



PROJECT PRODUCTION
INSTITUTE

Trends in Labor Productivity in the Construction Industry

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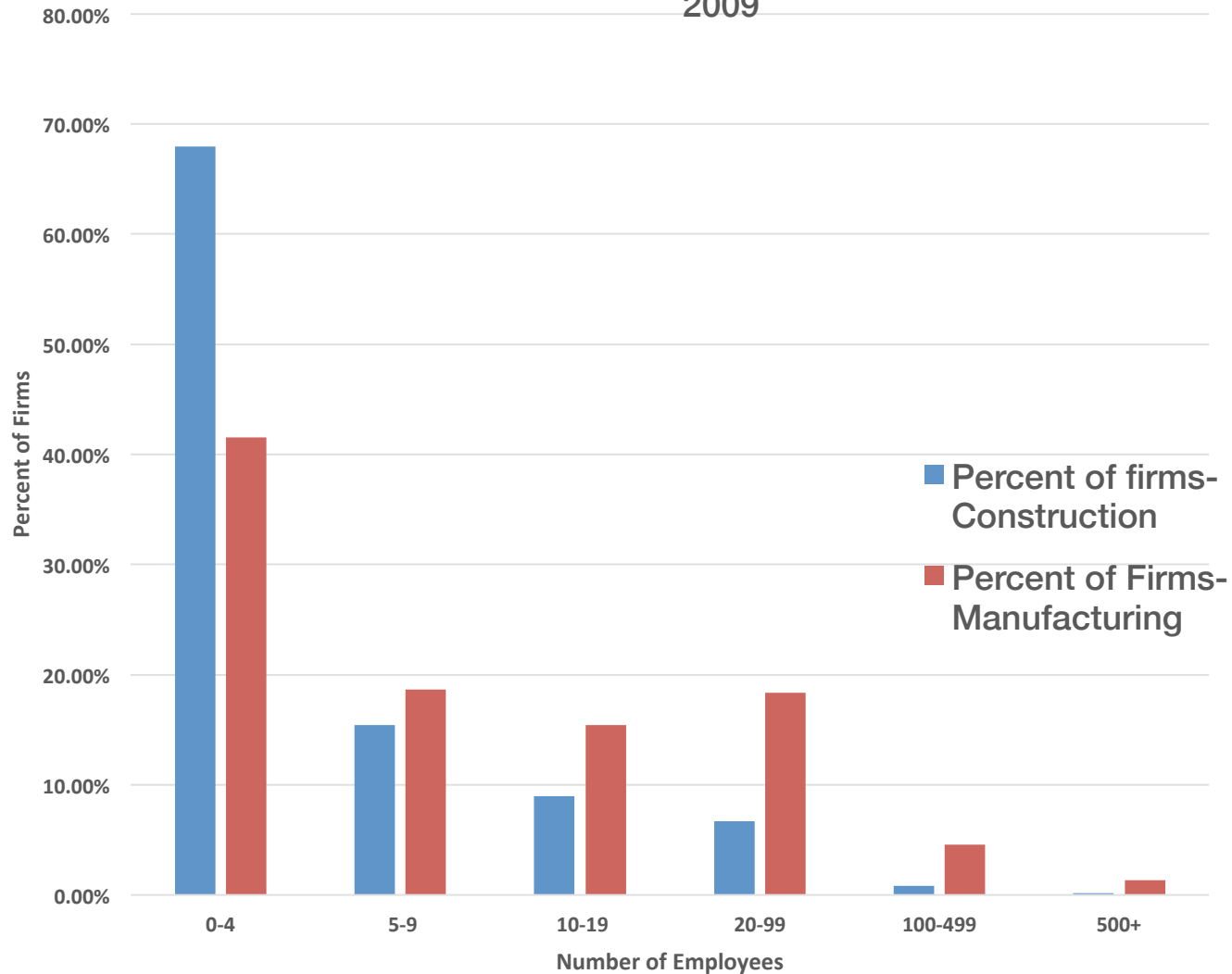
Some basic data about the industry

