

Deaton Review: Firms and Inequality

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Programme on
Innovation and Diffusion

Aims of our Chapter

1. Pull together evidence on what's happened to UK business landscape over last few decades (esp. '96-)
 - New evidence from (near) universe of UK company accounts & administrative ONS sources

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 - Increase in inequalities of firm-level productivity, wages, and size (industrial concentration ↑)
 - Coincides with worrying aggregate trends: growth of productivity & pay down; markups (of price over costs) and income inequality is up

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3. Assess some explanations and policy implications

Key Conclusions

1. Major UK problem is 15 years of low/no productivity growth
 - Has led to a stagnation of wage growth across distribution (median and mean)
2. Since mid-1990s, big growth in inequality of productivity & pay across firms (like the US)
 - “Superstar firms” pull away from the rest. Workers in top 10% of firms had sustained productivity & pay growth, those in middle stagnated
3. Increase in aggregate price-cost markups and rise in concentration (firm product market power up)
4. Focus should be on raising productivity, e.g. competition reforms & innovation policy

OUTLINE OF TALK

Why Look at Inequality Between Firms?

Firm level findings

Explanations

Policy

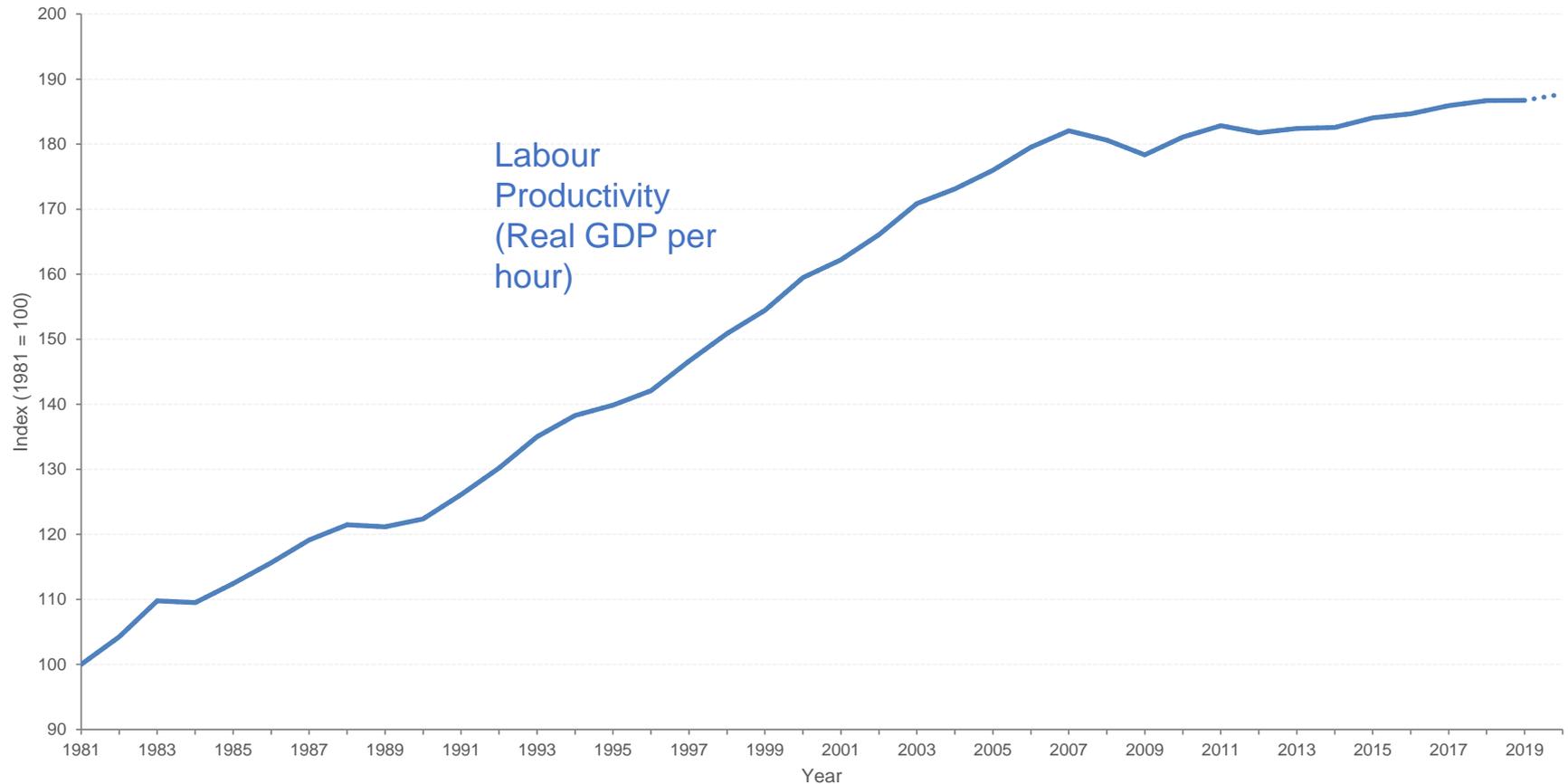
Why look at inequality between *firms*?

