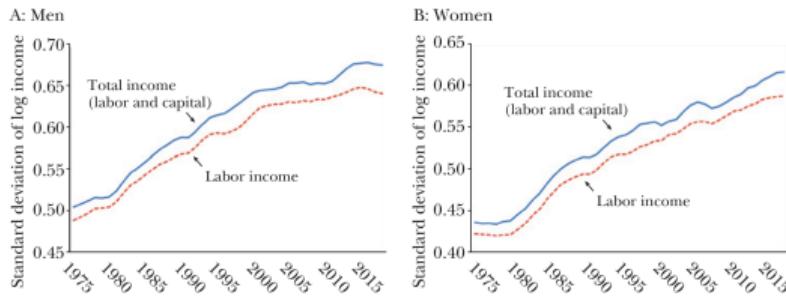


Wage Distribution in USA

Figure 1
Standard Deviation of Log Labor and Total Income



Source: Authors' calculations based on microdata from the March Annual Social and Economic Supplement (ASEC) of the Current Population Survey.

Note: The standard deviations are computed for a sample of full-time/full-year workers age 25-64 earning at least \$4 per hour in 2018 dollars. The top 1 percent of the distribution has been trimmed because of inconsistencies in the way earnings at the very top have been collected over time. Labor income consists of net self-employment and wage and salary income. Total income is the sum of labor and capital income (interest income, dividends, and rents). See text for more detail.

Figure 1: Source: Hoffmann et al. (2020)

Wage Distribution in USA

Figure 2

Variance Components of Total Income (Labor and Capital)

A: Men

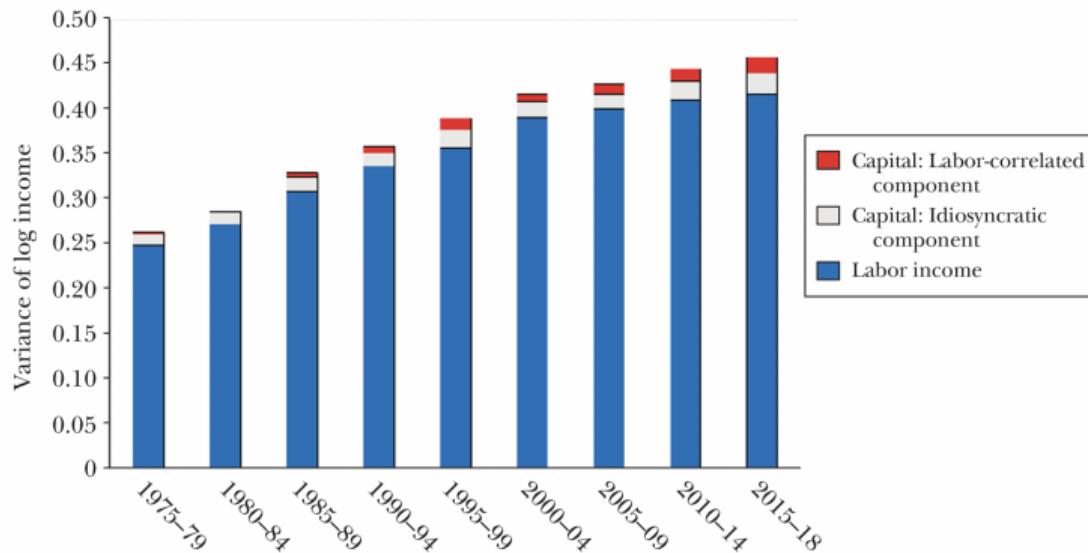


Figure 2: Source: Hoffmann et al. (2020)

