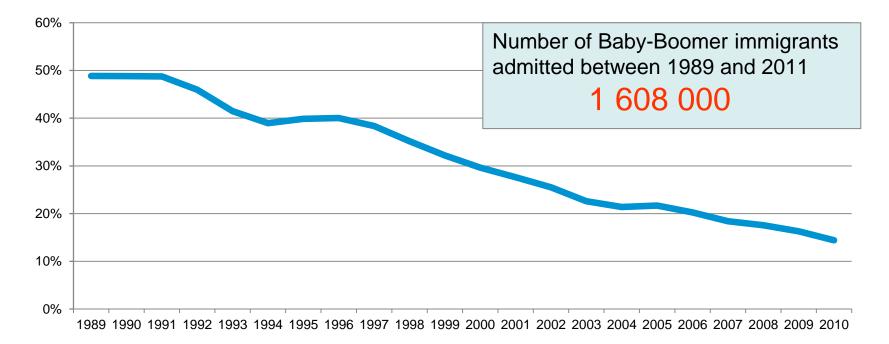
After 1989, immigration is not labor force driven

Sourcse : StaCan LFS (Cansim 28-0086) and CIC Facts and Figures



# Was it a good idea to increase immigration rates starting in 1989?

Too Many, Too Soon Percent of Baby-Boomers among annual immigrants



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## And then...

- High immigration is almost a religion in Canada, yet the Canadian immigration policy of the last 25 years has not been demographically nor economically sound.
  - It has supported unnecessary high population growth rate, and exacerbated the coming population aging challenge by increasing the number of Baby-boomers ready to retire from the labor market.
  - It has drained developing countries from their most skilled workers, but failed in the full economic integration of large cohorts of immigrants.
- Can we better use population forecast to improve future policy's decisions?



## **Objectives**

- Project the Canadian labour force population until 2031 using DemoSim, a continuous time, case based and event based microsimulation model, and look at its ethnocultural and educational composition.
  - 1. How demographic components of population growth and changes in participation rates affect the size and the composition of the future labour force?
  - 2. What will be the composition of the future Canadian labour force?
  - 3. What would be the effect on the LFP of better economic integration of immigrants?
  - 4. Should Canada increase its immigration levels or not if the objective is to alleviate the anticipated decline in support ratio?

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## **Objectives**

- Compare the results of the LF projections by education (supply) with the HRSDC projection of LF demand by level of competence.
  - 1. Is Canada really facing a labour shortage?
  - 2. If so, will it be for more qualified jobs or for less qualified?
  - 3. What are the possible consequences of these trends for future native and immigrant workers?
  - 4. Should Canada revise its immigration policy?



### **Census 2006 – Highlights of Education release**

### **University degree**

Census data showed that young adults had a higher level of educational attainment than their older counterparts. About 29% of young adults aged 25 to 34 had a university degree in 2006, well above the proportion of 18% among adults aged 55 to 64, the group approaching retirement age.

### **Trade Certificate**

Census data suggested that fewer young adults may be following their parents into the trades. The census enumerated 416,000 young adults aged 25 to 34 who had received a trade certification. They accounted for only 10% of the total population in this age group. In contrast, 478,800 adults aged between 55 and 64 had a trades certificate, 13% of the population in this age group which is approaching or entering retirement.



### **Demosim Demographic Modules**

- **Fertility** is a function of age, parity, place of residence, visible minority group, duration of residence for first generation immigrant and generational status for others, religion, place of births, education level and marital status.
- Intergenerational transfers of mother tongue, religion and minority group
- **Mortality** depends on age, sex and place of residence like in traditional projections, but relative risks of dying are also included to take into account the differentials in mortality by education level, immigration status and visible minority group
- **Immigrants** characteristics are allocated through imputation by donors taken from the Census data base.
- Emigration depends on age, sex, place of residence, country of birth and duration of residence in Canada for immigrants
- **Highest level of schooling** depends on birth cohorts, age, sex, place of birth and visible minority group.