- Many reasons to be concerned about inequality of opportunity & outcomes for families & communities
 - But firms are generally not households

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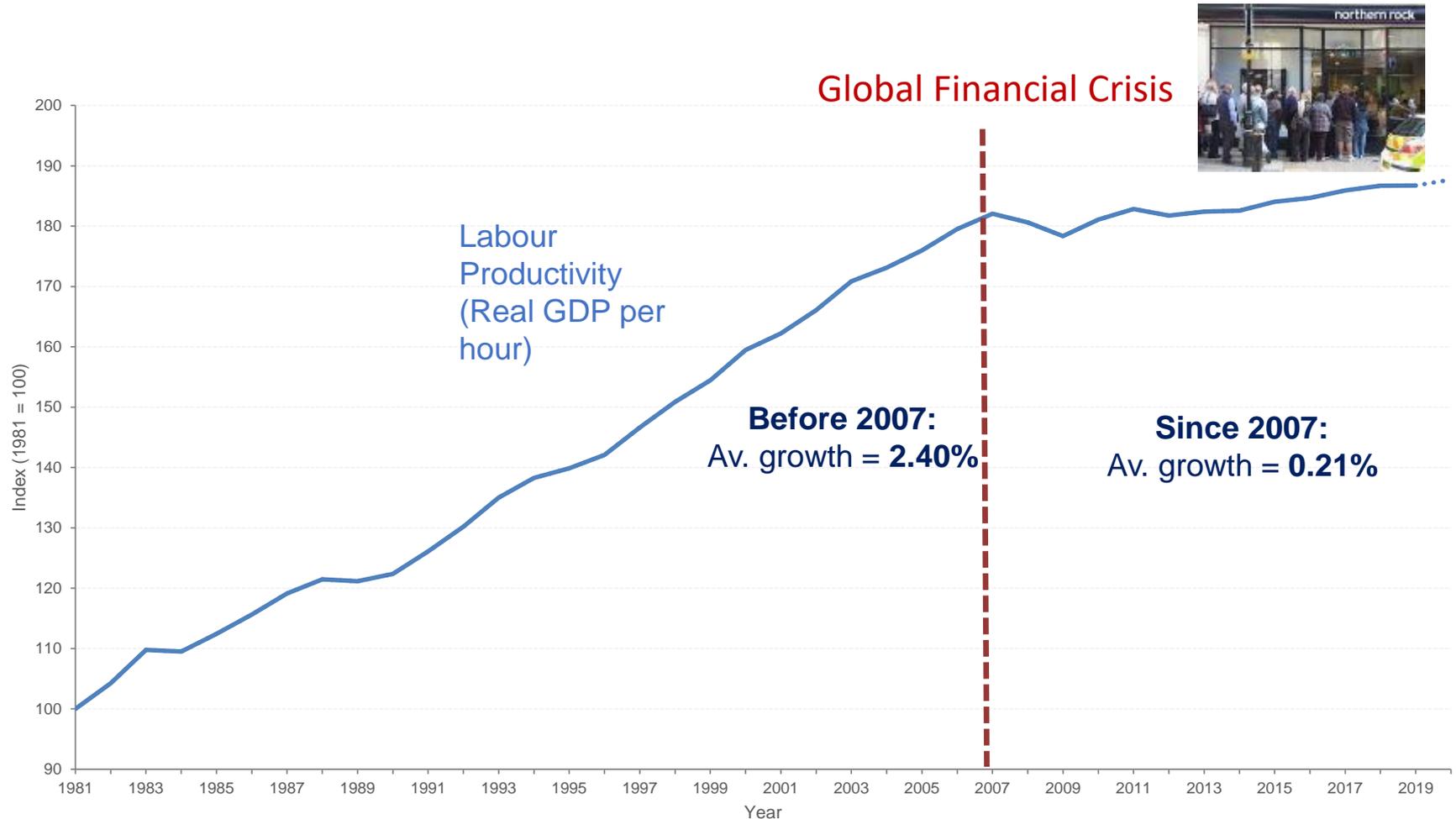
- Many reasons to be concerned about inequality of opportunity & outcomes for families & communities
 - But firms are generally not households
- Some reasons why firm inequality matters:
 1. The firm you work for is important for your wages & wellbeing. So increased inequality between firms puts upward pressure on increased inequality between people
 2. Firm inequality can matter for aggregate outcomes like productivity (the main long-run determinant of wages)
 - e.g. Diffusion of technology from superstar leaders to followers decreases, macro productivity growth slows
 3. Increasing lobbying strength of large firms could shift laws and regulations in their favour

