# Local labor markets, population density and the gender gap

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# Data

# Data

**Source:** IPUMS data for:

- 1950-2000 Decennial censuses.
- 5-year ACS for the years 2011 and 2018. For ease of presentation I label these datasets as 2010 and 2020 respectively.

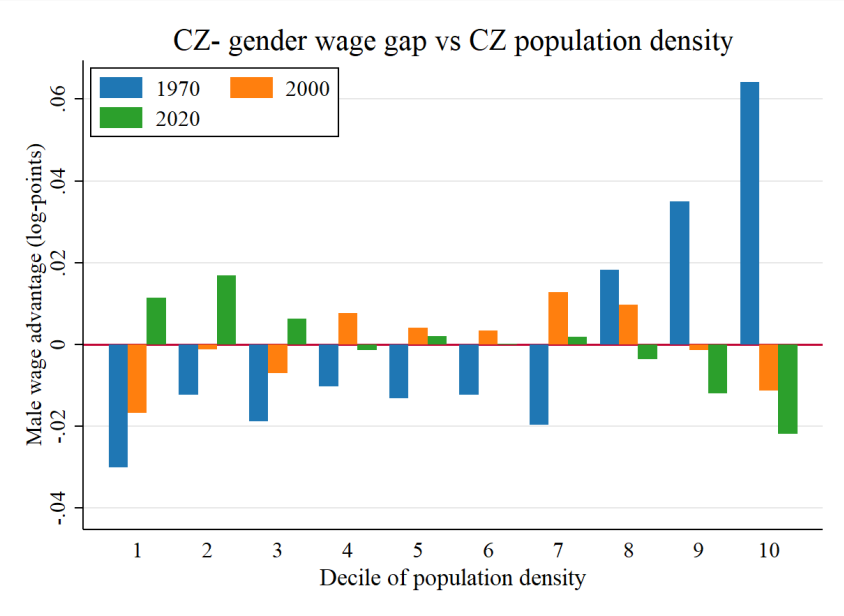
**Sample** includes all full-time year-round workers whom:

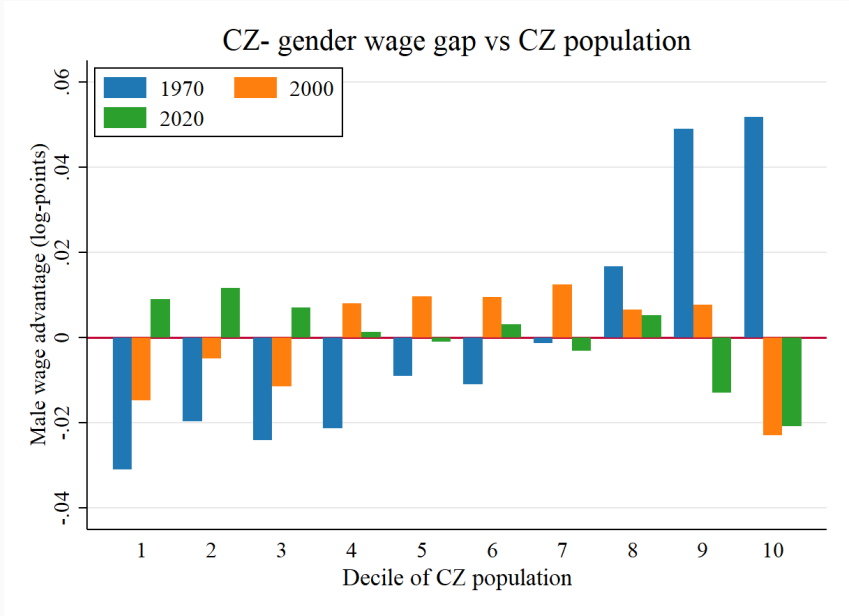
- Aged 18-64.
- Not attending school.
- Not living in group quarters.
- For all graphs I limit the sample to people living in CZ with a population density of at least 1 person per-square kilometer in 1950.

# Descriptive analysis

# Gender gap - density gradient has inverted

- The inversion arises when measuring density using (i) population density, (ii) total population from the CZ.