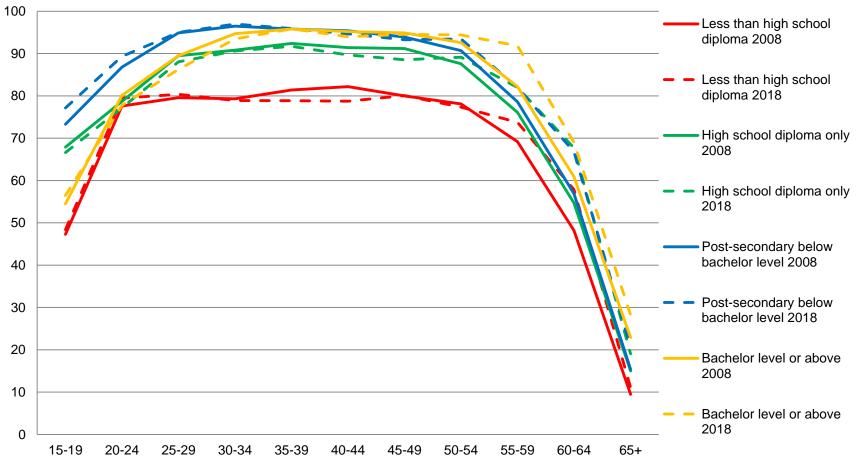


## LF Participation Module: Data sources and method

- In addition to age and sex, the projection of labour force participation accounts for variations in :
  - Education levels (4)
  - Immigration status and period of immigration (4)
  - Visible minority groups (14)
- Estimation of participation rates in two steps:
  - 1. Extrapolation of age, sex and education trends in activity rates by province (LFS)
  - 2. Calculation of activity differentials between immigration status, period of immigration and visible minority groups (Census 2006)

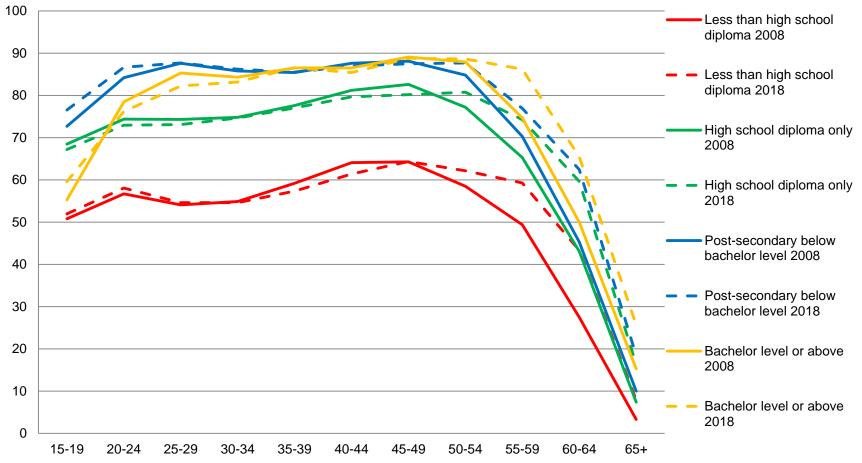


# Labour force activity rates by age and education levels for males, Canada 2008 and 2018





# Labour force activity rates by age and education levels for females, Canada 2008 and 2018





### **Assumptions and scenarios**

Scenario	Immigration	Fertility	Participation rate	Differentials Immigrants / vis. min	M/W activity ratios
Low Growth	6.0/1000	1.5	Increasing trend	Yes	Yes
Reference	7.5/1000	1.7	Increasing trend	Yes	Yes
High Growth	9.0/1000	1.9	Increasing trend	Yes	Yes
No differentials	7.5/1000	1.7	Increasing trend	No	Yes

