



Understanding the Downward Trend in Labor Income Shares

Presented by Weicheng Lian

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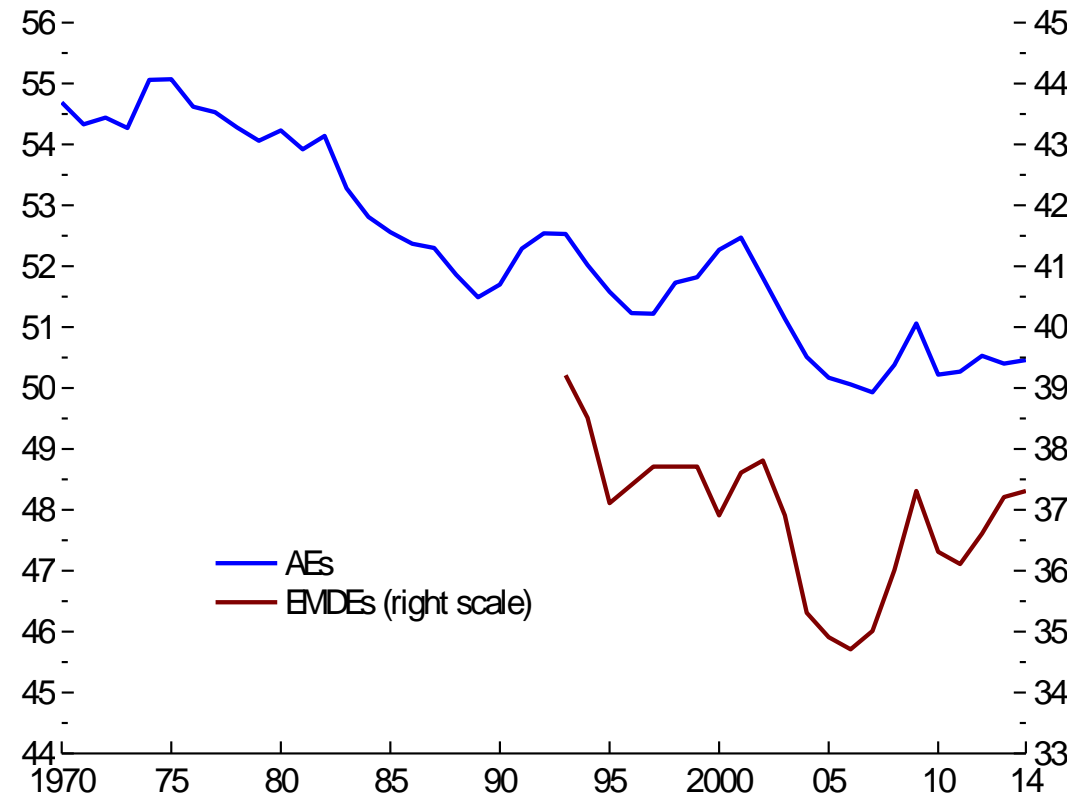


Understanding the Downward Trend in Labor Income Shares

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with contributions from Jihad Dagher and support from Ben Hilgenstock and Hao Jiang*