The Challenge: Macro Productivity growth dismal since Global Financial Crisis; Output per hour 1981-2020



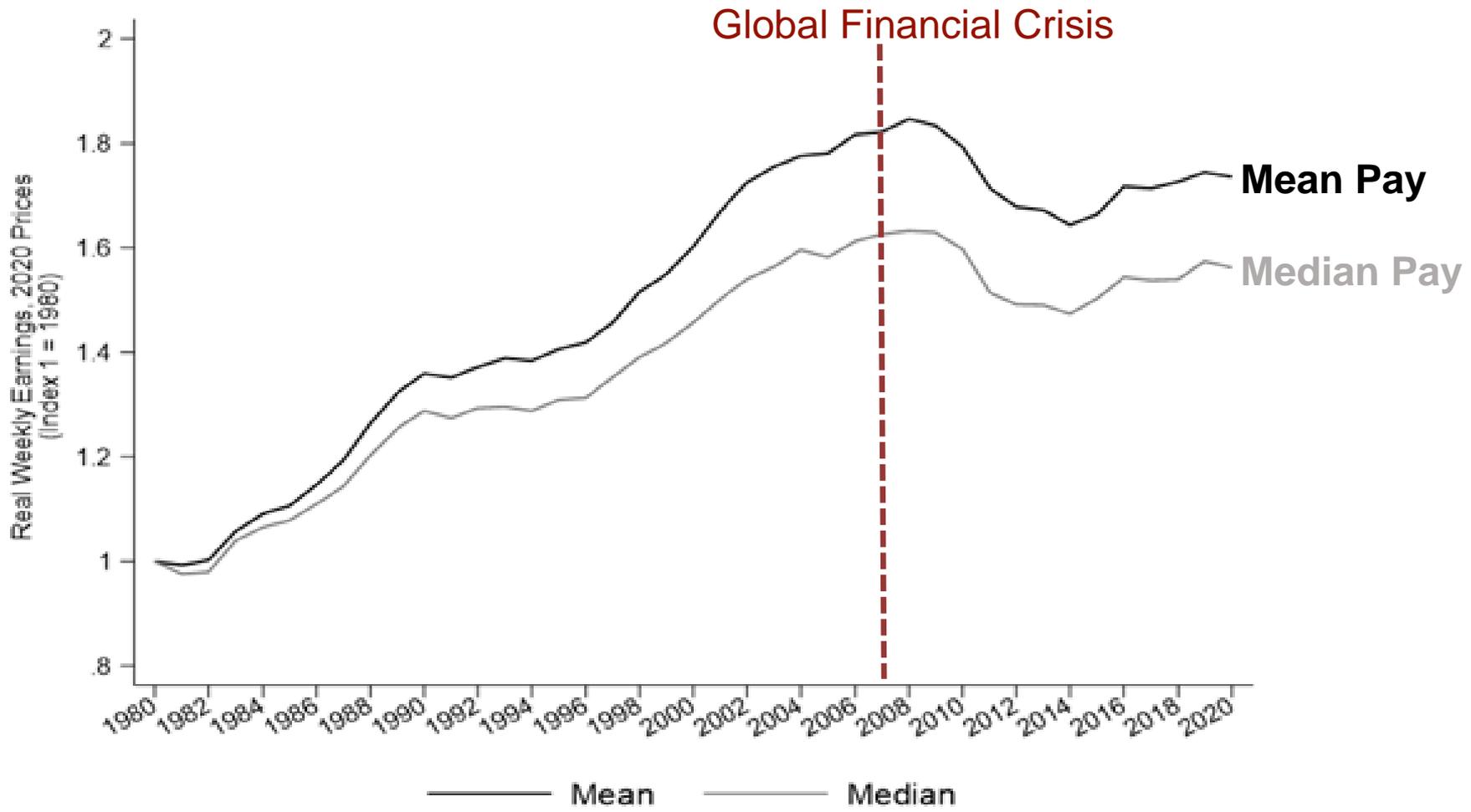
Source: ONS

The Challenge: Macro Productivity growth dismal since Global Financial Crisis, Output per hour 1981-2020