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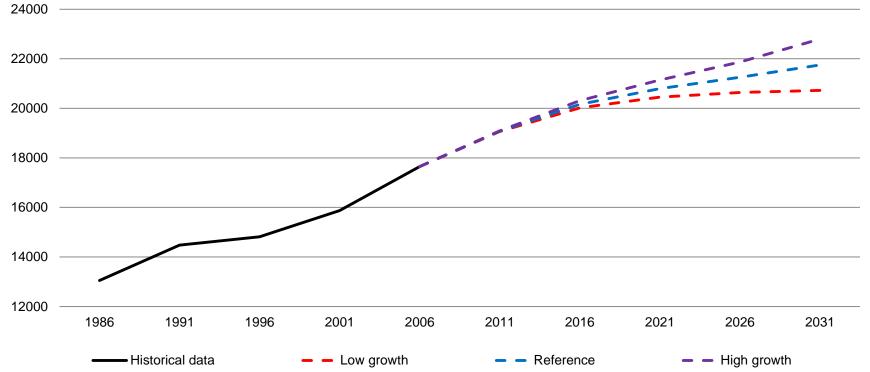
# Results

Thousands



# Canada's labor force population will continue to increase but a slower rate

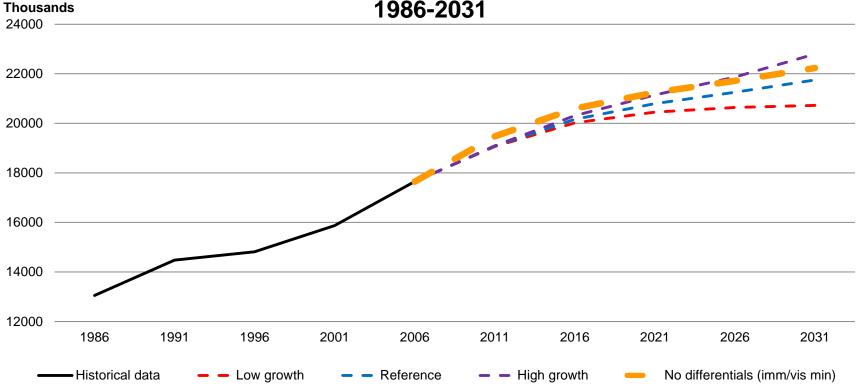
## Canada's labour force under 3 demographics scenarios, 1986-2031





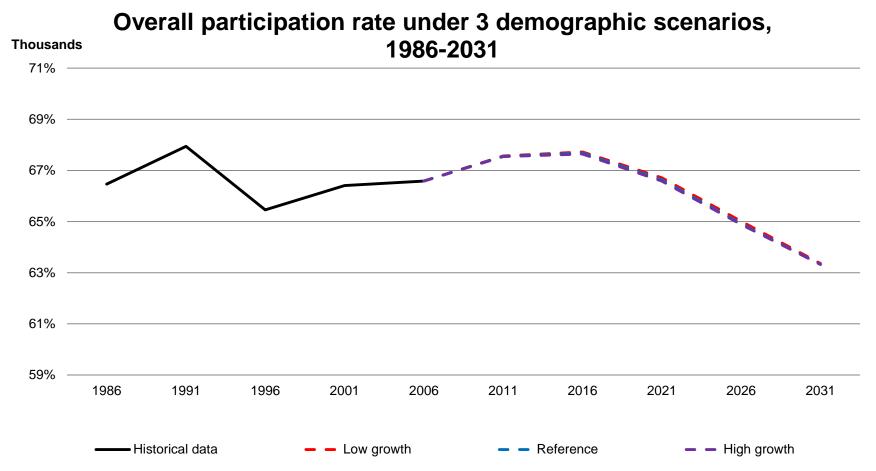
### A better economic integration of immigrants could increase labour force population in similar proportion to an increase of immigration

Canada's labour force under 4 different scenarios, 1986-2031





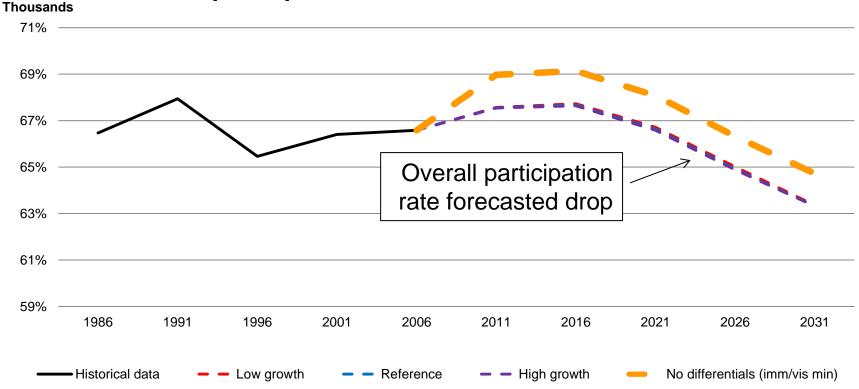
# Demographic assumptions have no effect on the evolution of the overall participation rate





