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The High Education/Low Income Paradox in Canada

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Skills anticipation and matching

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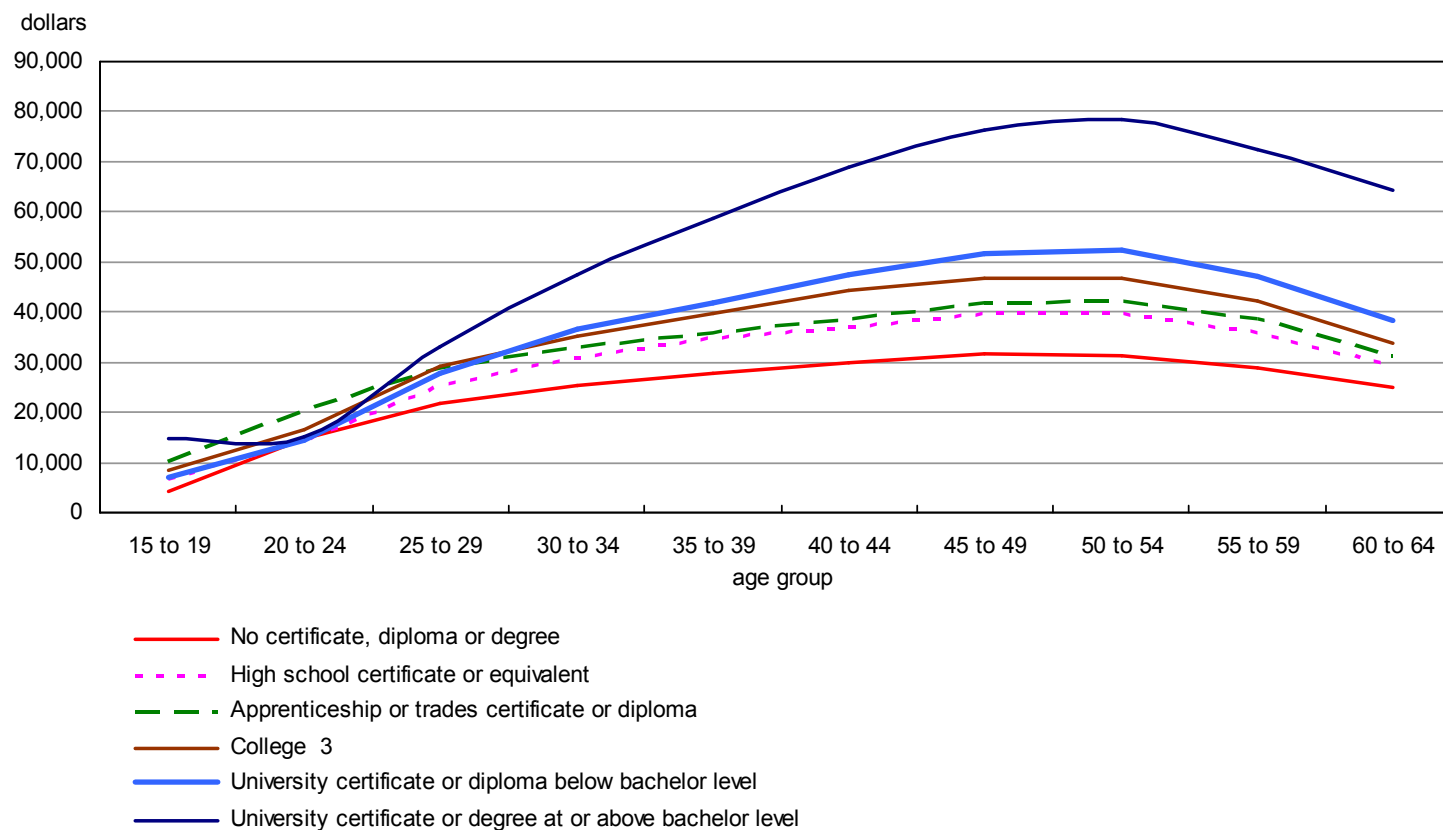
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Context

- An earnings approach to matching educational qualifications and jobs
- Education expected to be a sorting mechanism for the distribution of earnings
- On average, better educated individuals tend to earn higher income... but is this enough?

Earnings trajectories by education level

Average earnings/employment income, by age group and educational attainment, Canada, 2005 (last Census of population)