Wage Distribution in USA

Figure 3

Sources of Change in the Variance of Log Total Income

A: Men

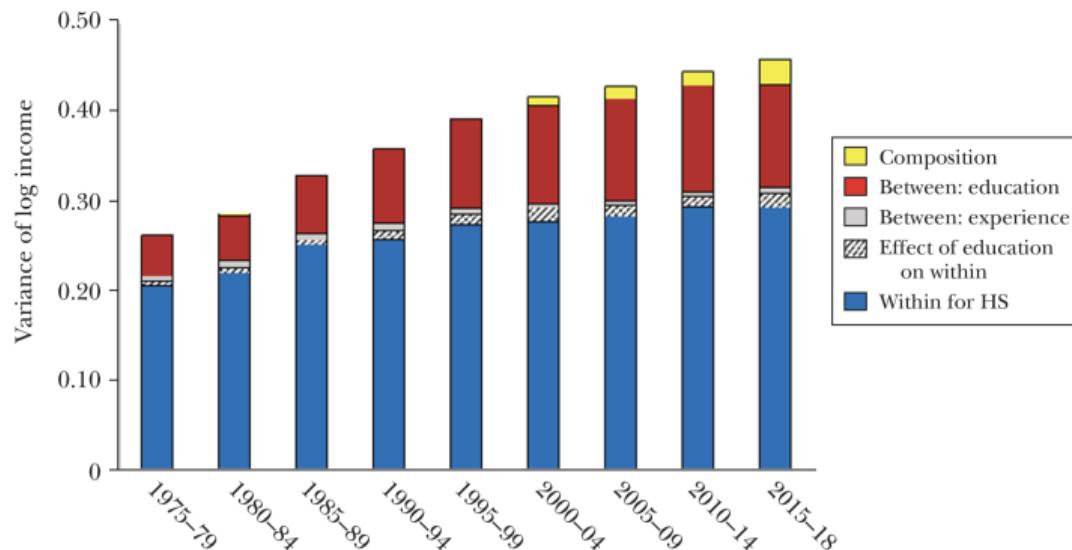


Figure 3: Source: Hoffmann et al. (2020)

Wage Distribution in USA

Table 1

Contribution (in %) of Education and Other Factors to the Growth in the Variance of Total Income

	Within (HS)	Contribution of education			
		Between: experience	Between: education	Education effect on within	Composition effects
A. Men					
<i>Total income:</i>					
1975–79 to 1985–89:	67.8	2.3	28.8	0.9	0.2
1985–89 to 2015–18:	32.2	-2.0	39.6	8.9	21.4
Total change:	44.4	-0.6	35.9	6.2	14.1
<i>Labor income:</i>					
Total change:	45.4	-0.9	37.5	6.3	11.7
B. Women					
<i>Total income:</i>					
1975–79 to 1985–89:	74.6	0.6	26.2	4.3	-5.7
1985–89 to 2015–18:	27.2	0.6	30.1	9.5	32.6
Total change:	42.8	0.6	28.8	7.8	20.0
<i>Labor income:</i>					
Total change:	42.1	0.1	30.5	8.3	18.9

Source: Authors' calculations based on microdata from the March Annual Social and Economic Supplement (ASEC) of the Current Population Survey.

Note: See the note to Figure 1 for details on the sample and the note to Figure 3 for an explanation of the variance components presented in the table.

Figure 4: Source: Hoffmann et al. (2020)