Labor productivity data for construction vs.
manufacturing and non-farm industries

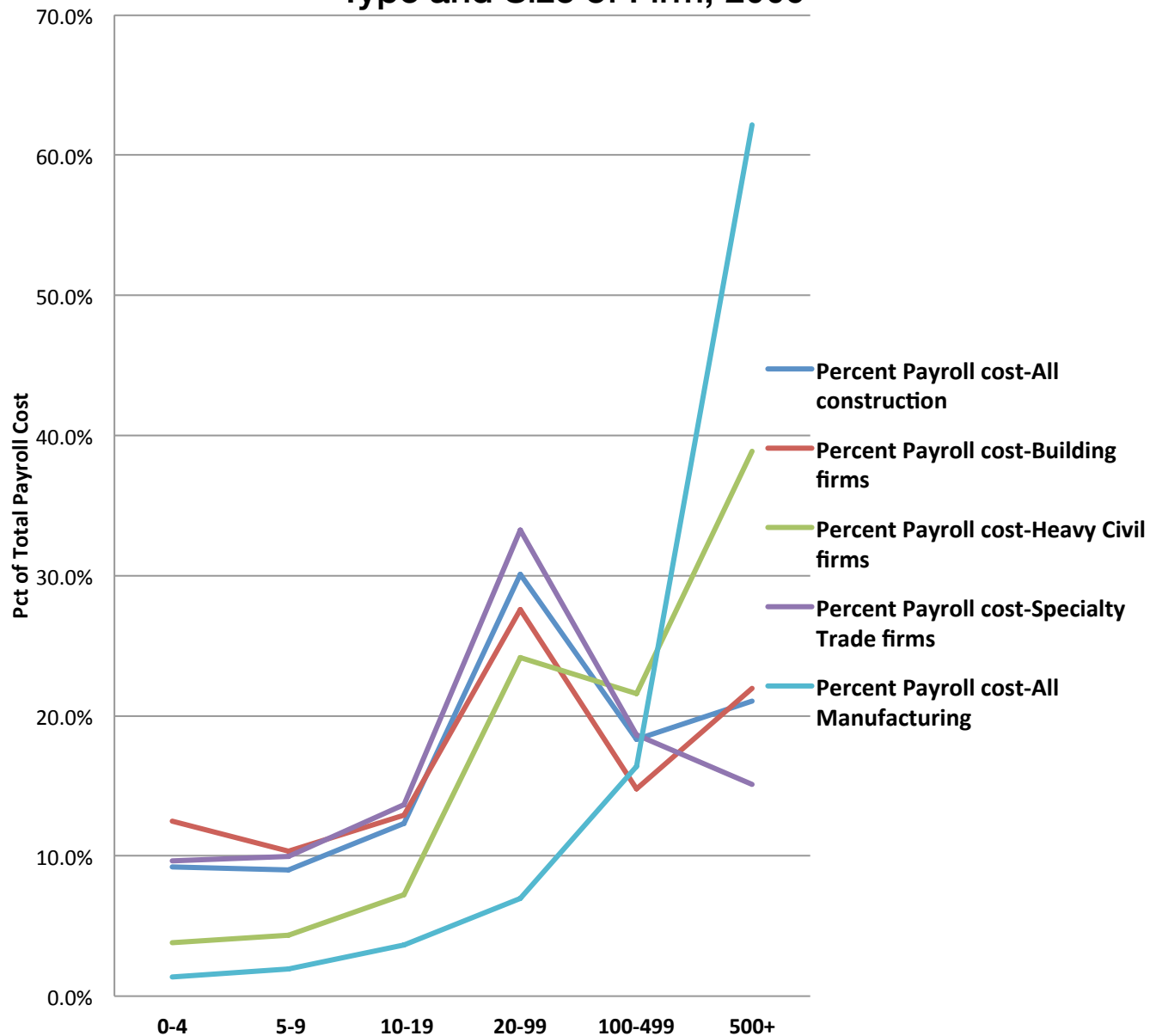
Structural problems that underlie continuing
low productivity



