

Decoupling of Wage Growth and Productivity Growth? Myth and Reality

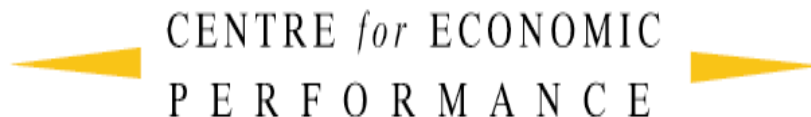
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LSE/Resolution Foundation Presentation

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INTRODUCTION

- Growth of inequality a major problem in UK and US over last 30 years (since late 1970s)
- In last 15 years evidence for “polarization”
 - Upper half inequality (90th-50th percentiles of wage distribution) continues to grow, but 50-10 compresses and shrinks
 - In US median and mean wages stagnant over 30 years (unlike UK where there has been real wage growth at median and bottom decile)
 - And top 1% doing very well (Bell and VR, 2011)
- Debate over decoupling: differences in *productivity* and wages. Workers not getting a “fair share” as productivity growth has been healthy
- Surprising as productivity growth a good thing – increases the size of the pie.

OUR FINDINGS

- There is essentially no “Net decoupling” in UK and US
 - Difference between growth of GDP per hour and hourly compensation using the same price deflator (e.g. GDP deflator/PPI)
 - Consistent with Econ 101
- There has been substantial “Gross Decoupling” in UK
 - Difference between growth of GDP per hour deflated by PPI and median hourly wages deflated by CPI/RPI
 - This is mainly because of (a) growth of inequality (mean – median wages) and (b) faster growth of compensation than wages (e.g. pension payments)
- Similar story in US except bigger gross decoupling & a little bit of net decoupling.
 - Also CPI deflator grows faster than GDP deflator

POLICY IMPLICATIONS

- Decoupling debate is a distraction? We should care about median living standards & inequality irrespective of what is happening to productivity growth
- Decoupling interpreted as workers getting a smaller fraction of the pie, but isn't true. Problem is distribution among employees not capital vs. labor
- Decoupling dangerous because it makes people think – *“why support policies to enhance productivity growth when the ordinary Joe doesn't get much out of it”*. But growth creates better possibility of re-distribution

OUTLINE

- 1. Decoupling “Theory”**

2. Decoupling in the UK

3. Decoupling in the US

4. Labour Shares of National Income

5. Industry Level Analysis

6. Conclusions: Facts and Policy

THEORY

- Firm chooses labour to maximise profits given labour costs. Implies that (for neutral technical change) growth of hourly compensation equals growth of output per hour
- **Net Decoupling** = Growth of GDP/Hour deflated by GDP-PPI LESS Average Compensation per hour deflated by PPI
- **Gross Decoupling** = Growth of GDP/Hour deflated by GDP-PPI LESS Median wages per hour deflated by CPI
- So (in growth rates) Gross – Net Decoupling =
 1. Average Compensation – average Wages
 2. Average wages – median wages
 3. CPI - PPI

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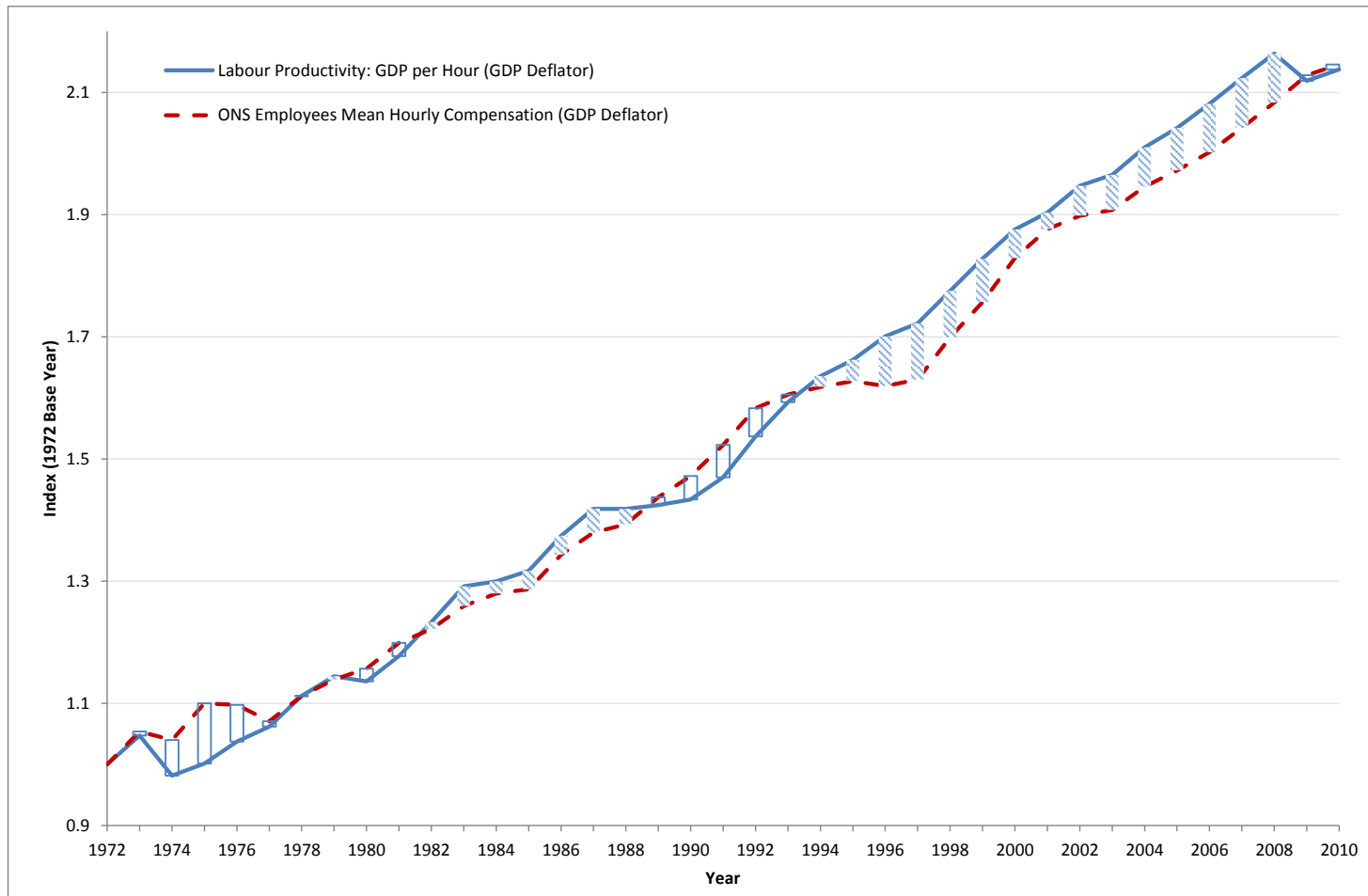
3. Decoupling in the US

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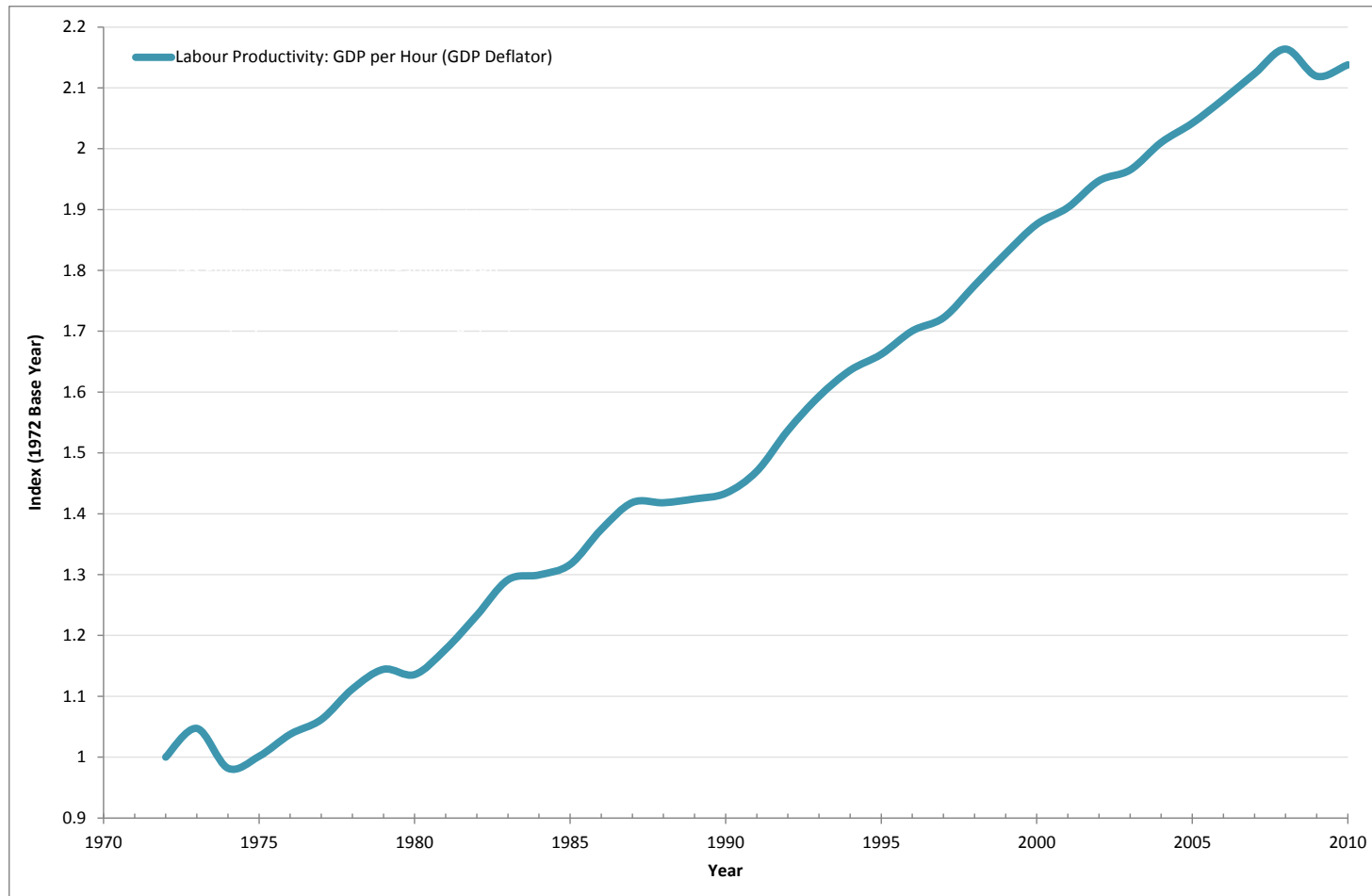
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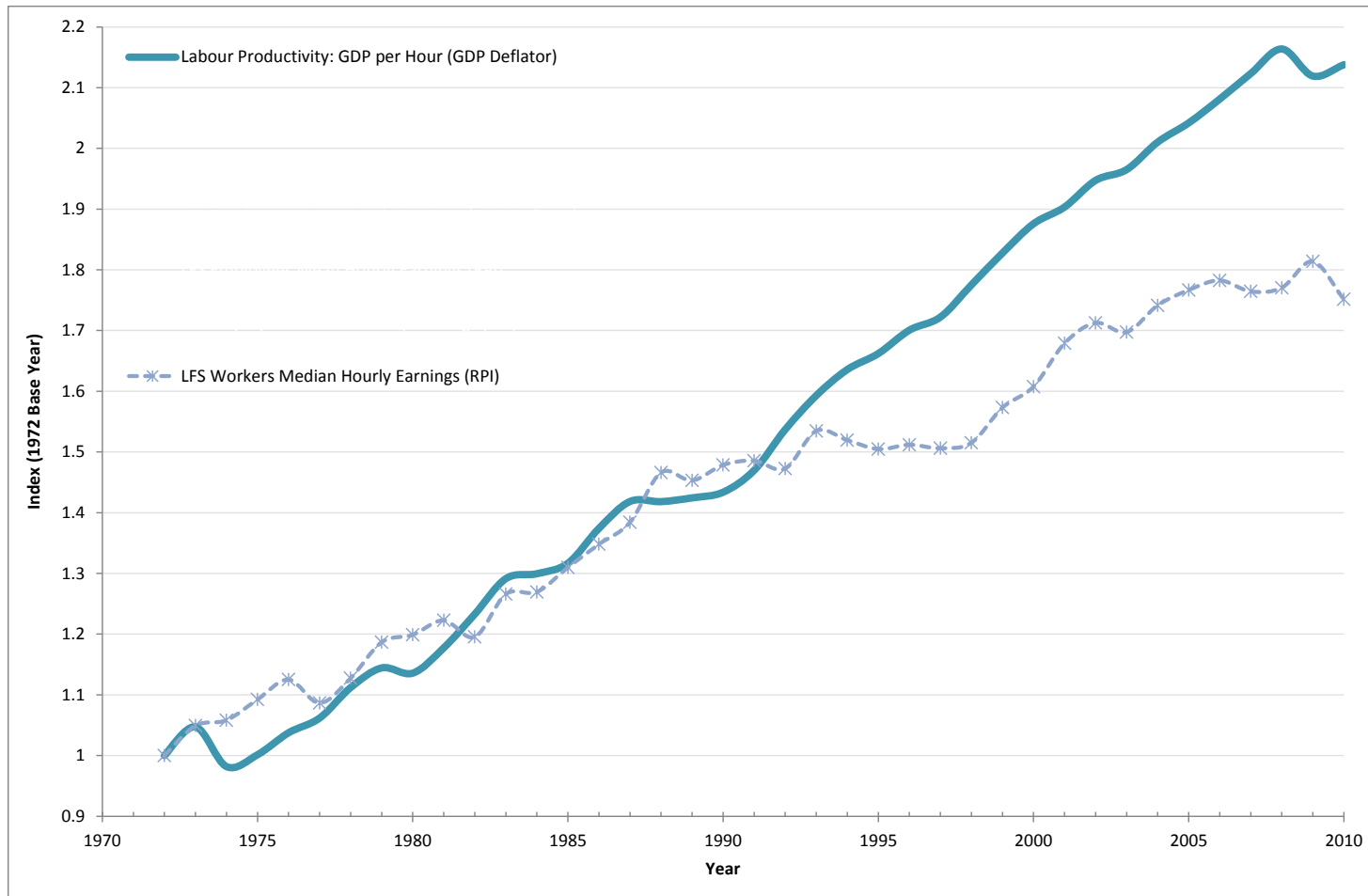
(ALMOST) NO NET DECOUPLING IN UK