Wage Distribution in USA

Figure 4

Effect of Additional Covariates on the Between-Group Variance

A: Men

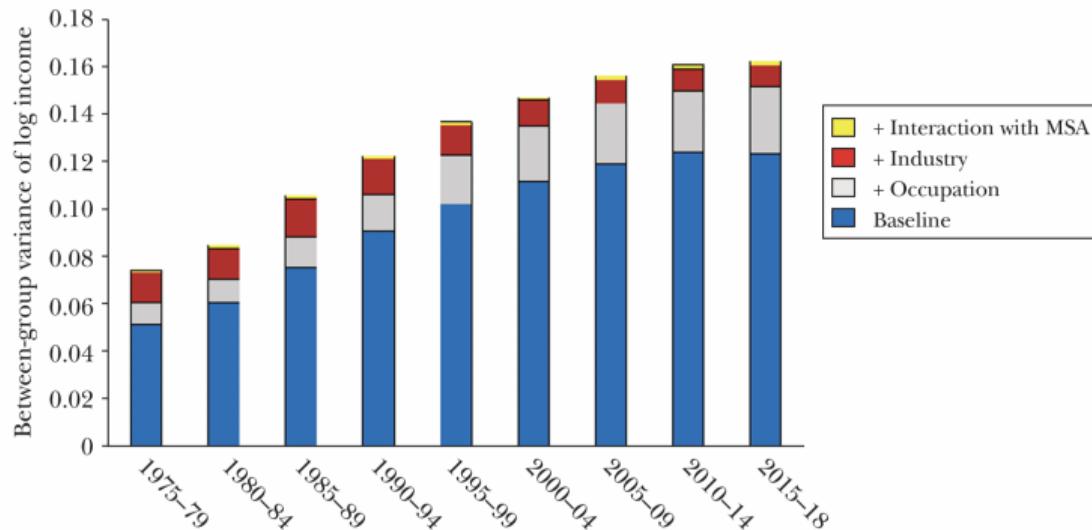


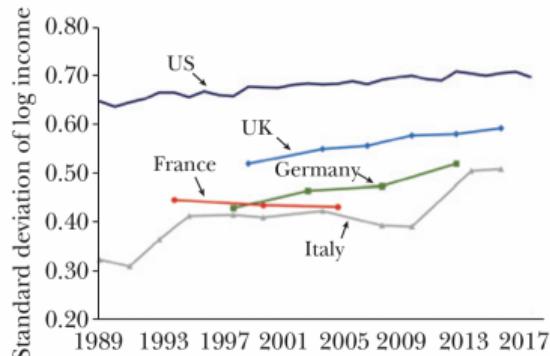
Figure 5: Source: Hoffmann et al. (2020)

Wage Distribution in the World

Figure 5

Standard Deviation of Log Total Income in European Countries

A: Men



B: Women

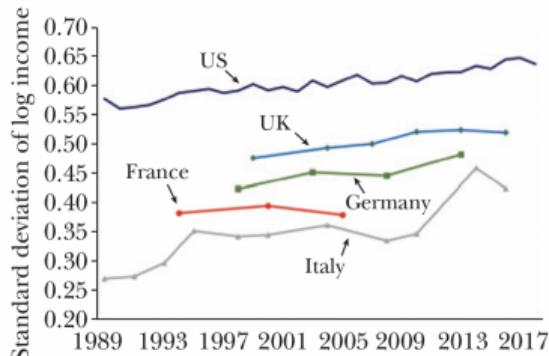


Figure 6: Source: Hoffmann et al. (2020)

Wage Distribution in the World

Table 3

Contribution (in %) of Education and Other Factors to the Growth in the Variance of Total Income

	Within (HS)	Between: experience	Contribution of education			
			Between: education	Ed. effect on within	Composition effects	Total change (by decade)
A. Men						
US: 1985–89 to 2015–18	32.2	−2.0	39.6	8.9	21.4	0.043
France: 1994 to 2005	13.7	−26.0	171.6	40.0	−99.2	−0.011
Italy: 1989 to 2016	54.3	5.1	7.0	4.8	28.7	0.057
Germany: 1998 to 2013	49.8	−0.9	15.7	11.2	24.2	0.060
UK: 1999 to 2016	47.3	−2.5	−12.6	18.7	49.1	0.048
B. Women						
US: 1985–89 to 2015–18	27.2	0.6	30.1	9.5	32.6	0.041
France: 1994 to 2005	373.0	−101.3	324.6	163.3	−659.6	−0.002
Italy: 1989 to 2016	46.0	3.8	9.6	12.3	28.2	0.040
Germany: 1998 to 2013	22.8	5.7	19.2	24.2	28.1	0.039
UK: 1999 to 2016	49.3	−5.8	−51.2	35.1	72.5	0.025

Source: Authors' calculations based on microdata from the March CPS for the United States, the Household Budget Survey for France, the Survey of Household Income and Wealth for Italy, the Family Resources Survey for the United Kingdom, and the Income and Expenditure Survey for Germany.