Source: ONS and OECD data

Mean and Median individual Wages have also both stagnated since Financial Crisis



Notes: ASHE data

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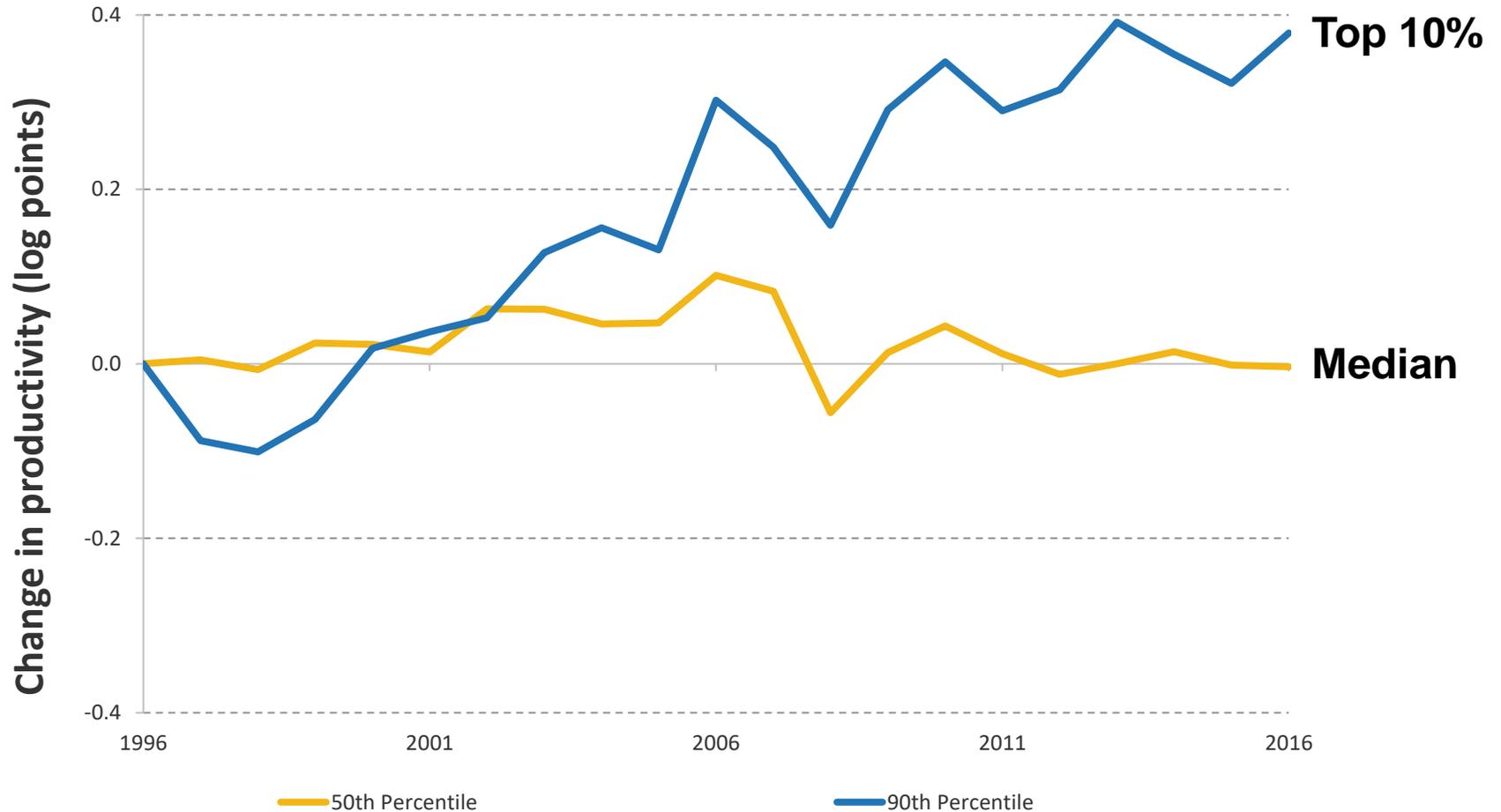
Policy

Productivity growth since 1996: Stagnation after Financial Crisis clear for median firm