## However, a better economic integration of immigrants first increases overall participation and then postpones the decreasing trend

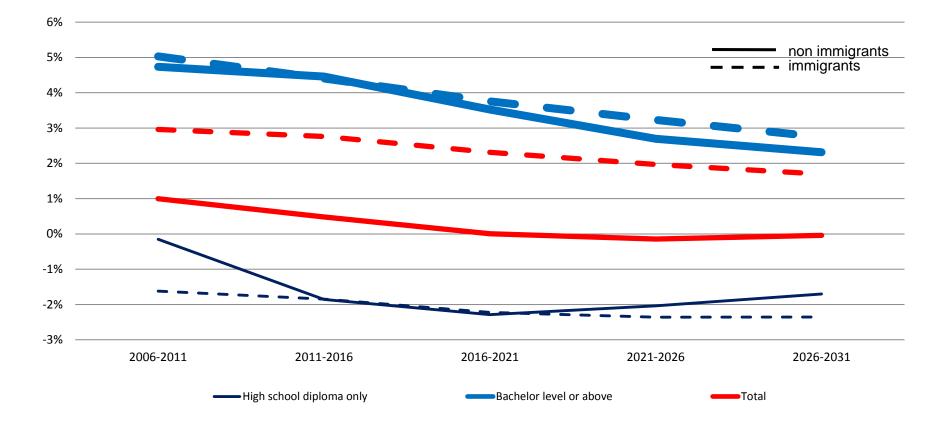
**Overall participation rate under 4 scenarios, 1986-2031** 





# Possible labour force shortage for lower skilled jobs and surplus of highly skilled employees

Labour force population growth rate by education and immigrant status





### Towards a knowledge society ...

#### Variation in Canada's labour force by education level

Total	17646	21749	23%	
above	5075	575 9420	145%	
Bachelor level or	3875	9426	143%	
bachelor level	0507	0074	070	
Post-secondary below	6507 6874	6%		
only	4001	5023	-34%	
High school diploma	4601	3023	-34%	
diploma	2005	2423	-370	
Less than high school	2663	2425	-9%	
	2000	2051	2006-2031	
	2006	2031	Variation	

# ...or an overqualified labour force?

- In 2008, 28 % of Canadian waged employees were overqualified.
- Over qualification rates reached 42 % for immigrants
- and 60% for immigrants with a university degree

(Gilmore, 2008)



### **Projection of LF Demand by Broad Skill Levels**

HRSDC (2008) Looking Ahead: 10-Year Outlook for the Canadian Labour Market Ressources humaines et Human Resources and Développement des compétences Canada Skills Development Canada

Les gens • Les partenariats • Le savoir

Direction de la recherche en politiques



Perspectives

du marché du travail canadien pour la prochaine décennie (2008–2017)

Direction de la recherche en politiques Politique stratégique et recherche

Novembre 2008



# Five broad skill levels are defined by HRSDC from the National Occupational Classification (NOC 2006):

- Level 0 Management
- **Level A** Professionals (occupations usually requiring university)
- Level B Skilled and Technical (occupations usually requiring college education or apprenticeship training)
- Level C Intermediate and Clerical (occupations generally requiring completion of high secondary school)
- Level D Elemental and Labourers (occupations usually requiring on-the-job training)