Note: See the note to Figure 5 for details on the European samples and the note to Table 1 for an explanation of the variance components presented in the table. In the case of the United States, we simply reproduce the figures reported in Table I for the 1985–89 to 2010–18 period. The column *Total change (by decade)* reports the annualized change in the variance multiplied by 10. Since countries are observed over different time frames, the transformation is used to make the changes in the variance comparable across countries.

Figure 7: Source: Hoffmann et al. (2020)

Price: Wage Distribution

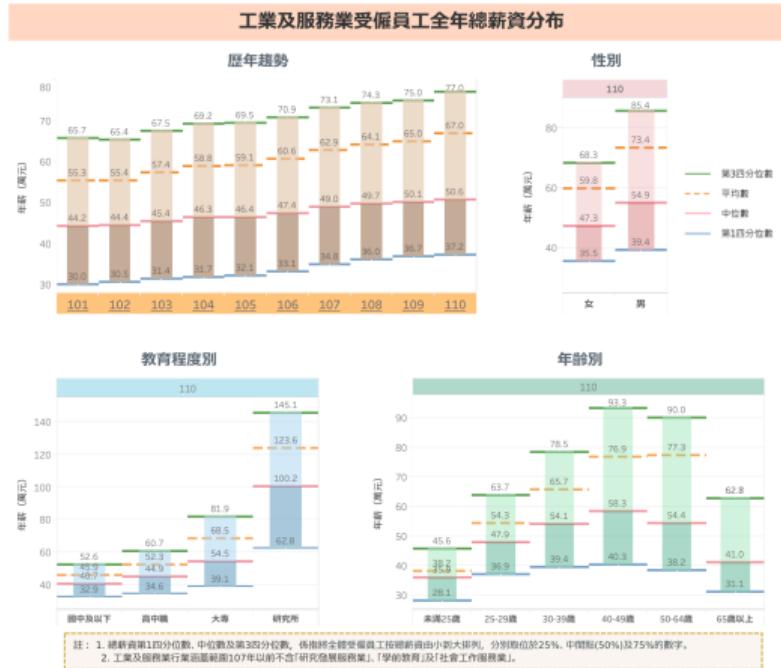


Figure 8: Source: Executive Yuan

Price: Wage Distribution



Figure 9: Source: Executive Yuan

