RESERVE BANK OF AUSTRALIA
QUANTITATIVE MACROECONOMICS WORKSHOP

14–15 December 2017
Sydney

RESERVE BANK OF AUSTRALIA

RBA 2017 Quantitative Macroeconomics Workshop,
15 December 2017

Real Wage Stagnation: Some Lessons From Abroad For Australia

Stephen Machin

CENTRE *for* ECONOMIC PERFORMANCE

LSE THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Motivation

Labour markets around the world are quite different in a number of dimensions to what they were in the past.

Shifts in skill structures, technical change, globalisation and changes in work organization have all contributed to big shifts through time.

These have affected wage trends, the inequality of labour market outcomes, industrial relations and the nature of work.

Structure of Talk

Talk will focus upon four aspects of the slowdown of wages and productivity in advanced countries:

1). Real wage stagnation

2). Productivity and employment

3). Decoupling

4). Changes in the balance of power between workers and firms

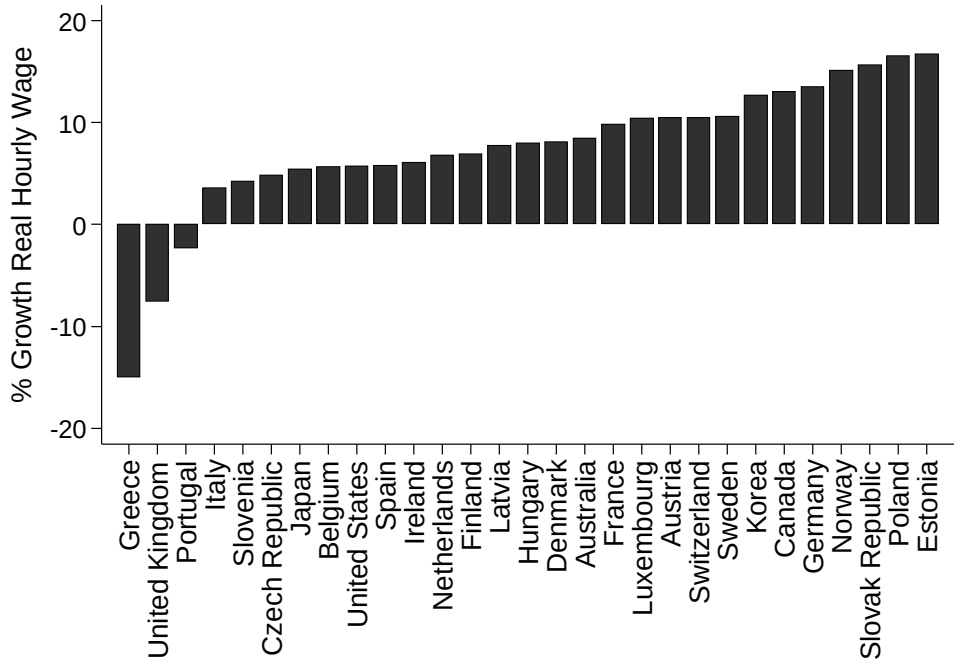
Real Wage Stagnation

Begin with the international position.

Then focus on experience of particular countries.

Highlight general nature of change, with implications, and consider where Australia lies within these patterns.

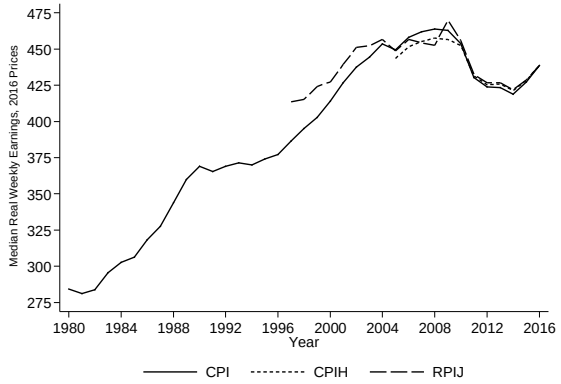
International Real Wage Growth



Notes: Average real wages defined by the ratio between total wage bill and average hours worked., 2008 to 2015. Source: OECD Stats, 2016 (https://stats.oecd.org/).