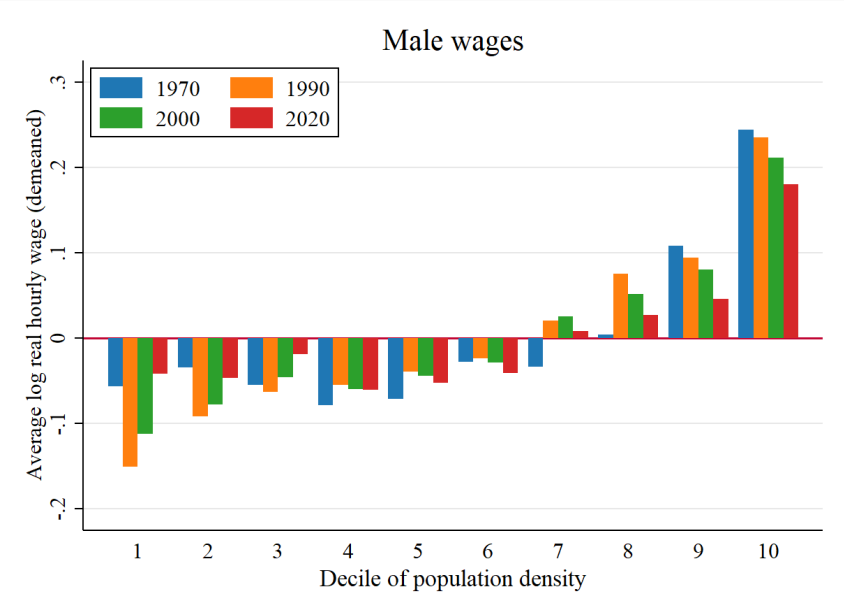


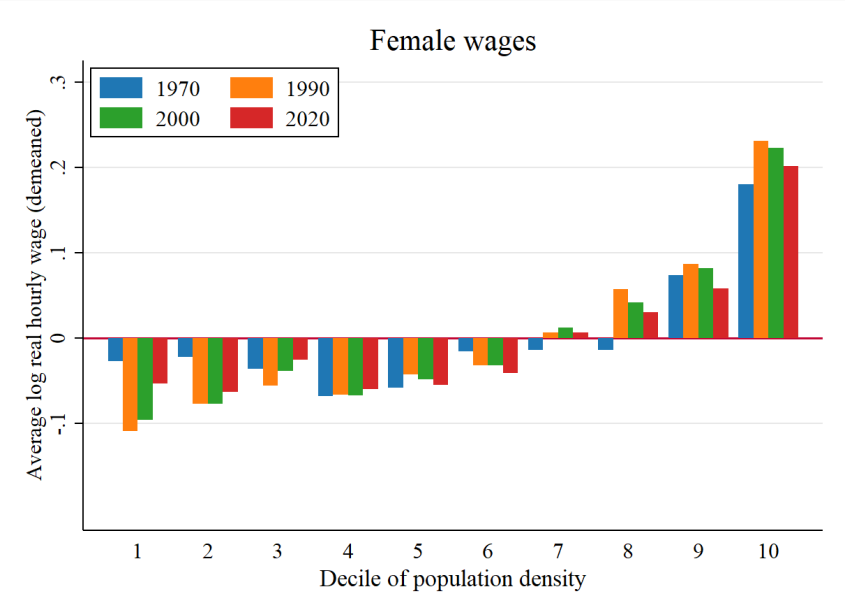




*Note:* analysis includes CZ with population density above 1 person per $km^2$ in 1950. Each bar shows the *unweighted* average of approximately 62 CZ. CZ are divided into deciles of population density (total population) separately for each census year. Average for each census year was substracted from the data. Deciles 7-10 account for about 85% of 18-65 pupulation.

# Why? Urban wage premium is decreased for men, not so for women

- Men's premium is in clear decline since 1990.
- Decline for women has been more moderate.