Price: Wage Distribution

教育程度別

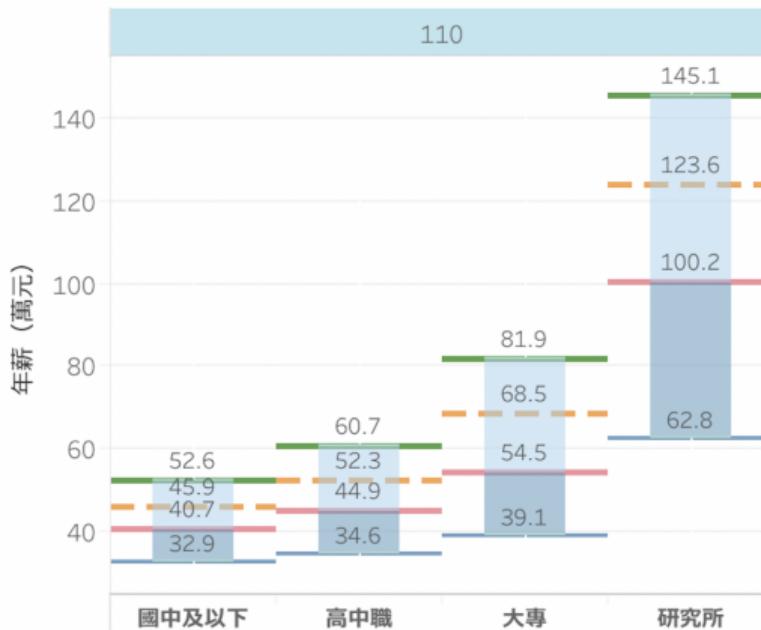


Figure 10: Source: Executive Yuan

Price: Wage Distribution



Figure 11: Source: Executive Yuan

Price: Wage Distribution

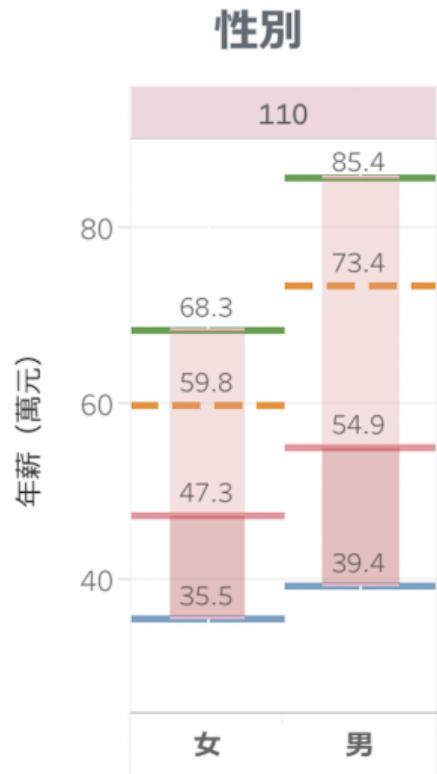


Figure 12.6: Price: Wage Distribution

Price: Wage Gaps

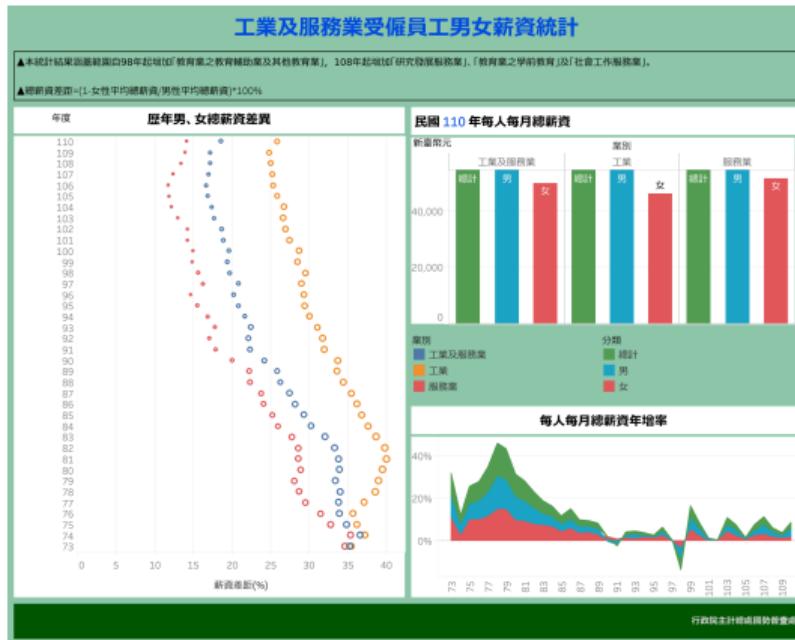
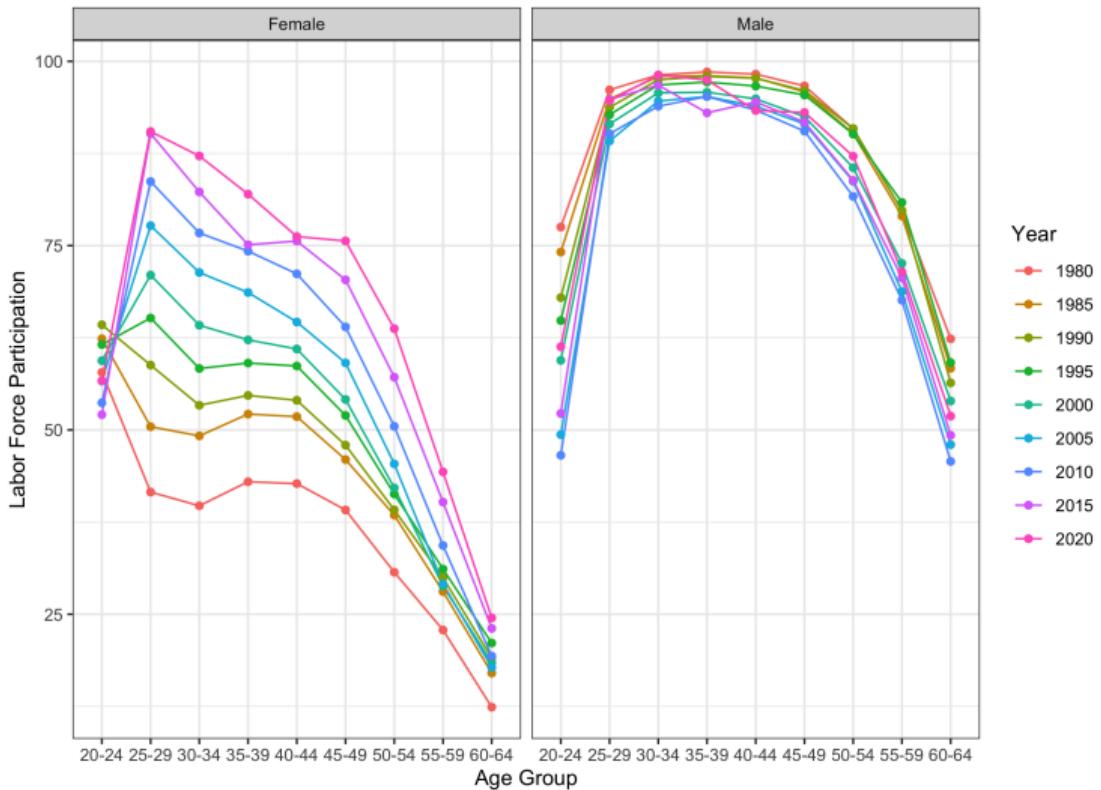