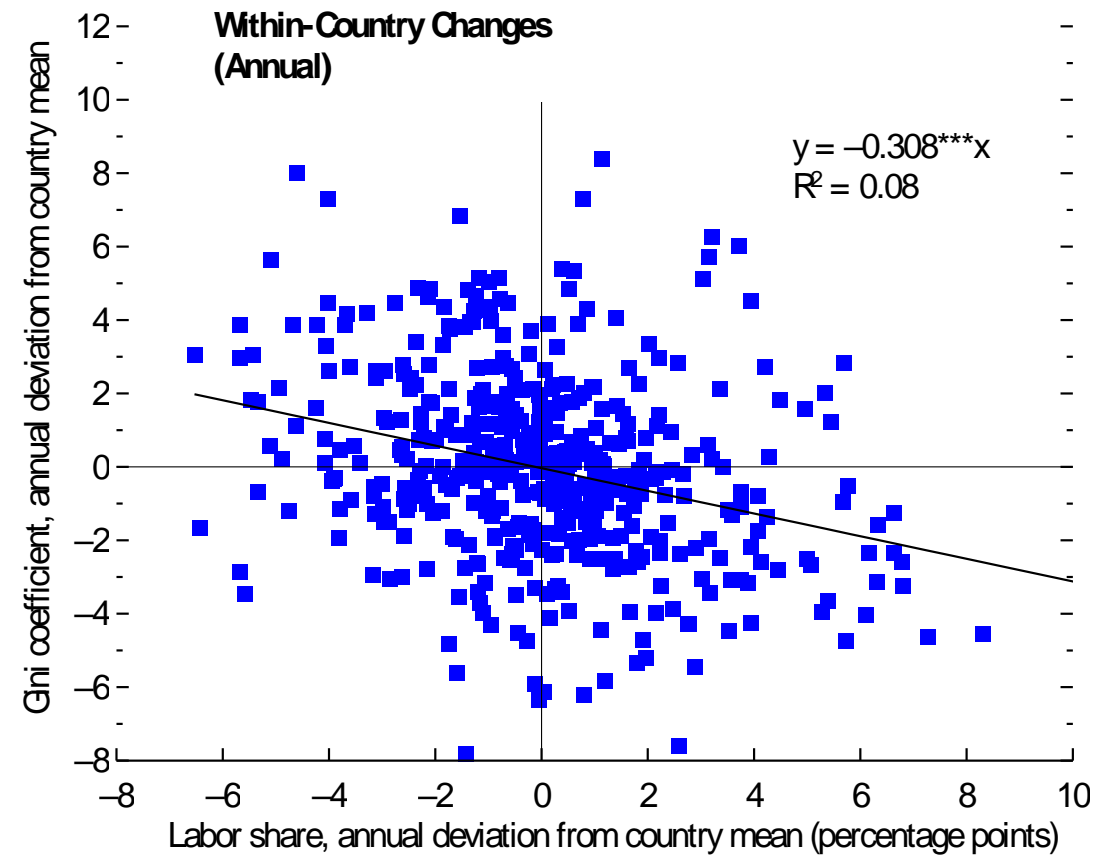
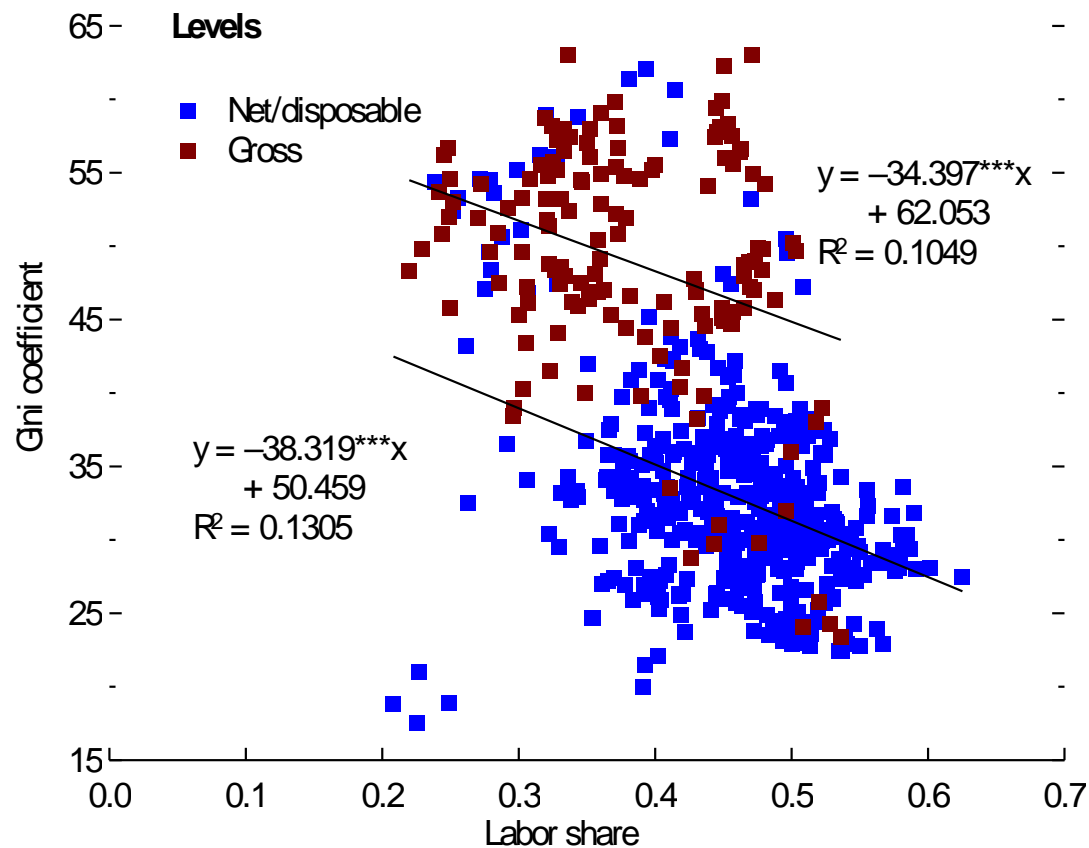
The global labor share of income has been on a downward trend...

Evolution of the Labor Share of Income
(Percent)



Declining labor shares are associated with rising inequality.

Labor Shares and Income Inequality



Central Questions

- How widespread is the decline in the labor share of income? To what extent have trends in labor income shares differed across countries, industries and skill groups?
- What are the key drivers of the labor share of income and through which mechanisms do they operate?
- Do the drivers vary between advanced economies (AEs) and emerging market and developing economies (EMDEs), industries, and skill groups?
- How have technological advancement and global integration affected labor shares? What has been the role of exposures to routinization and participation in global value chains (GVCs) in declining labor shares?

Preview of Key Findings

- The decline in labor shares is widespread, though heterogeneous, across countries, industries and skill groups.
- In AEs it reflects predominantly the advance of technology; global integration is a contributing factor, particularly in tradable sectors.
- In EMs it reflects predominantly the forces of global integration, notably the trend increase in participation in GVCs. Importantly, this could be benign development: a result of capital deepening that is not necessarily accompanied by dislocation of employment or reduction in wages.
- Routine-biased technology and participation in GVCs have lowered the labor share of medium-skilled labor.

How Widespread is the Decline in the Labor Share of Income?