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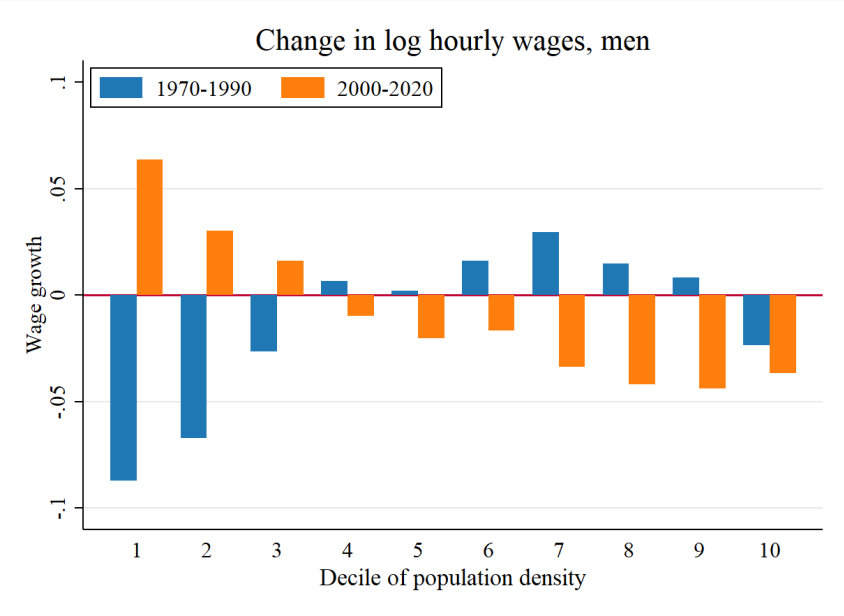
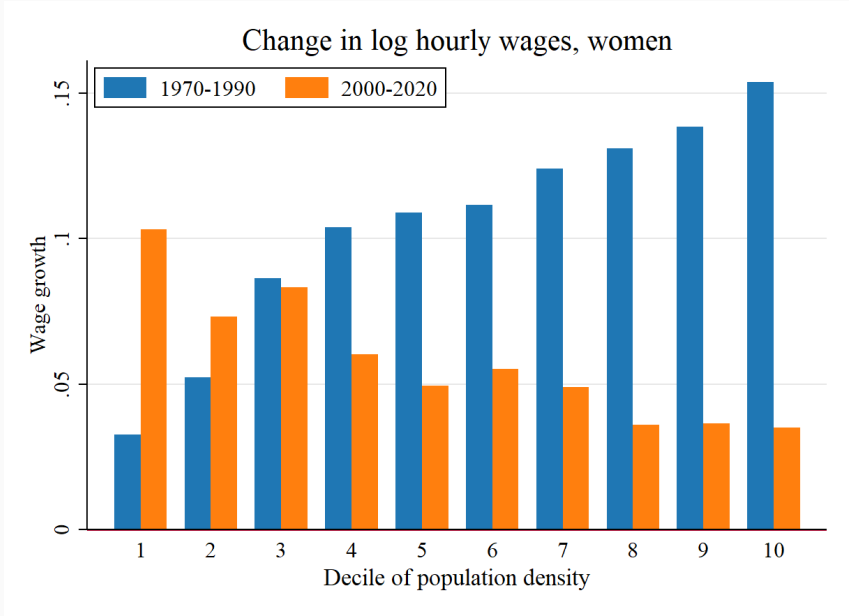
# Not just relative decline: men's wages have declined in denser places while women's have increased everywhere

- **Men's** wages have **declined** in denser labor markets since 2000.
- **Women's wages** have **increased** everywhere. Increase was faster in denser markets during 1990-1970. The opposite is true for 2000-2020.