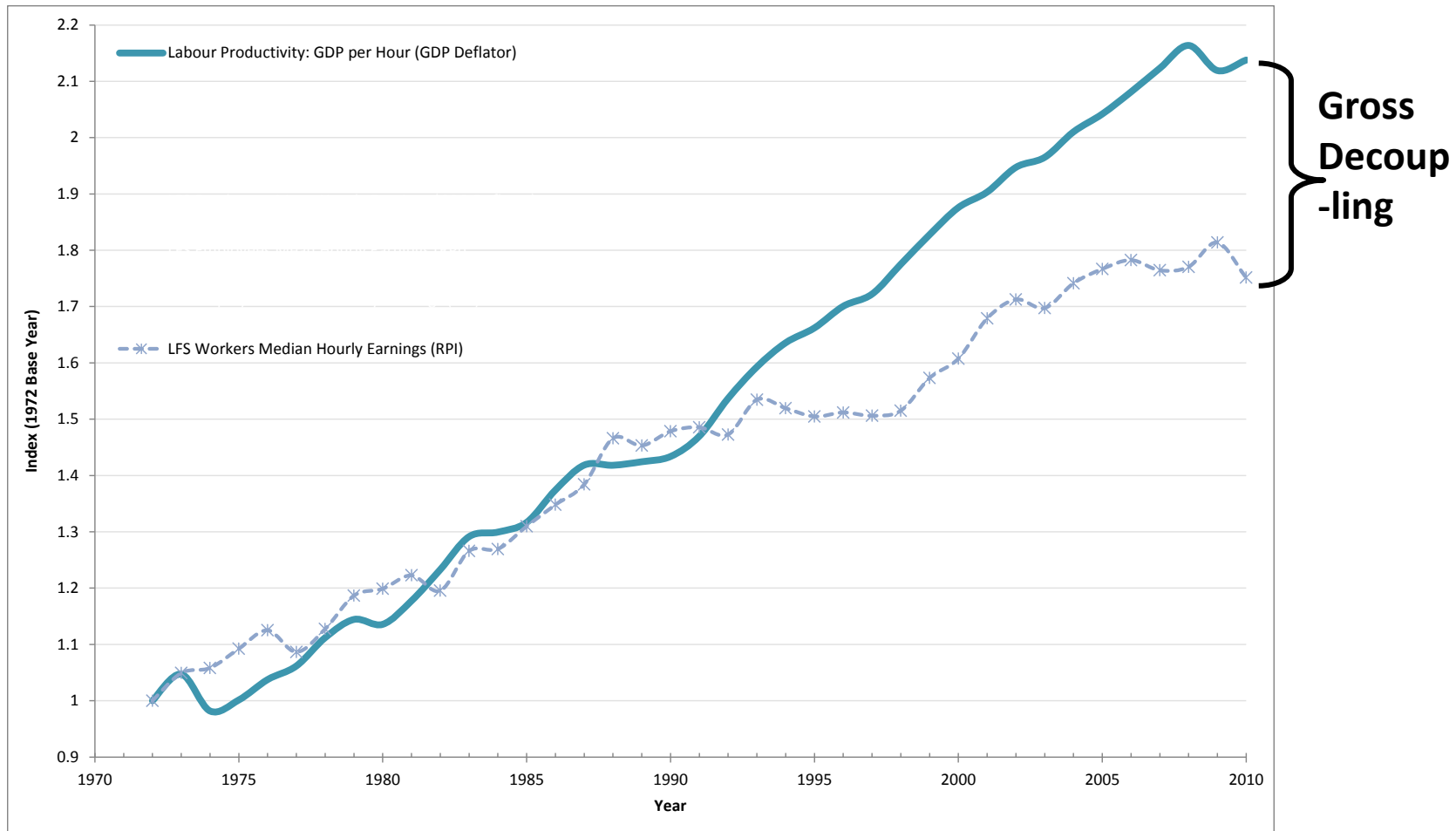
UK GROSS DECOUPLING: REAL GDP PER HOUR (1972=1)



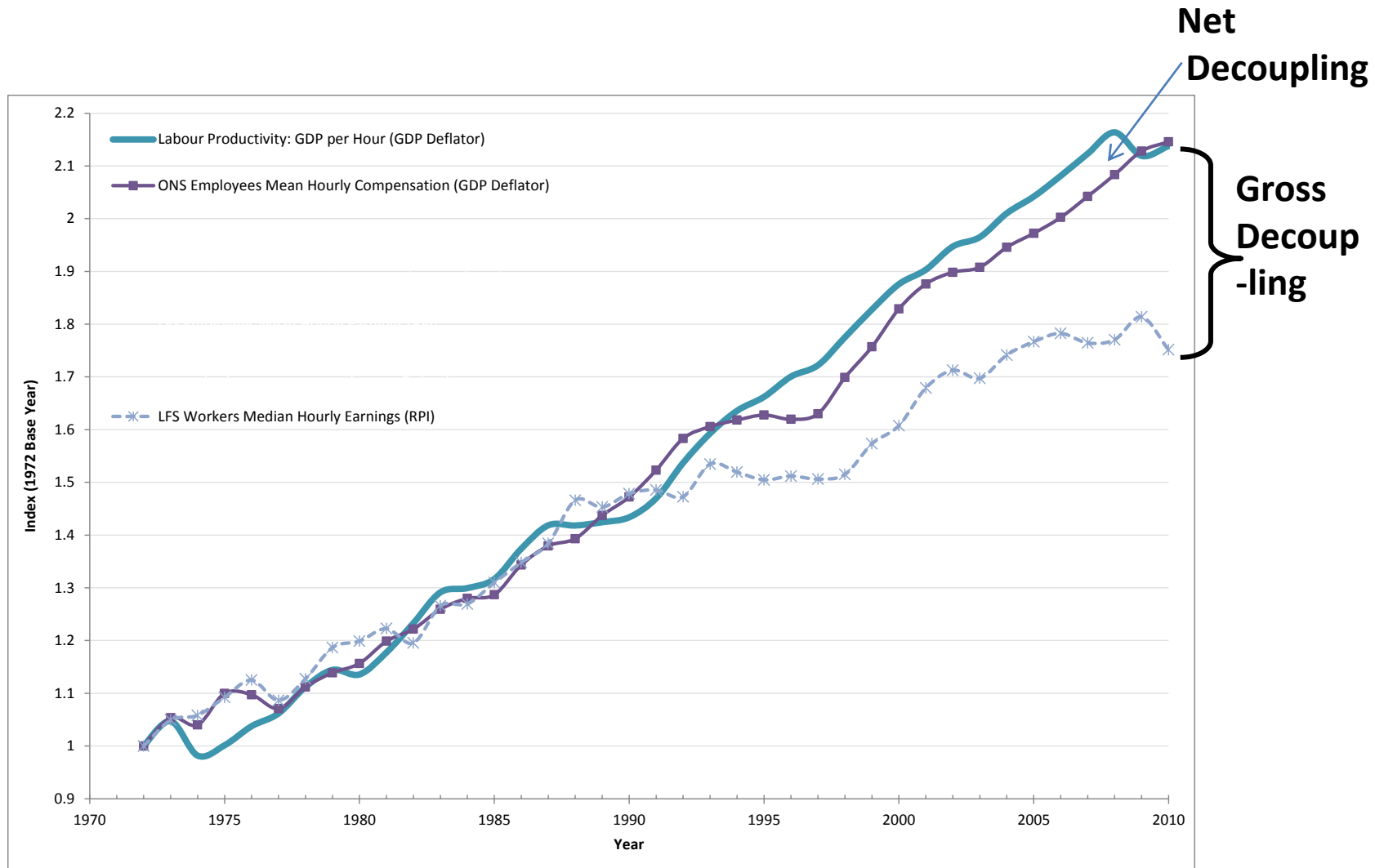
UK GROSS DECOUPLING: LFS MEDIAN HOURLY EARNINGS (RPI) INC. SELF EMPLOYED



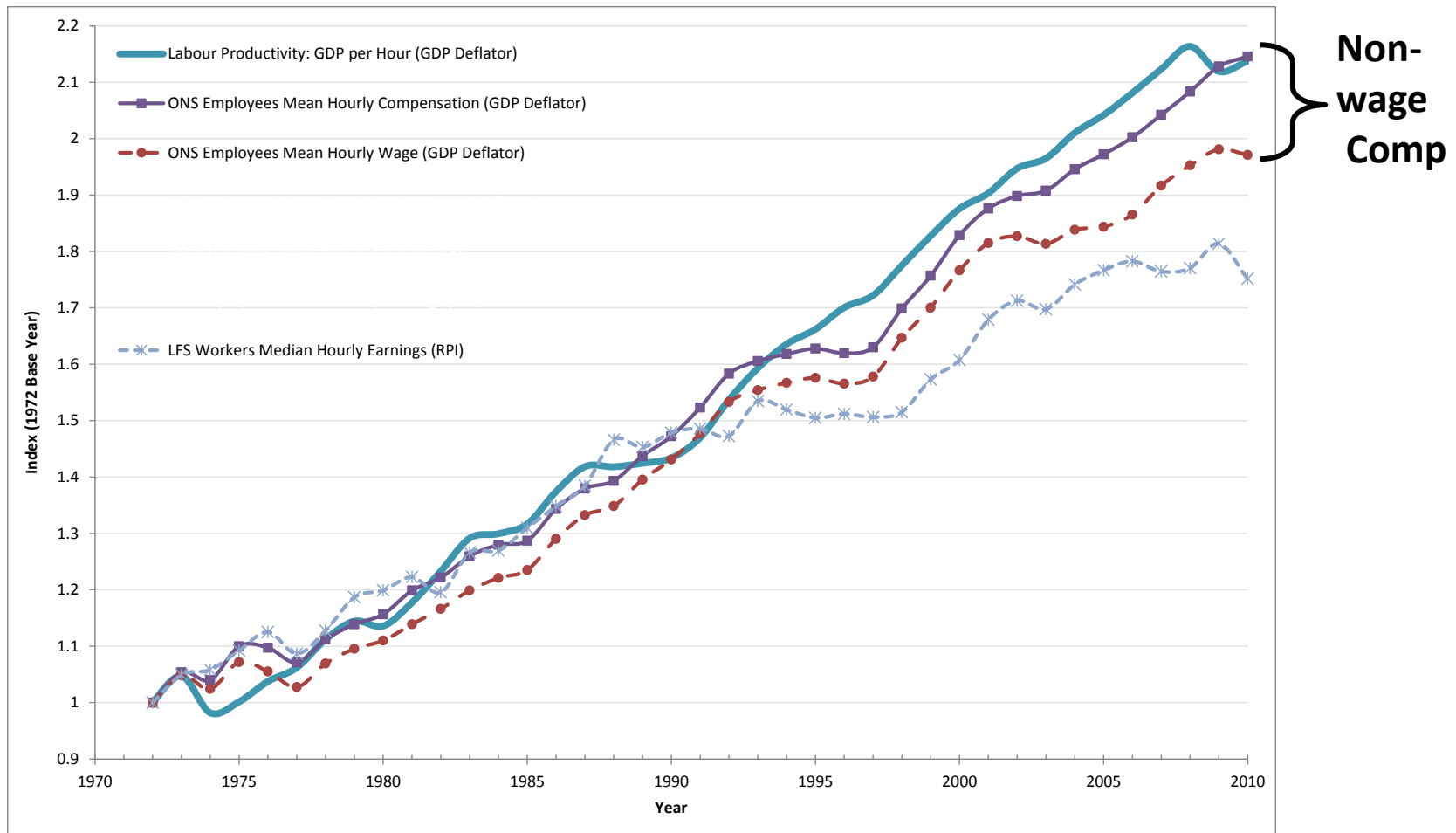
UK GROSS DECOUPLING 39%: LFS MEDIAN HOURLY EARNINGS (RPI)