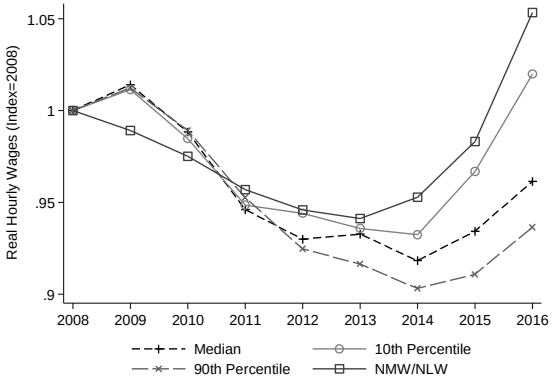
Real Wages, UK

Median, 1980 to 2016



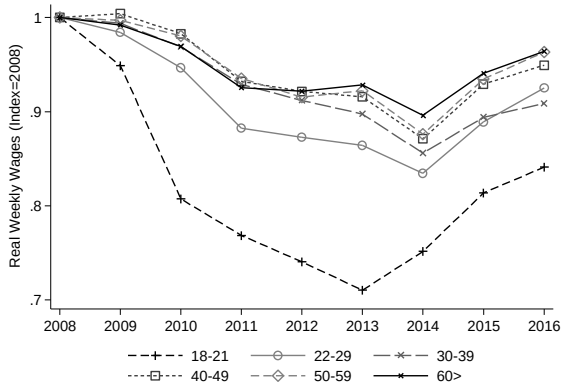
Weekly earnings deflated by CPI, CPIH and RPIJ.
Source: Annual Survey of Hours and Earnings (ASHE).

Distribution, 2008 to 2016



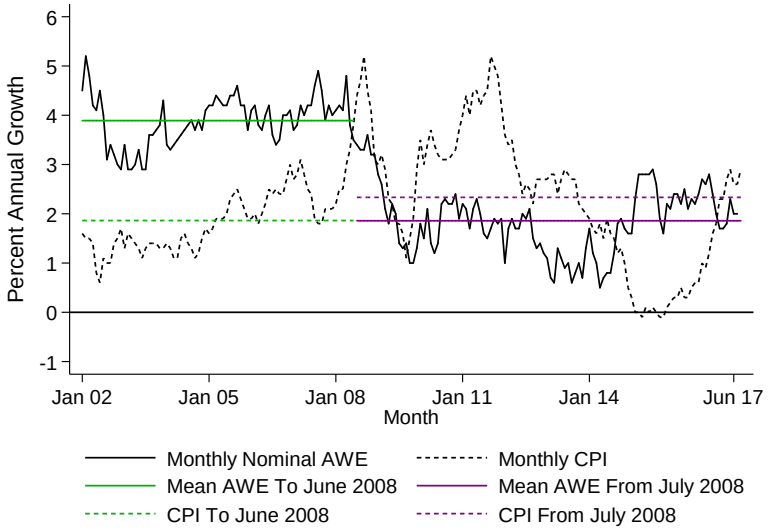
NMW stands for National Minimum Wage and NLW stands for National Living Wage.
Source: Annual Survey of Hours and Earnings (ASHE) hourly earnings, all workers. 2008 = 1.

By Age, 2008 to 2016



Source: Annual Survey of Hours and Earnings (ASHE) weekly earnings, all workers. 2008=1

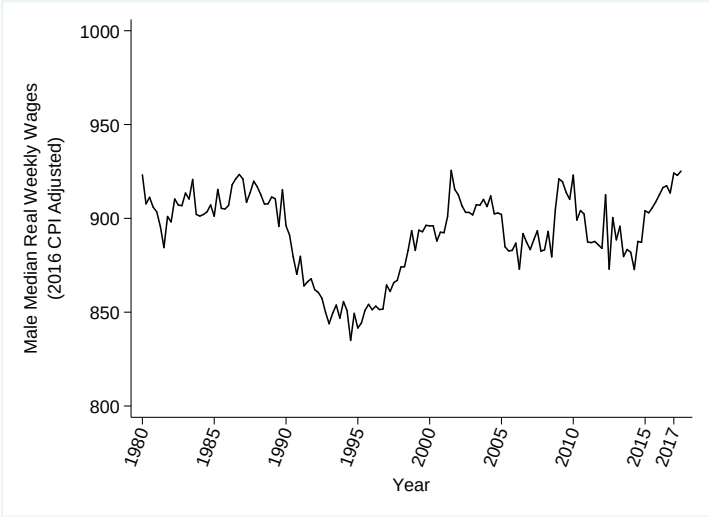
Nominal Wages and Prices, UK



Source: Average weekly earnings (AWE regular) and CPI from ONS.