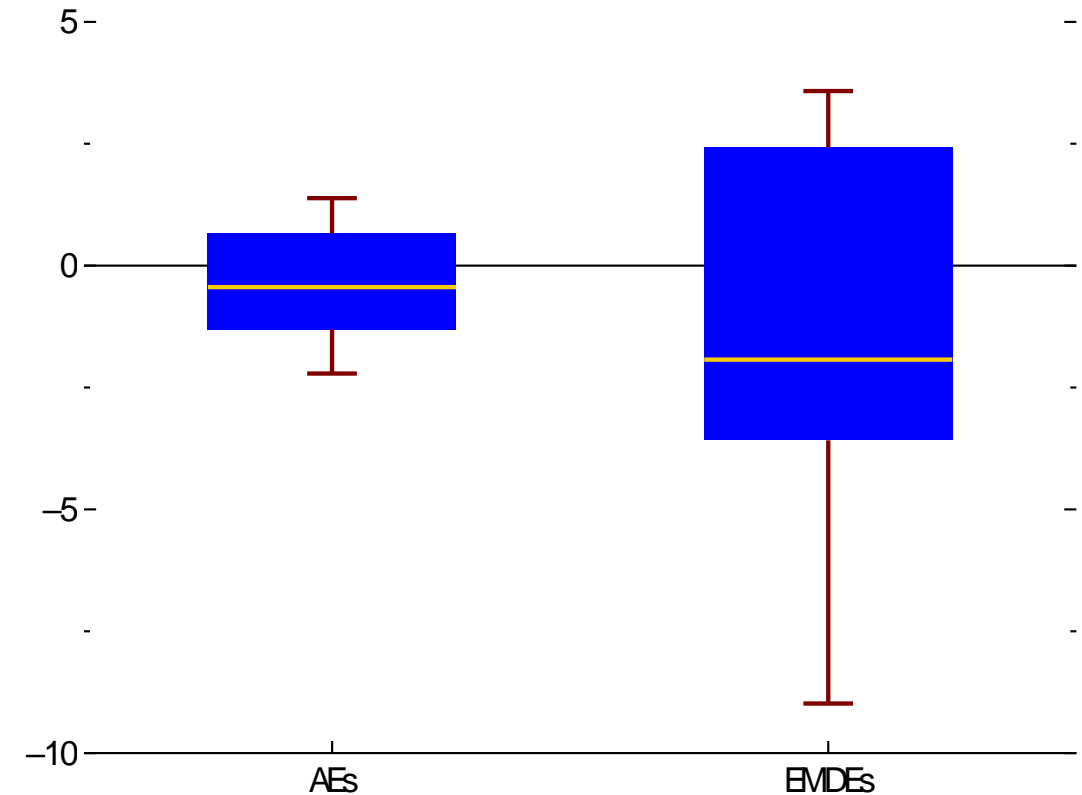
The global decline conceals considerable heterogeneity across countries...

Labor share data:

Predominantly primary sources (national authorities) for

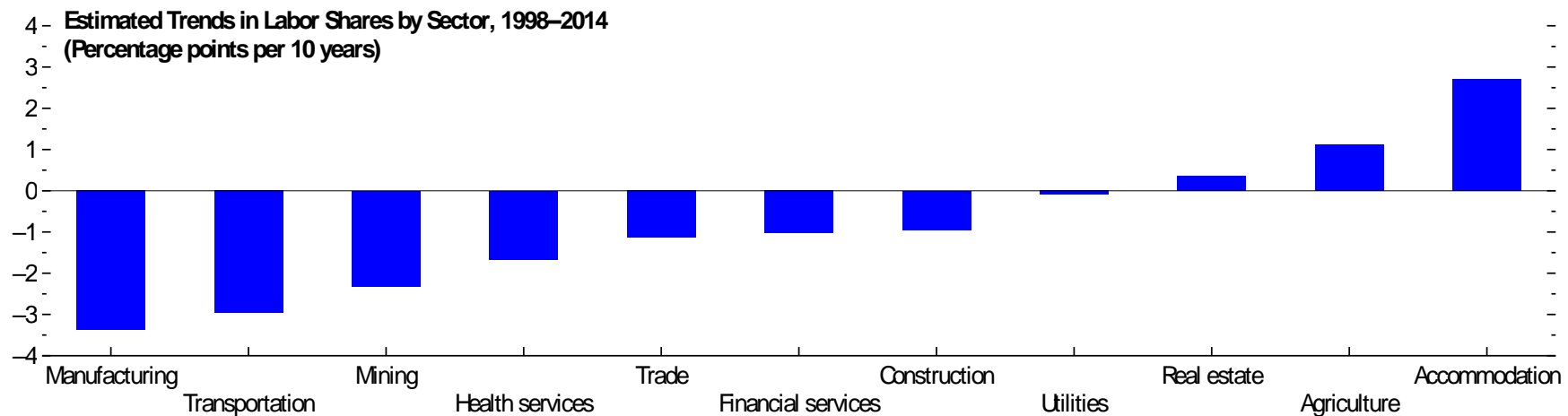
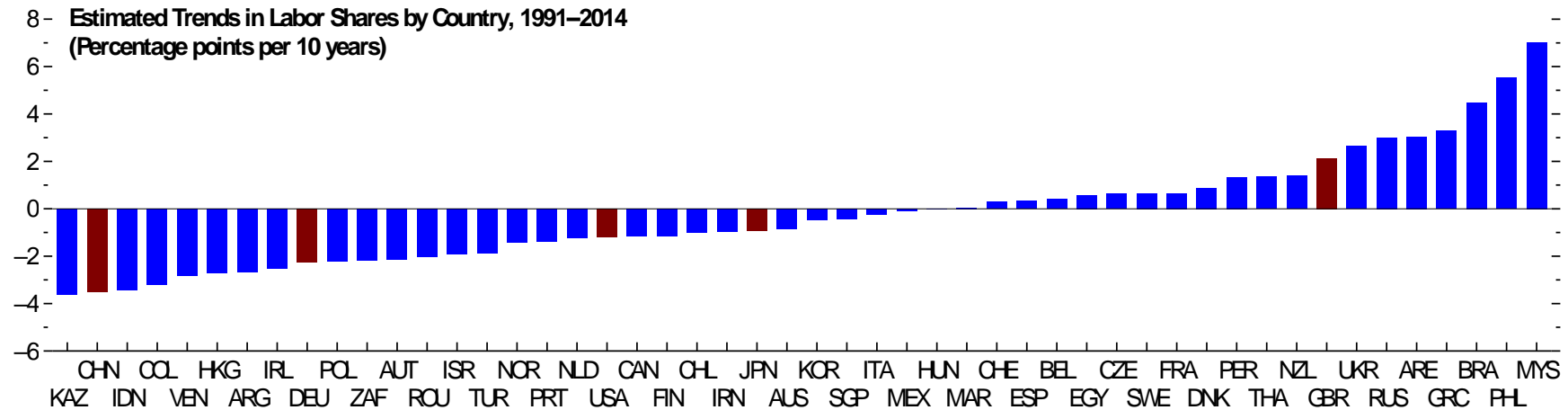
- 103 countries at the aggregate level,
- 40 countries at the sectoral level

