



Industry Economic Accounts

Measurement Issues in a Changing Economy

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Industry Economic Accounts

- BEA's Industry Economic Accounts provide information on current period production as it relates to:
 - Who is producing what in the economy
 - Who is using what in the economy
 - Industries' share of GDP growth and inflation (GDP by industry)
- How?
 - Input – output accounts
 - Real growth in industries' output, intermediate inputs, and value added
 - Price growth in industries' output, intermediate input, and value added

Limitations of Industry Statistics

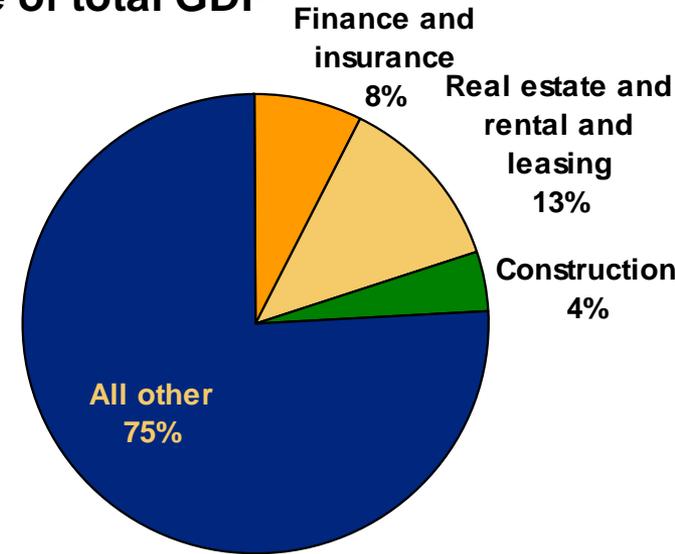
- Measures goods and services and incomes generated from current period production – Not financial transactions or stocks
 - BEA – provides industry-by-industry capital stock separately
 - FRB – provides flow of funds and balance sheet info for broad sectors
- Annual data only
 - Not timely for current period analysis (unlike quarterly GDP)
 - Benchmark and annual I-O statistics not 100% consistent, in the past
- Source data improving but gaps remain:
 - Industry coverage
 - Limited prices
 - Industry classification differences among source data providers

Key Industry Groups

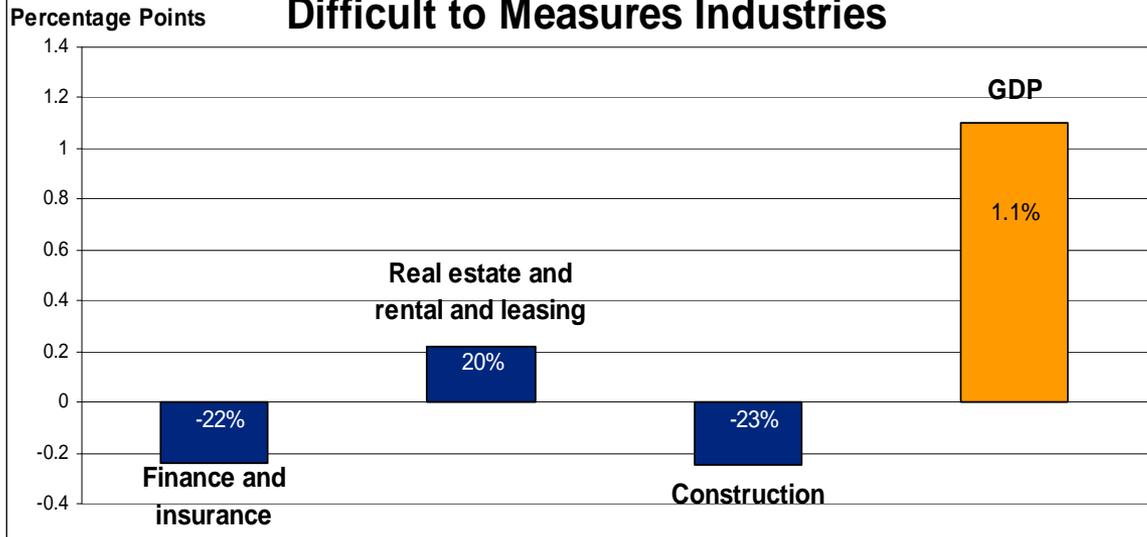
Key to analyzing current economic landscape
but difficult to measure

