OVEREDUCATION AS HIRING POLICY
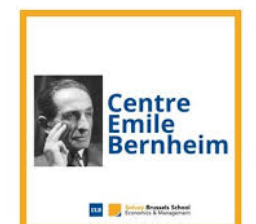
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INTRODUCTION

▸ Workers' level of education has substantially risen over the last decades :

  ▸ 22.4% of tertiary educated in 2000 (EU27)

  ▸ 34.6% in 2011

▸ Objective of the European Union to reach 40% by 2020

▸ If this increasing level of education does not match jobs requirements, **overeducation** may appear

INTRODUCTION

▸ **Overeducation** ?

   ▸ Worker's attained level of education

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     Level of education required for the job

▸ In Europe, overeducation concerned 36% of workers in the EU27 over the decade 2001-2011

▸ Overeducation appear to represent important issues whose effects need to be investigated

INTRODUCTION

▸ This paper provides empirical evidence on the direct relationship between overeducation and firm productivity from a firm point of view

▸ To what extent a firm may influence its productivity by wisely using job market and by hiring more higher educated workers than other firms in the same industry ?

  ▸ **By relying on an overeducated hiring policy?**

LITERATURE REVIEW – OVEREDUCATION AND FIRM PRODUCTIVITY

▸ Microeconomically : 2 different approaches related to overeducation and firm productivity

   ▸ The first relies on human capital theory and states that education allows developing capabilities that make workers more productive and that gaps in earnings should reflect these different levels of productivity

      ▸ The effect of overeducation on productivity could be estimated through wages and overeducated workers, by receiving higher wages, would be more productive

   ▸ The second investigates the impact of overeducation on job satisfaction and other correlates of workers' productivity

      ▸ Overeducated workers, frustrated by using fewer skills than they have, could be less satisfied, more absent and sicker than their adequately educated peers

LITERATURE REVIEW – OVEREDUCATION AND FIRM PRODUCTIVITY

▸ 2 approaches - 2 conclusions :

    ▸ HCT suggests that investing in overeducated workers should lead to higher levels of productivity

    ▸ Job satisfaction studies don't come to the same end

▸ Several methodological limitations:

    ▸ Education should influence productivity and wage in the same way

    ▸ Job satisfaction is not the only factor influencing productivity through education

    ▸ The main shortcoming : **Indirect investigations**

METHODOLOGY

$$\ln VA_{j,t} = \beta_0 + \beta_1(\ln VA_{j,t-1}) + \beta_2 Att_{j,t} + \beta_3 O_{j,t} + \beta_4 X_{j,t} + \gamma_t + \vartheta_{j,t}$$

▸ Where :

  ▸ $VA_{j,t}$ is the productivity of firm j at year t

  ▸ $Att_{i,j,t}$ is the average percentage of workers within the firm j at year t with a level of attained education i (i corresponding to primary, secondary, post-secondary non university or post-secondary university (or more))

  ▸ $O_{j,t}$ is a binary variable that takes the value 1 if the firm j hires more highly educated workers than the mean of the whole firms belonging to the same industrial sector

  ▸ $X_{j,t}$ is a vector representing aggregated characteristics of the firm j at year t (shares of women, blue-collar and workers under indefinite term contracts, size of the firm and sectorial affiliation (19 dummies))

  ▸ y_t is a set of year dummies

METHODOLOGY – ESTIMATION TECHNIQUES

▸ Pooled OLS

▸ FE

▸ **GMM-SYS**

DATA

▸ Dataset covering the years 2008-2016

▸ Unbalanced panel of 289,445 observations related to 30,727 firms

OVEREDUCATION AS HIRING POLICY: USEFUL FOR PRODUCTIVITY?

RESULTS

Table 2: Overeducation hiring policy and productivity		
Estimator / Dependent variables:	**Value added per worker (ln)**	
	OLS	**GMM-SYS**
Value added per worker (one year lagged, in ln)	0.817*** (0.003)	0.647*** (0.022)
Attained education (one year lagged, in % of workers)		
Secondary degree	-0.006*** (0.002)	-0.001 (0.019)
Post-secondary non-university degree	0.017*** (0.005)	-0.063* (0.038)
Post-secondary university (or more) degree	0.076*** (0.008)	0.042 (0.058)
Overeducation (one year lagged, in dummy)	**0.017*** (0.002)**	**0.041** (0.020)**
Firm characteristics[b]	YES	YES
Year dummies (11)	YES	YES
Sig. model (p-value)	0.000	0.000
Adj. R squared	74.46	
Hansen statistic		682.19
p-value		0.00
Arellano-Bond statistic (AR2)[c]		9.89
p-value		0.00
Number of firm-year observations	30727	30727

CONCLUSION

▸ Positive relationship between attained level of education and productivity

  ▸ In favor of a constant rise in the level of education

▸ Overeducation seems to improve productivity

  ▸ Beneficial for firms in their hiring decisions ? Careful !

THANKS !