Distribution of Estimated Trends in Labor Shares, 1991–2014
(Percentage points per 10 years)



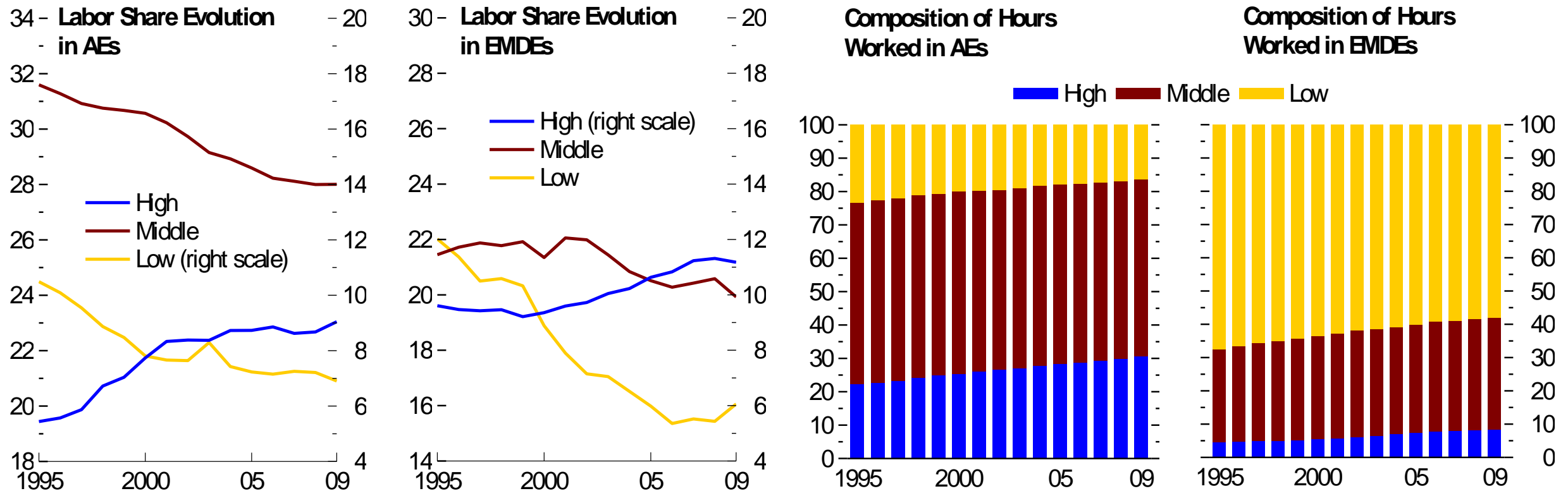
...as well as across sectors...

Estimated Trends in Labor Shares by Country and Sector



...and across skill levels, with a most pronounced decline among the medium-skilled.

Labor Share Evolutions and Labor Force Composition by Skill Level (Percent)