- Financial services
- Real estate/construction

Share of total GDP



Contributions to GDP Growth, 2008
Difficult to Measure Industries

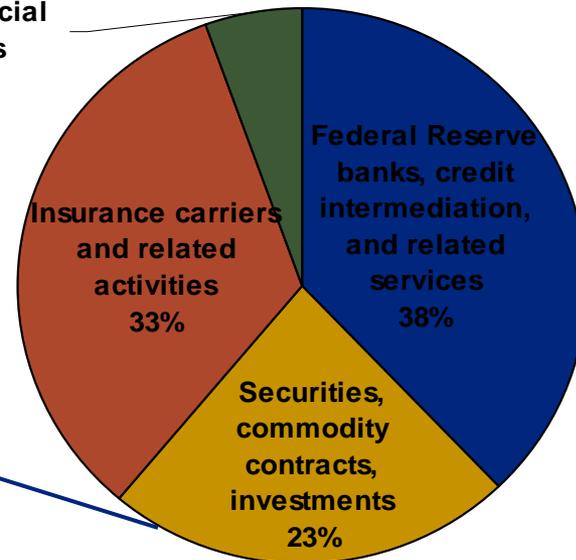


Case Study 1: Financial Services Industries

Gross Output:

- Credit intermediation: priced and unpriced intermediation services of depository and non depository institutions
- Securities and investments priced and unpriced investment services
- Insurance: service of pooling risk
- Funds and trusts: priced and unpriced fund and trust services

Gross Output, 2007



- Annual Census data covers roughly 23% of total output

Credit Intermediation Industries

- Commercial banks
- Thrifts
- Mortgage loan companies
- Consumer credit

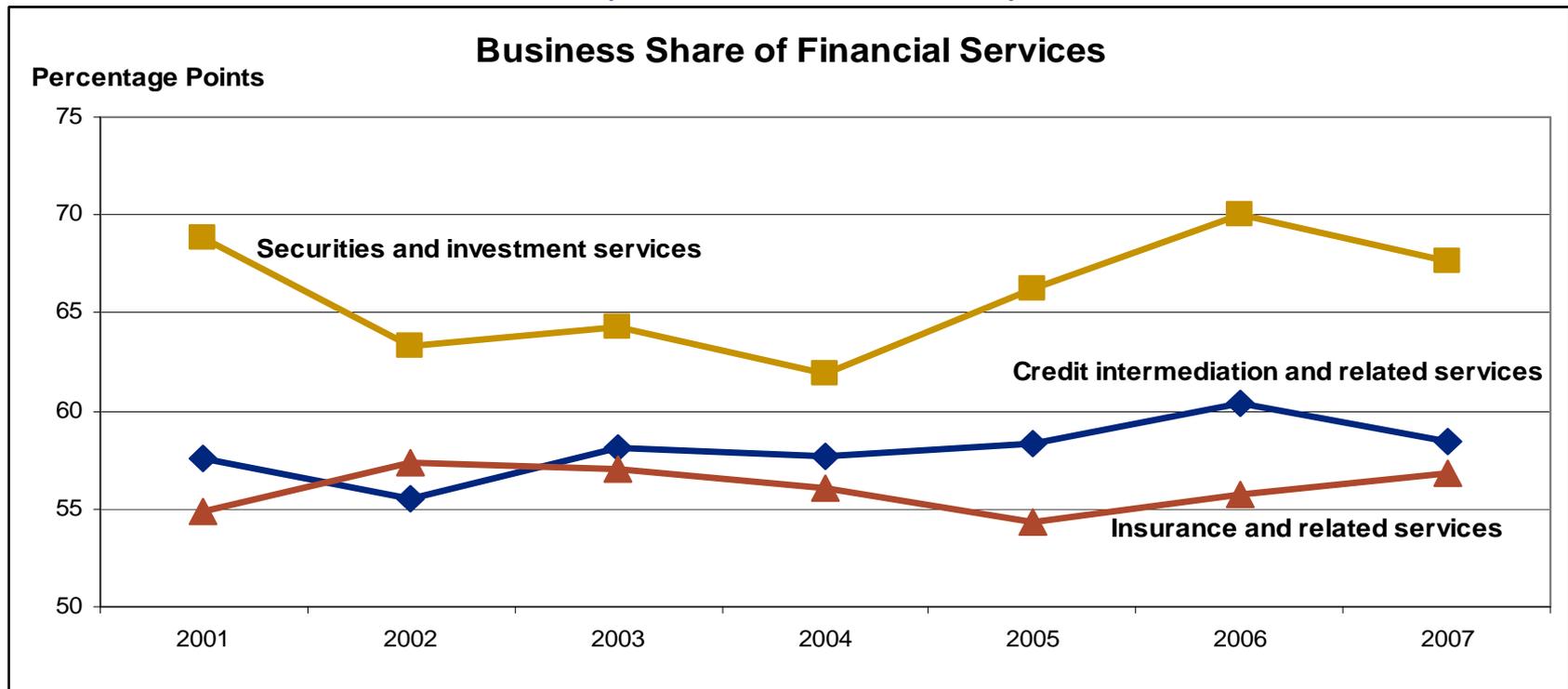
Credit Intermediation Output



- Priced services – non interest fee and other income (Census, FDIC, OTS, etc)
- Unpriced services –processing checks, transferring funds, intermediation between borrowers and lenders
 - Commercial Banks: user cost for depositor and borrower services
 - Others : property income received less interest income paid to depositors
- As institutions change charters, possible change to measuring unpriced output.