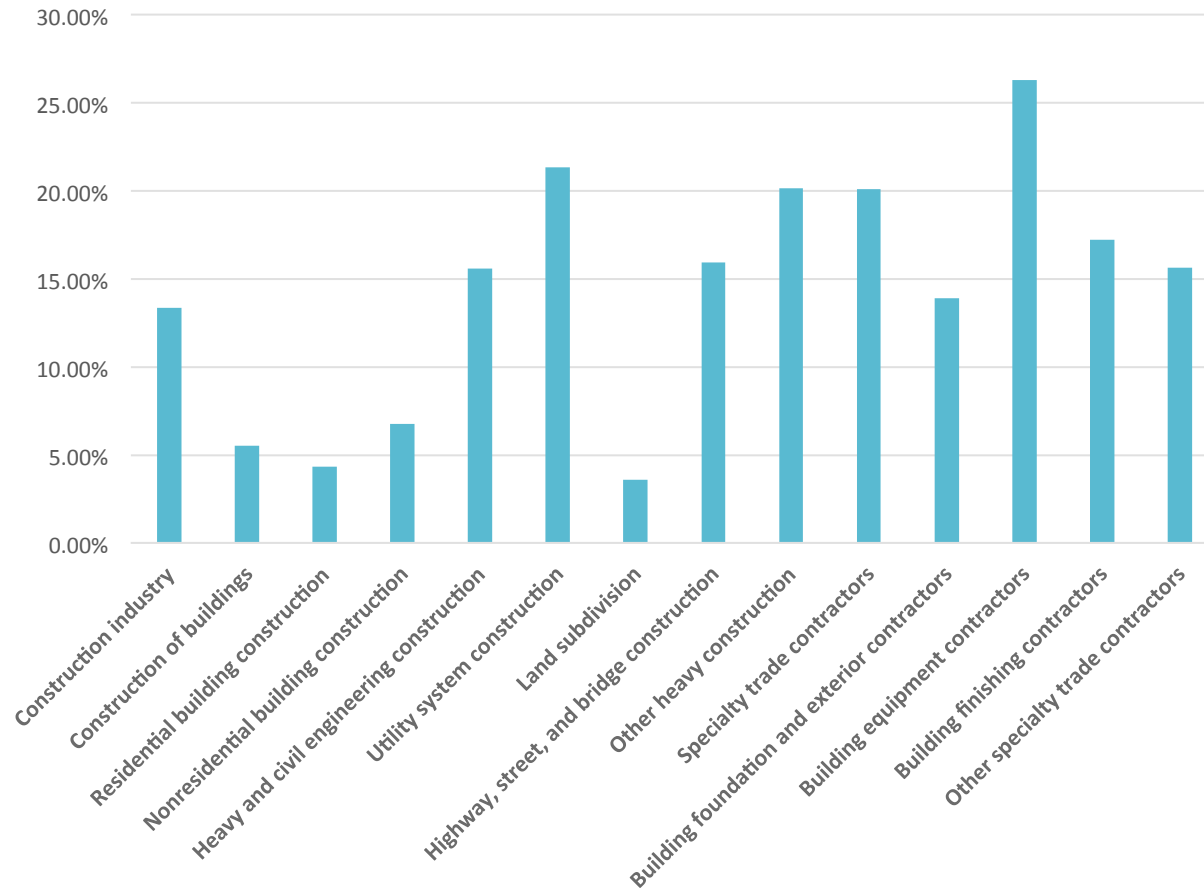
Percent of firms vs. size of firm,
total construction industry
total manufacturing industry
2009



