Recognition of foreign qualifications and skills in the Canadian labour market – results from PIAAC

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Central Services

Approx. 630 Staff members
Approx. 64% female staff
33 trainees in 5 Occupations
State recognised training occupations in Germany

One of BIBB’s statutory tasks is to maintain and publish the German list of recognised training occupations.

327 training occupations in dual system in 2017
The dual vocational training system

Approx. 522,200 apprentices per year / 1.3 Mio in total

Training company

- Approx 70%
- Approx 430,000 Training Companies
- Training financed by companies

Part-time vocational school

- Approx 30%
- Approx 1,600 Vocational Schools
- School financed by Federal states

Responsible:
- Federal Government
- Länder

Source: Ministerium für Bundesangelegenheiten, Europa und Medien des Landes NRW

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Recognition of foreign qualifications and skills in Canada

Aims of grant project:
• create an empirical basis regarding the situation of immigrants in the Canadian labour market
  ➢ explanation of skill under-utilization and pay inequity

• identify approaches that employers use to evaluate and recognize foreign qualifications and skills
  ➢ reasons and rationales of employers and employees in the recruiting process

Focus of current paper:
Analysis of impact factors of individual wages focusing on migration status
Background of Canadian migration policy

• Canadian Society characterised by plurality of immigrants

• In 2011 22% of workforce were born abroad

• Since 1967 (implementation of the points system) Canadian migration policy focusing stronger on economic criteria as well as qualifications and skills (Walker 2007; Guo/Shan 2013)

• Efficiency of the Canadian selection system has constantly been discussed critically (e.g. Li/Sweetman 2013; Picot/Sweetman 2012; Sweetman/McBride 2004)
Research on immigrants’ situation in the Canadian labour market

- Several studies document **deterioration of qualified immigrants’ labour market outcomes**: comparatively lower income, unemployment, devaluation of qualifications, skills and work experience as well as economic marginalisation (e.g. Picot/Hou 2003; Picot 2004; Thompson/Worswick 2004; Reitz 2005; Green/Worswick 2012; Schaafsma/Sweetman 2001)

- **Macro-level**: Income differences and over-education of immigrants **mainly explained by imperfect transferability of human capital across country borders** (e.g. Li 2008) depending on similarities of country of origin and host country in terms of economic conditions, educational systems, industrial structure, institutional settings, language etc.

- **Meso-level**: Pay inequity of immigrants more related to companies’ hiring decisions (limited job access) than internal wage policies (cf. Sweetman/McDonald/Hawthorne 2015; Owusu/Sweetman 2015)

- **Micro-level**: during their first two years after arriving in Canada immigrants perceive **lack of Canadian work experience and recognition of foreign credentials as biggest obstacles** regarding access to the labour market (Kustec/Thompson/Xue 2007)
Human capital theory (Becker 1964; Schultz 1961)

- **Definition:** Human capital is the stock of competencies, knowledge, and personality attributes, including creativity, embodied in the ability to perform labor so as to produce economic value.

- **Assumption:** education provides skills to individuals, which they use in their employment and which make them a **productive and functional member of society** (Walters 2004).

Source: Swanson/Holton (2001), p.110
Applying human capital theory

➢ For respective empirical analyses Mincer (1974) developed a regression model.

The standard form of the Mincerian wage regression is:

\[
\log y = \log y_0 + rS + \beta_1 X + \beta_2 X^2
\]

where \( y \) is the income (\( y_0 \) is the income of an individual with no education and no experience), \( S \) is the years of schooling, and \( X \) is years of labour market experience.

**Criticism:**

Human capital theory was often questioned regarding its argument that education leads to the acquirement of skills and thereby improves the productivity of individuals (e.g. Livingstone 1998; Wolf 2002).
Useful theories to extend human capital theory

**Bourdieu** extended the economic term of capital to be able to determine a person’s social status in a society. He interprets social capital as a resource, which enables an individual to claim a certain position in a social space (cf. Bourdieu 1983, p. 183ff.).

