

Demographic and Automation

- Demographic changes that reduce the ratio of middle aged to older workers induce the adoption of additional automation technologies
- Substitution between robots and worker
- Regression: $\text{robot/worker} \sim \text{aging}$
- instrumental-variables (IV): past birth rates and cohort sizes

Automation

- Automation: stock of robots per thousand workers
 - International Federation of Robotics (industry, country and year)
 - imports of industrial robots computed from bilateral trade data. (country, month)
 - number of integrators (one year cross sectional)