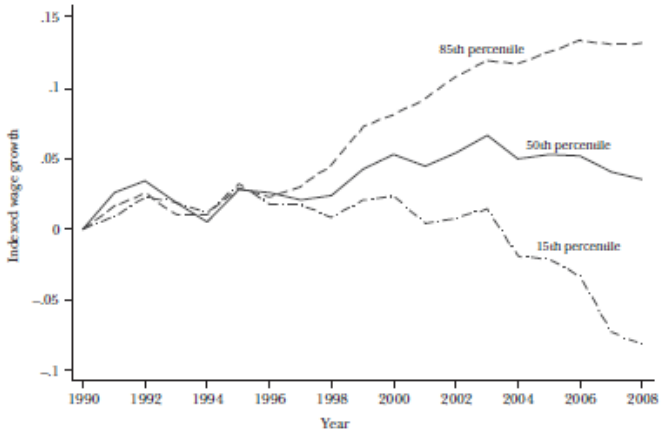
Real Wages, America and Germany

US Male Median, 1980 to 2017



CPS Median Real Weekly Earnings - Wage and salary workers. Sample restricted to men, full-time employed and 16 years and over.
Source: US Bureau of Labour Statistics

Germany Median, 1990 to 2008



Notes: Calculations based on SIAB Sample for West German Full-Time Workers between 20 and 60 years of age. The figure shows the indexed (log) real wage growth of the 15th, 50th, and 85th percentiles of the wage distribution, with 1990 as the base year. Nominal wages are deflated using the consumer price index (1995 = 100) provided by the German Federal Statistical Office.

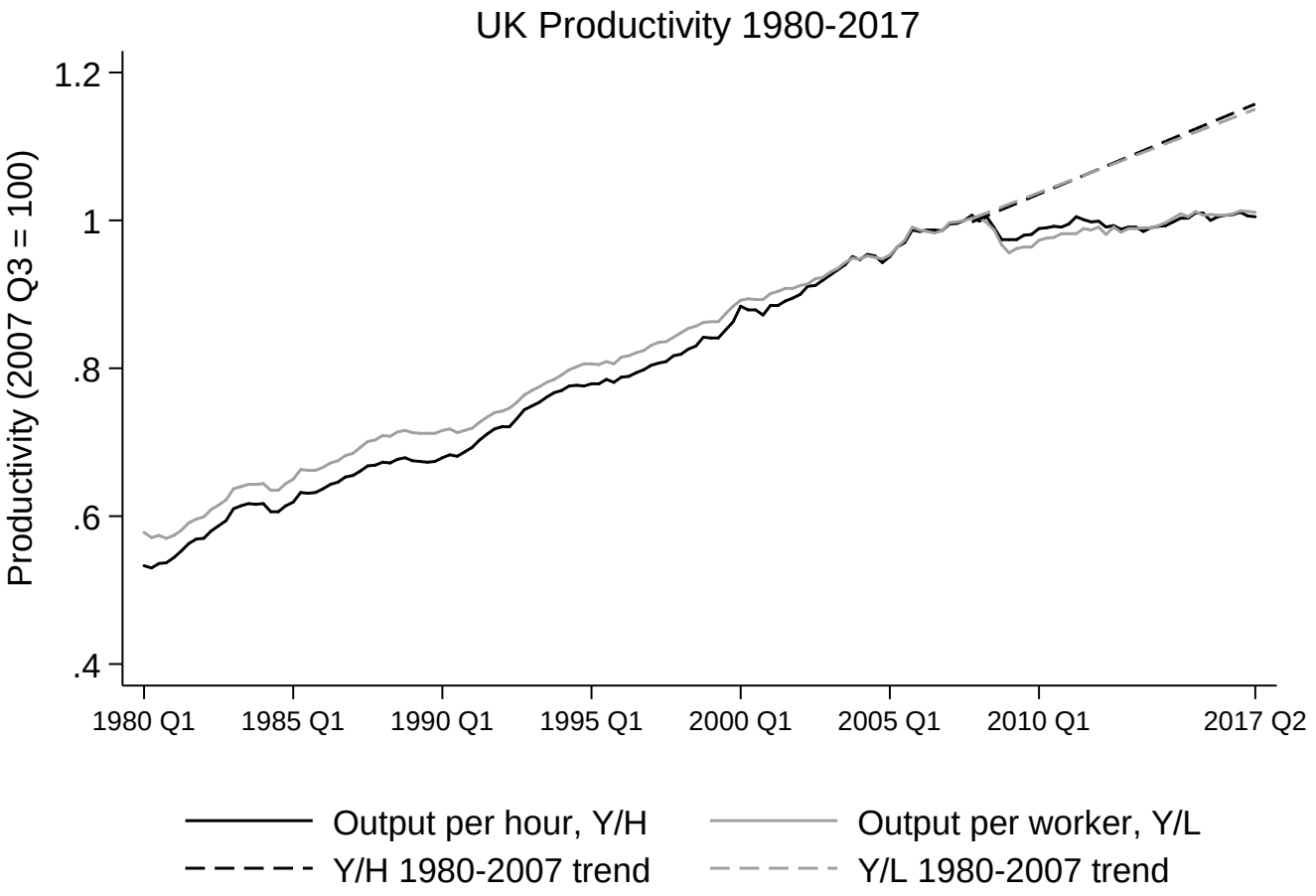
Dustmann, Ludsteck, Schonberg (2009) chart.

