The Changing Distribution of Earnings in OECD Countries

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New Data on Earnings Distribution in OECD Countries

- Starting from OECD Employment Outlook and LMS databases
- Going back further in time – importance of historical perspective
- A wide range of sources – household surveys, employer surveys, tax records, population census, census of industrial production
- Care with consistency over time, and recognition that data of differing quality
- Looking at distribution as a whole, not just at decile ratio or Gini coefficient
- Covering 20 OECD countries, including 3 from Eastern Europe
- Same focus as OECD on comparing changes over time, not levels of dispersion
What Learn?
Rather, what discover that is *not* true?

- If we lose the race between skill-biased technical change (SBTC) and education, then wage dispersion will necessarily continue to rise.
- Since OECD countries are exposed to the same forces of SBTC and globalisation, there will ultimately be the same rise in earnings dispersion everywhere.
- Recent rise in earnings dispersion is historically unprecedented.
- Most of the change in the earnings distribution affects the unskilled at the bottom.
- The earnings distribution in Continental Europe exhibits “unbearable stability” (IMF Staff Papers).
- We can focus on $Y(L_s, L_u)$ and not $Y(K, L_s, L_u)$. 
Relative wage of qualified workers $\frac{w_s}{w_u}$

Relative demand for qualified workers $\frac{L_s}{L_u}$

Shift in Demand
Relative demand for qualified workers $L_s/L_u$

Relative wage of qualified workers $w_s/w_u$

Demand shift at rate $g$

Supply response at rate $\beta$

Premium $g/\beta$

Differential required for human capital investment
• **Casts doubt** on criticism of the Skill Biased Technical Change (SBTC) hypothesis: “our main conclusion is that aggregate wage inequality has not risen continuously since the 1970s. … This suggests a potential problem for the SBTC hypothesis: why did the pace of SBTC slow down after an initial burst during the first few years of the microcomputer revolution?” (Card and DiNardo, JLE, 2002).

• **But Also:** Wage premium depends on $\beta$, which may vary from country to country.

• Wage differential may have increased because of rise in the cost of borrowing
  - = inter-connection between labour and capital markets.
Coverage of 20th century: 20 OECD countries

Note: the series do not give data for all years, and there are breaks in comparability.
Great Stability?

“Since the late 1970s wage inequality increased very dramatically in the United Kingdom. After showing relative stability for many decades (and a small compression in the 1970s) there has been an inexorable upward trend in the gap between the highest and lowest earners in the labour market.” (S Machin, 1996)

“The postwar years of prosperity were marked by … relative stability in earnings inequality. The benefits of economic growth were large and widely distributed. … These trends made a dramatic reversal in the early 1970s” (Morris and Western, 1999, p 625)

“Throughout the XX Century, despite the vagaries of inflation and the vertiginous growth of real earnings, an ‘invisible hand‘ seems to have led the best paid 10 percent of earners [in France] to receive 2.5-2.6 times the mean … [there is] a surprising stability to the hierarchy of salaries” (T Piketty, 2001, p 187).
Metric

What constitutes a “change”?

5 per cent criterion for change to “register”
10 per cent or more = “significant”
20 per cent or more = “large”

To “register”

P10  50   P90  180
P10  47.5 P90  189
Figure J.2 IRELAND upper part of distribution 1937-2000

Census of Industrial Production P90

Household survey P90

Large

Significant
Figure T.2 UNITED STATES top decile 1939-2005

Great Compression

Golden Age

LARGE

19%

Household survey All workers P90

Population census P90

Household survey FT (ORG)
Figure 6 Top and bottom earnings deciles in United Kingdom 1954-2005

Employer survey data

Bottom decile RH axis

Top decile LH axis

Income tax data

% median
Change in Bottom Decile % 1980-2000
Rise in Top Decile % 1980-2000
Earnings deciles in the UK (1977 = 100)

- **Fall**: Some recovery
- **Top decile**: Stability
- **Bottom decile**: Fanning out

Earnings deciles in the UK (1977 = 100)
Fanning out in recent decades

% increase relative to the median

P75  P90  P95

Australia  Germany  Ireland  Italy  Poland  Portugal  CH  UK  US
**Role of the capital market**

- Affects the cost of acquiring education and skills; expect higher return to compensate for higher real after–tax rates of interest and changes in government policy towards the financing of education.

- Higher implicit cost of capital for firms with move to shareholder value maximisation, reduces incentive to invest in workers and converts labour market to “spot market”.

- Corporate governance and accountability of remuneration committees.
Conclusions

- We have to study dynamics; even if technical progress continues to out-strip education, the premium for qualified workers may converge.
- There has been widening of earnings dispersion in majority of OECD countries, but rises in decile ratio due more to changes at top than at bottom. We have to explain the “fanning out” at the top.
- The widening is not unprecedented; the “Golden Age” was less than golden; in a number of OECD countries, dispersion has followed a “W-path”. Stability is not the norm, not even in Continental Europe.
- We need to look at the capital market as well as the labour market.