1. **economic capital**: ownership of any goods (enterprises, means of production, property) and any property (money, shares, jewelry, art)

2. **social capital**: actual and potential available resources, which derive from the affiliation to and the participation in a social network

3. **cultural capital**:
   - **objectified**: property of material cultural goods like books, music instruments, drawings, machines
   - **incorporated**: cognitive competence; acquired education via the educational measures of the family (primary education) and school education (secondary education)
   - **institutionalized**: educational degrees and academic titles, which are accredited in credentials/certificates; official recognition of the incorporated cultural capital
Useful theories to extend human capital theory

**Credentialism** (Collins 1979):

- Only weak relationship between credentials of the educational system and skills, which are required for an employment. Range of credentialism reaches from the assumption that credentials do not contain any information value at all until the assumption that required educational level needed for a certain job increased over time.

- Points out high importance of the labour market regarding the adjustment of the value of education and credentials.

- Credentialism is a mechanism of social closure (Weeden/Grusky 2012) and thereby represents an approach to explain discriminatory recruiting decisions.
Methodological Design

**Research objective:** Analysis of impact factors of individual wages focusing on migration status

**Data source:** Canadian PIAAC data set 2012
- Representative sample of over 27,000 adults aged 16 to 65
- Oversampling of immigrants

**Data set contains:** Sociodemographic characteristics, information on educational attainment, cognitive skills, work experience, migration status and hourly wages

**Estimation sample:** Only including employees who work more than 30 hours per week

**Estimation model:** Extended Mincer regressions
Results

Descriptives

- 44.62% females
- 25.31% born abroad
- 15.43% acquired their highest qualification outside of Canada

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<th>Variable</th>
<th>Mean</th>
<th>Std. dev.</th>
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<tbody>
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n=12,937; weighted; Data source: PIAAC 2012.
### Wage effects of education, work experience, skills and migration status

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
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<th>Model 3</th>
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Notes: robust standard errors (in parentheses); n=12,937; weighted data; significance: bold = p<0.01; Data Source: PIAAC 2012.
Summary of results

**General:**
- Mincer regression model can be replicated
- Numeracy skills explain additional variance of wages

**Migration specific:**
- Foreign country of birth has negative income effect
- Negative effects if qualification was acquired abroad (income penalty for North America or Europe relatively small)
- Negative Interaction effect between born abroad and years of education
- No significant interaction effects between born abroad and work experience as well as numeracy skills
Conclusion and forecast

Overall:

➢ Findings generally confirm the discrimination of immigrants in the Canadian labour market regarding their income.
• But the data only proof the devaluation of qualifications acquired abroad.

Limitations:
• Operationalisation of migration status
• Trade off between consideration of all relevant factors and parsimony of model
• Actuality of data

Further project:
Investigate the reasons for the discrimination of migrants by conducting case studies in Canadian enterprises.
Maximum variation sampling: Health and IT sectors
Thanks for your attention!

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Alternatives to human capital theory?

**Information feedback process as part of the signaling model**

- Assumptions of the employer about unobservable characteristics of the job applicant given specifications of the signal
- Empirically determined correlation between unobservable characteristics and the signal after hiring process
- Decision of the employer about the wage structure
- Decision of the job applicant about specification of the signal
- Costs for generating the signal

Source: c.f. Spence 1983, p. 359

- Education does not increase productivity, but signals an employee’s qualifications to potential employers who do not have respective information.
- Education increases earnings not because it increases productivity, but because it certifies that the employee belongs to the group of smart employees.

**Self selection constraints:**

1. Level of education of signaling must be characterized in a way that non-smart employees are unwilling or unable to attain it.
2. Achieving a given level of education must be cheaper for smart employees than for non-smart employees.
Sequential Explanatory Mixed Methods Design

Sequential Explanatory Mixed Methods Design

1. Conceptualization of the analyses of the Canadian and German PIAAC data set
2. Analysis of the Canadian and German PIAAC data set regarding the labour market success of immigrants
3. Comparative analysis of the results of the quantitative research phase
4. Inferences and conclusion

5. Conceptualization of the case studies and expert interviews in Canada and Germany considering the results of the quantitative research phase
6. Case studies and expert interviews in Canada and Germany to analyse reasons and explanations for the labour market success of immigrants as well as measures, methods and approaches of employers and employees towards recognition, integration and overcoming of information asymmetries
7. Comparative analysis of the results of the qualitative research phase
8. Inferences and conclusion

Overall conclusions and recommendations

Structure referring to: Teddlie/Tashakkori (2006), p. 22