Real Wages, Australia

Source: Australian Bureau of Statistics

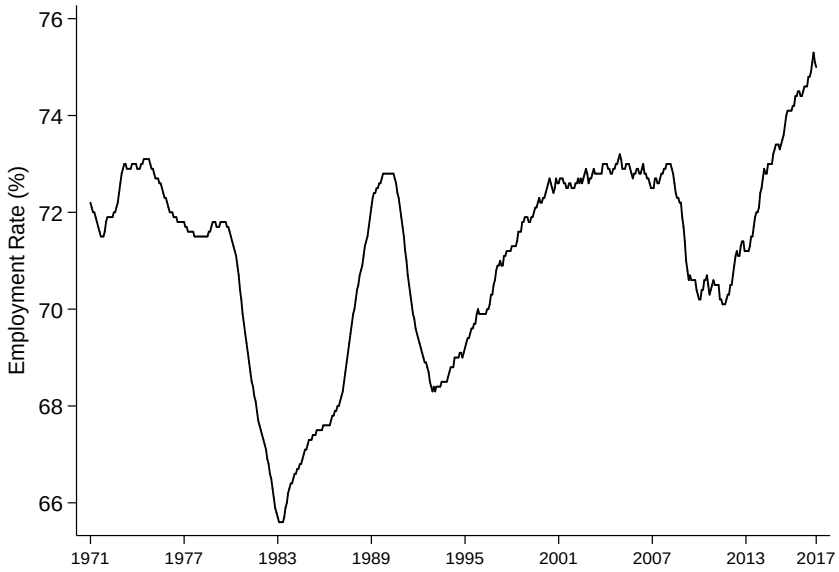
Productivity

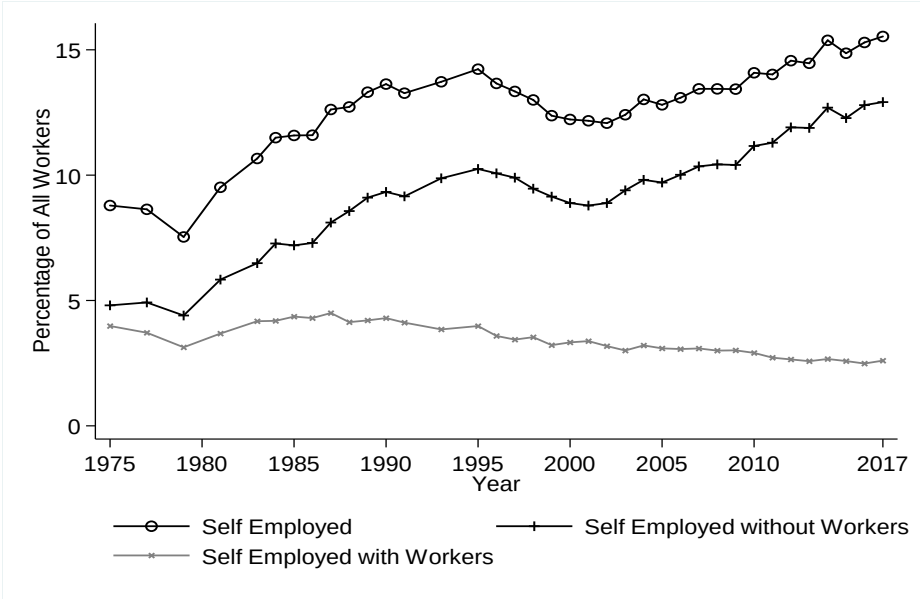
UK again:



