

International Migration and U.S. Innovation

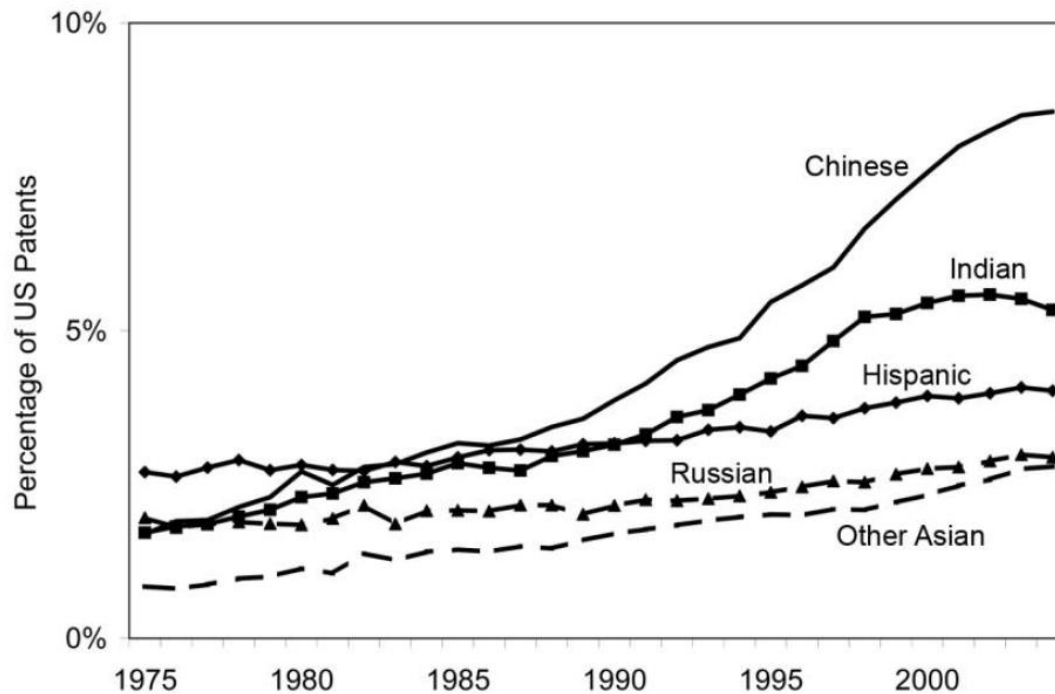
Hot topic again (right now!)

- The US is a land of immigrants...
 - 16% of (legal) workforce in 2008
 - 29% of growth since 1995
- ...especially in science and engineering (SE)
 - 25% with bachelors educations
 - ~50% with doctorates
 - 2/3rds of the growth since 1995

Always converging to 25%

- Innovation
 - USPTO data and ethnic-name techniques
 - WIPO data and citizenship status