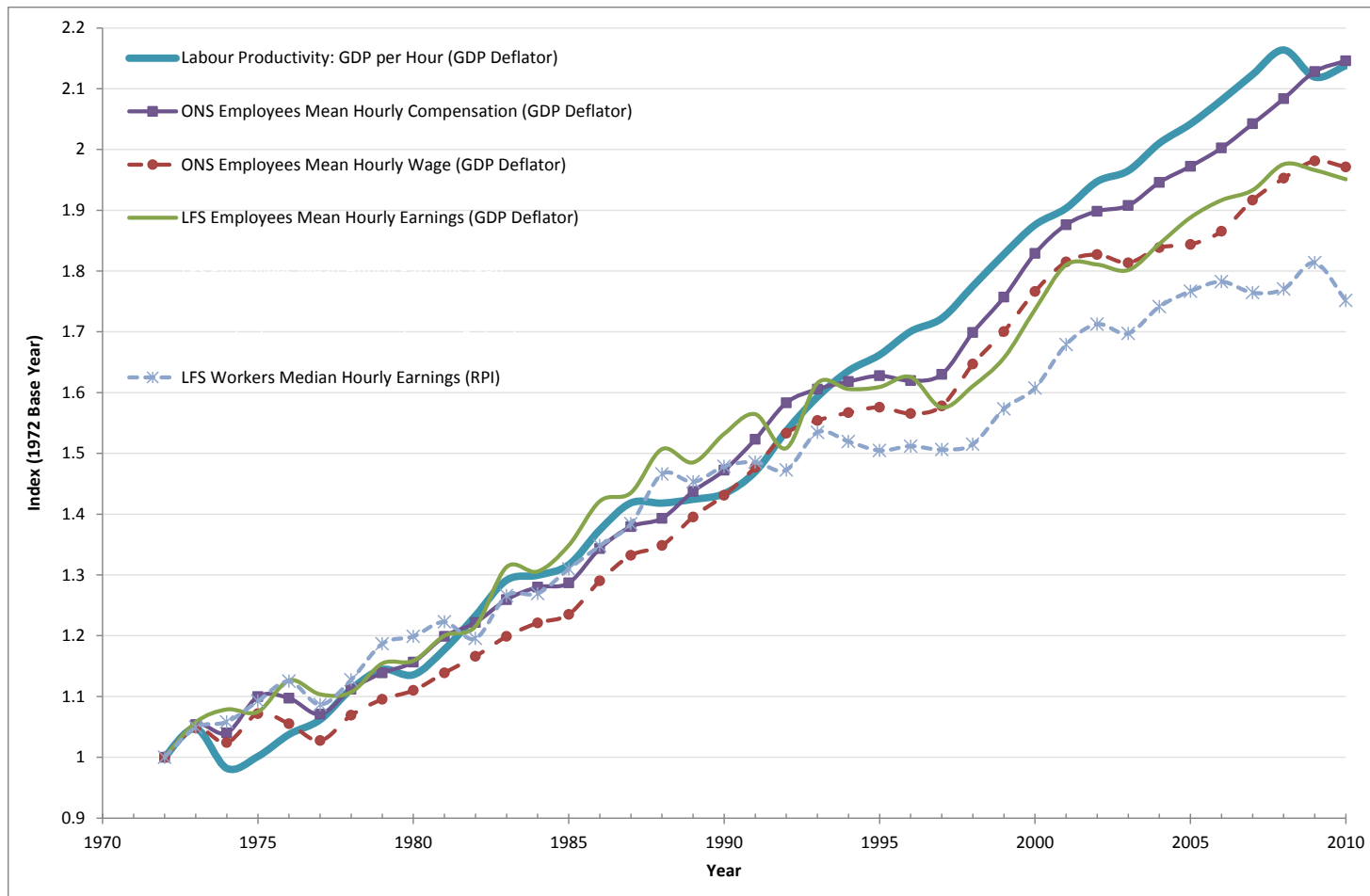
COMPARING GROSS AND NET DECOUPLING



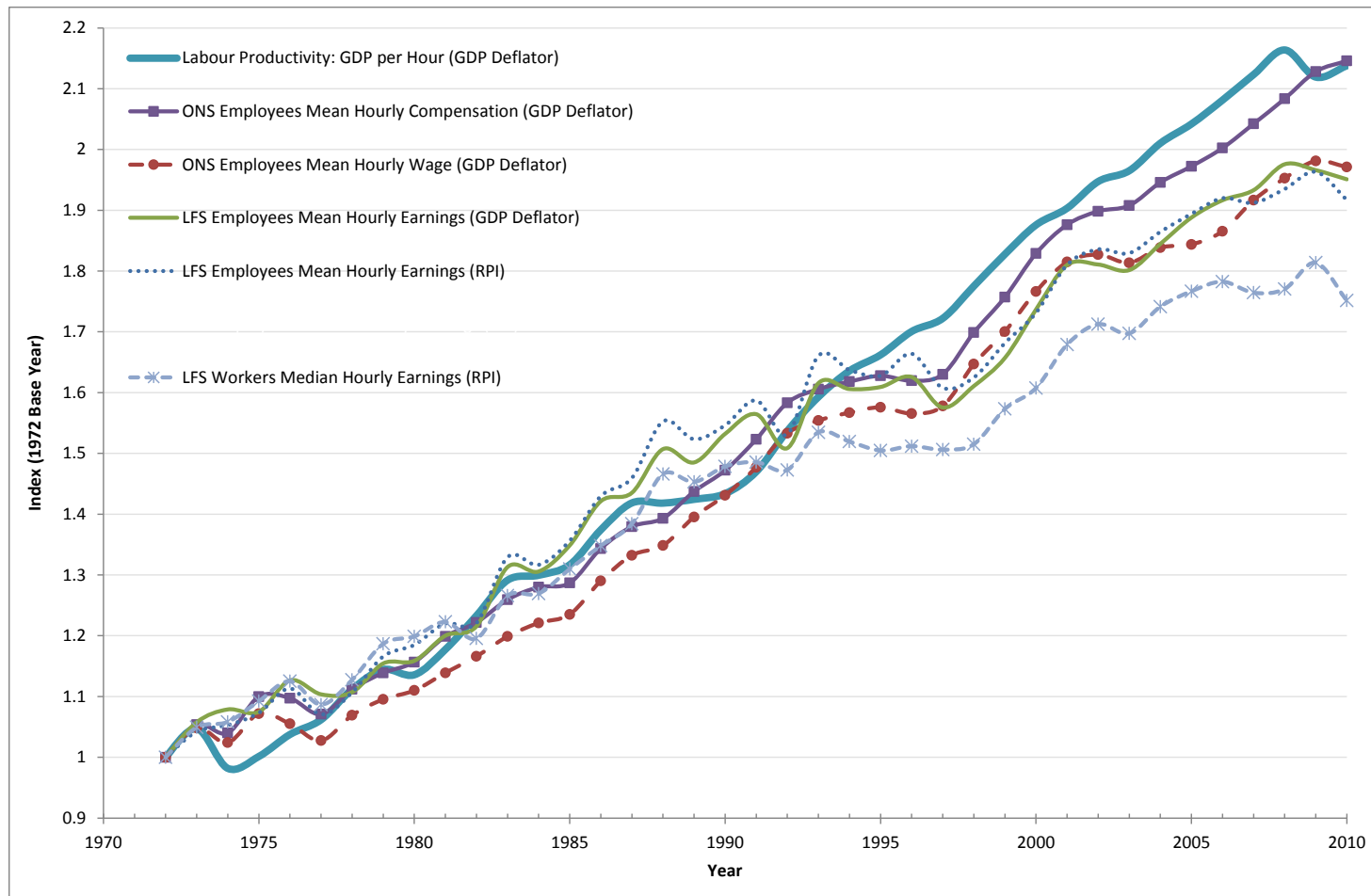
COMPARING GROSS AND NET DECOUPLING: BIG EFFECT OF COMPENSATION VS. BENEFITS



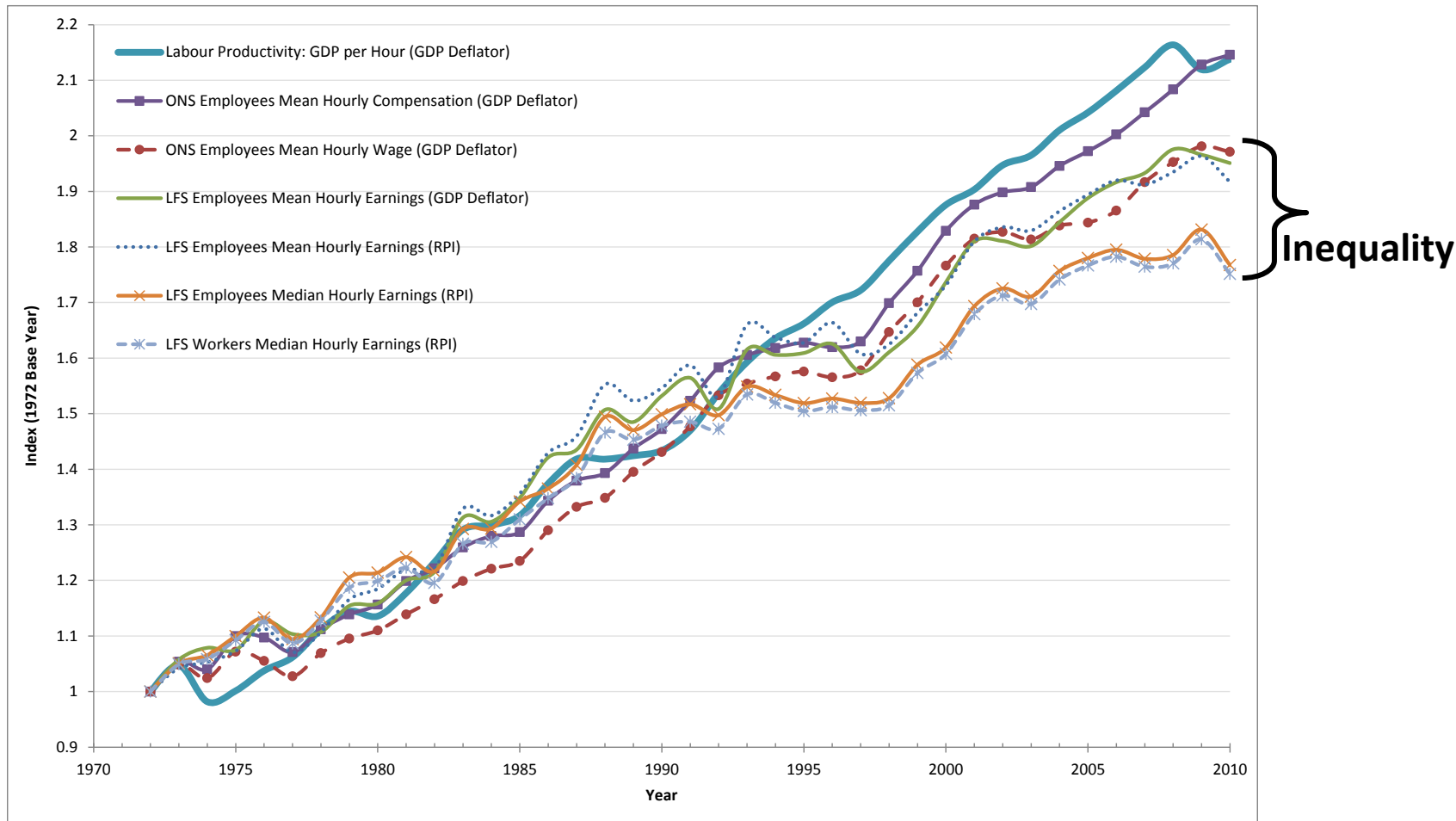
COMPARING GROSS AND NET DECOUPLING: NO EFFECT OF DIFFERENT WAGE DATA: ONS VS. LFS