Education and earnings

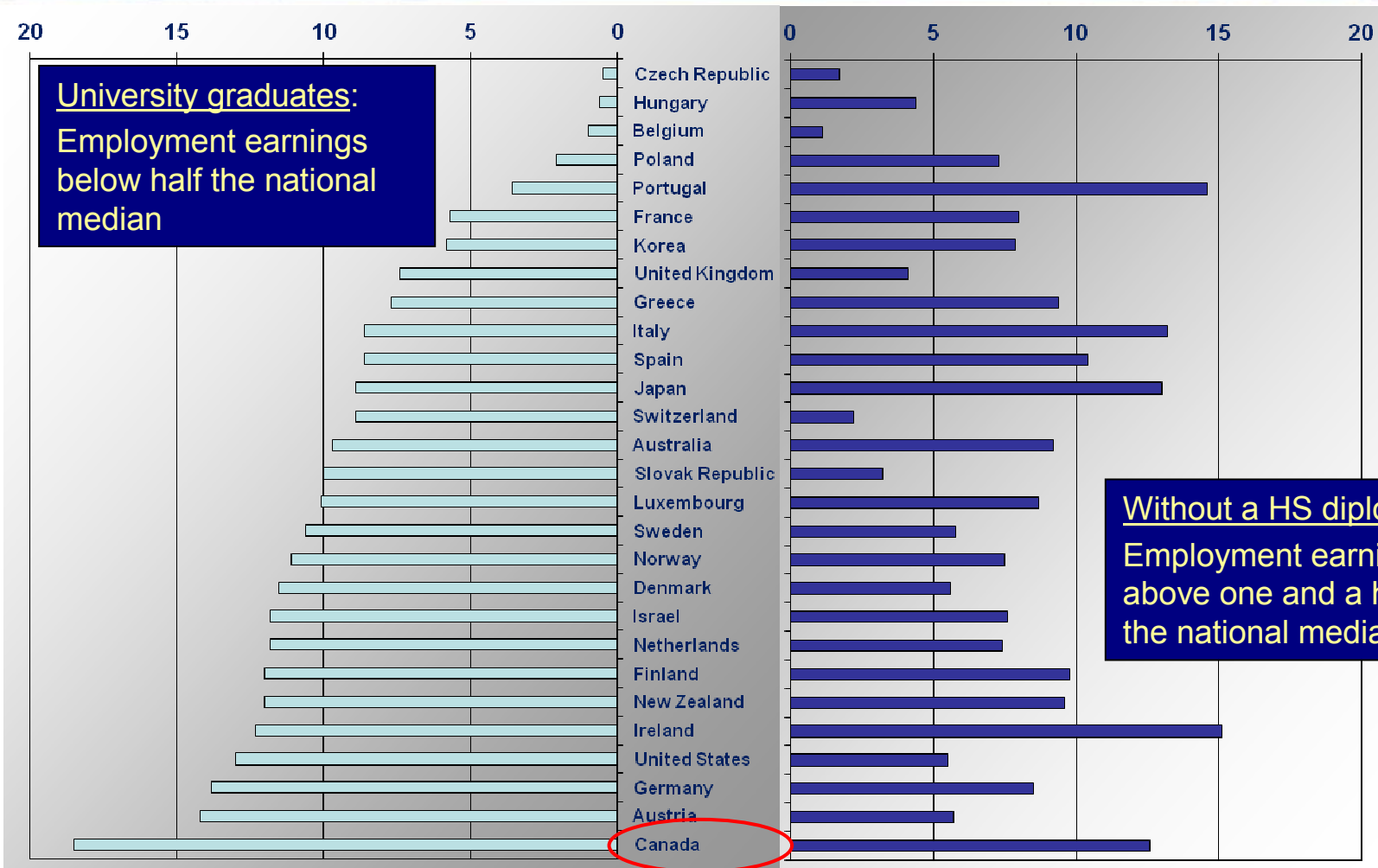
Population 25-to-64-year-olds with earnings from employment

	Level of earnings						Proportion with no earnings
	Less than \$18,500	\$18,500 - \$37,000	\$37,000 - \$55,500	\$55,500 - \$74,000	More than \$74,000	Total	
Below upper secondary	39.2	31.4	16.7	6.7	5.9	100	36.6
Upper secondary and PS non-tertiary	28.3	28.4	21.6	11.0	10.7	100	17.8
Tertiary-type B education	23.0	25.9	24.0	13.6	13.5	100	12.3
Tertiary-type A and advanced research programmes	18.5	15.4	19.4	16.9	29.8	100	10.4
All levels of education	25.1	25.0	21.2	12.8	15.9	100	17.1

Earnings distribution: Two stories

- ✓ 18% of university graduates earn less than half the median earnings
- ✓ 13% of those without a HS diploma have high earnings