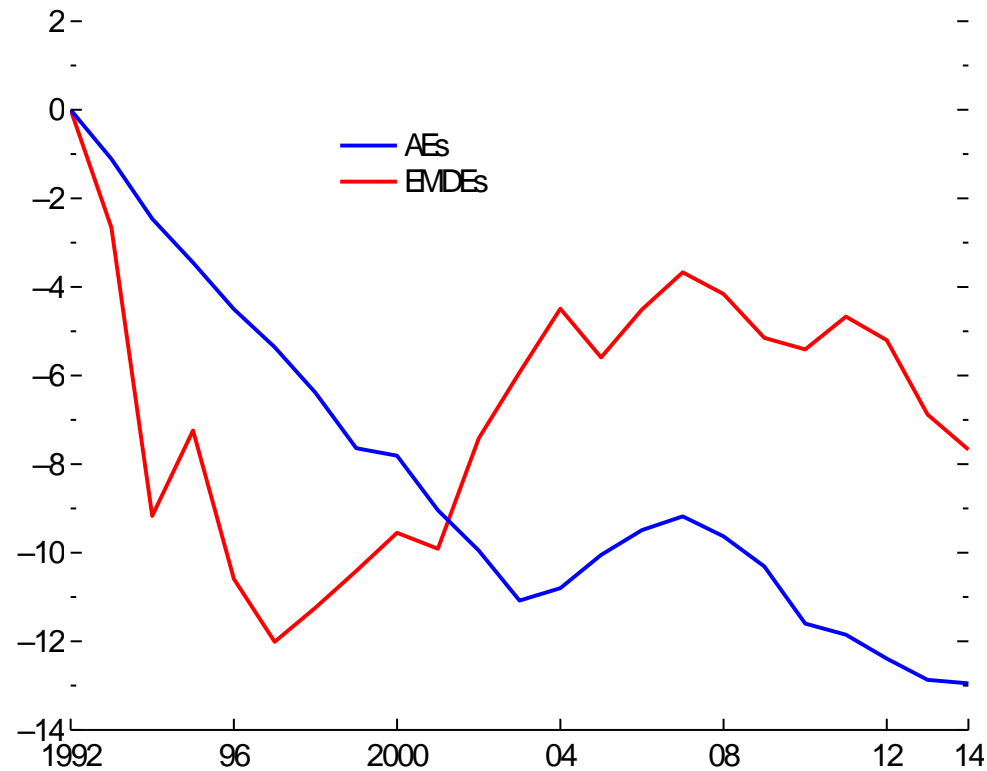


What are the Key Drivers of the Labor share of Income?

The relative price of investment declined more in AEs than in EMDEs...

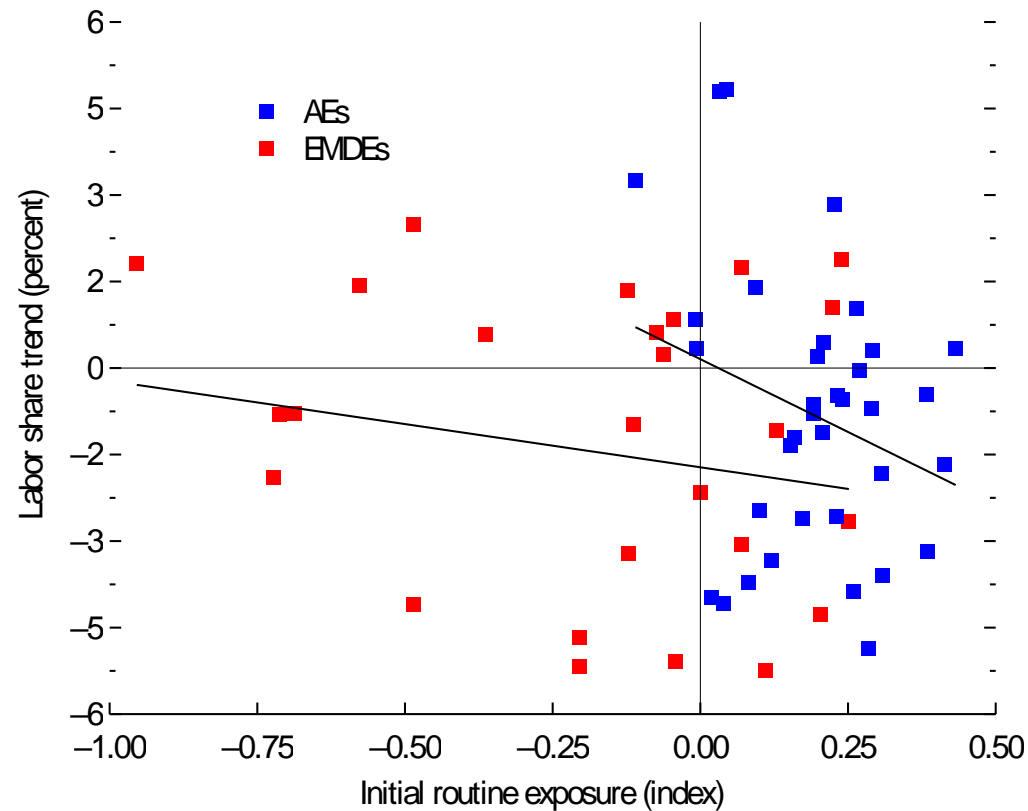
Trends in Potential Drivers of Labor Shares: Relative Price of Investment

(Percent change relative to 1990)