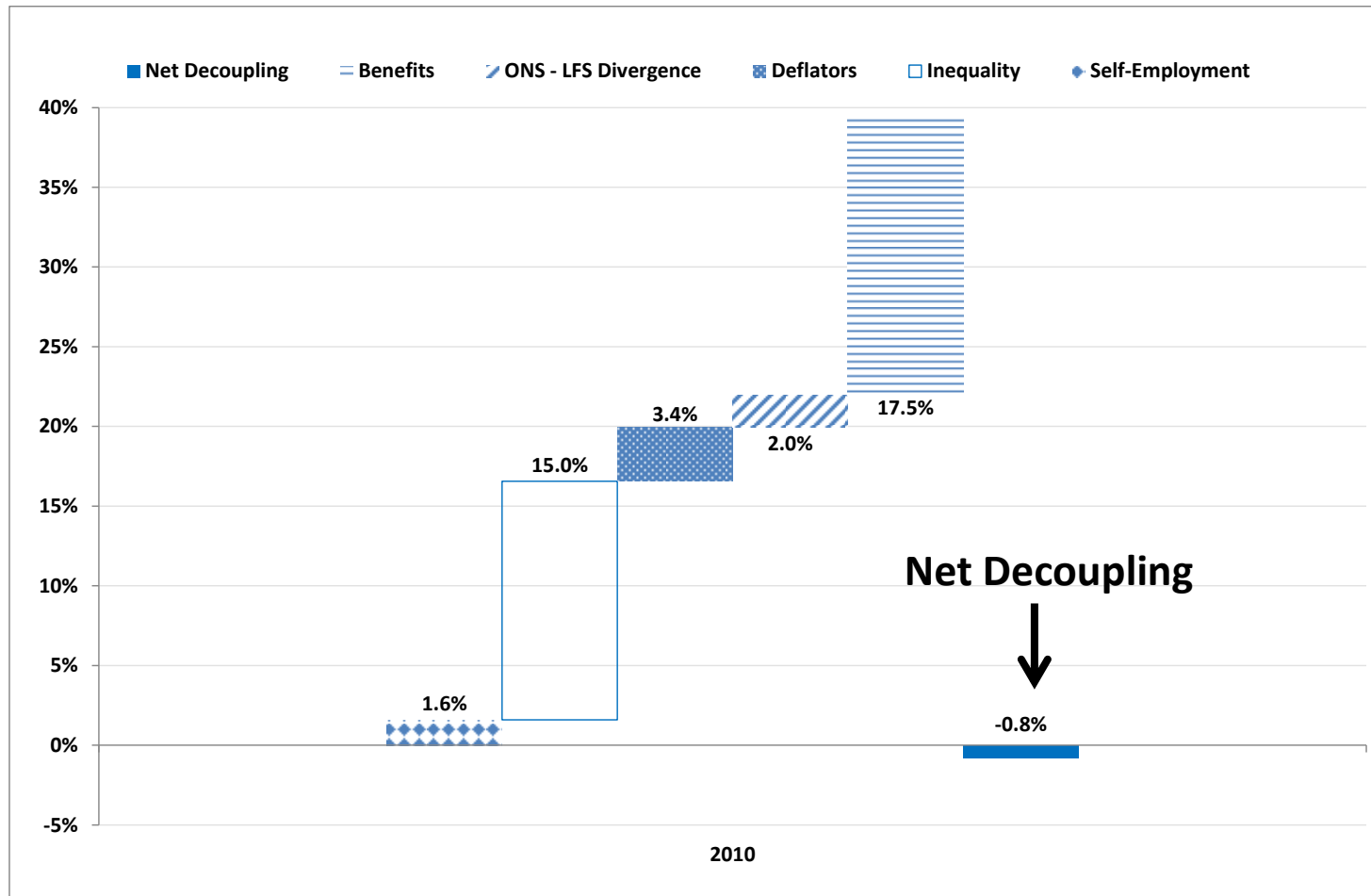
COMPARING GROSS AND NET DECOUPLING: NO EFFECT OF DIFFERENT DEFLATORS



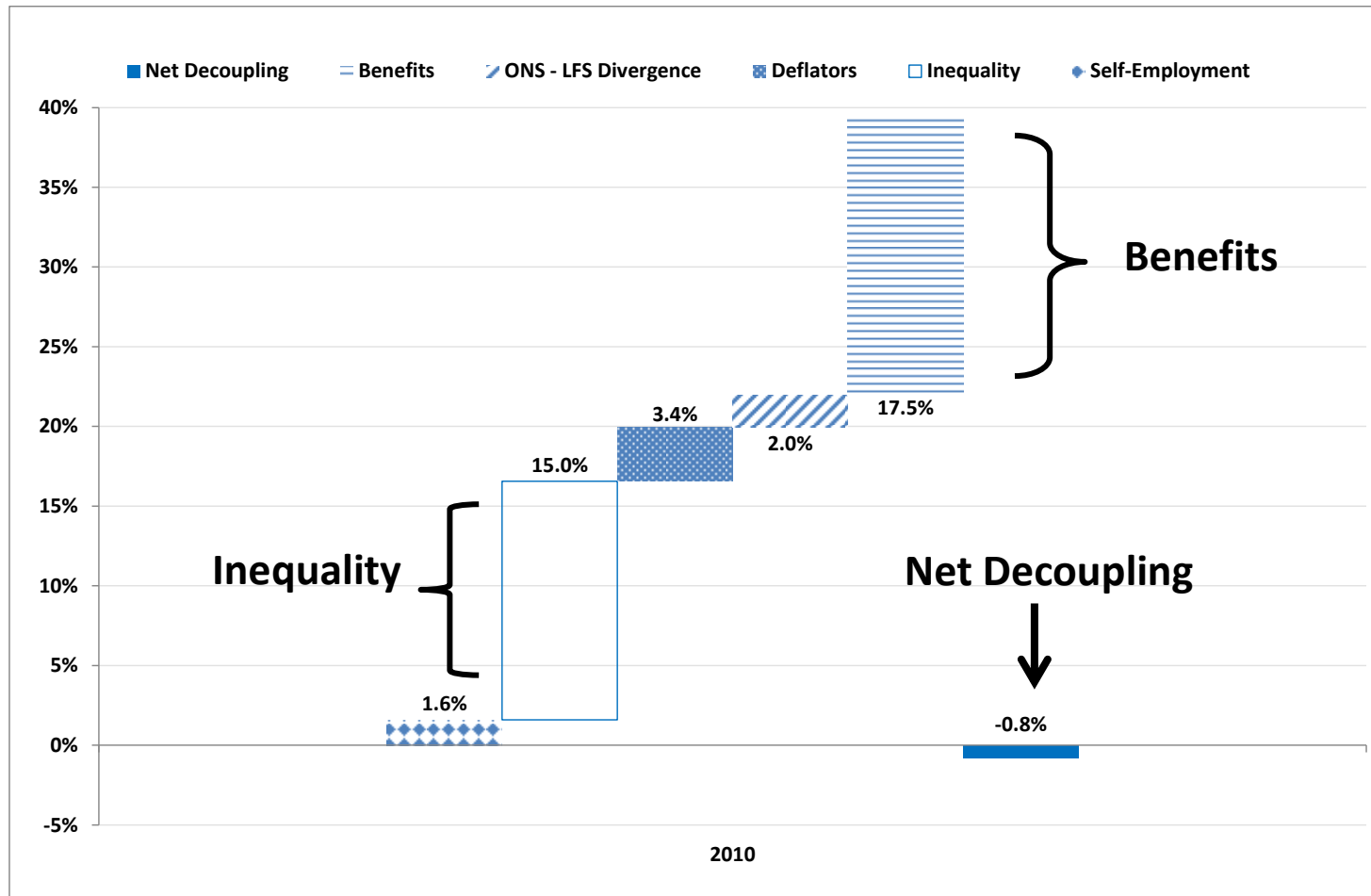
COMPARING GROSS AND NET DECOUPLING: BIG EFFECT OF USING MEDIAN INSTEAD OF AVERAGE WAGE (INEQUALITY RISING)



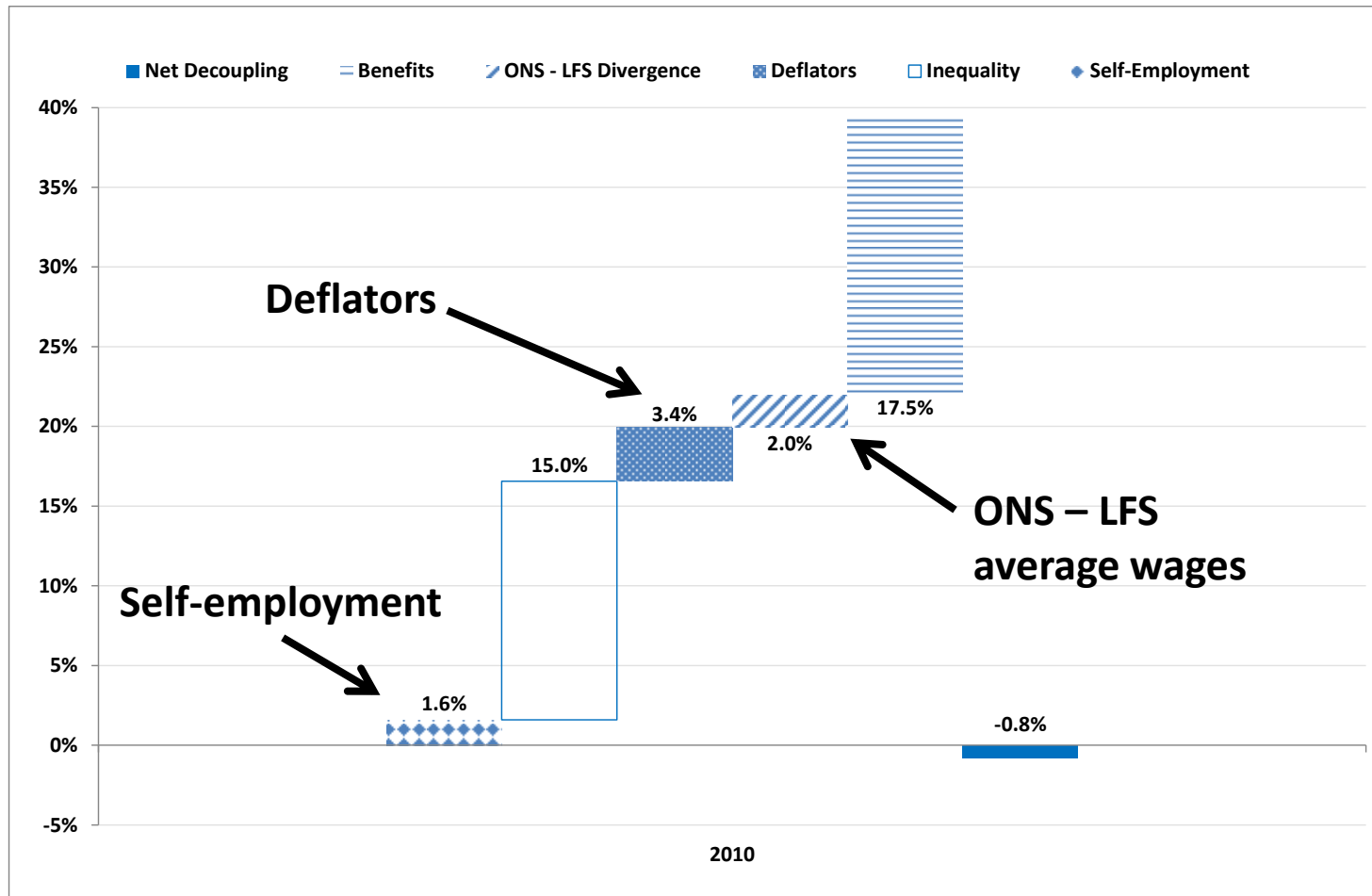
DECOMPOSITION OF THE 39% GROSS DECOUPLING IN UK BETWEEN 1972-2010



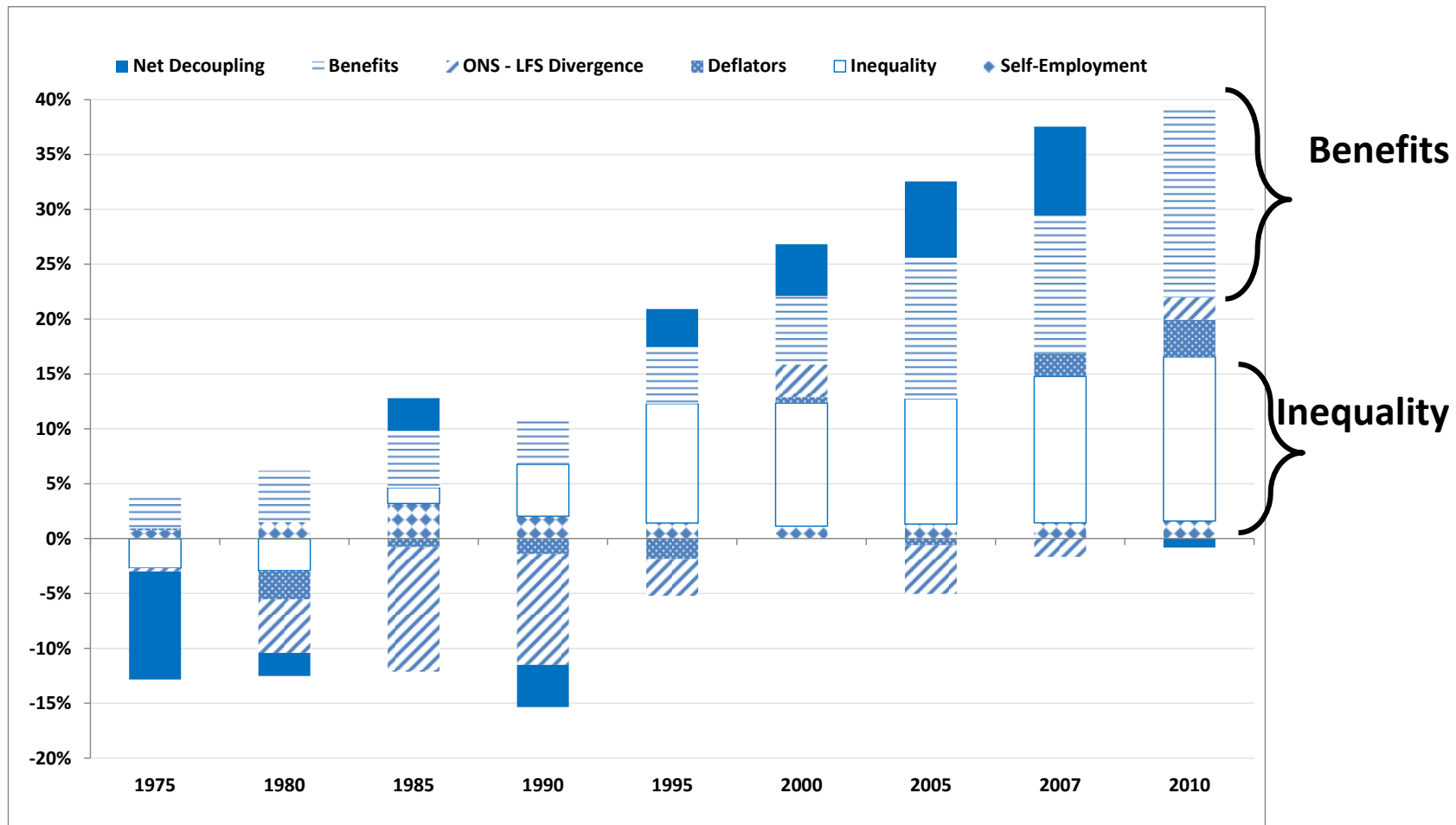
1972-2010 DECOMPOSITION OF GROSS DECOUPLING IN UK