Population aged 25 to 64 years with employment earnings

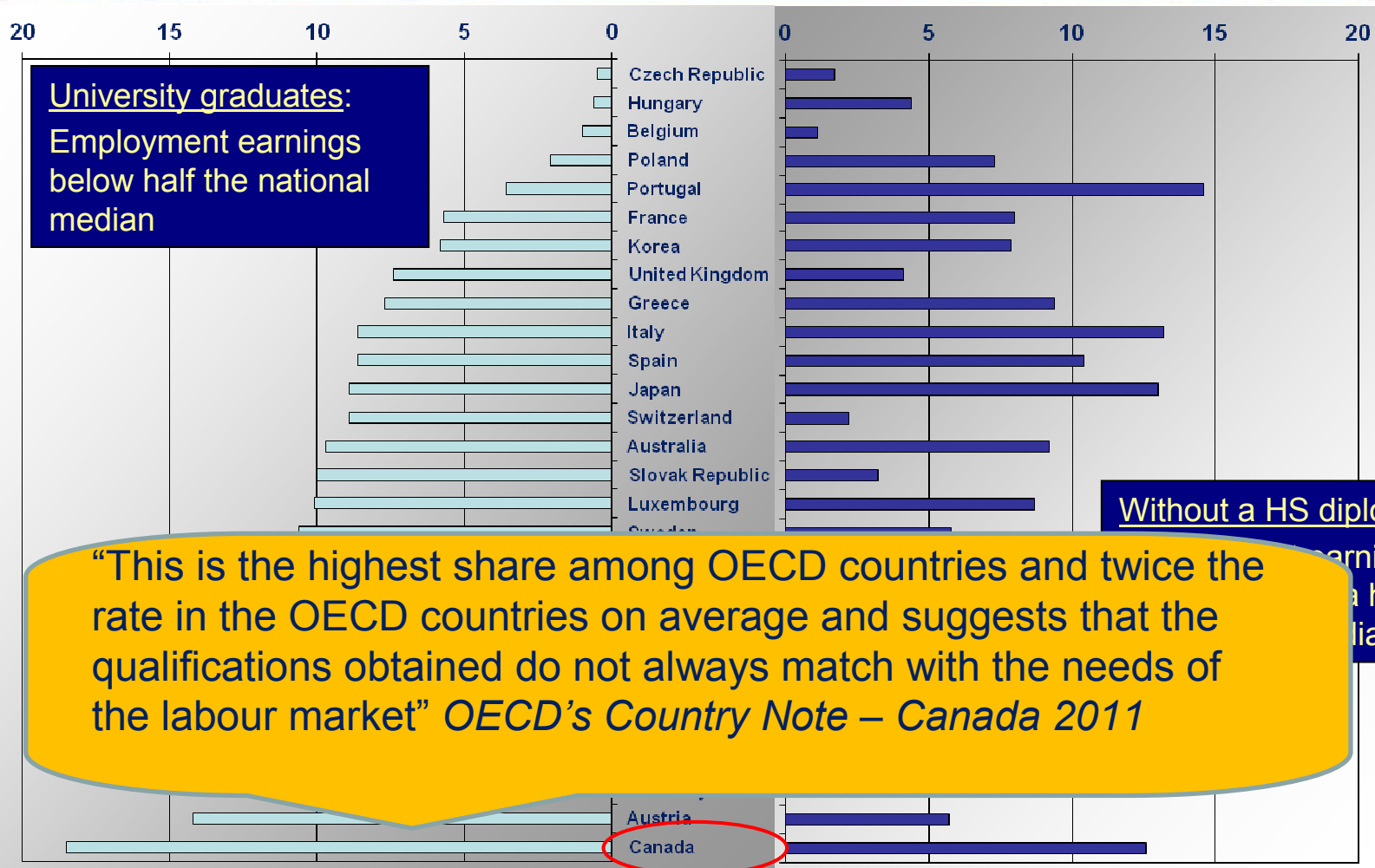


EAG 2011 (Data for 2009 or latest available year)

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EAG 2011 (Data for 2009 or latest available year)

Large dispersion in earnings of university graduates – Explanations?

- A study tried to shed light on the characteristics of university-educated Canadians with low earnings:
 - Demographic: age, gender, family situation, immigration
 - Geography: province of residence
 - Education: field of study, location of study
 - Major activity: main activity, work schedule
 - Industry and occupation
- Factors looked at both independently and interactively

Which characteristics associated with lower returns to education?

- Women more likely to experience low earnings
- Polarized age distribution: younger and older
- Immigrant status: more accentuated among recent immigrants
- Living in B.C. or in the Atlantic provinces
- Graduates of psychology, social sciences and humanities
- Main activity during the year other than working – the situation of 48% of university graduates!
- Not being in a full-time/full-year working situation
- Working in less skill-demanding occupations

Taking interactivity into account through multivariate analysis – which factors hold?

- Gender and age (for the young) effects are reduced when major activity and work schedule are taken into account, but not much impact of the field of study
- Effect of immigrant status (recent) remains strong, and interacts with province of residence
- Some fields of study keep coming up with a strong impact, but somewhat reduced when occupation/industry is considered → demonstrates the limited labour market opportunities for some fields of study
- Occupation and industry effects remain strong

Lessons and further research (1)

- On the research approach:
 - looking at earnings presents a relevant perspective on education-job matching
 - averages hide a lot of the real picture – necessity to bring distributions into the analytical toolkit
- On the research findings:
 - whether working is the main activity is a key determinant – but why so many with higher education are not working → impact on social/public returns on educational investments
 - significant issue of credential recognition for immigrants
 - disparity of economic opportunities in a large country

Lessons and further research (2)

- On complementary research:
 - studies largely supply-side driven – need for skill use analysis in various contexts of employment
 - the findings of the Canadian study show that several of the low earnings factors rest not with poor paying conditions in a job, but rather with working itself not central in life – could a population selection bias explain the large difference with other countries?
 - we would like to see similar studies done in other countries