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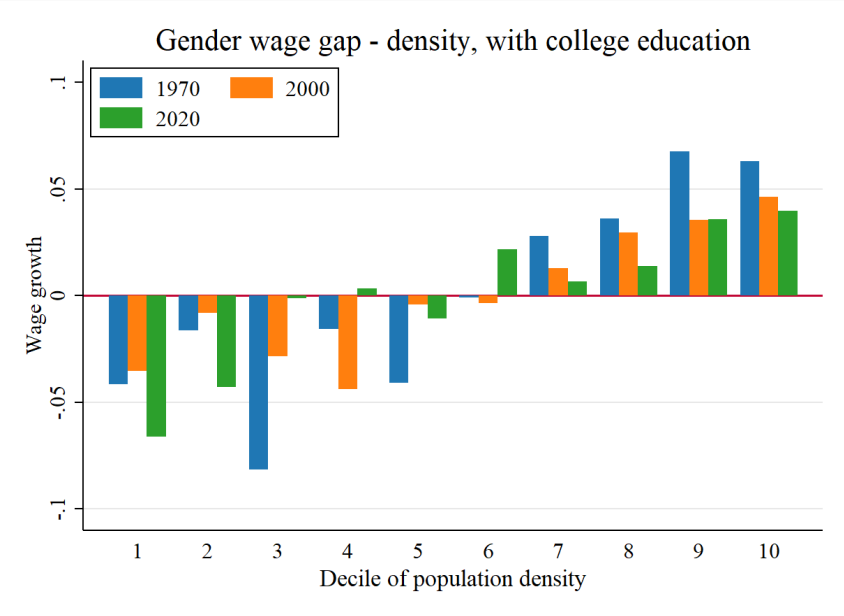
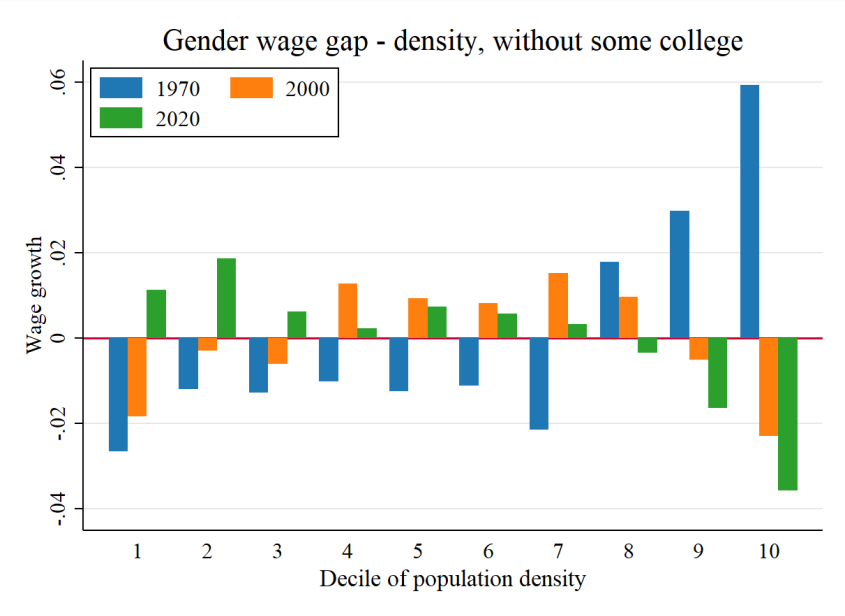
# Is the gradient inverting for everybody? No. It is concentrated on workers without a bachelor degree

- Inversion of the gradient happens only for workers without a bachelor degree.
- Decline of gradient for workers with a Bachelor's degree is moderate (if there is one).