1972-2010 DECOMPOSITION OF GROSS DECOUPLING IN UK



DECOUPLING IN UK FOR SELECTED YEARS (BASE IS 1972)



ACCOUNTING FOR UK GROSS DECOUPLING 1972-2010

- Inequality increases: 13%
- Non-wage Compensation (mainly increasing pension contributions): 17.5%
- Minor factors
 - Differences between ONS and LFS wages (2%)
 - Price deflators RPI – GDP deflator (3%)
 - Growth of Self employed (2%)

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2. Decoupling in the UK

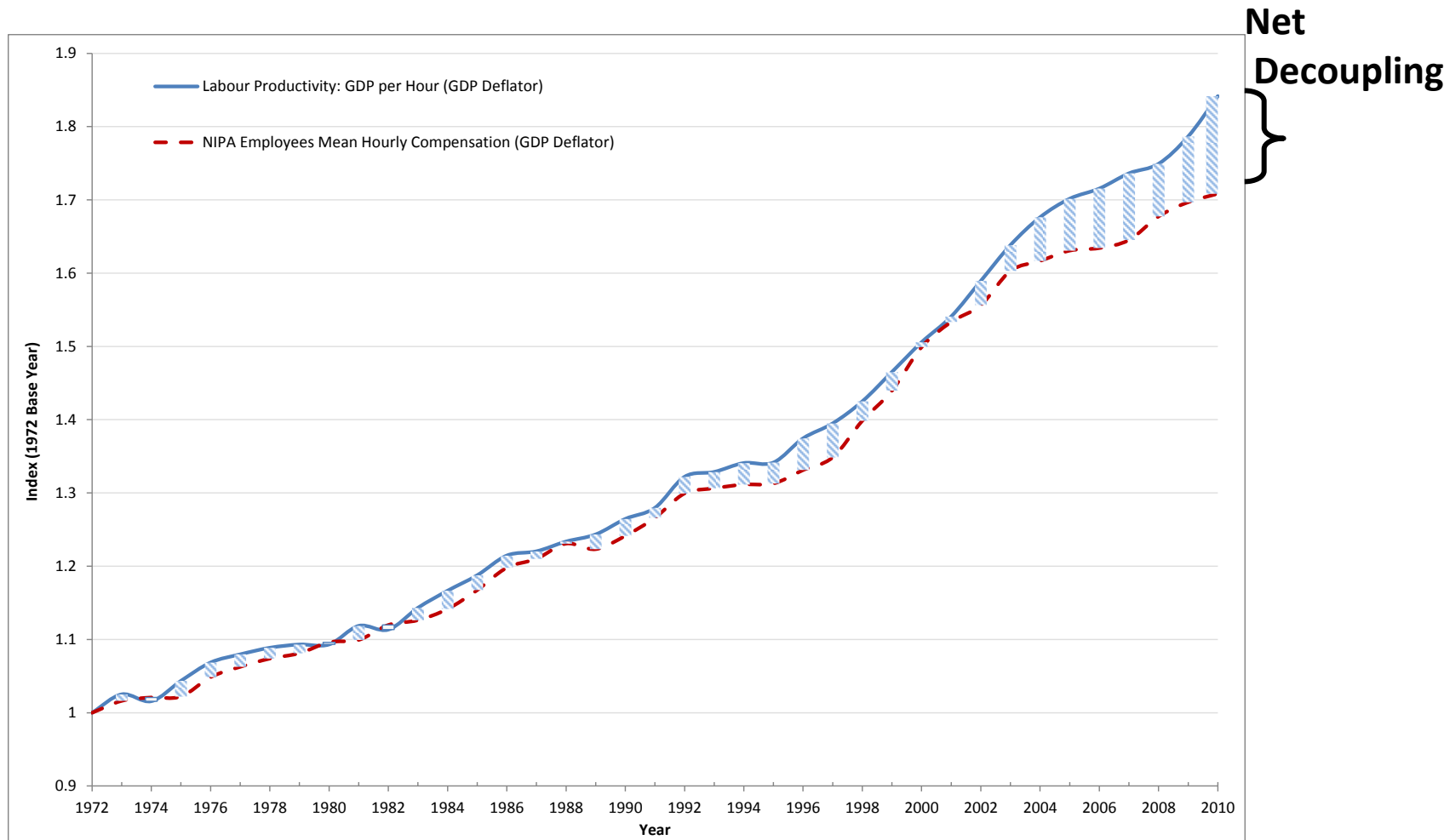
3. Decoupling in the US

4. Labour Shares of National Income

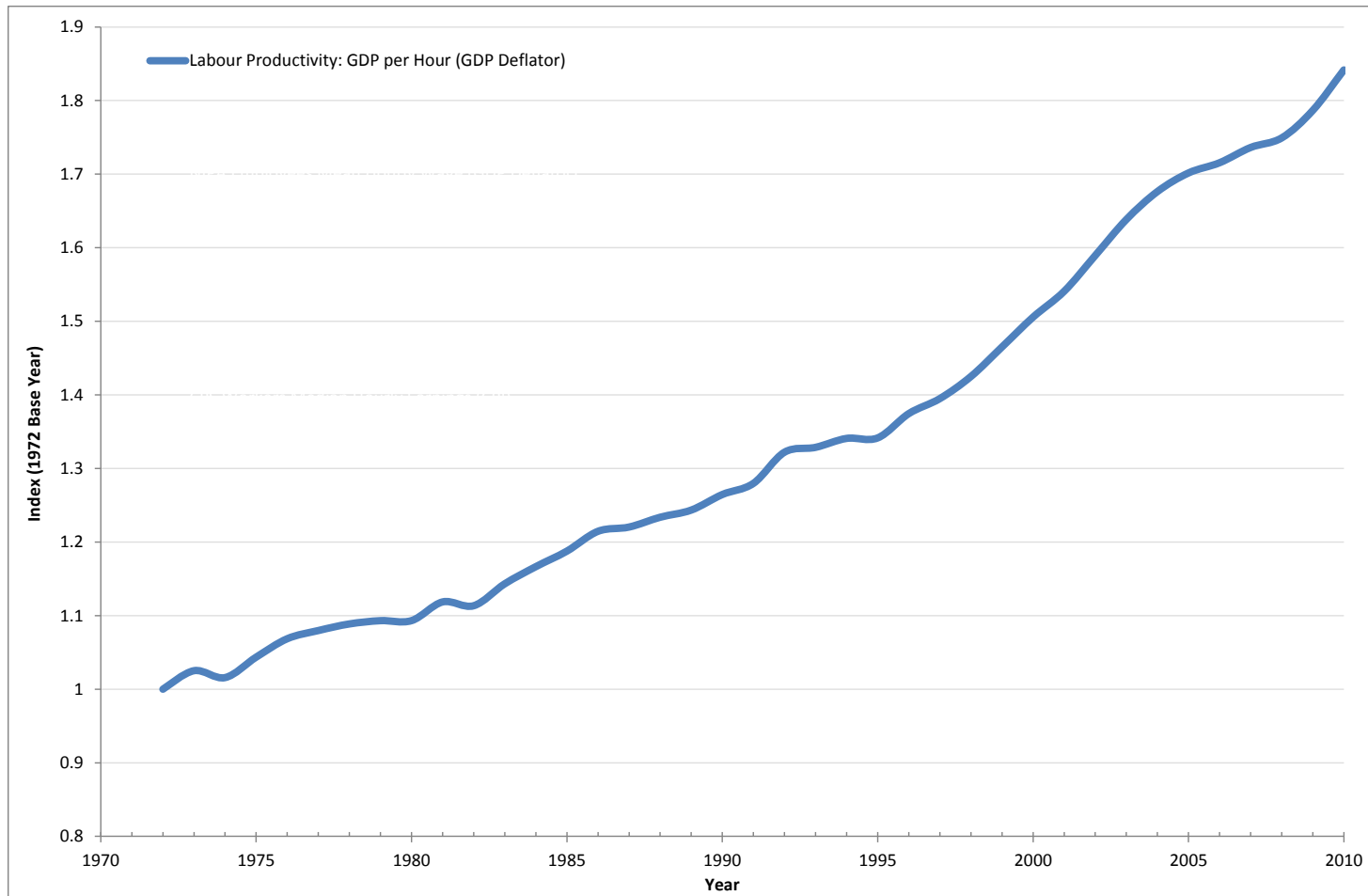
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6. Conclusions: Facts and Policy

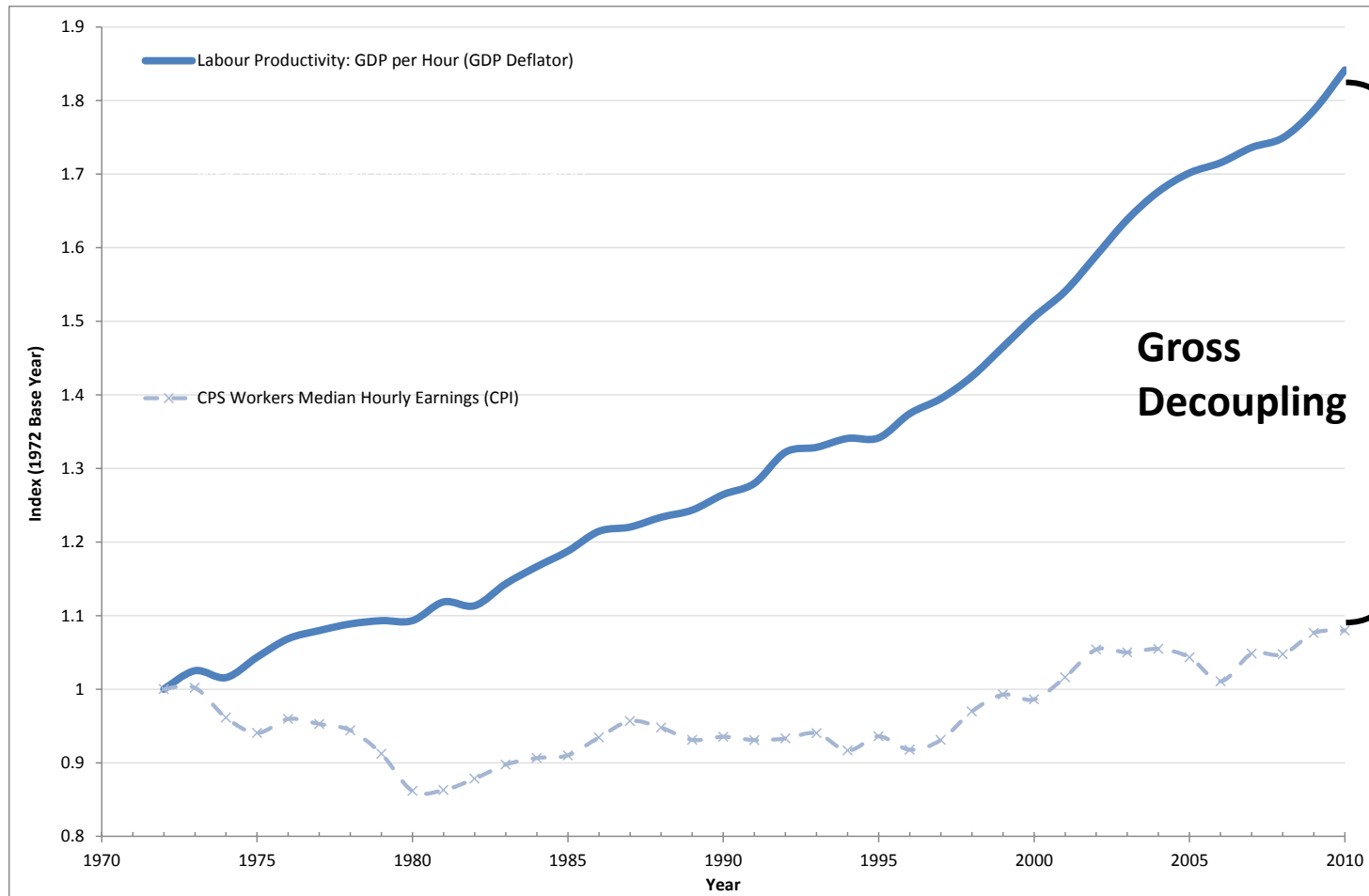
SOME US NET DECOUPLING (~13% 1972-2010) NIPA AVERAGE COMPENSATION (GDP DEFL.)



