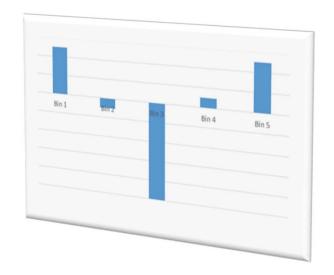


## Labour market polarization as a regional process



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# Background

- widespread concerns that the post-industrial process of economic change comes with increasing labour market polarization (Autor et al. 2006, Goos & Manning 2007, Goos et al. 2009)
- divergence and increasing differences characterizes regional development in many developed economies (European Parliament 2007, Rosés and Wolf 2018)
- few studies have investigated if there is an analytical link between the processes; explanations remain contested (however: Lindley and Marchin 2014, Åberg 2015)









### Aim

- to investigate regional patterns of labour market polarization under conditions of regional divergence
- by analysis of detailed job data for Swedish regions 2002-2012, the paper decomposes the growing polarization of the labour market geographically
- the "Swedish labour market model" was (in)famously known for its focus on job upgrading,
- but there seems to be polarization in Sweden, too! (Aberg 2013, 2015, LO 2014, Henning et al. 2016)









# Main findings

- substantial spatial heterogeneity
- the geographies of labour market *polarization* is driven by two main tendencies
- increasing labour market polarization and spatial selection in the fast-growing metropolitan regions
- polarization in previously manufacturing heavy municipalities
- outside these spaces, many municipalities still experience more traditional patterns of job upgrading
- *job downgrading* in regions is instead especially associated with demographic factors









# Four non-exclusive explanations to labour market polarization

- *globalization, de-industrialization*: hollowing out of previously rather well paid manufacturing jobs
- technology: technological change finds complementary tasks among upper part of the wage distribution, which also raises demand for easy jobs
- *institutions and change in socio-political arrangements*: labour market institutions, political factors
- demography: share of foreign immigrants who find it hard to get complementary jobs







## Swedish experiences

- Swedish model:
- -pushed for more qualified and better paid jobs (Aberg 2013, 2015; LO 2014)
- relatively high labour costs promoted early automation in manufacturing (Svensson Henning 2009)
- -"pecuniarization" of much household work took place in Sweden during the 1960s and 1970s
- Changing labour market regime?
- -some household services tax deductible (2004, 2007)
- facilitating growth of simple jobs is "even" by the social democratic
  party seen as a way to increase participation rates for disadvantaged
  groups







## Data and method

- individual micro data from Statistics Sweden covering the years between 2002 and 2012
- "job" as a cross-combination between industry and occupation
- we excluded individuals that changed workplace (and/or occupation) the previous two years, all jobs with less than 100 employees, and removed outliers
- for the year 2002 we calculated the median wage of each job and placed it into one of five bins
- we compare the "population" of the bins in each municipality in 2002 and 2012







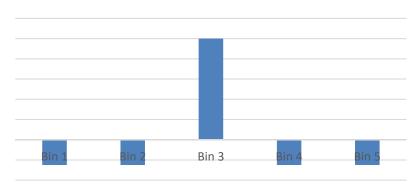


# Stylized municipality groups

## Polarizing regions



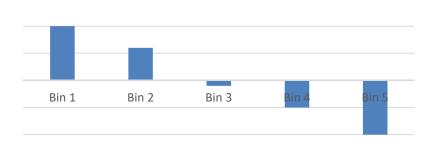
#### Middling regions



Upgrading regions



Downgrading regions











We strategically select a number of municipality-level explanatory variables based on the expectations (2002):

- globalization and de-industrialization
- -shares of employees in extraction and manufacturing
- -shares of employees in low-skill manufacturing occupations
- technology
- -shares of employees in KIBS
- -shares highly educated
- –shares of employees in advanced professions
- institutions
- —shares in public and social services
- shares of public contracts to private sector
- demography
- -shares of population born outside Sweden
- -shares of population above retirement age

