

Managerial income polarization along the Hungarian NUTS4 system

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Session 2B: Labour market changes




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Overview

- Introduction
- Database
- Main results
- Indicators
- Summary
- Future research



Introduction

- Basis: increase in income differences in the labor markets of most developed countries
 - From 1980 still increasing
- Polarization: Demand for employees with higher wages increased at a higher level than the need for employees with middle or low wages
 - Acemoglu and Autor (2011): wage differences in the USA (1980-2009)
- Various reasons behind this phenomenon
 - Dickens and Katz (1987) wages of different occupations are highly correlated between industries
 - If a field is highly paid in one sector  wage premium in other industries
 - There are better-paying industries
 - If someone looks for a job in a highly paid industry, then in the same occupation, he or she will receive higher wages



Analyze the wage differences between different occupations in Hungary

Database

- Hungarian Wage Tariff database, 2016
- 186,568 companies and 906,900 records of employees
- Do not contain demographic information (Marital status, number of children)
- It consists of data in connection with the analyzed companies
- Contains more detailed information about the location, industry, or geographical, territorial data of the company
- Hungarian NUTS 4 system (175 micro-regions)
- Gross wage

Main results

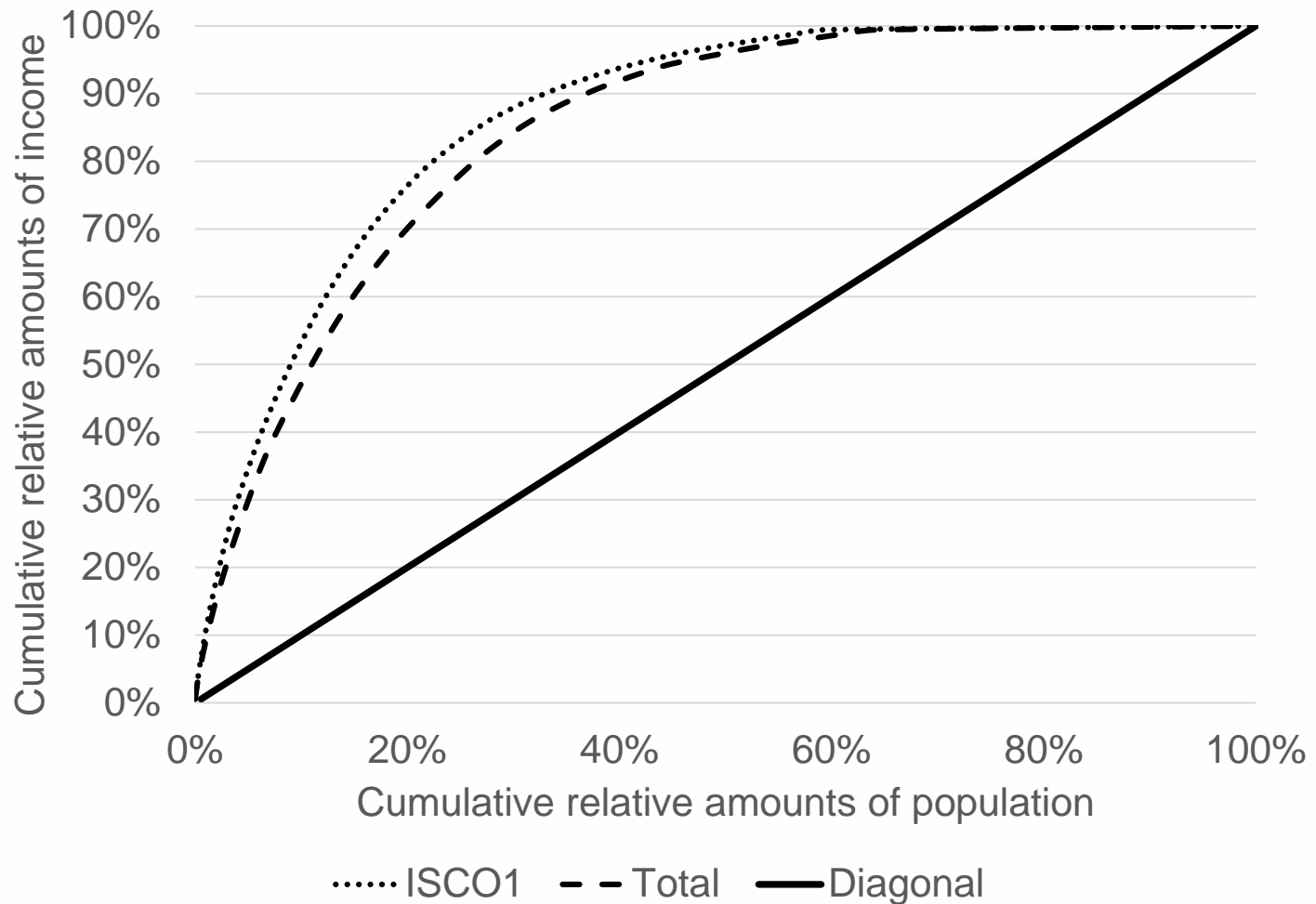
- Introduce the geographical polarization of Hungarian wages
- Primary focus: show the managerial income differences from a lesser analyzed point of view
- We choose managers from the International Standard Classification of Occupations (ISCO)
- Prior assumptions: there are significant differences in their salaries, which is closely connected to the economic potential of a given geographic location
- Show the differences along two theoretical viewpoints
 - NUTS4 breakdown: detailed but not too fragmented
 - Possible to represent the regional disparities properly
 - ISCO:
 - The four-digit data was aggregated to one digit to have a proper level of classification
 - The examination of each class separately served as a benchmark to identify the unique characteristics of managers