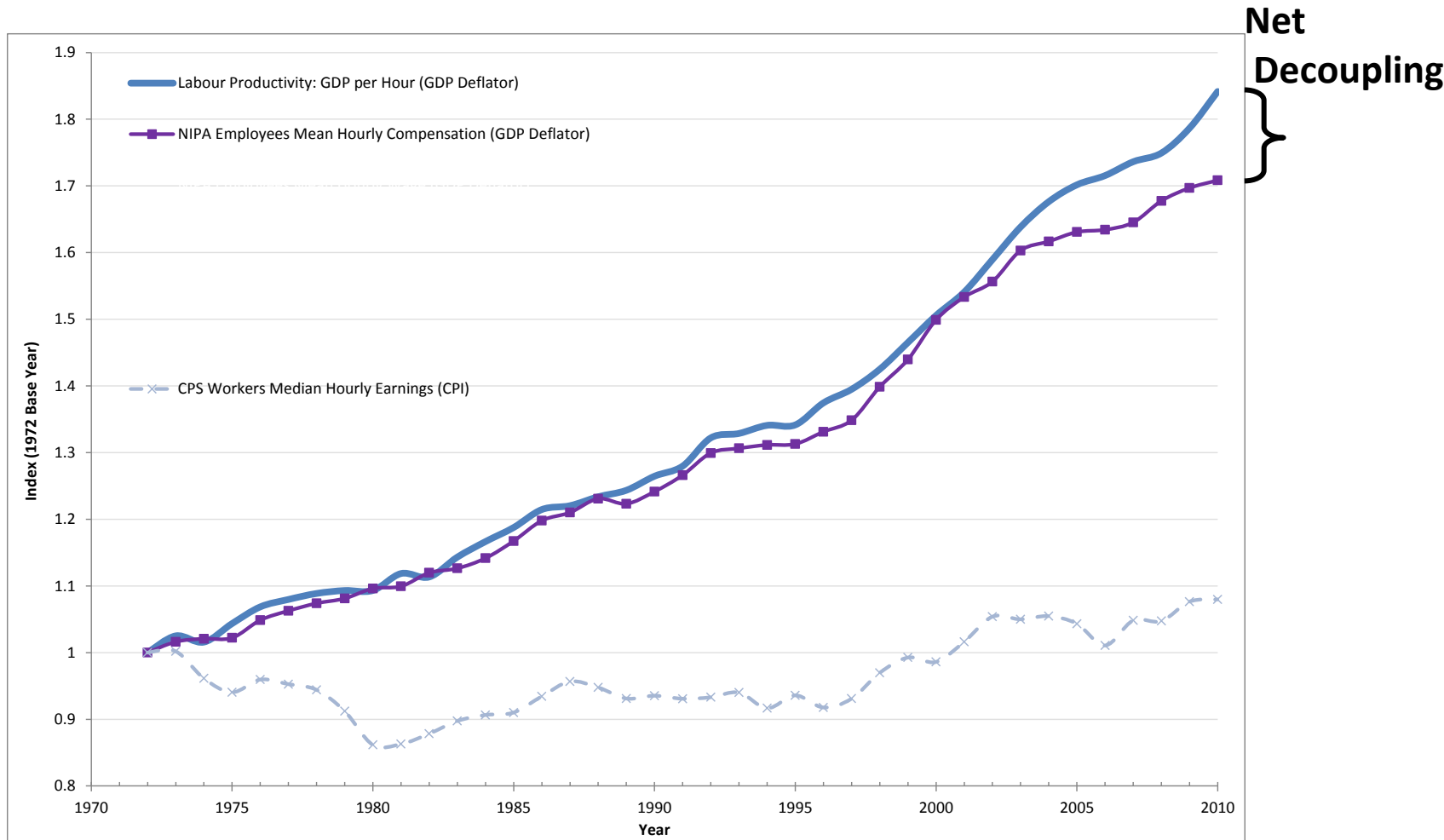
US GROSS DECOUPLING



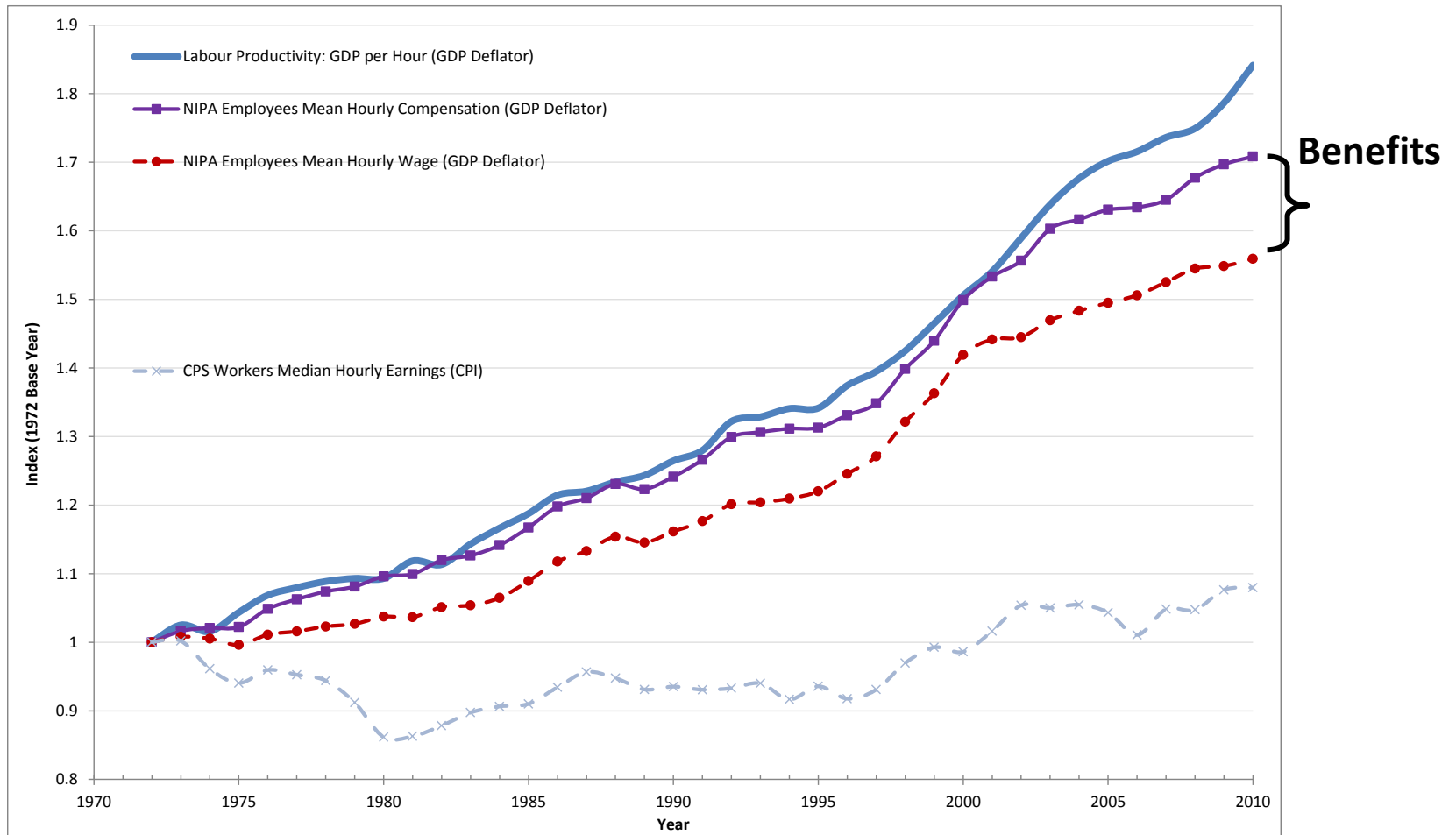
HUGE US GROSS DECOUPLING OF 76% (MEDIAN WAGE OF WORKERS DEFLATED BY CPI)