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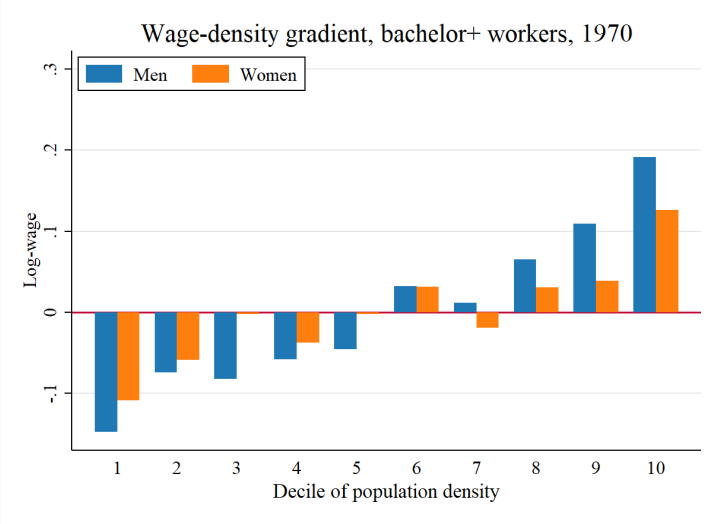
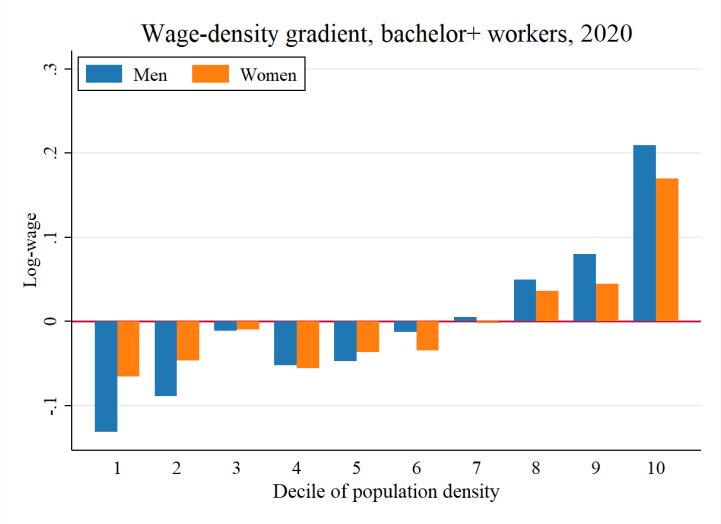
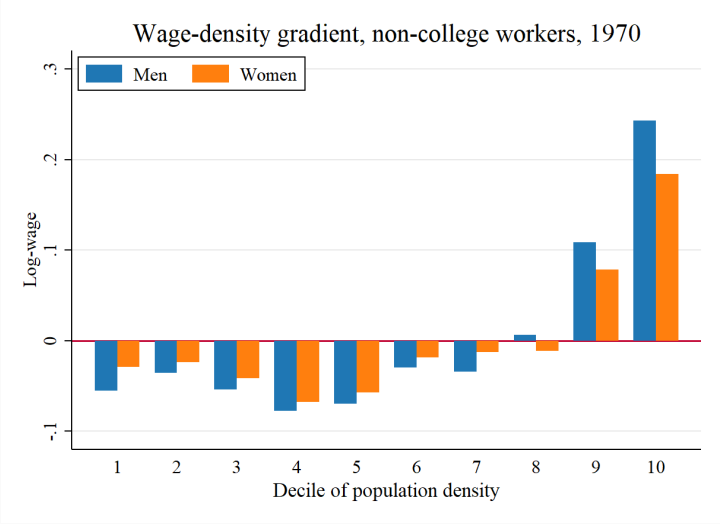
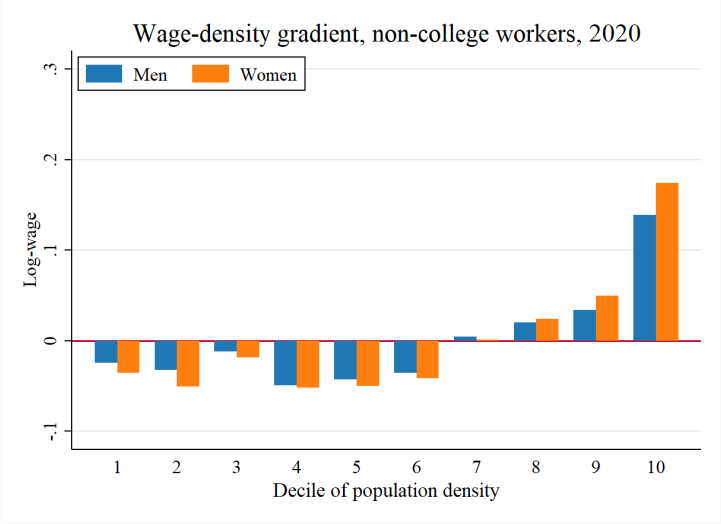
# Decline for non-college workers is driven by men's decline in the urban wage premium

