Outline

Part I: Major Trends in Wages

- Global trends
- Wages, productivity and labour shares

Part II: Wage Inequality in the Workplace

- The extent of wage inequality
- Within & between enterprises
- Gender pay gaps

Part III: Summary & Conclusion
There is growing recognition that wage trends have been problematic in many countries …

In many countries, wage trends have become a social and political issue, changing the “nature of political discussion”.

There are some unresolved debates on the economic dimensions of wages, particularly their impact on competitiveness and aggregate demand.
The ILO wage database has data on average wages for 133 countries.

Weighted average, %

<table>
<thead>
<tr>
<th>Country</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>64</td>
</tr>
<tr>
<td>Americas</td>
<td>98</td>
</tr>
<tr>
<td>Arab States</td>
<td>74</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>99</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>100</td>
</tr>
<tr>
<td>World</td>
<td>95</td>
</tr>
</tbody>
</table>

Country Coverage:
- Some data have gaps for some years which we have filled through interpolation and extrapolations based on a model with few variables. We then calculate real wage growth using CPIs.

Employee Coverage:
- We use this data to produce regional and global estimates, which take into account the relative size of each country (i.e. they are weighted estimates), and we try to correct for the bias that arises because some countries have no data at all.
Global wage growth has decelerated since 2012

Annual average global real wage growth (2006-15)
Weighted average; data from ILO global wage database, %

Global wage growth has decelerated since 2012.
Wage growth has increased in developed countries; but declined in emerging economies

**Annual average real wage growth in the G20 (2006-15)**

Weighted average; data from ILO global wage database, %

**G20**

**Developed**

**Emerging**
In the last 10 years, real wage gaps have opened up between developed countries.
... and also between emerging economies

Average real wage index (2006-15)
base year=2006; developing G20 countries

[Graph showing the average real wage index for various countries from 2006 to 2015, with China, India, Russia, Turkey, South Africa, Brazil, Indonesia, Saudi Arabia, and Mexico.]
In developed countries, real wages growth has lagged behind the growth of labour productivity.
... and there has been a global decline in labour income shares

Adjusted labour income share, %

- **China**
  - 1992: 56%
  - 2007: 48%
  - 2012: 50%

- **Mexico**
  - 1995: 42%
  - 2010: 34%
  - 2015: 32%

- **Portugal**
  - 1992: 63%
  - 2011: 51%

- **United States**
  - 1991: 62%
  - 2011: 55%

Note: China data is unadjusted

Major Trends in Wages
In conclusion …

Emerging economies: Some emerging economies have performed well in terms of average wage growth, but the pace of convergence is slowing down.

Developed economies: Wage growth has been slow in many developed economies, lagging overall behind productivity growth.

Coordination: Coordination of wage policies should take into account the relationship between wages & productivity, and labour income shares.
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Motivation for Part II

Excessive inequality is bad for economic growth; it reduces social mobility and creates divisions within society.

Debate has mostly focused on the characteristics of workers, and the effects of technology and globalization. A new literature looks at the role of the workplace.

Data sources for Part II

For Europe, we use EMPLOYER-EMPLOYEE matched data (Structure of Earnings Survey, Eurostat).

22 Countries, 2002 to 2010, 22 million wage employees from about 1.1 million enterprises.

For Emerging & Low income Economies, such data is not available. Instead, we used labour & household surveys & enterprise level surveys.
Wage inequality increases sharply at the top

**Gross monthly wage of employee (2010)**

Weighted average by centile; data from 22 European economies, Euro (thousand)

![Bar chart showing wage inequality](chart.png)

- 1st: 0.5
- 2nd-10th: 0.8
- 2nd: 1.0
- 3rd: 1.3
- 4th: 1.5
- 5th: 1.7
- 6th: 1.9
- 7th: 2.2
- 8th: 2.5
- 9th: 3.1
- 91st - 99th: 4.7
- 100th: 12.5

The chart illustrates the disparity in wages across different percentiles, with a significant increase from the 1st to the 100th percentile, represented as 7.4x.
There are differences across countries; some have much lower wages inequality

**Gross hourly wage of employee (2010)**
Weighted average by centile; data from 22 European economies, Euro

- **Finland**: 4.4x
- **France**: 6.5x
- **Spain**: 6.2x
- **United Kingdom**: 13.3x

Wage Inequality in the Workplace
Top decile of highest-paid employees earn 2-5 times more than the bottom decile

Real gross monthly wage share of employee (2010)

Weighted average; data from 22 European economies,

Bottom 50% takes 29.1%

Top 10% takes 25.5%
Education is correlated with wage levels

Education of wage employee (2010)
Weighted average by centile; data from 22 European economies,
%

Having college degree does not help you move to top 1%

1-10th centile 11th to 20th 21-30 31-40 41-50 51-60 61-70 71-80 81-90 91st to 99th 100th centile

Primary Post secondary Lower secondary Upper secondary University Postgraduate

0 0 0 1 1 1 2 3 5 7 5
7 8 10 13 16 20 27 36 45 57 62
5 6 7 8 10 11 12 13 11 11 11
51 53 53 52 50 48 44 38 23 18 11

26 22 21 19 18 15 11 12 9 6 4

0 0 0 1 1 1 2 3 5 4 4

Education is correlated with wage levels
Can such wage distributions be justified by differences in worker characteristics?