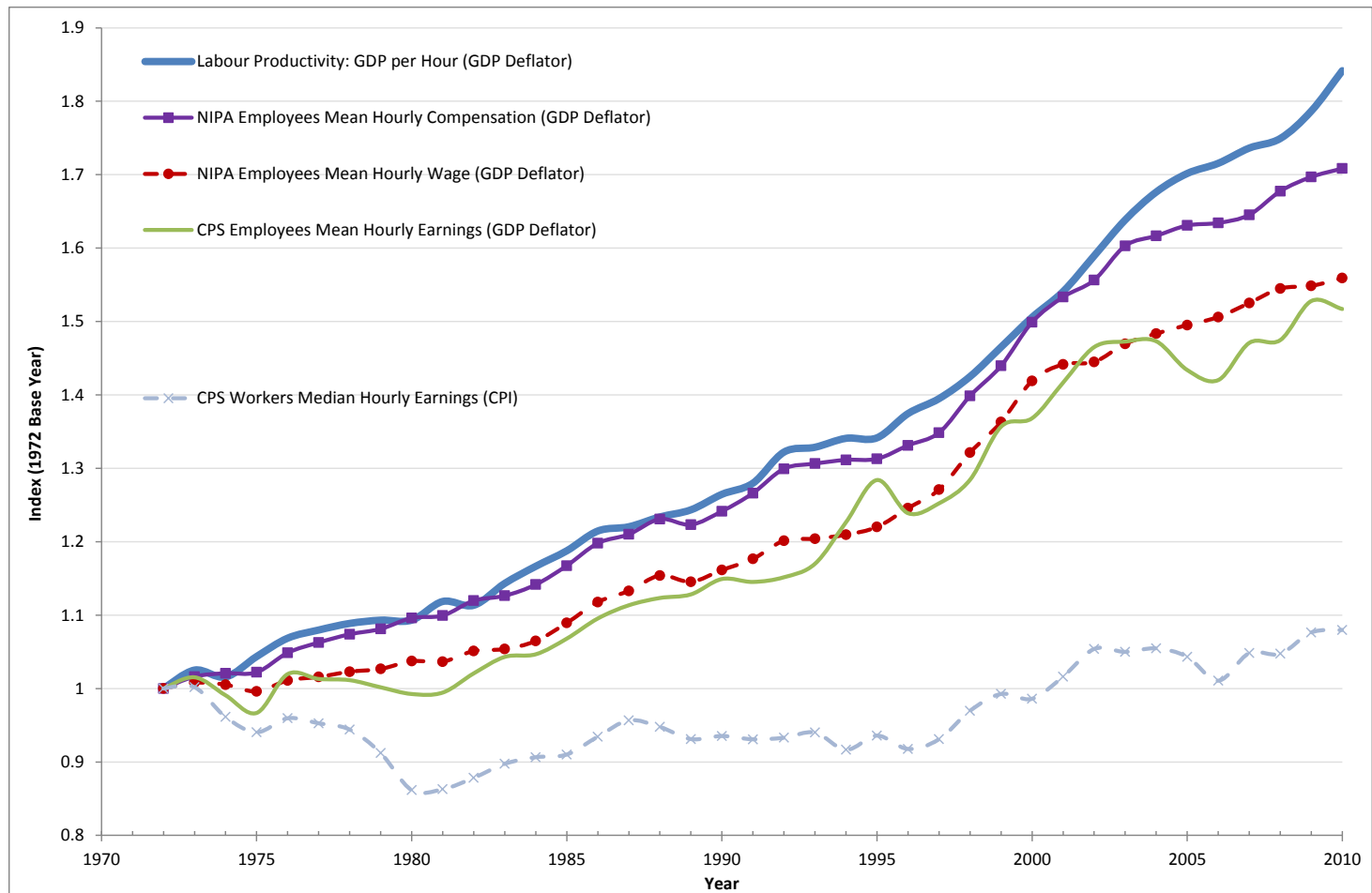
US GROSS VS. NET DECOUPLING



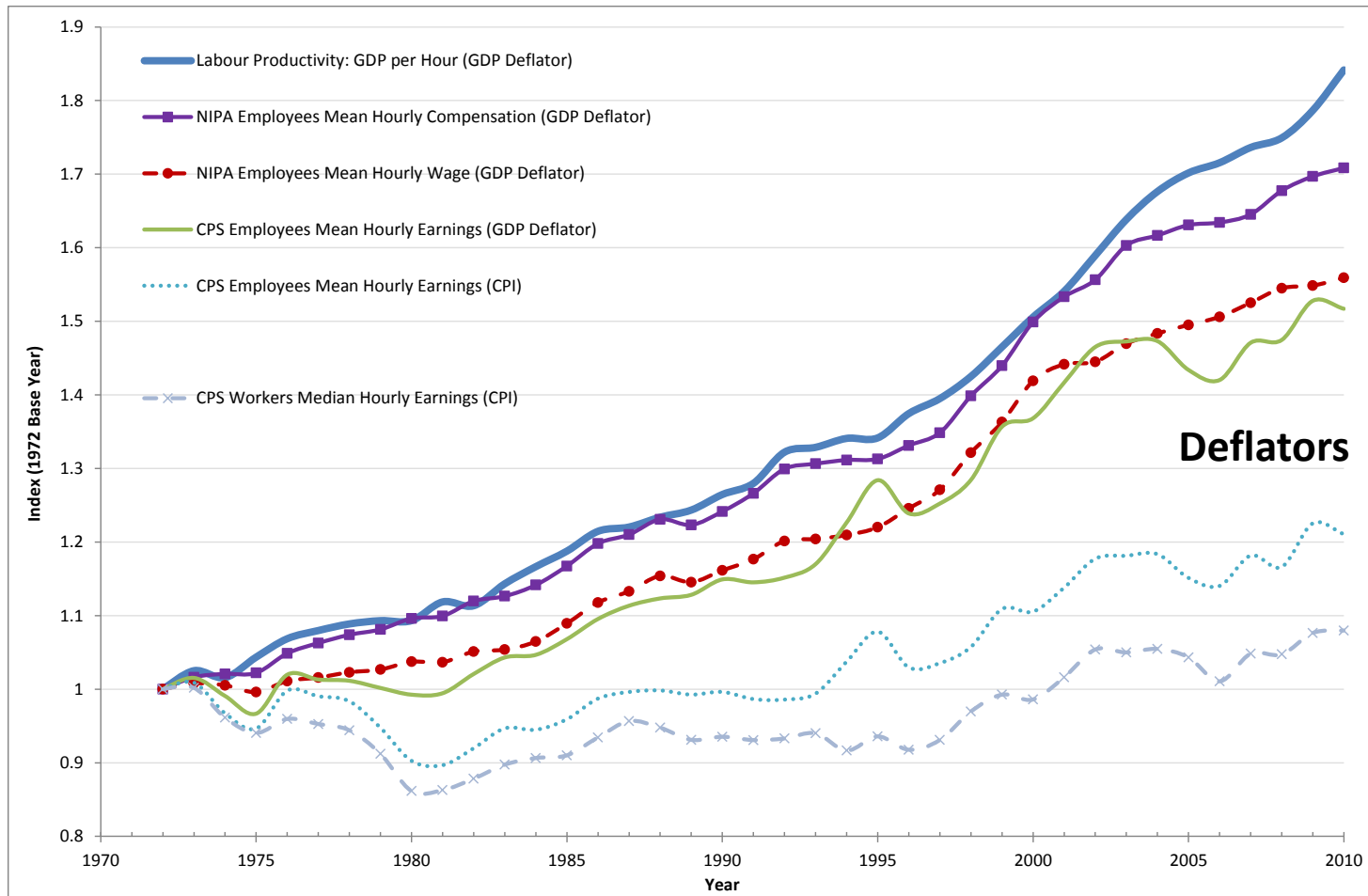
US DECOUPLING: BENEFITS



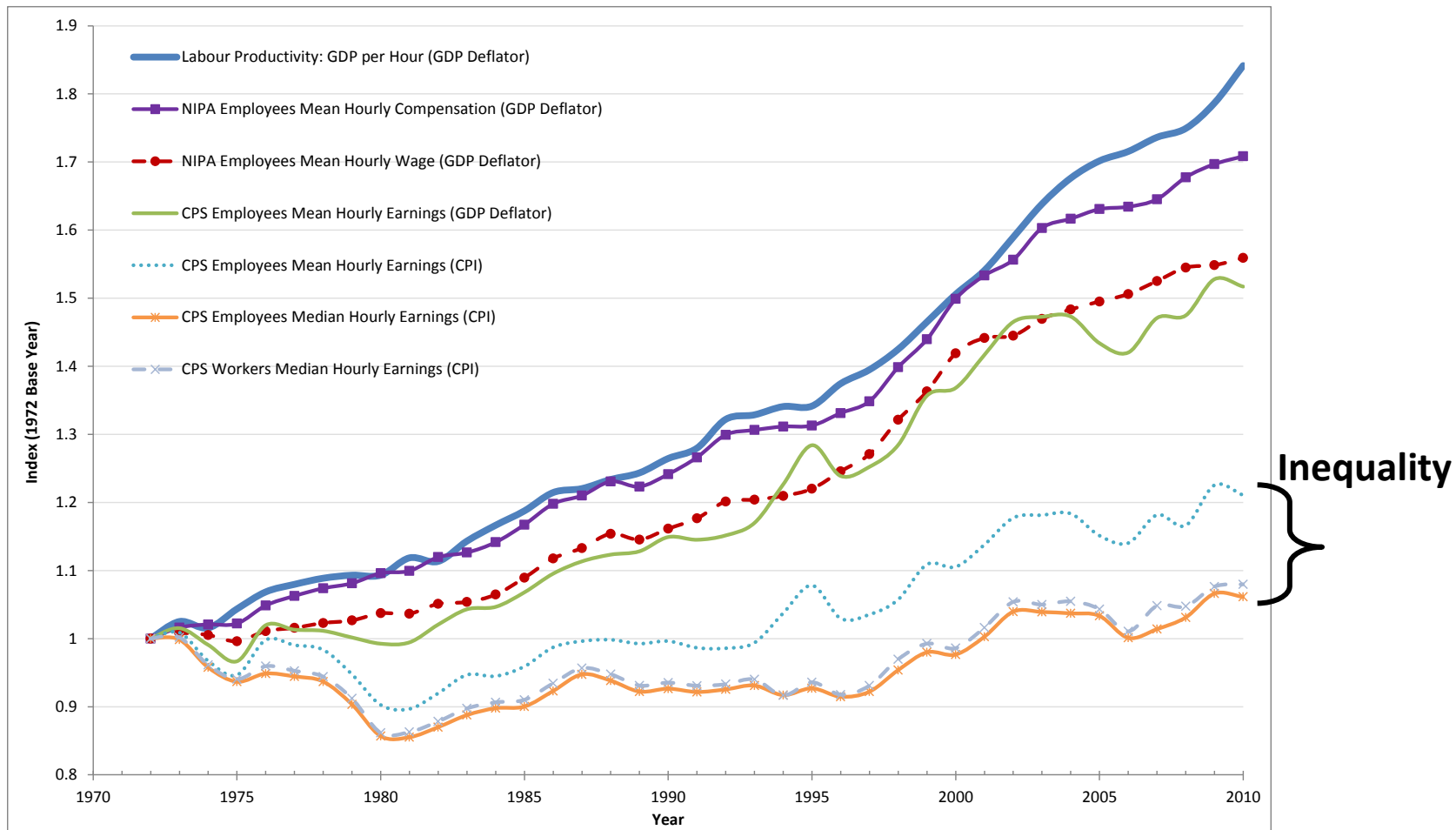
US DECOUPLING: NIPA VS. CPS WAGE SERIES



US DECOUPLING: DEFLATORS



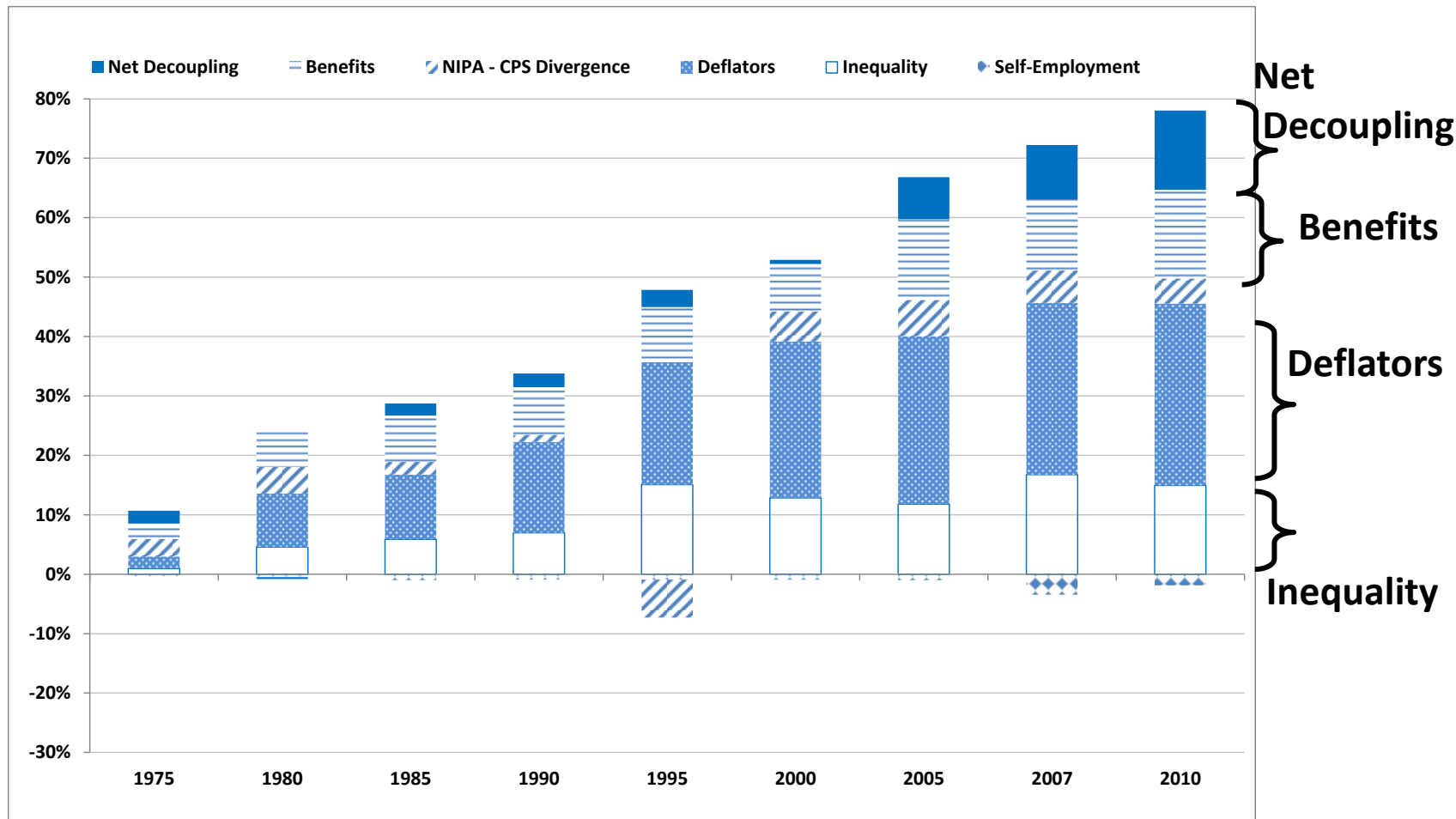
US DECOUPLING: INEQUALITY



ACCOUNTING FOR US GROSS DECOUPLING 1972-2010

- Inequality increases: 15% by 2010
- Compensation growth greater than wages growth (mainly health insurance); 15% by 2010
- GDP deflator rises more slowly than CPI (31% by 2010)
 - ICT investment good price deflator
 - Oil
 - PPI understated? CPI overstated?
 - Other factors?
- Minor factors
 - Differences between NIPA & CPS
 - Self employed