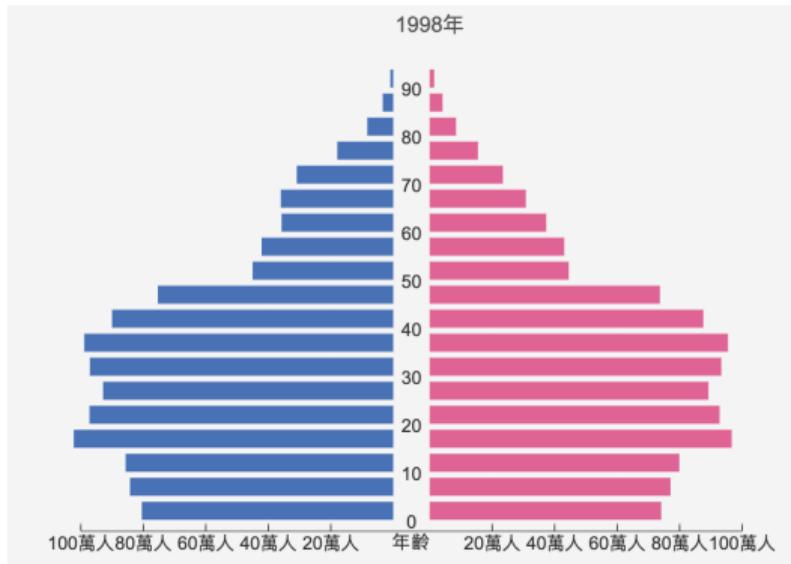
Figure 13: Source: Executive Yuan

Quantity: Labor Force Participation

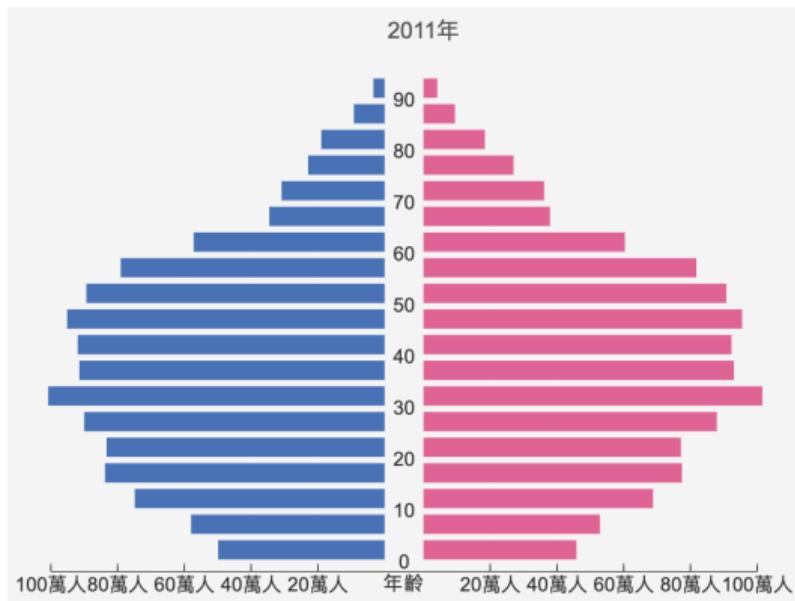
Labor Force Participation in Taiwan



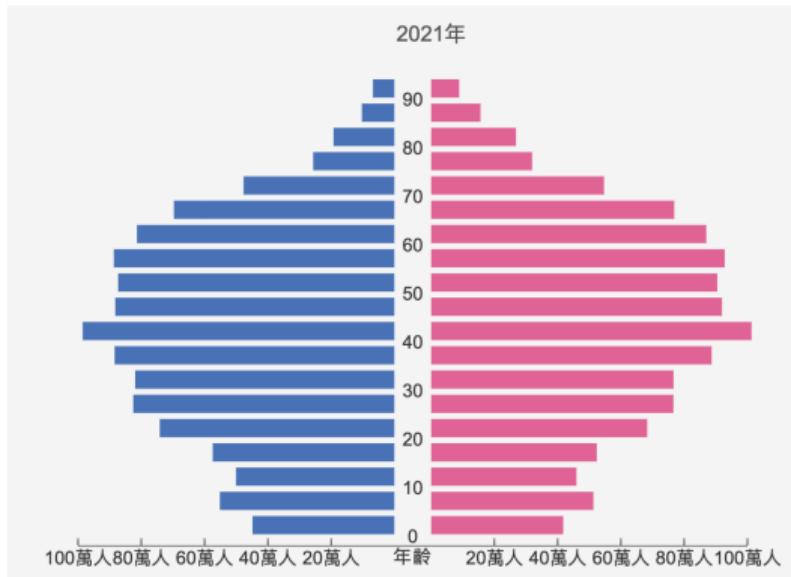
Quantity: Demography Change



Quantity: Demography Change



Quantity: Demography Change



Wage Distribution in Taiwan

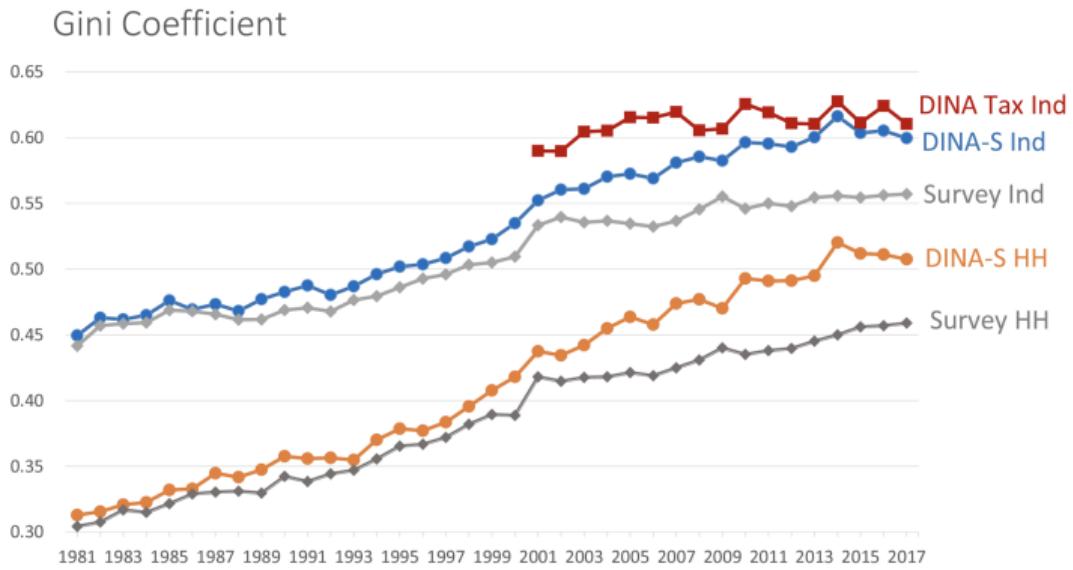


Figure 10: Gini coefficients of DINA individual and household series.

Figure 14: Source: Chu, Chen, Lin, and Su (2022)

Labor Markets

- We study the labor market
- Trends and determinants of the distribution of wage and income
- Income and wages
- Skill and skill prices
- Tax and transfers
- Social mobility
- Health

Roy Model

- Everything is a Roy model
 - Especially those harmless/harmful econometrics
- Fishing, hunting, and earning distribution
- Cornerstone of labor economics
- Bring economics back in empirical work
- “Structural” vs “Reduced Form”
 - I hate this dichotomy. Completely nonsense
 - All about questions and clear specifications
 - Question, Question, Question!

Econometric Review

- So called ways to deal with “endogeneity”
- All nested in a Roy model
 - Control for Observables
 - Instrumental Variables
 - Panel Data

Labor Supply

- Who works? Who does not work?
- How much more will one work if wages are higher?
- Most studied issue in labor economics
- Questions motivated econometric studies

Human Capital, Schooling, and Skills

- How does human capital relate to wage?
- What are the skills that matter in the labor market?
- How do we measure skills?

Dynamic Models

- How do people choose their career when there are long-run consequences?