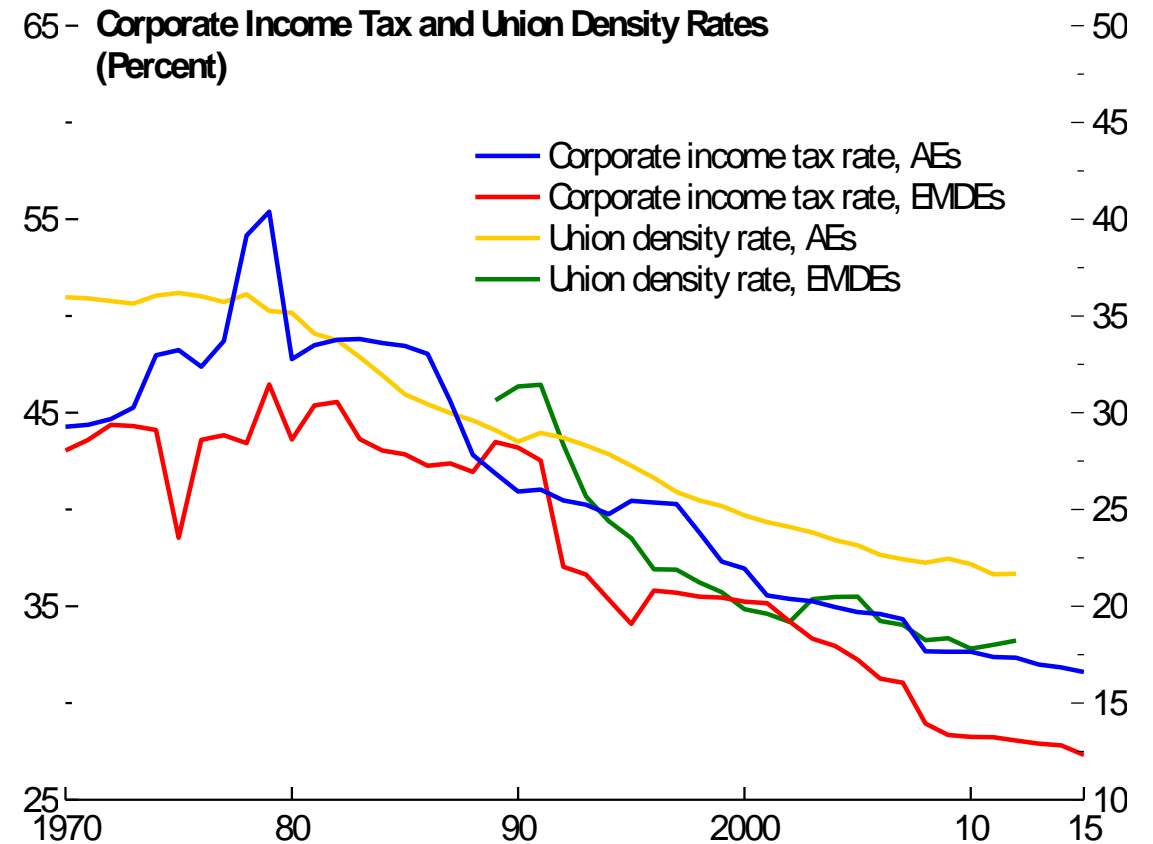
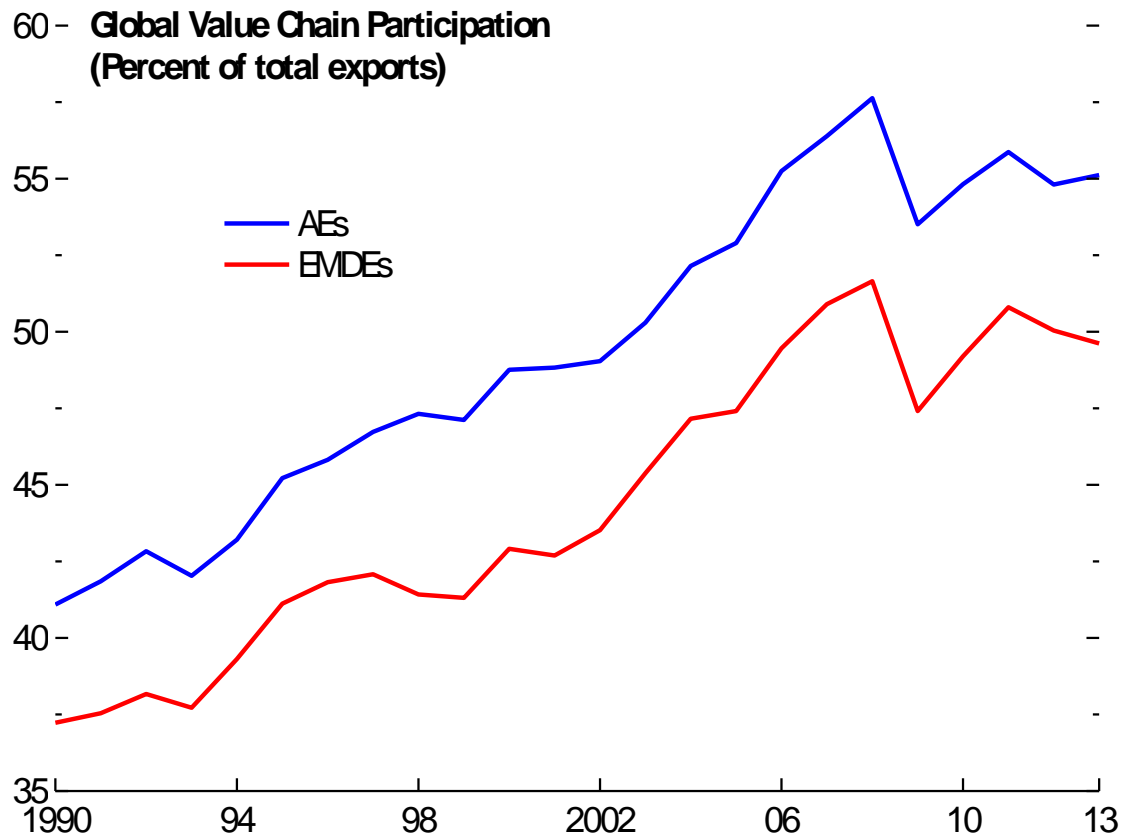
..and countries with higher initial routine exposures experienced larger declines in labor shares.