Employment

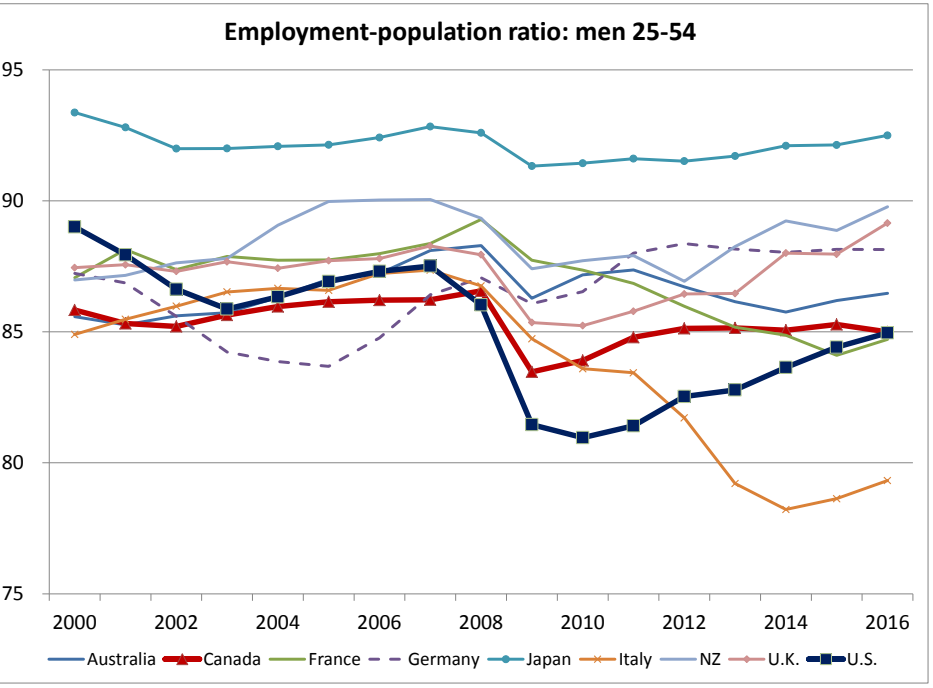
UK again:

