

Offshoring and Inequality

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Offshoring: Facts

Offshoring: Fragmentation, slicing the value chain, vertical specialization, outsourcing. *Breaking apart the production process with various stages occurring in different countries.*

Hummels, Ishii and Yi (2001) consider the value of imported inputs embodied in goods that are exported for the 1970-1990 period. The index increased in most countries: From 18% to 24% in France, 20% to 26% in the UK, 6% to 11% in the US.

Chen, Kondratowicz and Yi (2005) extends the data to 2000 with similar results.

Strauss-Kahn (2004): The index measures the share of imported inputs embodied in production for the 1977–1993 period for France. It increases from 9% to 14%, which represents more than a 50 % growth over the period.

Inequality: Facts

Table 1
Trends in earnings dispersion

Country	Time period	% change in earnings D9/D5	% change in earnings D5/D1
Austria	1980–1994	0.7	2.5
Belgium	1985–1993	0.0	–1.4
Denmark	1980–1990	2.6	–2.1
Finland	1980–1994	1.8	–1.4
France	1981–1994	3.9	–2.4
Germany	1983–1993	0.6	–6.2
Italy	1980–1993	15.4	–1.8
Netherlands	1985–1994	2.5	0.6
Norway	1980–1991	2.7	–6.4
Sweden	1981–1993	3.8	2.3
United Kingdom	1981–1994	10.7	11.5
United States	1981–1994	15.5	10.9

Sources: Author calculations; Data are from the OECD Employment Outlook (Organisation for Economic Cooperation and Development (OECD), 1996–1997).

Notes: D1 and D9 refer to the upper earnings limits of, respectively, the first and the ninth deciles of employees ranked in order of their earnings from lowest to highest, i.e., D1 corresponds to the 10% workers earning the least. D5 is defined similarly. It corresponds to median earnings.

Data from the same source for equivalent periods show increase in employment differential (skills correspond to education levels): 83% in Finland, 95% in France, 110% in Norway, 28% in US, 48% in UK.

The majority of the increase in inequality occurs within industry (Berman et al. (1994) for the US, Berman, Bound and Machin (1998) for cross-country...)

Reconciling facts and theory

Whereas traditional trade theory (HO) fails to capture such observed within-industry change, offshoring provides a trade explanation of the increased inequality.

Both offshoring and skilled biased technological change are likely culprit of the increase in inequality. Determining which of these explanations accounts for the observed changes becomes an empirical question.

Empirical evidence

Study	Country	Main Results
Feenstra and Hanson (1996, 1997, 2003):	U.S.	Offshoring contributes from 15% to 24% of the decline in the share of production workers in the wage bill during the 80's.
Strauss-Kahn (2004)	France	Offshoring accounts for 11% to 15% of the within-industry shift away from unskilled workers toward skilled workers over the 1977–1985 period and to about 25% over the 1985–1993 period.
Hsieh and Woo (2005)	Hong-Kong	Offshoring to China accounts for about 40% increase of the wage share of skilled workers.
Hijzen, Gorg and Hine (2005)	U.K.	Offshoring reduces the demand for less-skilled worker but not for semi-skilled and skilled workers.
Yamashita (2008)	Japan	Offshoring with East Asian countries contributed to skill upgrading in employment.

The road ahead

- Firms level data
- Include services
- Inequality in the 90's : A different story.

Feenstra (2008) reveals that in the 90's relative wage of skilled to unskilled workers continued increasing while relative employment decreased. Again biased technological change (toward the more skilled) and offshoring are potential explanation. But now we should think in term of offshoring in services. Grossman and Rossi-Hansberg (2008)'s paper provides theoretical evidence.