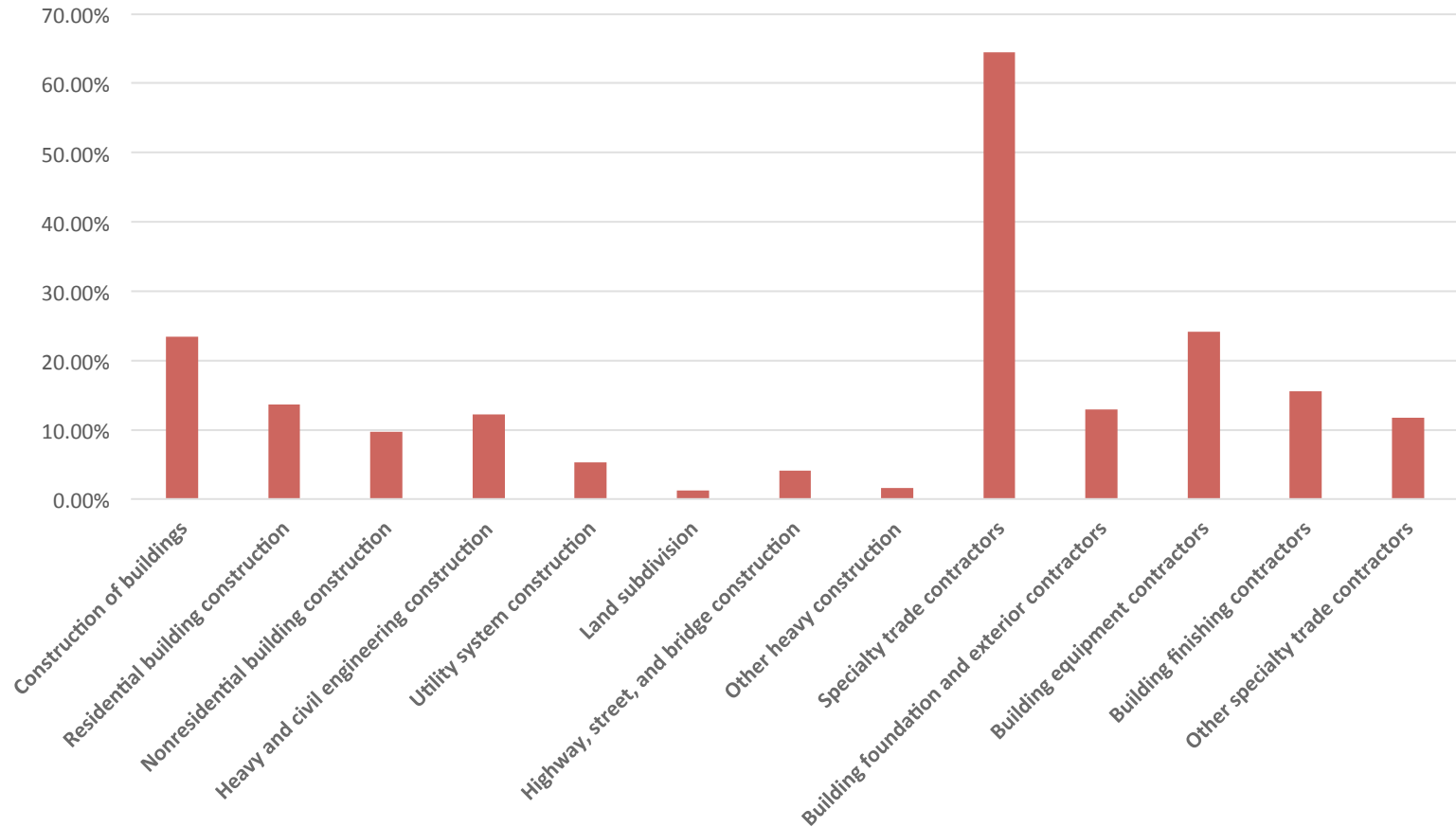
Percent of Total Payroll by Type and Size of Firm, 2009