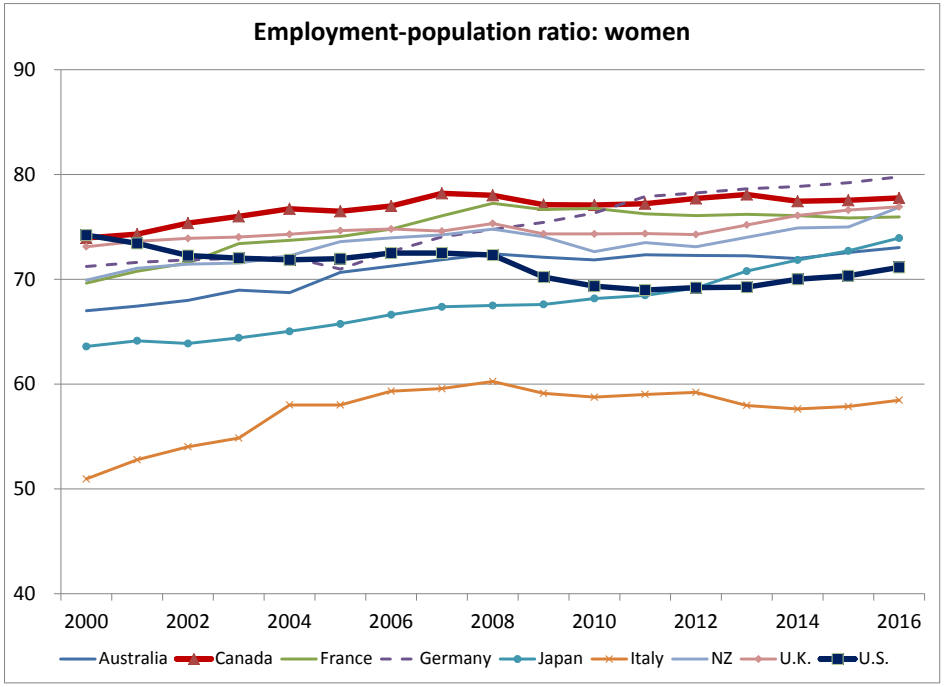




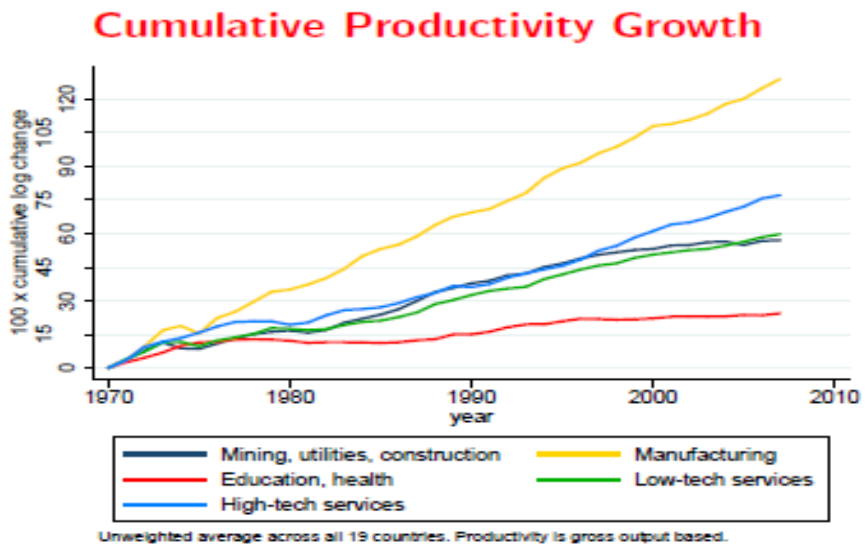
Employment

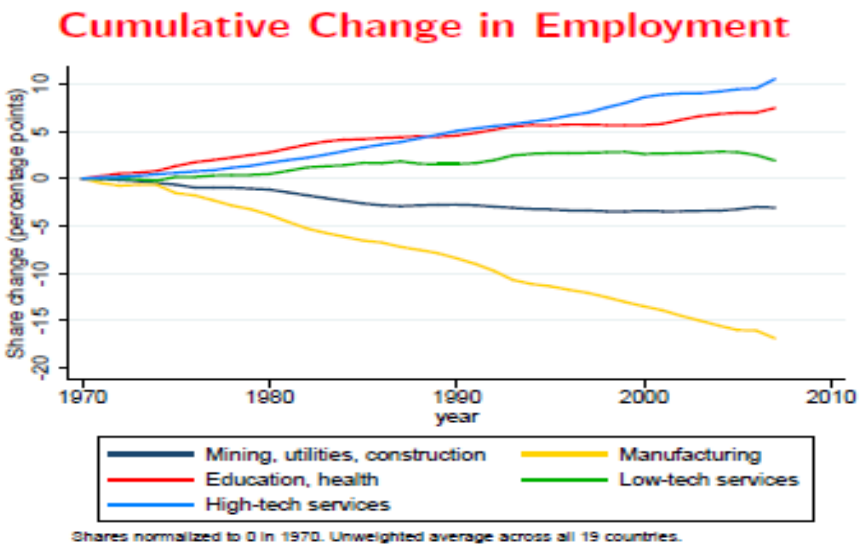
International:





Productivity Growth



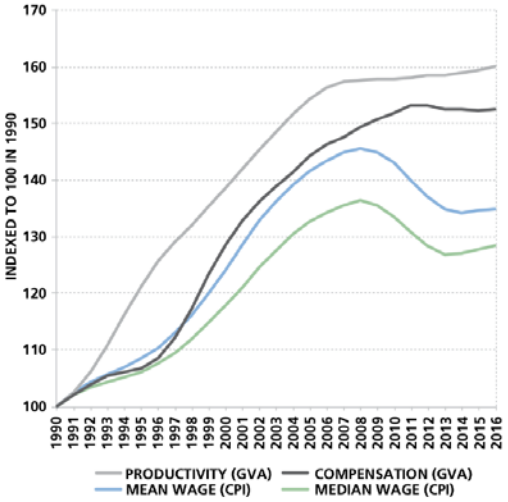


Source: Autor and Salomons (2017)