The long-run using granted patents

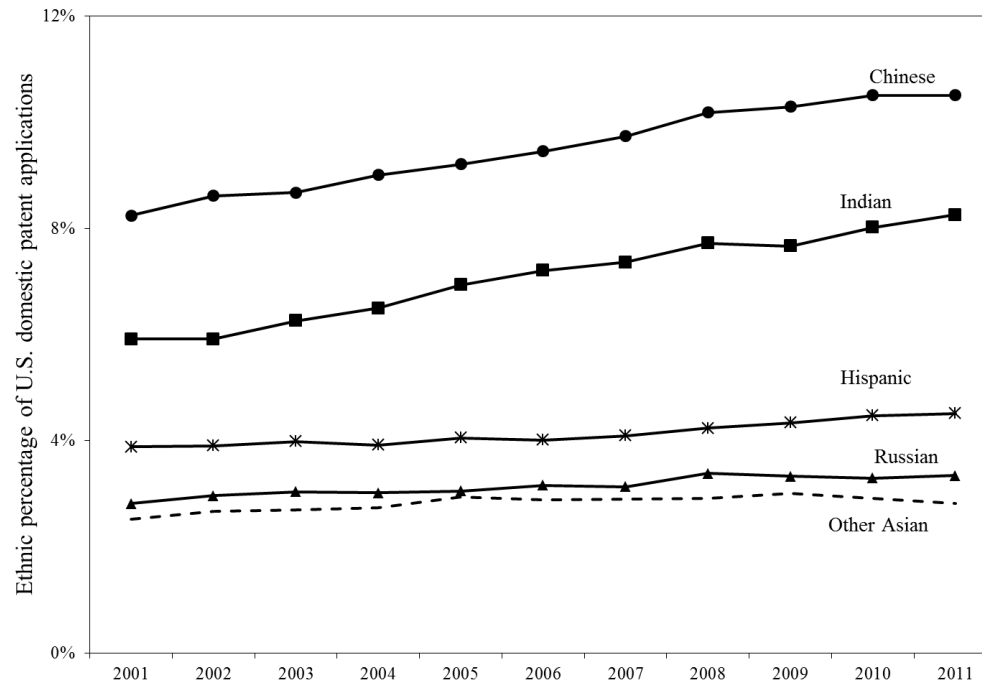


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A. Ethnic shares of U.S.-based patenting



Recent trends using applications for patents

Always converging to 25%

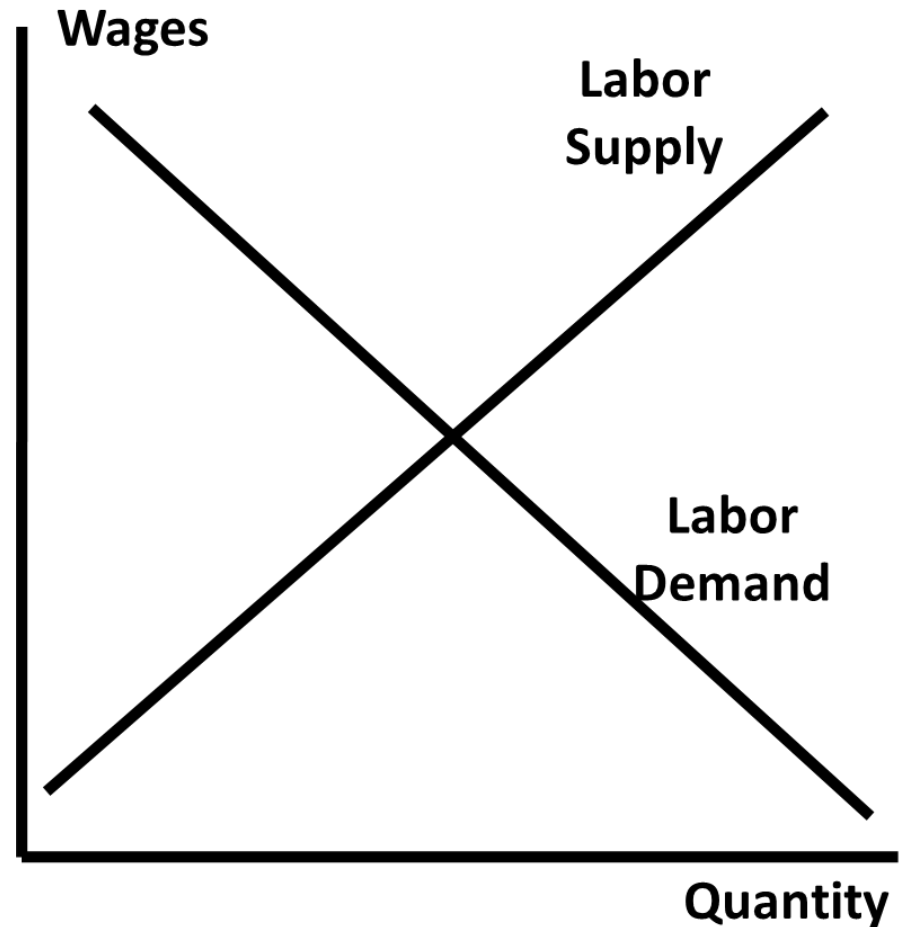
- Innovation
 - USPTO data and ethnic-name techniques
 - WIPO data and citizenship status
- Entrepreneurship
 - Surveys of Silicon Valley firms
 - Surveys of fast-growth firms
 - Surveys of recent IPOs

The two Q's

- The first Q: Quality
 - Extreme tail and similar aggregates
 - Not certain how to compare these
 - Reference point is exceptionally important
 - School (the future?) more uneven
- The second Q: Quantity