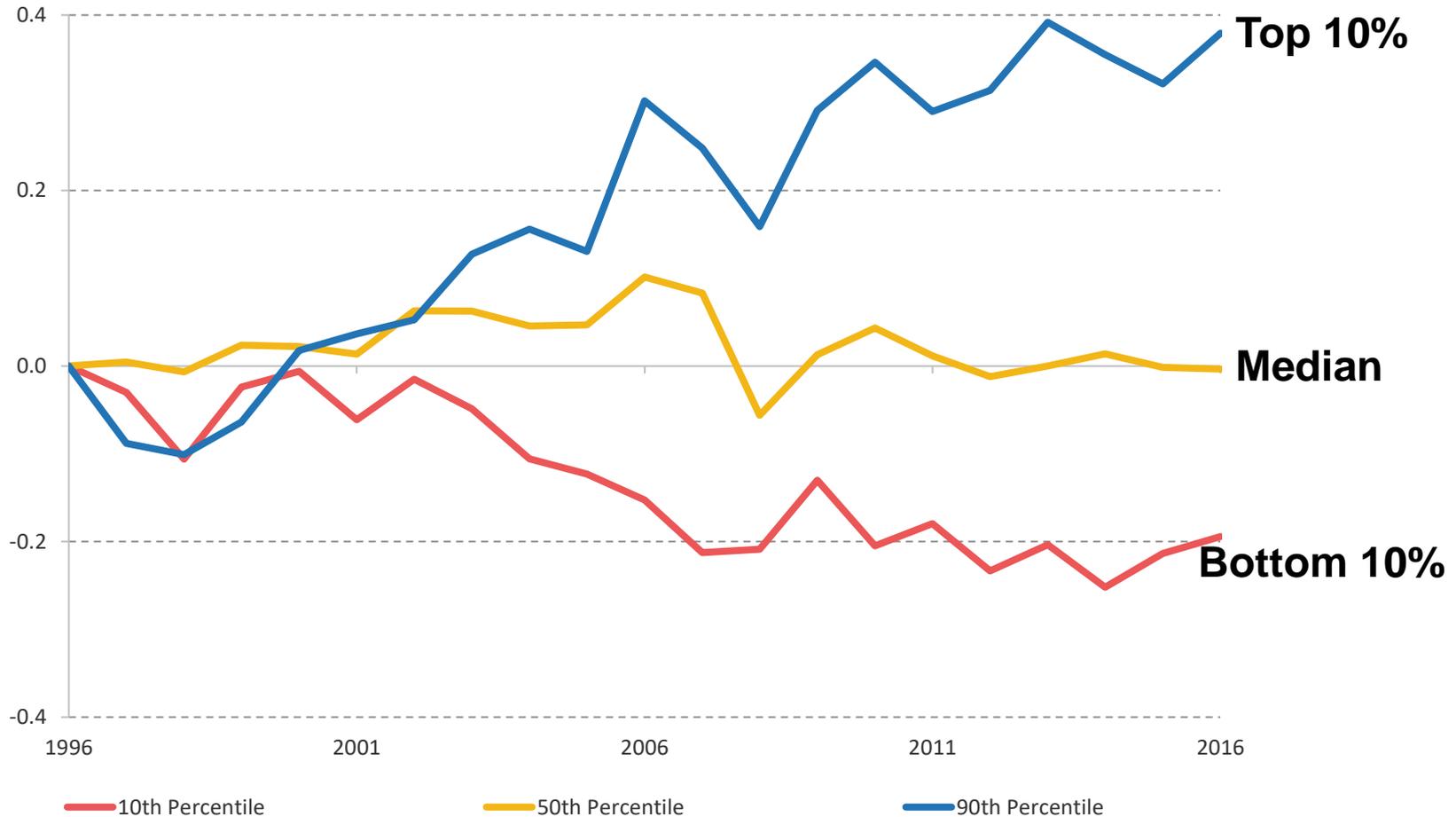
Notes: Historical ORBIS, $\ln(\text{value added}/\text{employee})$, quantiles weighted by firm employment; values indexed to zero in 1996; Changes in log points, so 0.05 = about 5% growth; $0.4 = (e^{0.04} - 1) * 100 = 50\%$

“The Best pull away from the Rest”: Superstar Firms have strong productivity growth