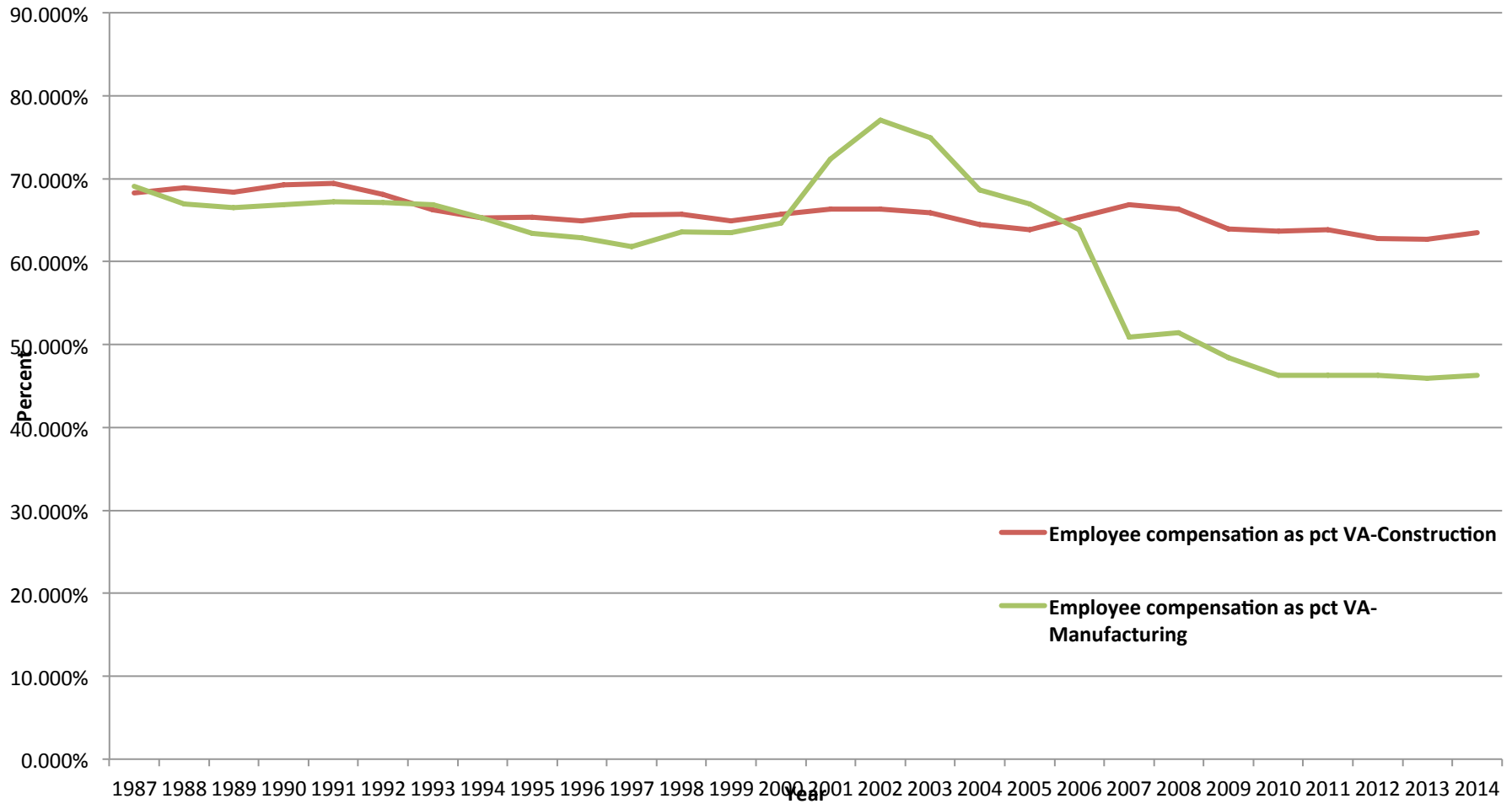
Maintenance & Repair as Percent of Total Construction Volume, 2007