ISCO system in Hungary

0.	Armed forces occupations
1.	Managers
2.	Professionals
3.	Technicians and associate professionals
4.	Office and management (customer services) occupations
5.	Commercial and services occupations
6.	Agricultural and forestry occupations
7.	Industry and construction industry occupations
8.	Machine operators, assembly workers, drivers of vehicles
9.	(Elementary) Occupations not requiring qualifications

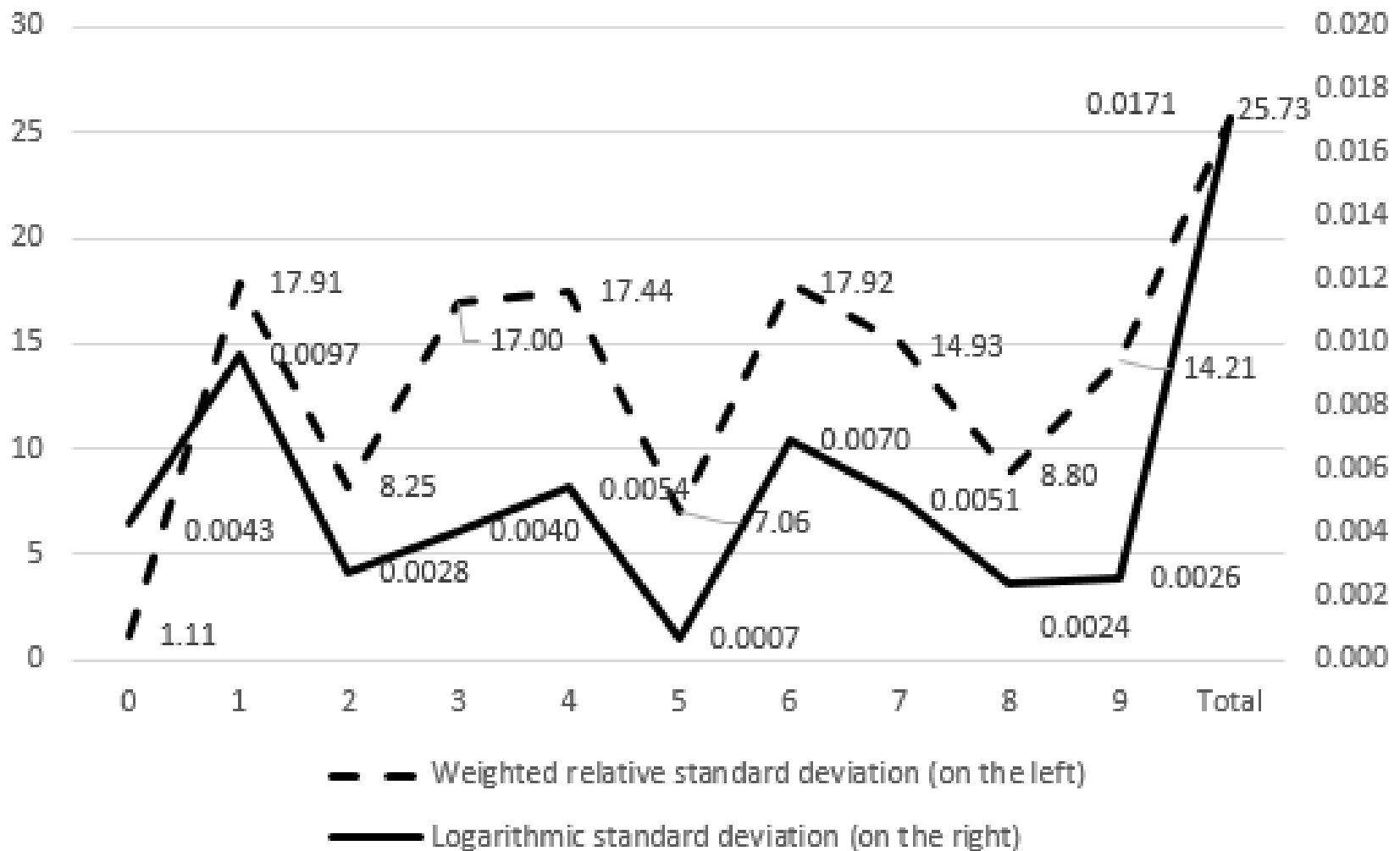
Source: Own editing based on Magyar közlöny, 2010

Lorenz curve of income of managers and all of the other employees based on the micro-regional breakdown, 2016