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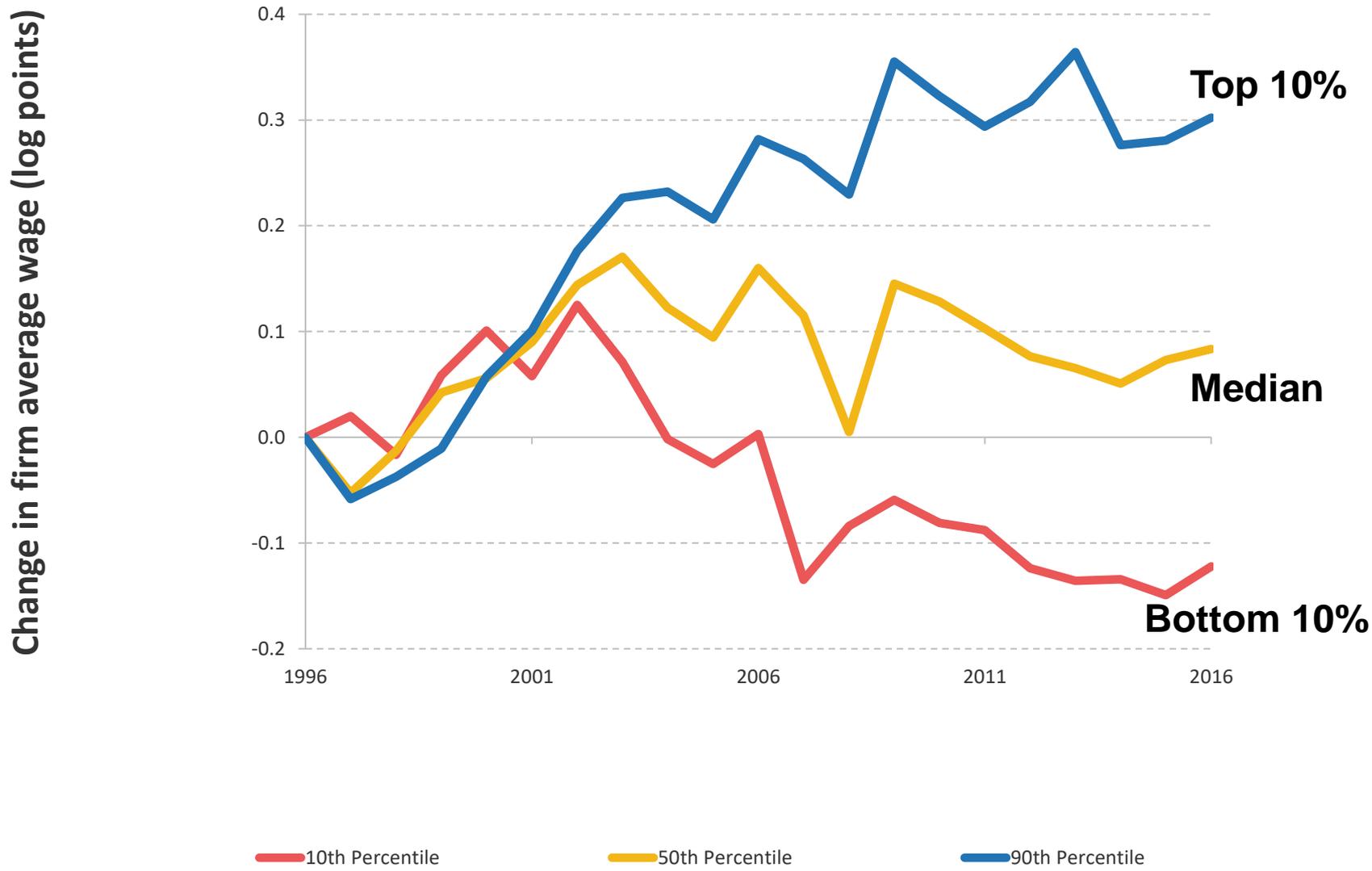
And poor productivity performance at the bottom of the distribution



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But what about Wages in these Firms?

Average Wages by firm have become increasingly dispersed, (like productivity)



Notes: Historical ORBIS, $\ln(\text{wage bill}/\text{employment})$, quantiles weighted by firm employment; values indexed to zero in 1996; Changes in log points, so 0.05 = about 5% growth; $0.4 = (e^{0.40} - 1) * 100 = 50\%$

Comparing UK trends with US

<i>Indicator</i>	<i>UK</i>	<i>US</i>
Aggregate Productivity Growth	Slowdown since GFC	
Productivity Dispersion	Increase	
Aggregate Wage Growth	Slowdown since GFC	
Wage Dispersion	Increase	