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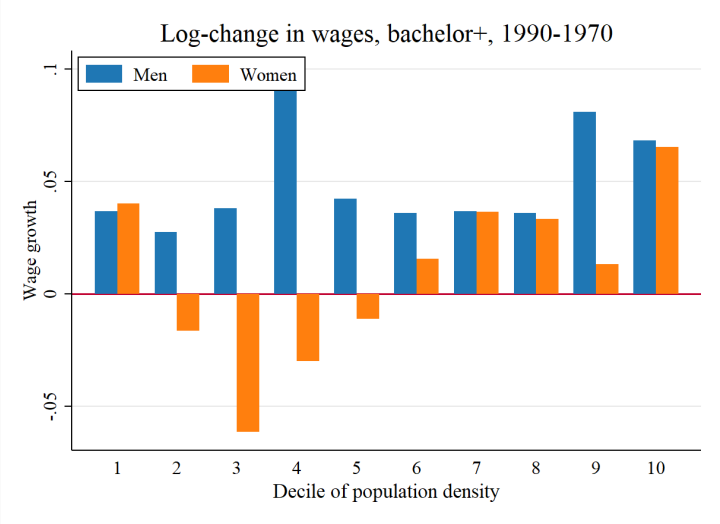
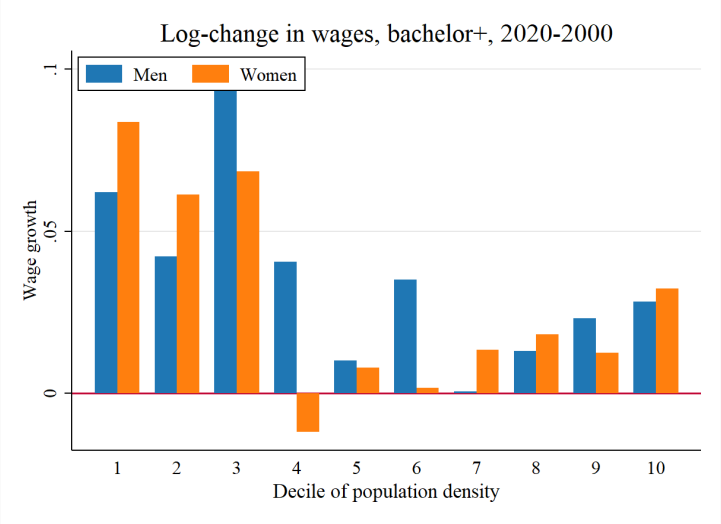
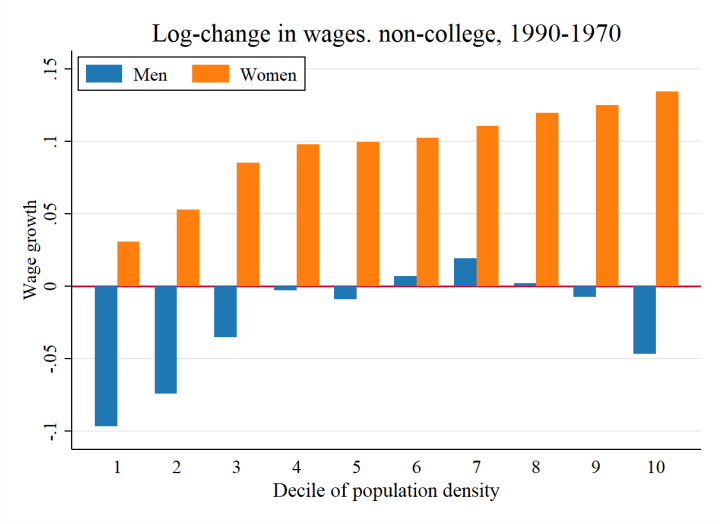
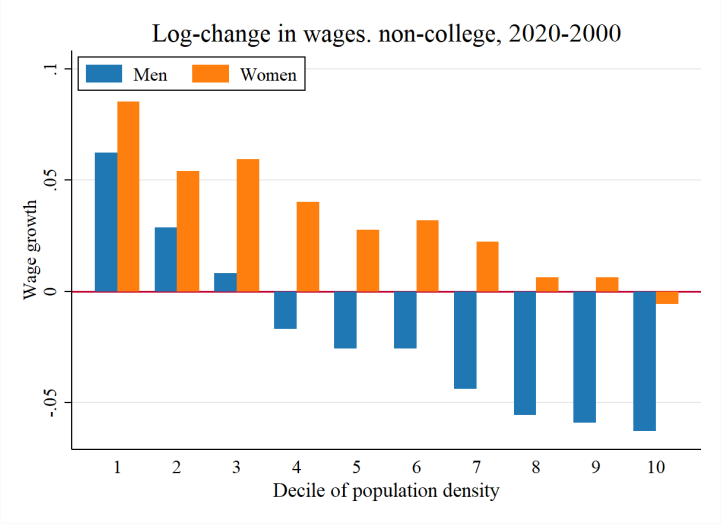
# Decline in the premium is driven by wage *decline* in denser labor markets for non-college men