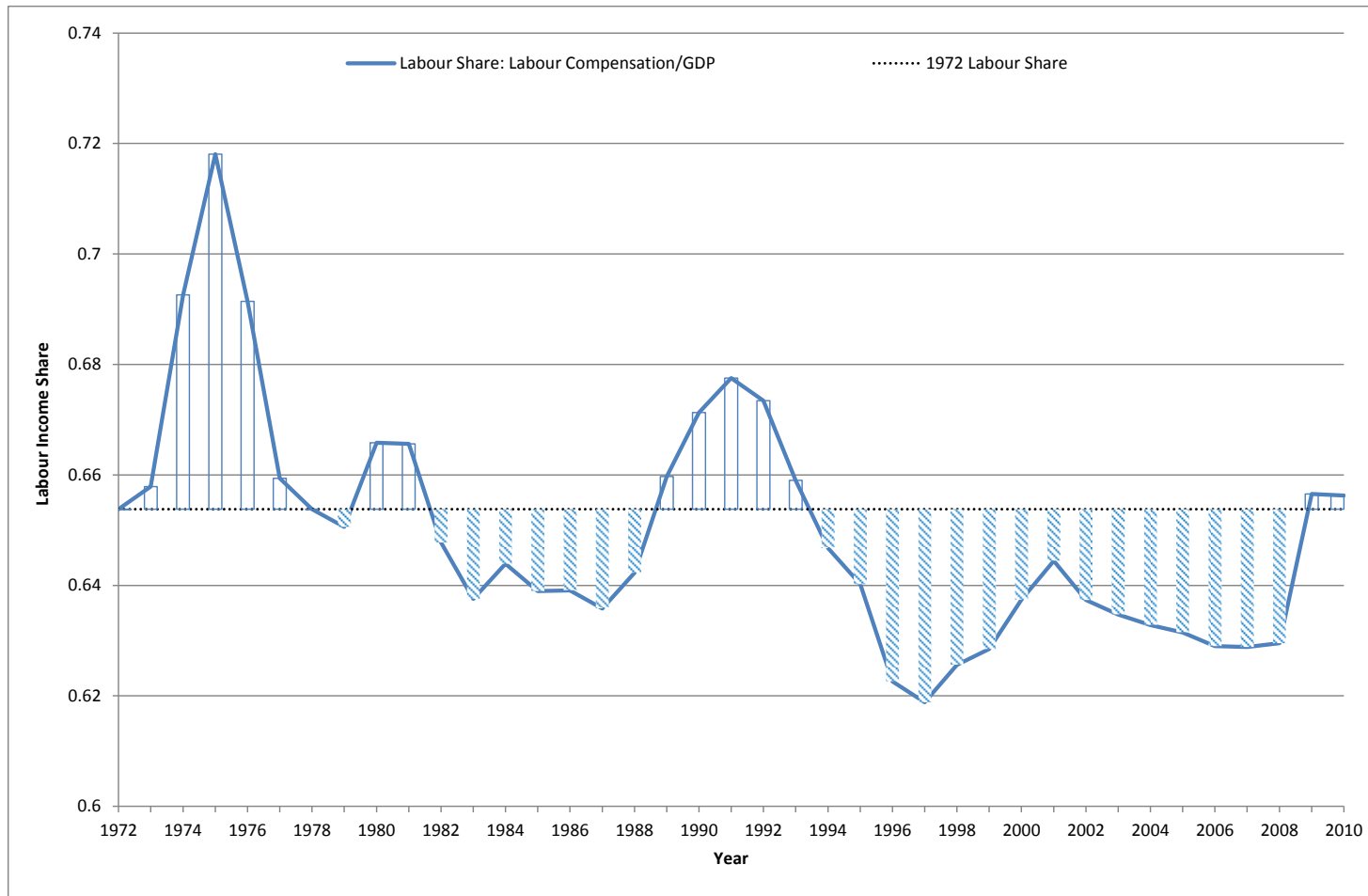
DECOMPOSITION OF GROSS DECOUPLING SELECTED YEARS - US



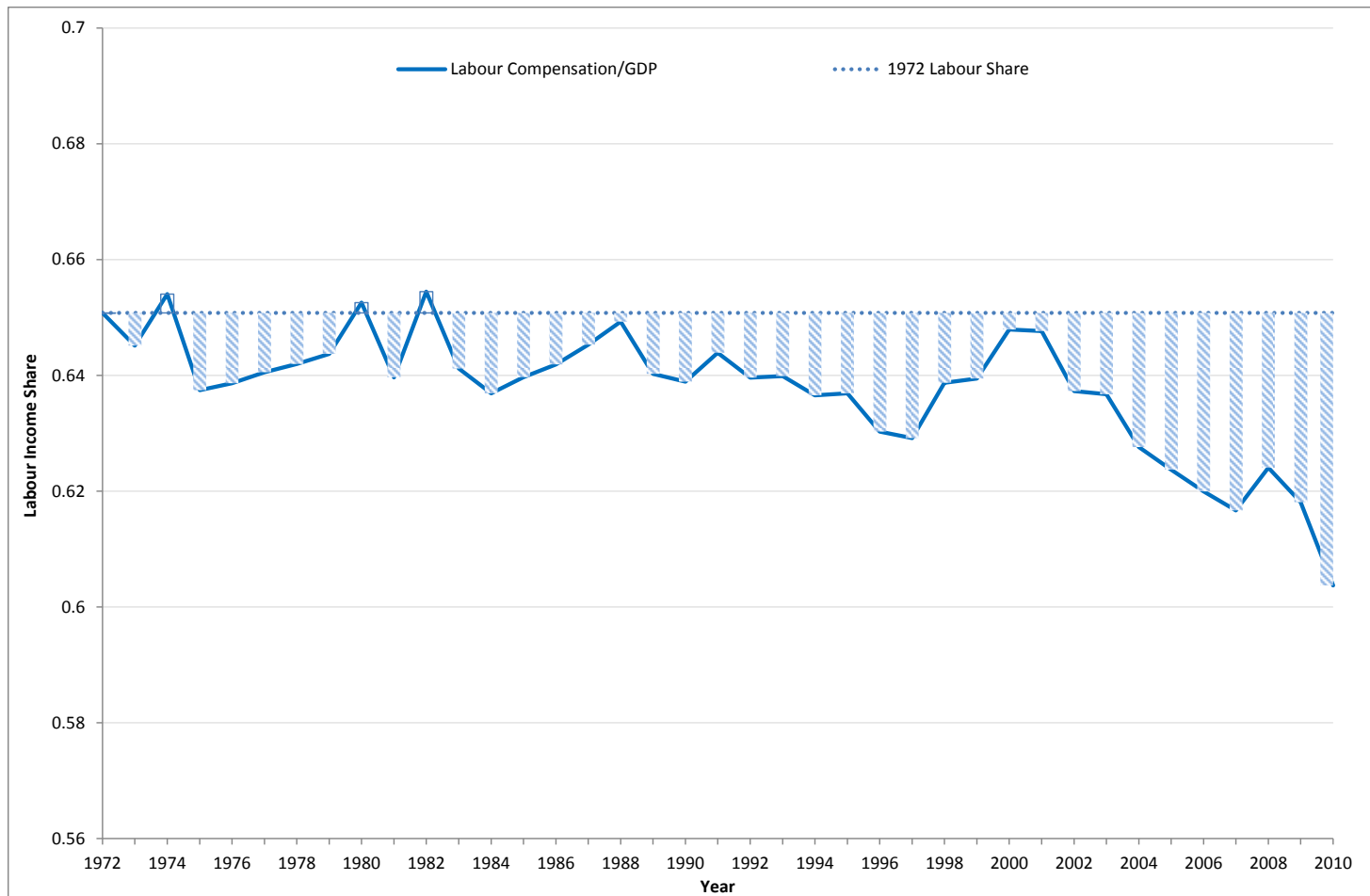
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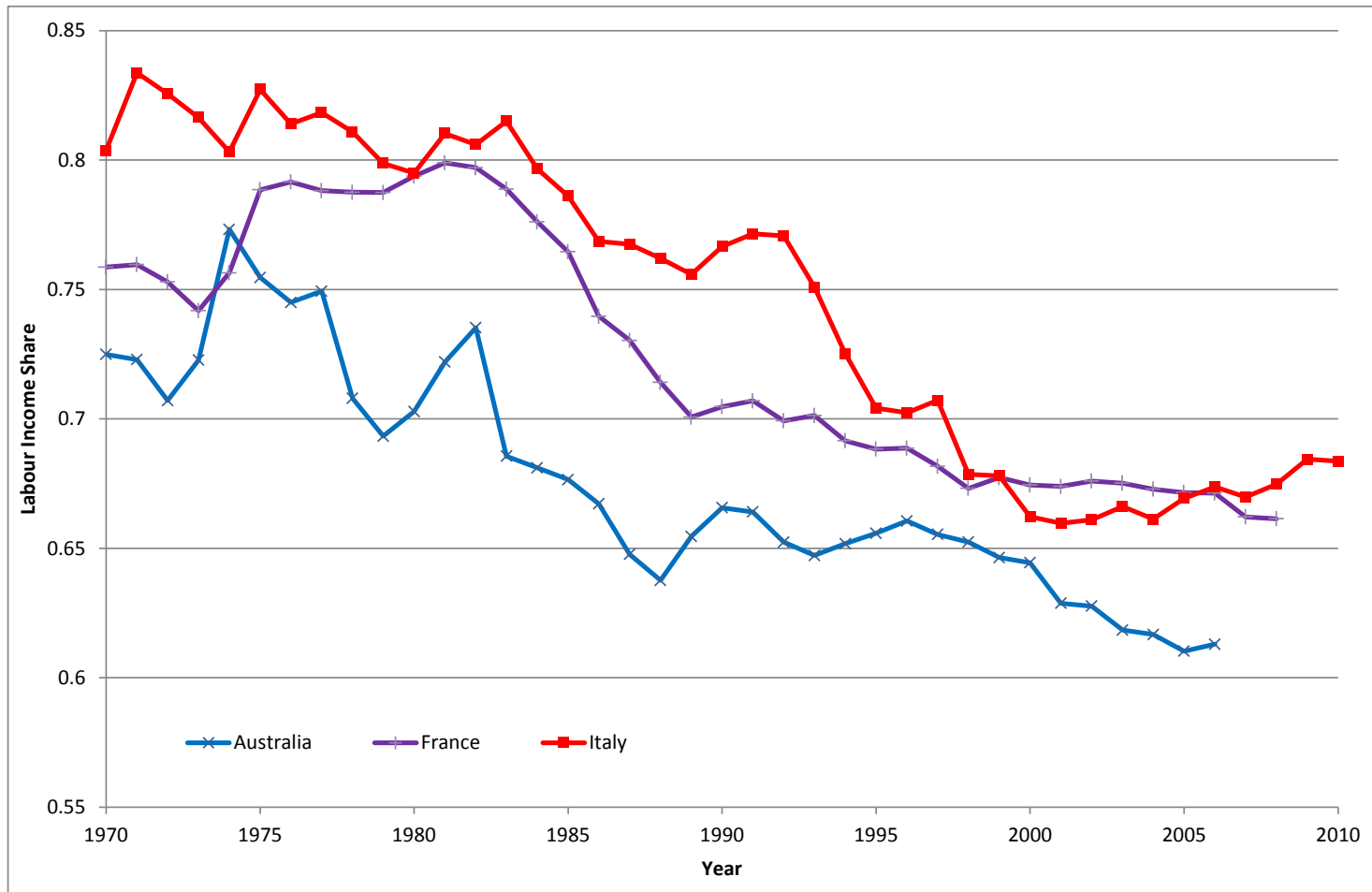
UK LABOUR SHARE OF GDP PRETTY STABLE BETWEEN 62-68% OVER LAST 30 YEARS



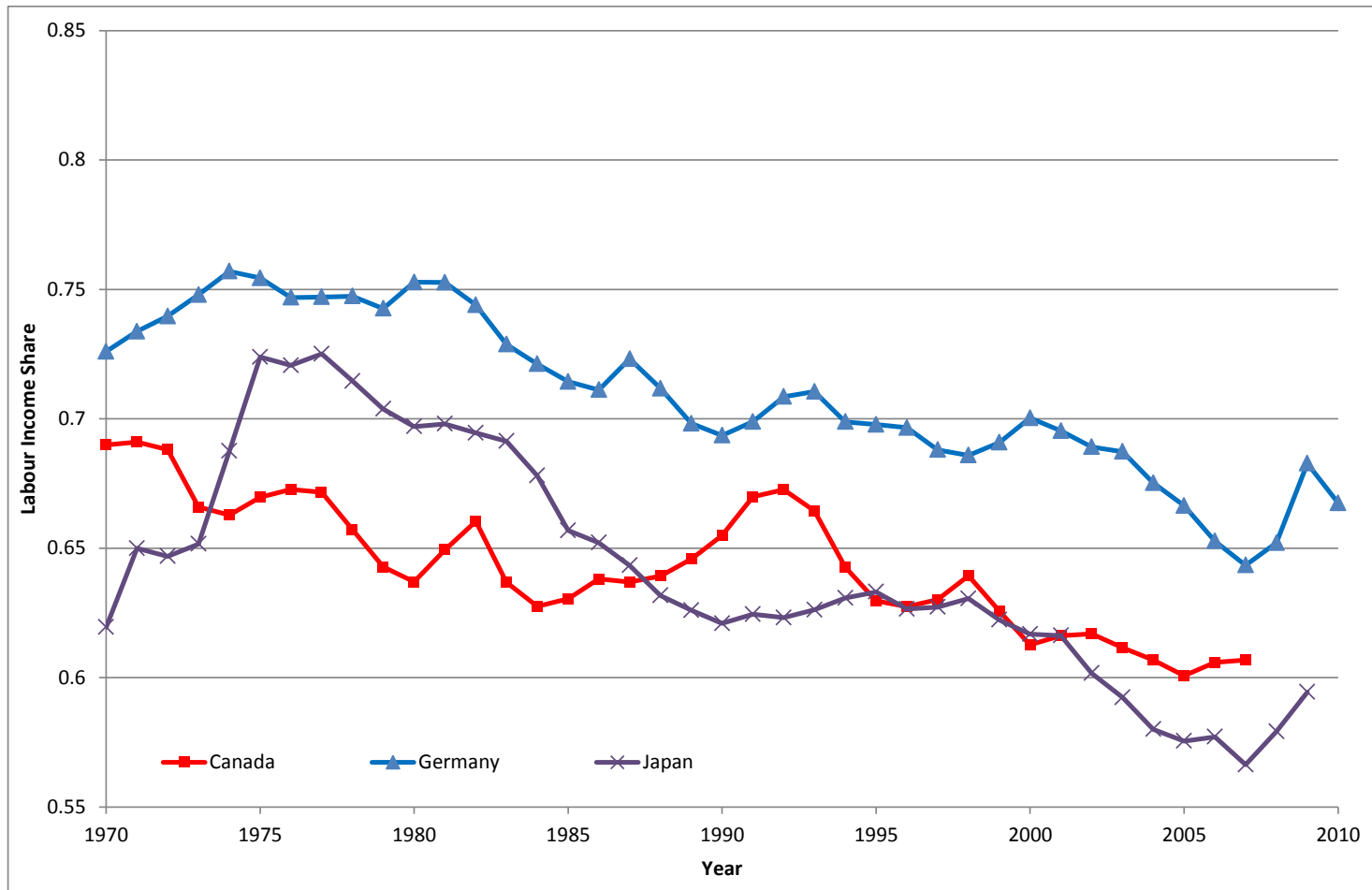
US LABOUR SHARE OF GDP BETWEEN 61-65% OVER LAST 30 YEARS



LABOUR SHARES FALLING IN SOME OTHER COUNTRIES LIKE FRANCE AND ITALY



LABOUR SHARES FALLING IN SOME OTHER COUNTRIES LIKE JAPAN AND GERMANY



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DECOUPLING AT THE INDUSTRY LEVEL

- Unclear what this means. In basic model wages = skill price does not vary by industry & should not be related to industry-specific (or firm-specific) productivity
- Alternative models (e.g. rent sharing) could generate such a relationship
- We look in UK at net decoupling at industry level
 - Wages follow productivity in general
 - Compensation generally risen a bit **faster** than productivity in market sector (especially in personal services & finance)
 - In Non-market sector productivity rises faster than wages (i.e. decoupling)! Probably because public sector and real estate value added hard to measure

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CONCLUSIONS: FACTS

- Important to define terms : Gross vs. Net Decoupling
- In UK
 - net decoupling almost zero: productivity and compensation grow at similar rates in long-run (over last 40 years)
 - Gross decoupling of about 40%
- Difference is mainly because (i) mean wages grew faster than median wages (inequality) and (ii) compensation grew faster than wages (pension benefits)
- In US gross decoupling bigger, but net decoupling also pretty small. In addition to inequality & nonwage compensation, there is a big divergence between GDP deflator and CPI

CONCLUSIONS: POLICY

- Growth of wage/income inequality is extremely important. Focus of applied economics for 2 decades+
- Unclear what “decoupling” adds. Interesting if compensation grew more slowly than productivity (net decoupling) – workers losing out
 - But not happening!
- Interesting that nonwage comp is growing fast (pension and health reform?).
 - But don't need to know anything about productivity for this
- Focus on gross decoupling distracts from urgent need to raise growth rates which is the problem facing developed world today