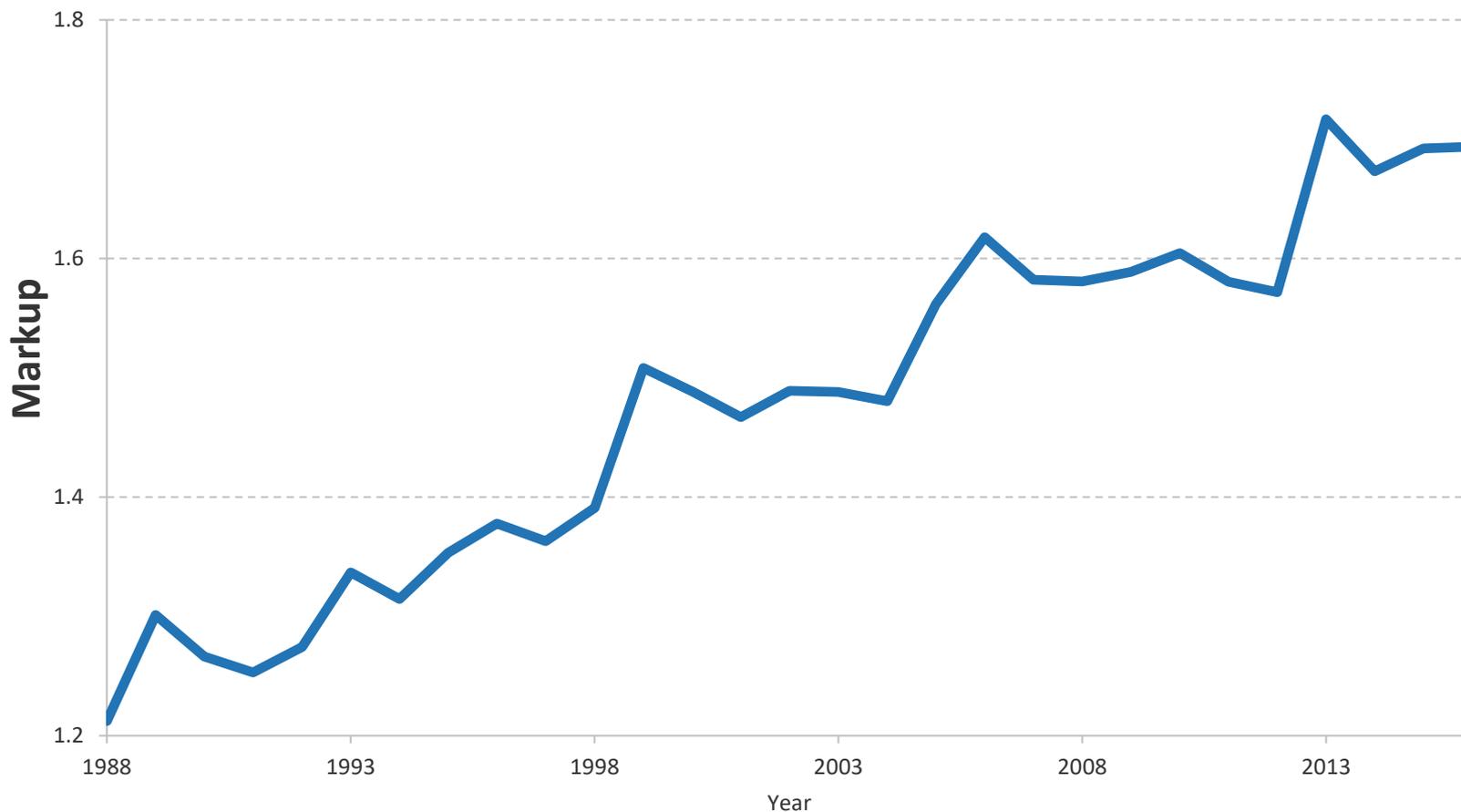
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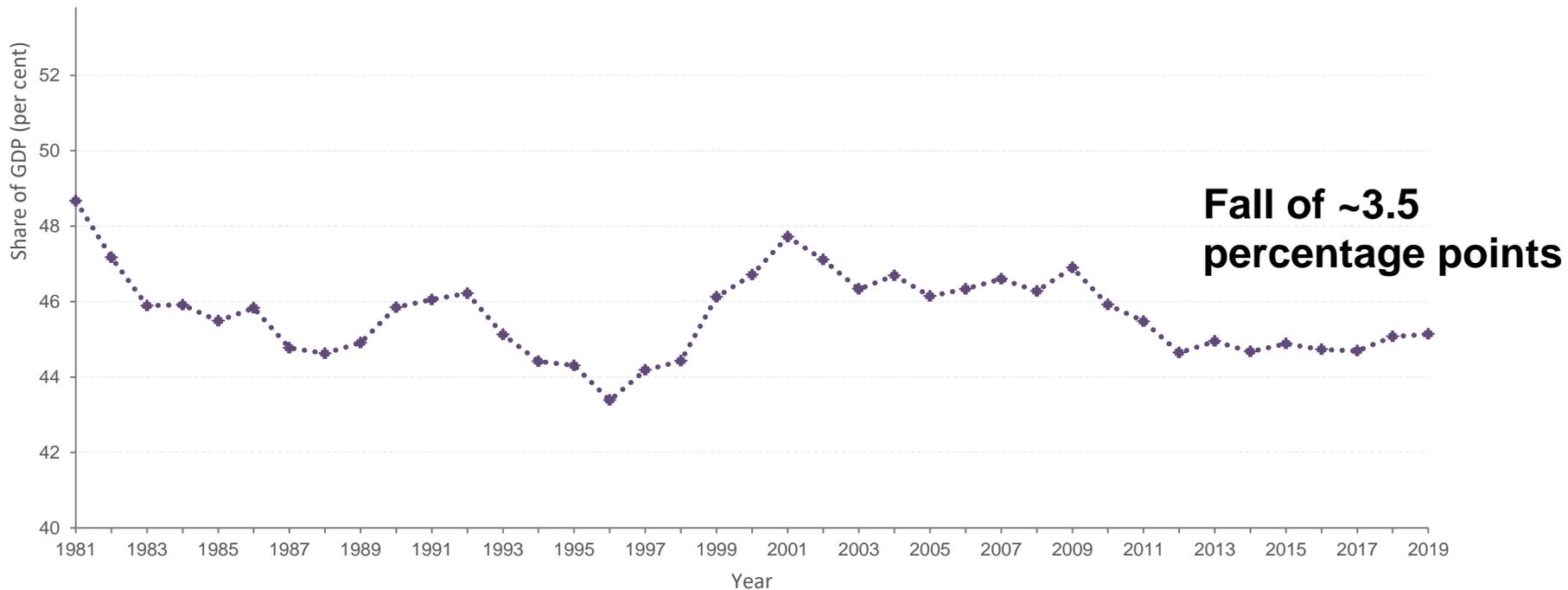
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Aggregate Mark Up		
Mark Up Dispersion		
Aggregate Labour Share		
Labour Share Dispersion		