Trends in Potential Drivers of Labor Shares: Initial Routine Exposure and Changes in the Labor Share



GVC participation increased; corporate income taxes and union density rates fell.

Trends in Potential Drivers of Labor Shares: Global Value Chain Participation, Corporate Tax Rates, and Union Density Rates

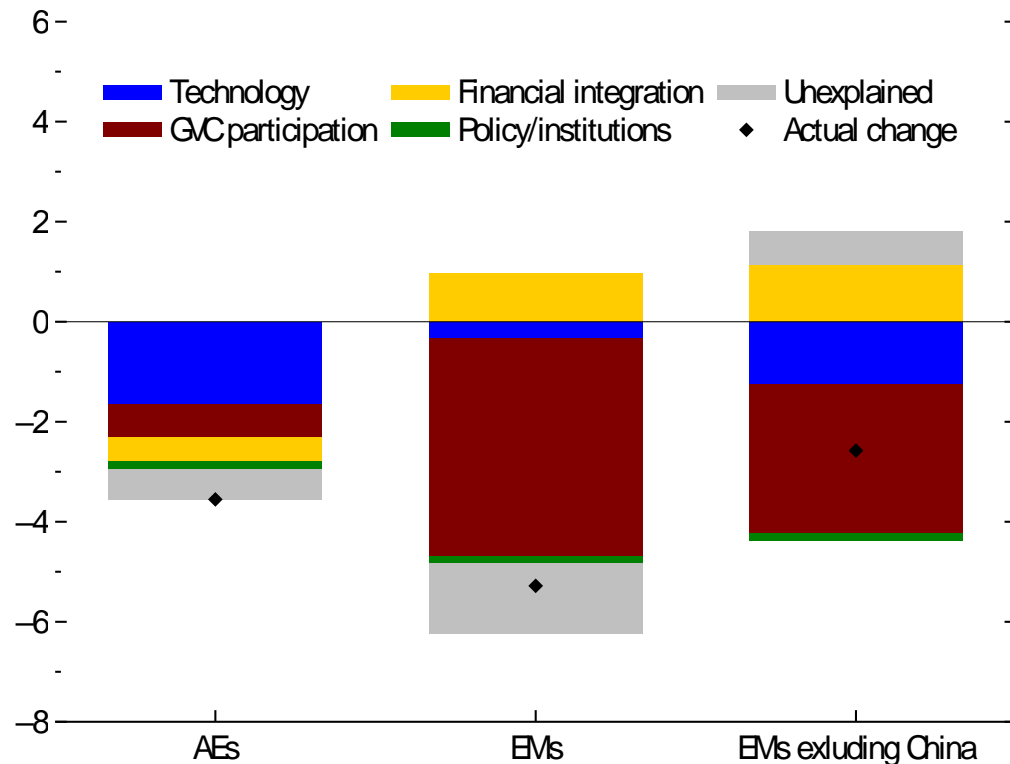


The relative importance of the key drivers in affecting labor income share

Technology is the key driver of labor shares in AEs, GVC participation in EMs.

Aggregate Results: Contributions to Aggregate Labor Share Changes, 1993–2014

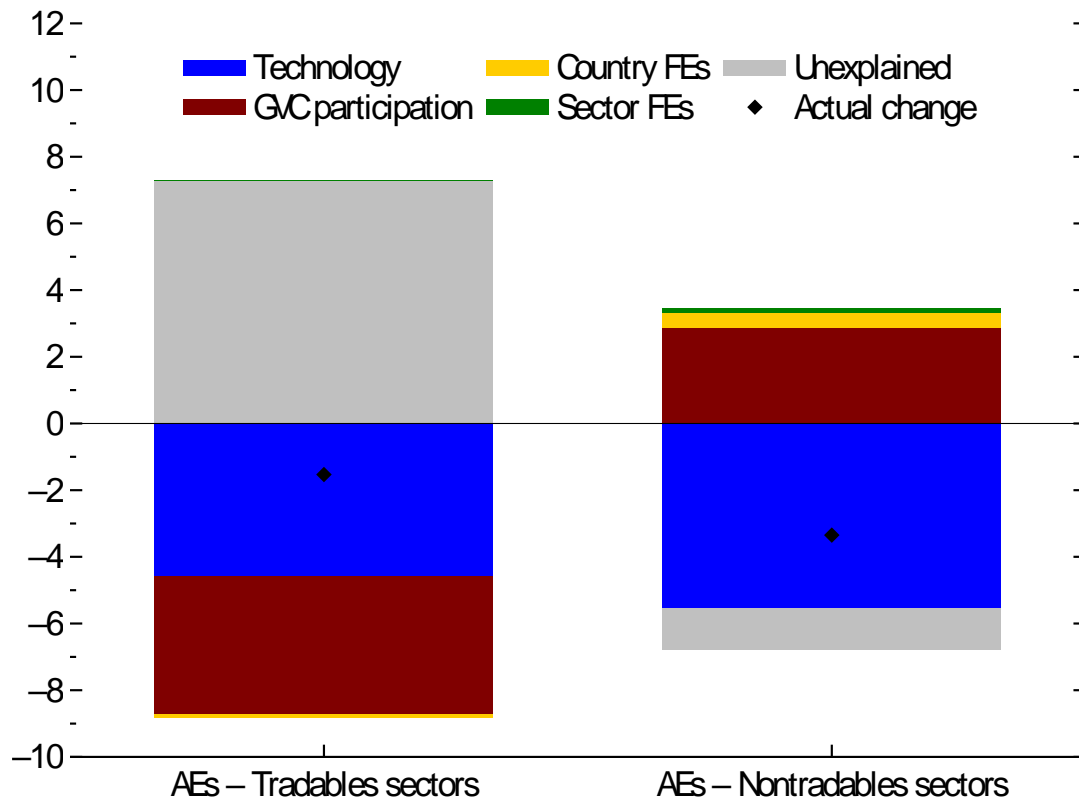
(Deviation from regression constant)