Decoupling 1

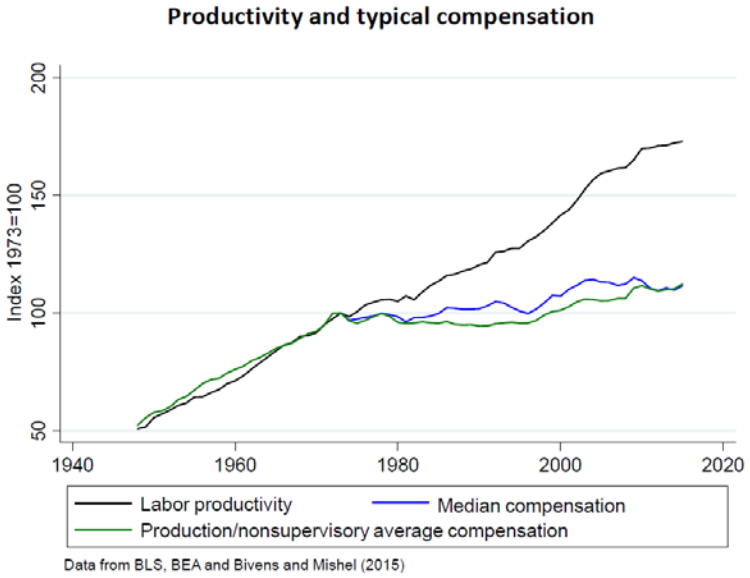
Even though productivity growth has been sluggish, wage and labour compensation growth have been slower ("decoupling").

UK



Notes: Growth rates of real productivity, real compensation (deflated by the GVA deflator), real average and median wages per hour (deflated by the CPI).
Source: OECD National Accounts, ONS.

US



Data from BLS, BEA and Bivens and Mishel (2015)

Decoupling 2

So the gains from productivity do not been shared out equally.

Two dimensions of inequality are central to this:

i) The gap between average wages and total compensation per hour suggests that non-wage labour costs, mostly pensions in UK and health in US, have taken a growing share of the productivity growth that has been achieved.

ii) The opening of the gap between mean and median wages is because of rising wage inequality. As top earners had faster wage growth that pulled the average (mean) wages up at a faster rate then the median wages (of the middle or typical worker).

Shifts in the Balance of Power Between Workers and Firms

Have these patterns arisen because of shifts in the balance of power between workers and firms?

Several features can be highlighted:

1). The real wage shifts seem not to be cyclical, either reflecting changes over a relatively long period, or since the downturn little sensitivity to the cycle.

2). Longer run declines in collective bargaining probably matter, but there are more fundamental shifts within firms as well.

3). Drops in the degree of rent sharing.

4). Changes in product market structures.

Falling Labour Share

In most countries (with some notable exceptions) compensation has also grown more slowly than productivity, so that labour share has also fallen.

Karabarbounis and Neiman (2013)

Australia = -1.9

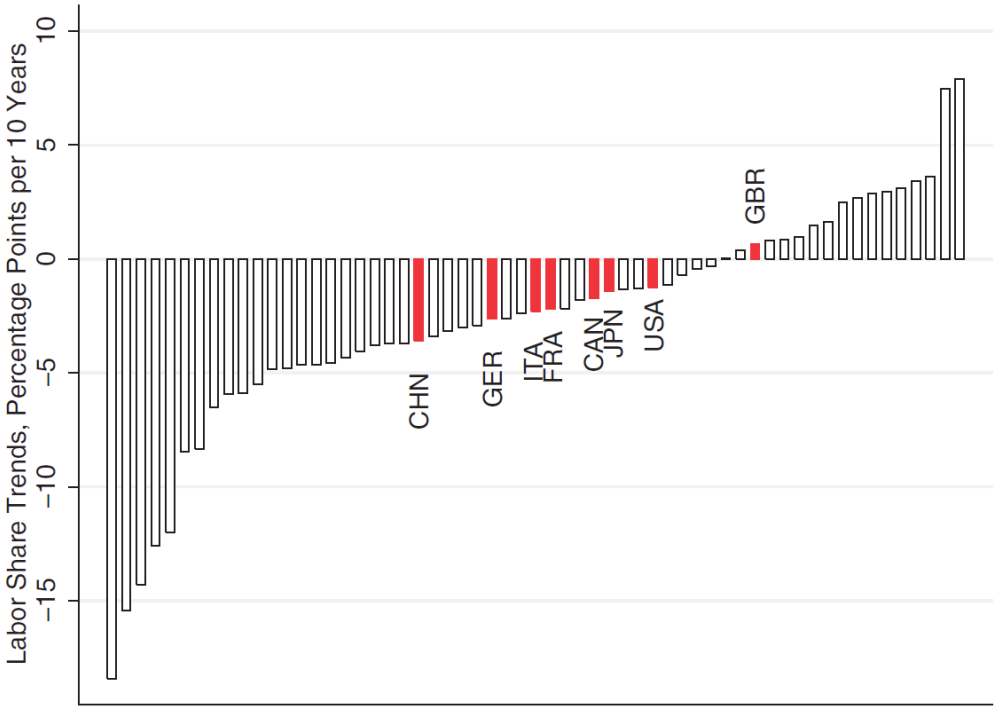


FIGURE III

Estimated Trends in Country Labor Shares

The figure shows estimated trends in the labor share for all countries in our data set with at least 15 years of data starting in 1975. Trend coefficients are reported in units per 10 years (i.e., a value of −5 means a 5 percentage point decline every 10 years). The largest eight economies are shaded.