Predicted & actual wages using a classic human capital model (age, education, tenure) (2010)
Individual ranked by average hourly wage; 22 EU economies data, Euro (ln)

Methodologies & Findings

1. We run a model which tries to explain the wages of individuals to the observed skills-related characteristics of workers, including age, education and tenure.

2. The result shows that these factors are important, but that there are enormous differences between individuals’ actual wages and those predicted by the model.

3. This is particularly striking at the top (where people’s actual wages exceed predictions) and at the bottom (where wages are below predictions).
Next, we therefore bring enterprises into the analysis.

**Between enterprises**
According to recent research, increases in inequality in the U.S. are due to mainly to growing difference in productivity and average wages between enterprises.

**Within enterprises**
But what about inequality within enterprises? Let us also distinguish changes over time, and the part of total inequality due to *between* and *within* inequality at one point in time.
About 80% of employees earn less than the average wage in their enterprises.

**Average hourly wages of individuals & enterprises (2010)**

By centile ranking of individual wages; data from 22 European economies, Euro (ln)
Wage inequality is much higher among enterprises that pay high average wages.

**Average minimum & maximum wages of individuals (2010)**

By centile of establishments ranked by average hourly wage; data from 22 European economies,

Euro
A few workers in a few enterprises earn extremely high wages

**Mountain of wage inequality in Europe (2010)**
Hourly wage; enterprises and individuals ranked by their average wages in centiles; data from 22 European economies, Euro
Real-estates & finance and transportation & communication sector provide high wage jobs

Economic sector of wage employee (2010)
Weighted average by centile; data from 22 European economies, %

1 in 5 top 1% wage earner work in R&F
Decompose total variance in wages as the sum of the “within” and “between”

**Average hourly wages of individuals & enterprises (2010)**
Wage variance; data from 22 European economies, % of total

- Variance within establishments: 43%
- Variance between establishments: 57%

Within-enterprise inequality is as nearly important as between-establishments inequality
Countries with more “between” inequality also have more “within” inequality.

**Decomposition of variance (2010)**

Average hourly wage; data from 22 European economies

$s^2 (\ln)$

![Graph showing wage inequality](Image)
Fewer women in top deciles; more women in low-pay.

Gender of wage employee (2010)
Weighted average by centile; data from 22 European economies, %

<table>
<thead>
<tr>
<th>Centile</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10th centile</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>11th to 20th</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>21-30</td>
<td>55</td>
<td>45</td>
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<td>31-40</td>
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<td>51-60</td>
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<td>61-70</td>
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<td>71-80</td>
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<td>81-90</td>
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<td>58</td>
</tr>
<tr>
<td>91st to 99th</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>100th centile</td>
<td>21</td>
<td>79</td>
</tr>
</tbody>
</table>

1.4x
Gender wage gap is even wider among top 1% of wage employees

Gender of wage employee (2010)
Ratio of female to male hourly earnings among total population; data from 22 European economies, %

<table>
<thead>
<tr>
<th></th>
<th>Among top 1% earners</th>
<th>Wage earning population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender pay gap</td>
<td>45</td>
<td>20</td>
</tr>
</tbody>
</table>

Gender pay gap among the highest-paid occupational categories
By occupational category & within top 1 per cent

The gender pay gap is not just larger among the highest-paid occupational categories but actually increases at the top end of the wage distribution.
- The gender gap among CEOs in the population is about 40 per cent – twice as high as the overall gender pay gap.

Within the top 1 per cent, male earn almost twice as much as their female counterparts
- The gender pay gap reaches about 45 per cent overall, and among CEO top 1 per cent amounts to more than 50 per cent.
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Proposing country-specific measures to reduce excessive wage inequality

Productivity growth

Top salaries: regulation or self-regulation?

Minimum wages & collective bargaining

Sustainable Wage Policies

Government

Employer

Trade Union

Gender & other pay gaps
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Gender & other pay gaps
THANK YOU FOR YOUR ATTENTION!

For further information on Global Wage Report or research conducted by the ILO wage group, please refer to:

Global Wage Report 2016/17

Minimum Wage Guide & Other Publications