Aggregate markups (Prices/marginal cost) have also been increasing, 1988-2016



Notes: Worldscope (publicly listed firms), estimate of price/marginal costs using COGS/Sales and calibrated elasticity of output to variable costs of 0.85. Trends in markups of all firms (since 1996) looks broadly similar

UK Wage Share of GDP falls, 1981-2019 (smaller than US though)



Source: Teichgraeber and Van Reenen (2021) using ONS and OECD data.

Note: Wages and adjusted mixed income over GDP (excluding non-wage benefits of employees)

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Aggregate Mark Up	Increase	✓
Mark Up Dispersion	Increase	✓
Aggregate Labour Share	Decrease	✓
Labour Share Dispersion	Increase	✓
Average firm size	Increase	✓
Firm size (Concentration)	Increase	✓
Share of start-up activity	Decrease	✓

OUTLINE OF TALK

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Explanations

Policy

Three broad types of explanation

1. Institutions

- Weaker enforcement of competition policy allowing superstar firms more market power

2. Technology

- Network effects in digital industries: “Google effects”
- Increased fixed costs/Intangible Capital (e.g. software): “Tesco effects”
- Slower technology diffusion from superstar leaders to followers

3. Globalization

- Reallocation effects (via product markets)
- Multinational Global Value Chains (via input markets)

Assessment

- Striking similarity between UK and US
 - Suggests some **common factors** like technology rather than **purely** country-specific institutional explanations (like weakening competition enforcement in US)
- Labour Share falls less in UK than US, despite upward trend in price-cost mark up in both countries
 - Offset by fall in monopsony power in UK? 1999 introduction and uprating of the **minimum wage** (Draca, Machin & Van Reenen, 2011) whereas real value fell in US

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 - **Raising productivity** through long-term investments in innovation, skills & infrastructure. Address policy ADD
 - Need faster diffusion of better technology & management

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2. Even if superstar firm success is because of innovation, there is still risk of abusing market dominance
 - Must **modernise competition policy** in “winner take all” world
3. **Labour market institutions** have been important countervailing force in UK (Minimum Wages)
 - Improving labour market regulation (e.g. in Gig economy)

Thanks!