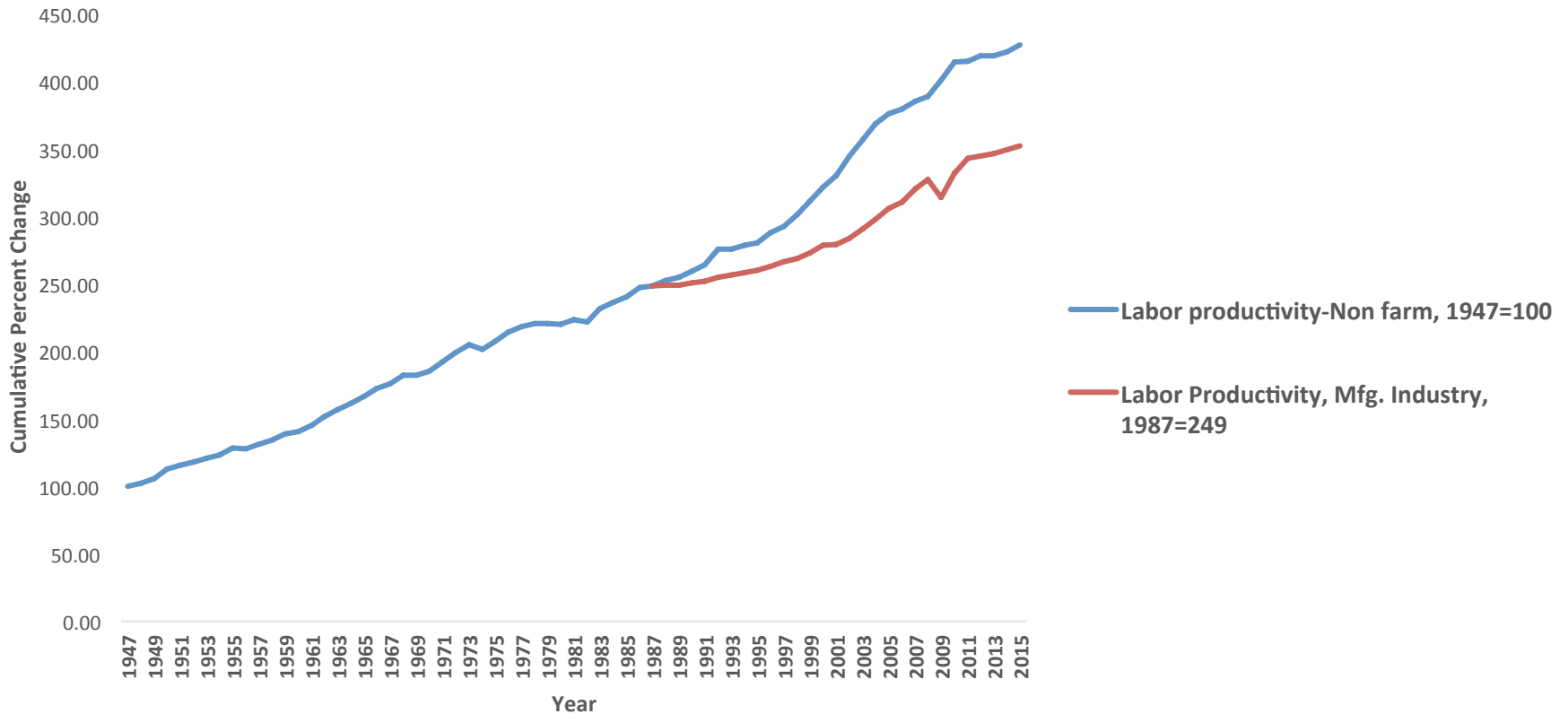
Hours worked as Percentage of Total Hours, 2007