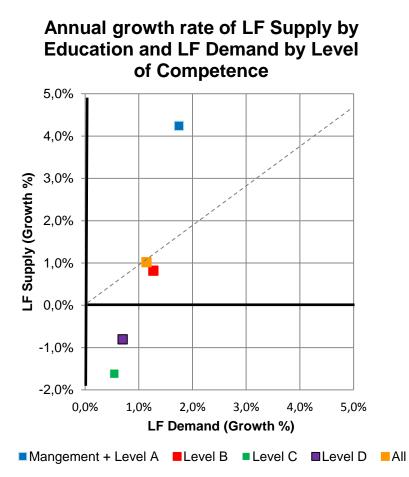
### **Definition of Overqualification**

Level of education of employee > skill level of the occupied job

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### **Overqualification likely to increase**



### Over the next 20 years,

- The total growth in LF supply matches the projected demand.
- For technical jobs (Level B) projected supply will be slightly lower than demand.
- For lower skill jobs, the projected mismatch can be important and labor shortages are likely to occur.
- For professional jobs (Level A) growth rate in supply will double the demand



## **Overqualification index (%) by place of birth, Montreal, Toronto and Vancouver, 2006**

Place of Birth	Montréal	Toronto	Vancouver
Total	33.4	34.4	34.4
Canada	31.4	27.6	29.0
Outside Canada	41.2	40.9	41.9

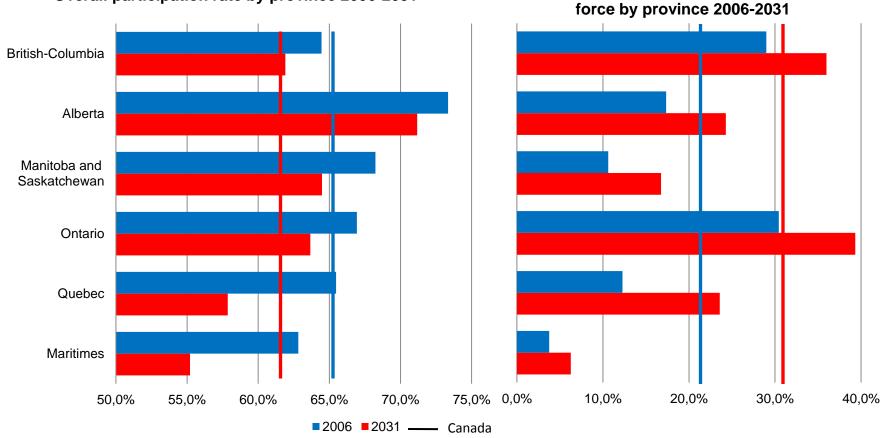
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Percentage of immigrants in the labor

### **Regions with few immigrants see their participation rate decreases more**

Overall participation rate by province 2006-2031



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### **Discussion**

- More Diverse Labour Force
  - Fractionalization (ethnic, linguistic and religion)
  - Economic Integration
  - Future Litteracy Level
  - Productivity?
- Skill Level
  - Overqualification
  - Returns of higher education



## Conclusion

- Under all scenarios, Canada labour force population will continue to increase in the next 25 years, but its age structure, ethnocultural and educational composition and regional distribution will change rapidly.
- Demographic components of population change have an effect on the size of the future labour force, but cannot modify the future evolution of the overall participation rate, but better economic integration of immigrants can.
- The overall participation rate will decline under all scenarios after 2011-2016, but not dramatically at the Canada level.
- However, some regions are likely to face labour shortage unless the distribution of immigrants change and their concentration in a few large metropolitan areas decreases.



## Conclusion

- We are also likely to observe an important change in the educational composition of the labour force, with very rapid increase among most educated and sizable decline among less educated.
- In general, the supply of professionals (University graduates) workers will likely be larger than the demand, while labour shortages can be apprehended for lower skill jobs.
- This can translate into increasing overqualification of the labour force and reducing returns to education.

Linporalités. L'espace occupe a. Ingique des mutations sociales, économic de la société québécoise. L'espace s'inscrit l'action publique et des rapports sociaux ant à comprendre l'aménagement

# **Questions?** Comments?

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urbaines et rueles et les quartiers son <sup>100</sup> sont developpées assurant la vitalit Thank you

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