- How do people decide when to retire?
- Dynamic Programming
- Life Cycle Models
- Dynamic Discrete Choice Models

Sorting

- Do good workers work at good firms?
- AKM model and team works

Family

- How are families formed?
- How do family decide labor division?
- How do families make fertility decisions?

Reports

- Four reports required throughout the year
- Two options:
 - replicate a classic paper using Taiwanese data
 - conduct your own research on a topic of your choice
- Both options allow for further project development and potential use in a thesis
- Independent or classmate (up to 2 in total) work allowed
- Modern methods on unexplored questions in Taiwan
- Replicate original paper in Taiwanese context and contribute to existing literature using unique data or policy environment features

Importance of Communication

- Science is about story-telling and convince people
- Appearance matters!
- Use AI tools to help you!

Presentation

- Many online guides available
 - <https://github.com/paulgp/beamer-tips/blob/master/slides.pdf>
 - https://scholar.harvard.edu/files/shapiro/files/applied_micro_slides.pdf
- Learn from others
 - Online resources, NBER lectures.
- Generally: Less is More

Where to Find Original Questions?

- Research from other fields (Sociology, Public Health, ...)
- News reports (The Reporter, PTS,. ...)
- Everyday life
- I don't recommend finding original questions from other econ papers

Where to Find Replication Materials?

- Handbook of Labor/Education/Family Economics

Where to Find Data?

- Survey Data: SRDA, ...
- Administrative Records: NHIRD, FIA, ...
- US Source: PSID, NLSY, IPUMS, ...