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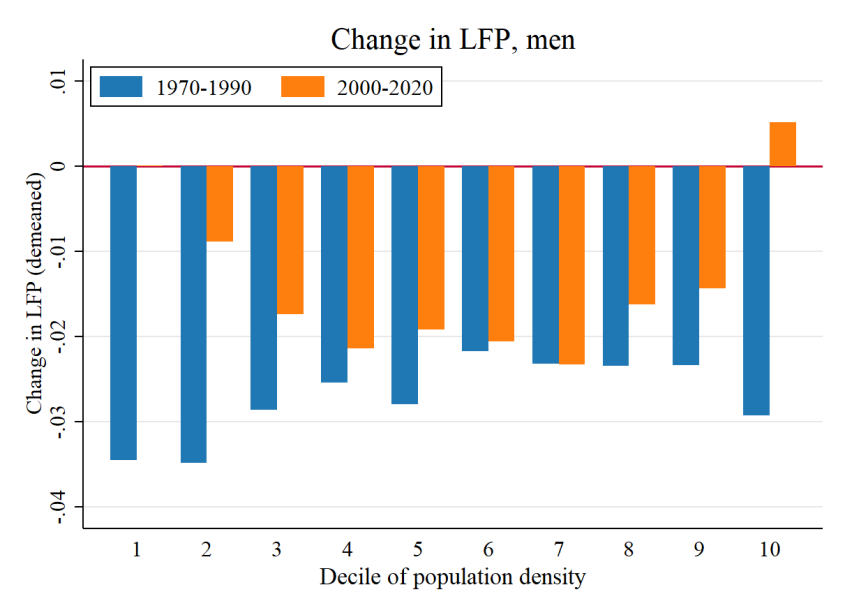
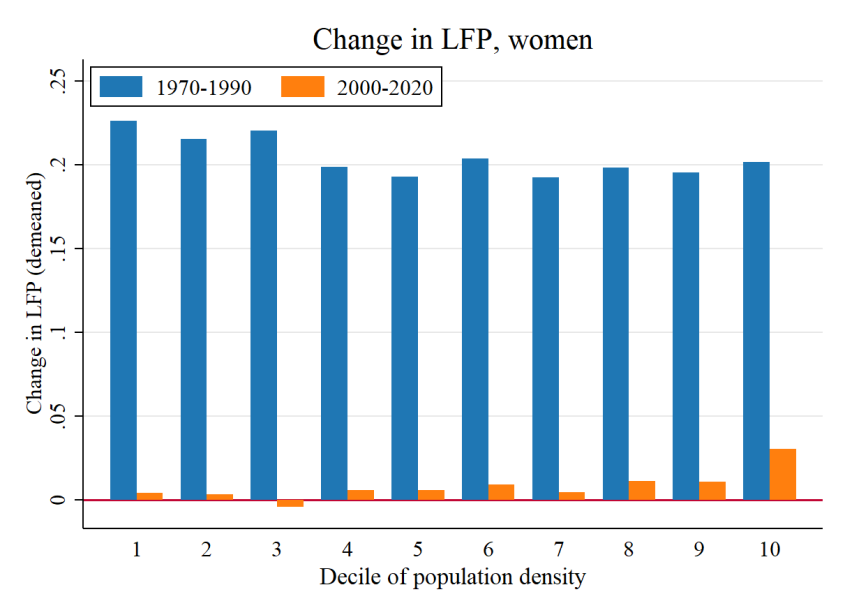
# Women's LFP is increasing everywhere while men's declines mostly everywhere

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