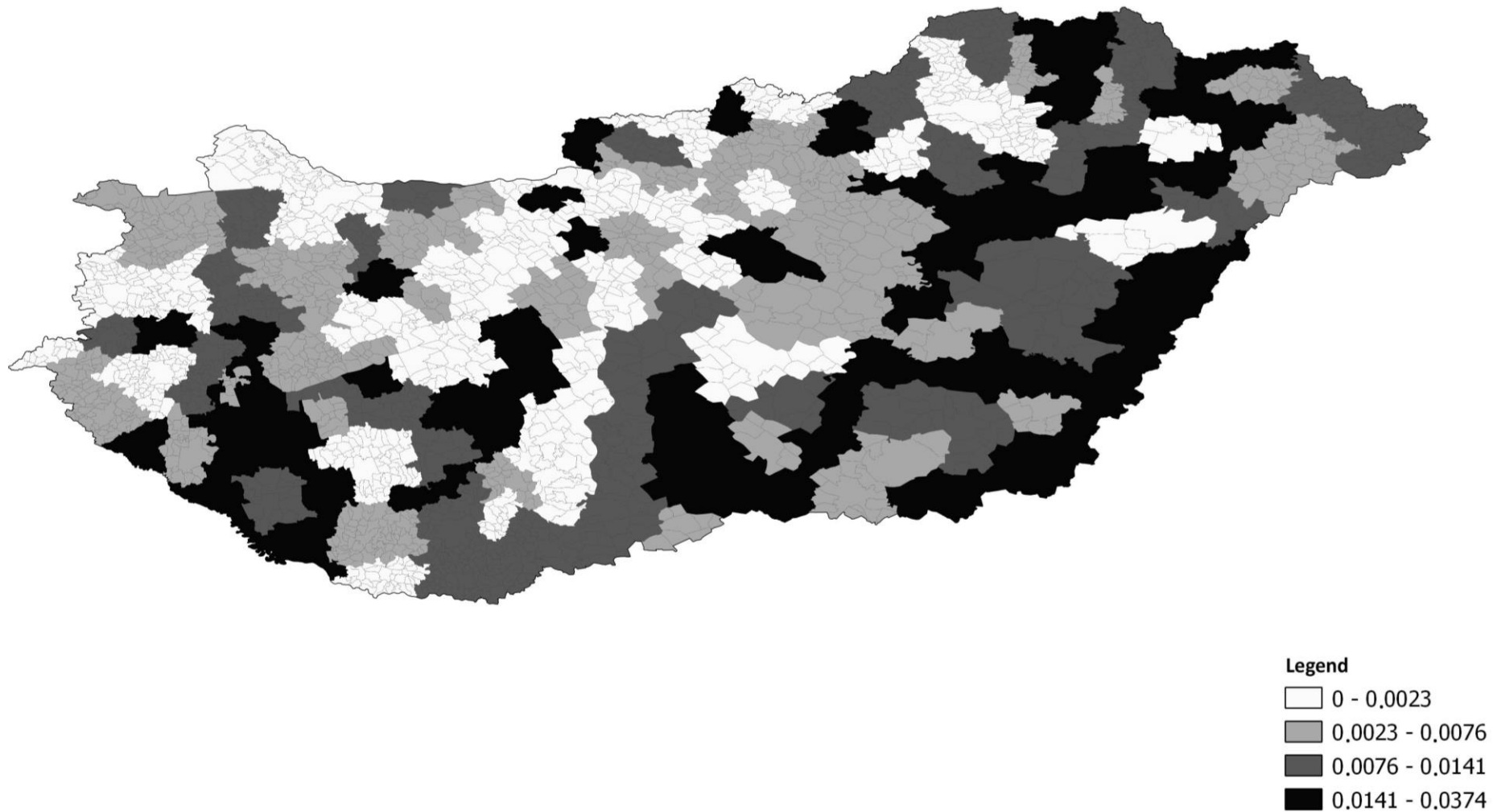
Own editing based on Hungarian Wage Tariff database of 2016

Logarithmic standard deviation and relative weighted standard deviation along ISCO, 2016



Own editing based on Hungarian Wage Tariff database of 2016

ISCO 1 factors of logarithmic standard deviation along micro-regional breakdowns, 2016



Own editing based on Hungarian Wage Tariff database of 2016



Summary

- A selected range of indicators most commonly used in the international literature was involved and ran on the Hungarian Wage Tariff Database of 2016
- Managers:
 - Highest average income
 - Largest standard deviation
- Employees in Agricultural and forestry occupations
 - Larger-than-average differences
- The differences between the richest and poorest regions for managers are 1.238 times (moderate in comparison)
 - Supported by the Lorenz curve and the Gini index
 - The weighted relative standard deviation shows a similar inequality for managers and those working in Agricultural and forestry occupations
- Based on the logarithmic standard deviation, managers face the most extensive level of variance

Future research

- Analyzed the indicators along with ISCO 1



Do it along with all ISCO 4 levels

- Clearer picture of the background of the presented differences
- Plan to repeat the research of
 - Frey and Osborne (2013) & Blinder (2007) on Hungarian data



Help us analyze the effects of technology on the Hungarian labor market polarization

Thank you for your attention!



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