- A decline in the relative price of investment of 15 pct over 1990-2014 implies 0.4 ppt fall in LS in countries with low exposure, 1.7 ppt fall in countries with high exposure to routine-biased technological change. (Median was -3 ppt among countries with declining LS)
- An increase in intermediate trade by 4 pct of GDP (median increase in sample) implies a fall in LS of 1.6 ppt.
- Effect of corporate tax and financial integration small in comparison (or offsetting).

GVC participation is associated with declines in labor shares only in tradable sectors.

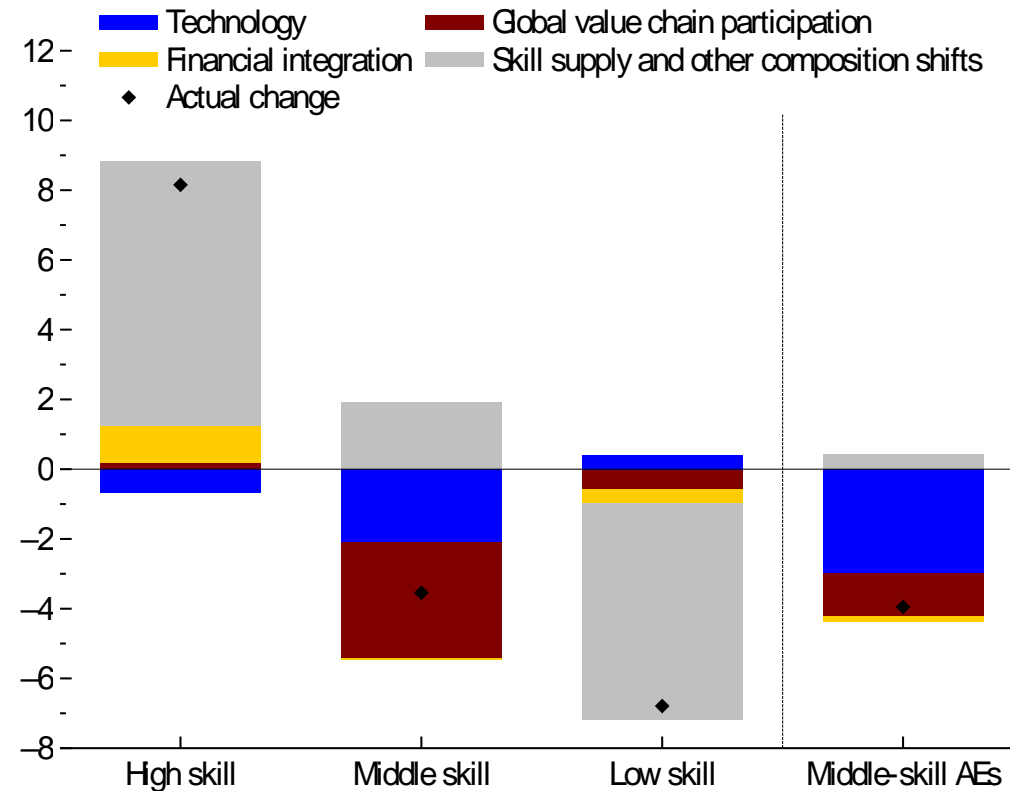
Sectoral Results, Advanced Economies: Contributions to Sectoral Labor Share Changes



- Median decline in relative price of investment -> decline in LS observed in country-sector at the 25th percentile of routinization.
- Effect of a decline in relative price of investment is double that at the 75th percentile of routinization.
- Move from 25th to 75th percentile of routinization distribution roughly matches observed difference.

Technological progress and GVC participation hollow out the medium-skilled.

Contributions to Aggregate Labor Share Change by Skill,
1995–2009



Conclusions

- The decline in the labor share of income in advanced and emerging market economies conceals heterogeneity across countries, sectors and skill levels, with the medium-skilled seeing the sharpest declines.
- Overall, the declines in the labor share of income are mostly due to within-sector declines not reallocation across sectors.
- In AEs, technological advancement has been the key driver of the evolution of labor shares.
- In EMs, participation in GVCs played a larger role, though could reflect benign changes.
- Technological advancement and GVC participation affected labor shares largely through their impact on middle-skilled labor.

Policy Implications

- Policies should depend on country circumstances: level of development, extent of decline in labor shares, relative importance of underlying drivers, and existing social safety nets.
- In AEs:
 - help workers cope with disruptions, including through skill upgrading and facilitating transitions,
 - long-term investment in education,
 - longer-term redistributive measures in line with social contract.
- In EMs:
 - Decline in labor share by itself may not call for policy intervention, but gains from growth should be shared more broadly.
 - Challenges similar to those in AEs could arise as automation progresses – promote skill deepening to prepare for further structural transformation.