Drops in Rent Sharing/"Insider" Power 1

Return to an older literature on rent sharing in firms from the 1990s (e.g. Nickell and Wadhwani, 1989, 1990; Abowd and Lemieux, 1993; Van Reenen, 1996), which has in part (for different reasons) taken on a new lease of life more recently (Card et al., 2014, 2016; Guvenen et al., 2017).

Interest in the size of rent sharing parameter, β: $w \backsimeq \overline{w} + \beta\left(\frac{\pi}{n}\right)$

Firm-level wage equation:

$$w_{ijt} = \alpha_i + f(t) + \sum_{c=0}^{C} \beta_c \, (\pi/n)_{ij,t-c} + \sum_{c=0}^{C} \gamma_c \, \overline{w}_{j,t-c} + \sum_{c=0}^{C} \gamma_c \, u_{t-c} + \lambda w_{ij,t-1} + \varepsilon_{ijt}$$

Drops in Rent Sharing/"Insider" Power 2

UK Top 300 Firms (Per Year), 1983 to 2016

$$w_{ijt} = \alpha_i + f(t) + \sum_{c=0}^{C} \beta_c \, (\pi/n)_{ij,t-c} + \sum_{c=0}^{C} \gamma_c \, \overline{w}_{j,t-c} + \sum_{c=0}^{C} \gamma_c \, u_{t-c} + \lambda w_{ij,t-1} + \varepsilon_{ijt}$$

	1983-2000	2001-2016
λ	0.378 (0.006)	0.428 (0.062)
β_0	0.017 (0.004)	0.010 (0.003)
β_1	-0.003 (0.004)	-0.003 (0.003)
β_2	0.004 (0.003)	0.002 (0.002)
β_3	0.006 (0.003)	0.002 (0.001)
Long run effect	0.043	0.012
Sample size	4719	5202
Number of firms	547	503

Notes: Arellano-Bond first differences estimates, standard errors in parentheses.

Drops in Rent Sharing/"Insider" Power 3

US 459 Manufacturing Industries, 1963 to 2011

$$w_{jt} = \alpha_j + f(t) + \sum_{c=0}^{C} \beta_c \, (\pi/n)_{j,t-c} + \sum_{c=0}^{C} \gamma_c \, \bar{w}_{j,t-c} + \sum_{c=0}^{C} \gamma_c \, u_{t-c} + \lambda w_{j,t-1} + \varepsilon_{jt}$$

	1963-1979	1980-1989	1990-1999	2000-2011
λ	0.514 (0.030)	0.472 (0.034)	0.505 (0.027)	0.508 (0.031)
β_0	0.029 (0.007)	0.012 (0.003)	0.008 (0.003)	0.005 (0.002)
β_1	-0.006 (0.004)	-0.005 (0.003)	-0.006 (0.004)	0.001 (0.002)
β_2	0.002 (0.003)	0.003 (0.003)	-0.002 (0.003)	-0.005 (0.003)
β_3	0.003 (0.003)	0.004 (0.002)	0.002 (0.003)	0.001 (0.002)
Long run effect	0.052	0.026	0.001	0.005
Sample size	4719	4590	4557	4972
Number of industries	547	547	547	547

Notes: Arellano-Bond first differences estimates, standard errors in parentheses.

Rising Product Market Power

Autor et al. (2017) show labor share falls more where industry concentration has increased.

Labor share especially low in big new US technology companies. Not because wages low, but because profits and market valuations are enormous.

Globalisation - transfer pricing and shifting profits abroad, and global value chains.

Technology – rise of gig economy and digitisation, and jobs with poor prospects of career progression.

End

There is widespread real wage slowdown/stagnation in advanced countries which seems to:

a) Date back to different origin dates.

b) Not be a cyclical phenomenon.

c) Be less present in (what might be termed) special circumstance places.

Better learning about the extent to which these can be explained by technological change and/or globalization is of critical importance for future labour market opportunities and outcomes, and for inequality in terms of how productivity growth is shared across the income distribution.

RESERVE BANK OF AUSTRALIA
QUANTITATIVE MACROECONOMICS WORKSHOP

14–15 December 2017
Sydney

RESERVE BANK OF AUSTRALIA