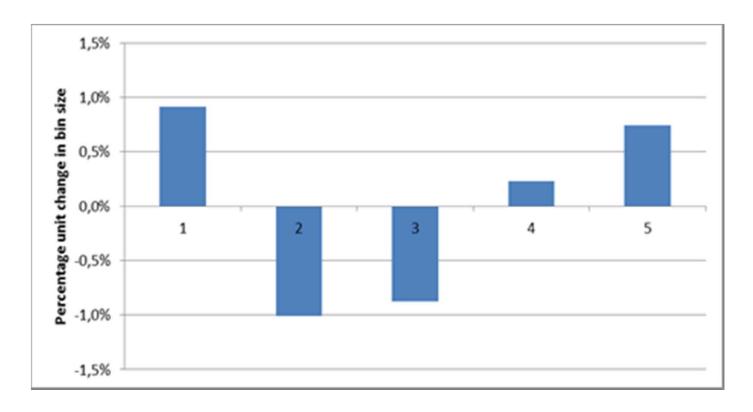








# Findings



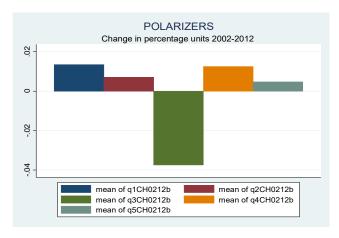


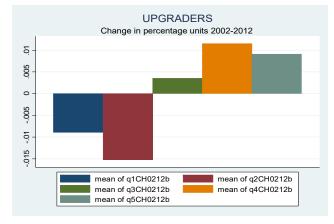


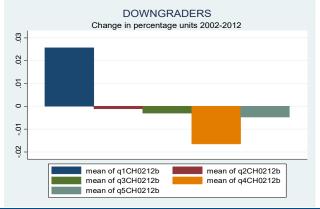


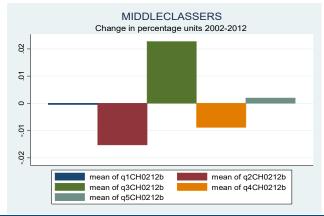


Patterns	Number of municipalities	Total population
Polarizers	61	1,942,176
Upgraders	146	4,027,945
Downgraders	55	2,405,688
Middling	27	549,848

















#### **Upgraders**

Higher shares of extraction industries\*

Higher shares of public officials

Higher shares of care workers

• → institutions

#### **Polarizers**

higher manufacturing shares/tasks\*

lower education levels

mid-sized municipalities

ightarrow o de-industrialization, hollowing out

#### Middling

- more affluent
- higher education levels
- smaller municipalities\*

#### Downgraders

- higher manufacturing shares
- service dominated
- higher shares of foreign born\*
- higher growth rates
  - $\rightarrow$  demography

Significant in logit regressions









Number of municipalities	Polarizers	Upgraders	Downgraders	Middleclassers
Greater Stockholm		12	13	1
Greater Gothenburg	2	9	2	
Greater Malmö		9		2

Share of foreign born, average	Polarizers	Upgraders	Downgraders	Middleclassers
Greater Stockholm		12.6	18.7	12.8
Greater Gothenburg	16	8.1	8.6	
Greater Malmö		10		12.8









## Conclusions

- regionally, there is much more going on than just polarization
- all four alternative regional trajectories are "inhabited" by a number of municipalities
- only a minority of municipalities are themselves polarizing, but the aggregate makes for national polarization
- *globalization and de-industrialization-forces* have a greater effect on which regions experience hollowing-out
- upgrading regions rely more on extraction industries and public sector jobs (but could still experience absolute decline, as long as the remaining jobs are better)
- demography and spatial big-city selection/segregation gives clues as to the downgrading of jobs in some municipalities
- middle-class paradises are formed in small affluent municipalities
   with highly educated population





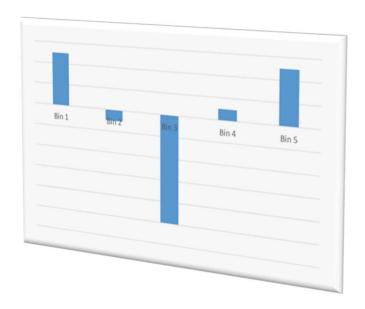


- while some degree of labour market polarization may be expected in times of high growth and quick technological change, the results are nevertheless cause for great concern from a social point of view
- especially as spatial divergence and labour market polarization now coincide
- parts of the labour forces in regions that experience rapid manufacturing change and in regions which have welcomed high shares of immigrants to Sweden, fall behind on the new job markets, where all municipalities cannot expect job upgrading to dominate any more









Thanks!
Happy to send the paper!

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