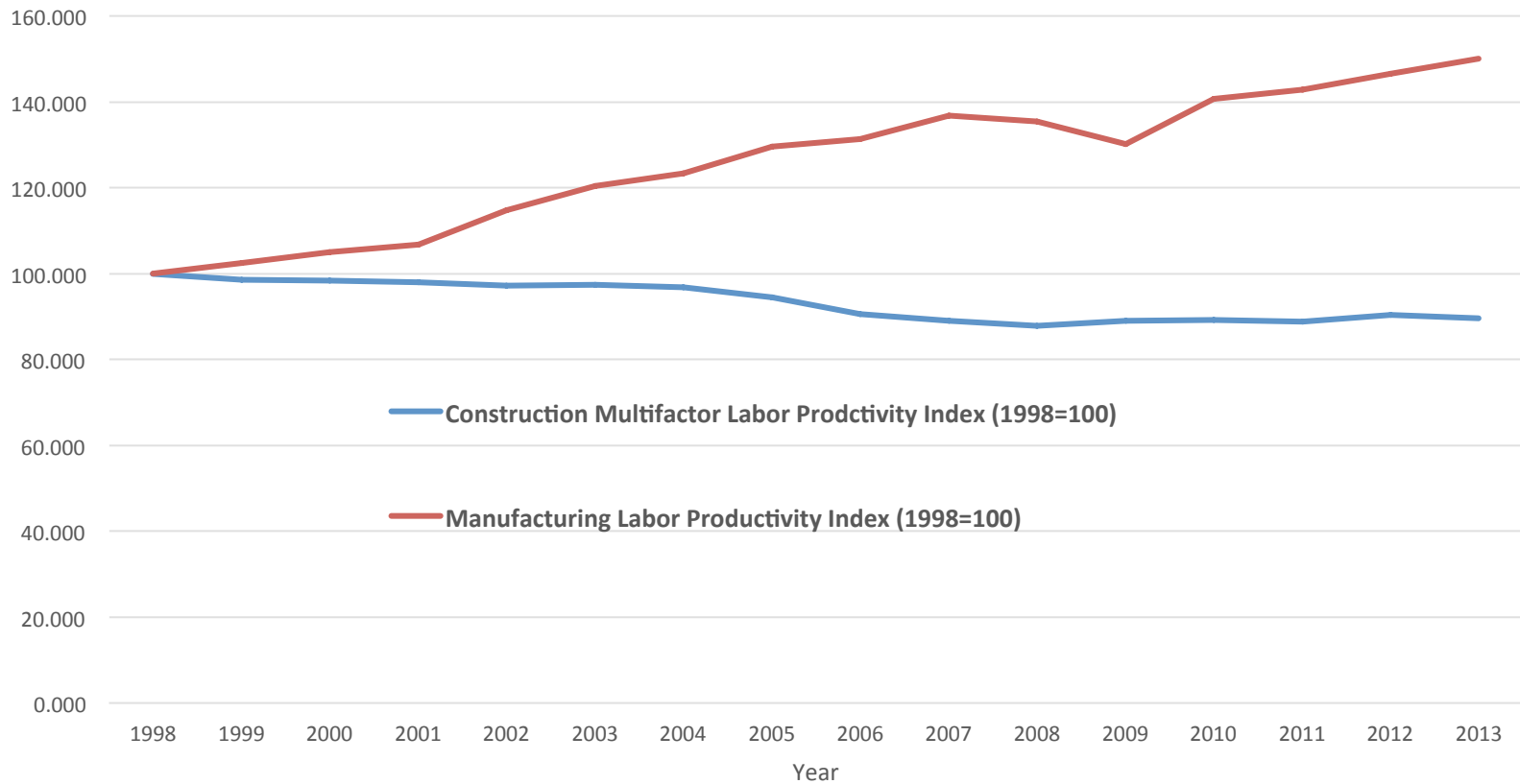
Employee Compensation as Percent of Value Added Construction & Manufacturing 1987-2013