Adding up the larger impacts

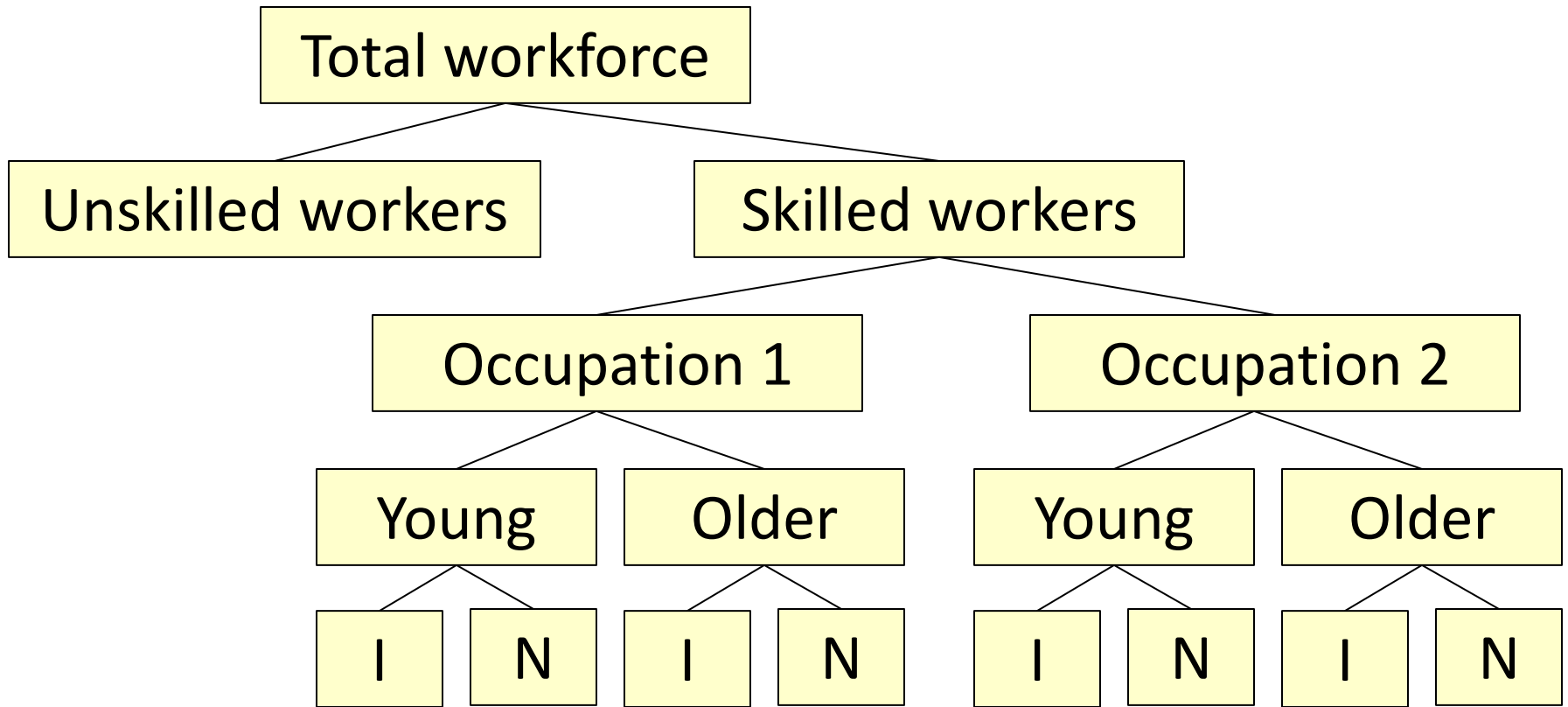
- The labor market
 - Local areas (+)
 - Occupations (?)
 - Student majors (-)
- Role of growth?
- Porous borders?
- National validity?



H-1B program's composition

- 1995: India ~20%, Computer 25%
- 1998: India ~45%, Computer 57%
- 2002: India 28%, Computer 28%
- 2008: India 57%, Computer 53%
- 2012: India 64%, Computer 70+%

Complementary occupations



Some firm-level findings

- Range of pay differential studies
- Growth of firm employment overall
 - Especially strong among younger workers
 - Flat for older native workers
- Growth of firm innovation/patenting
- Global connections to home countries