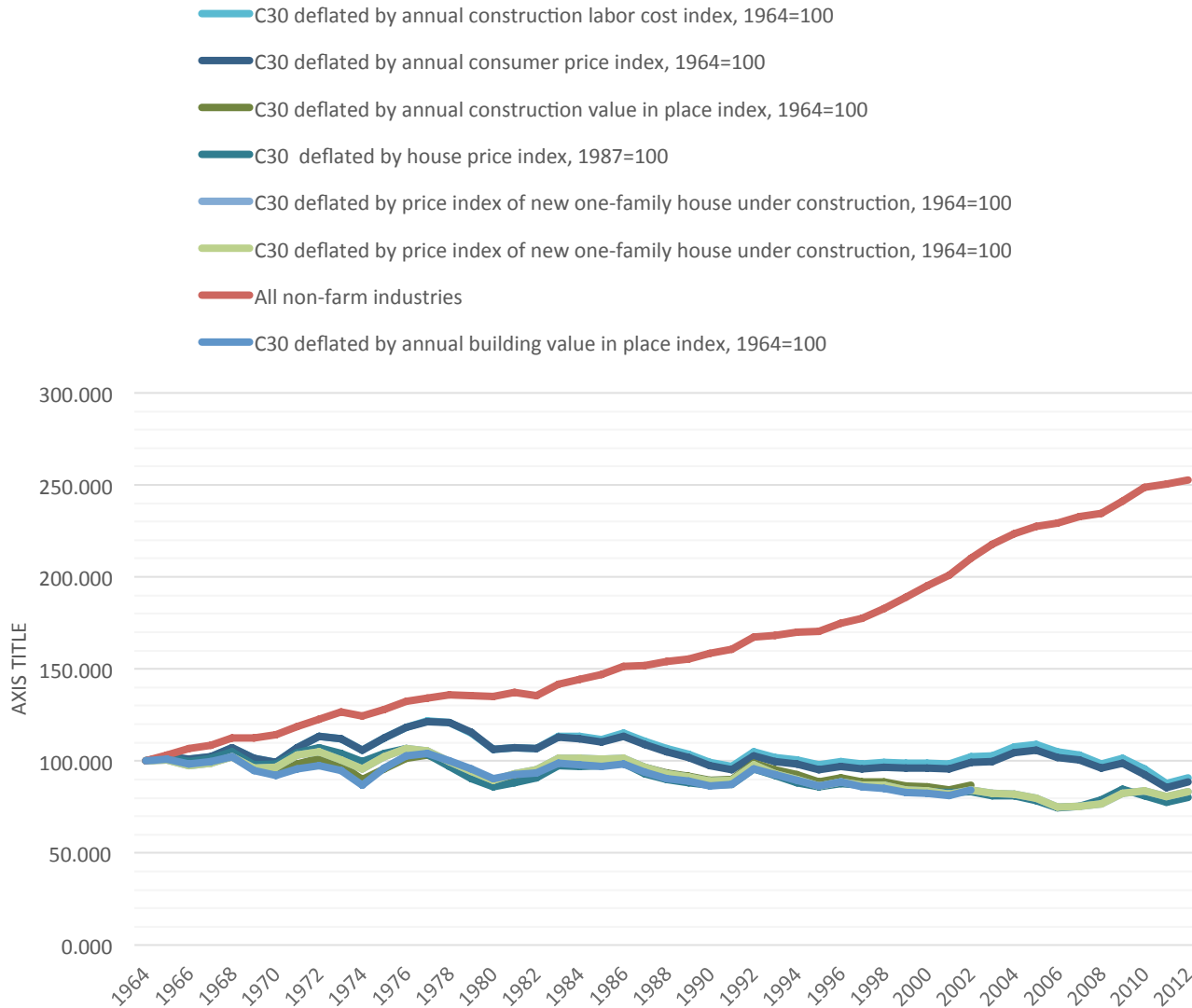
Output per Hour, Non Farm Industries Manufacturing Industry 1947-2015



Integrated Labor Productivity Index (2009=100)
Construction and Manufacturing Industries
1998-2013
Source: BEA



Construction Labor Productivity, 1964-2012 based on various deflators 1964 = 100



Some Causes of Poor Construction Labor Productivity

Fragmented process for procuring a project

- Design/bid/build still most common form of contracting
- Owner tries (but fails) to insulate themselves from sources of risk
- Poor coordination of design, permitting, and construction and turnover with low quality data

Inefficient use of labor at site

- Many crafts need to be managed (not there when needed, space constraints)
- Materials brought to site, stored, moved, etc.
- Labor works with ‘stick level’ materials rather than assemblies and modules
- Very difficult to take advantage of equipment to replace use of labor at site

Results in delays, conflicts, claims, extra costs – low value for owner



Questions