Demand for Financial Services

- Full accounting of financial services output
 - \approx 60% of output is for business (includes housing)
 - \approx 40% of output is for consumers (excludes housing)
 - Sector breakout of output use can be tricky to measure

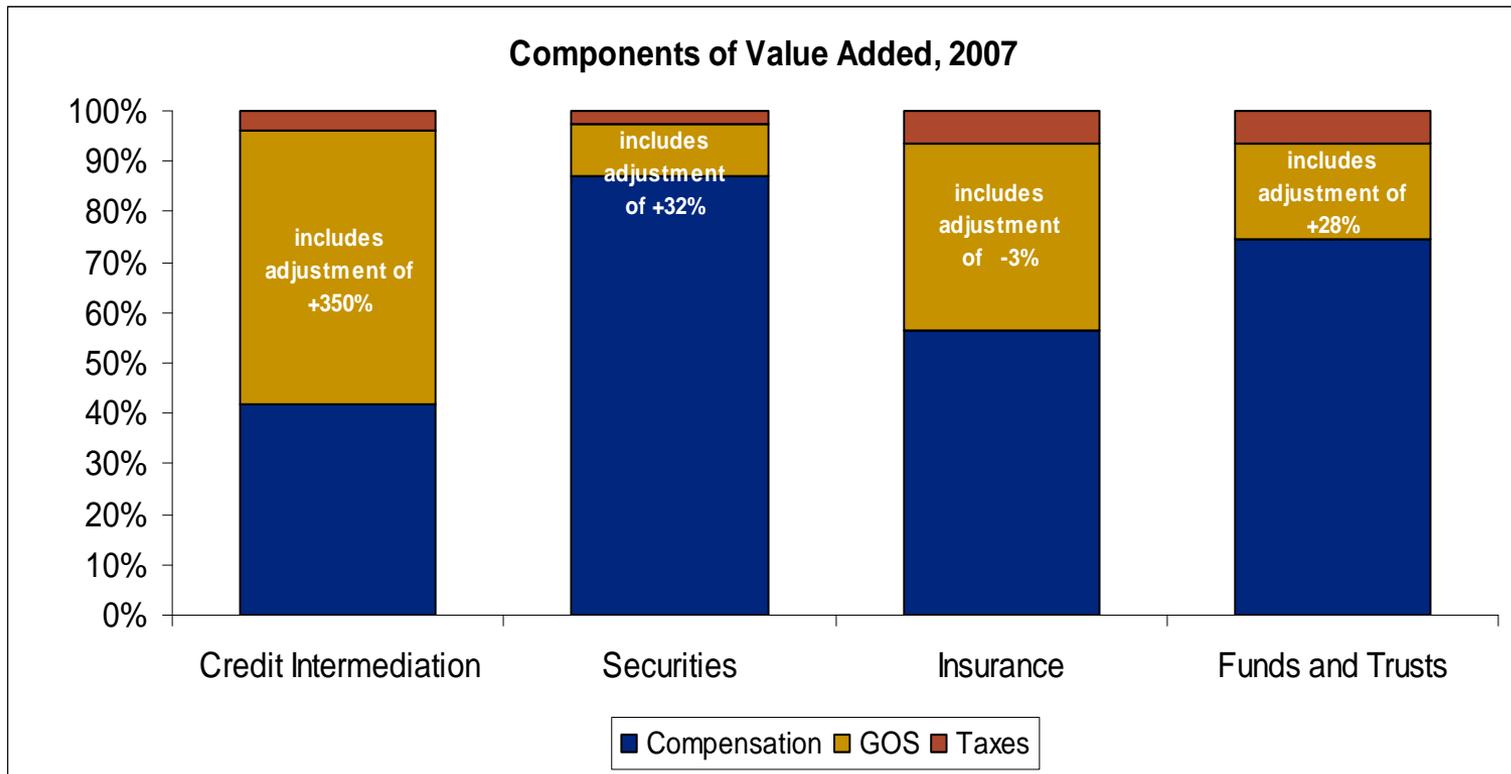


Financial Services Value Added

- Value added – annual time series uses income approach
- Gross output (GO) – VA = Intermediate Inputs (II)
- Real GO – Real II = Real VA
- GO data from Census, regulators, private trade sources
 - Establishment based industry classification
- VA data – hard to measure components
 - Compensation
 - Wages and salaries BLS based establishments- differ from Census
 - Corporate profits and interest
 - Company basis – needs to be adjusted to establishment basis
 - New innovation to compensation and accounting practices makes measuring VA difficult

Components of Nominal Value Added

- Mergers/acquisitions or changes in primary source of revenue can alter industry classification of source data – results in large adjustments to bring onto establishment basis.

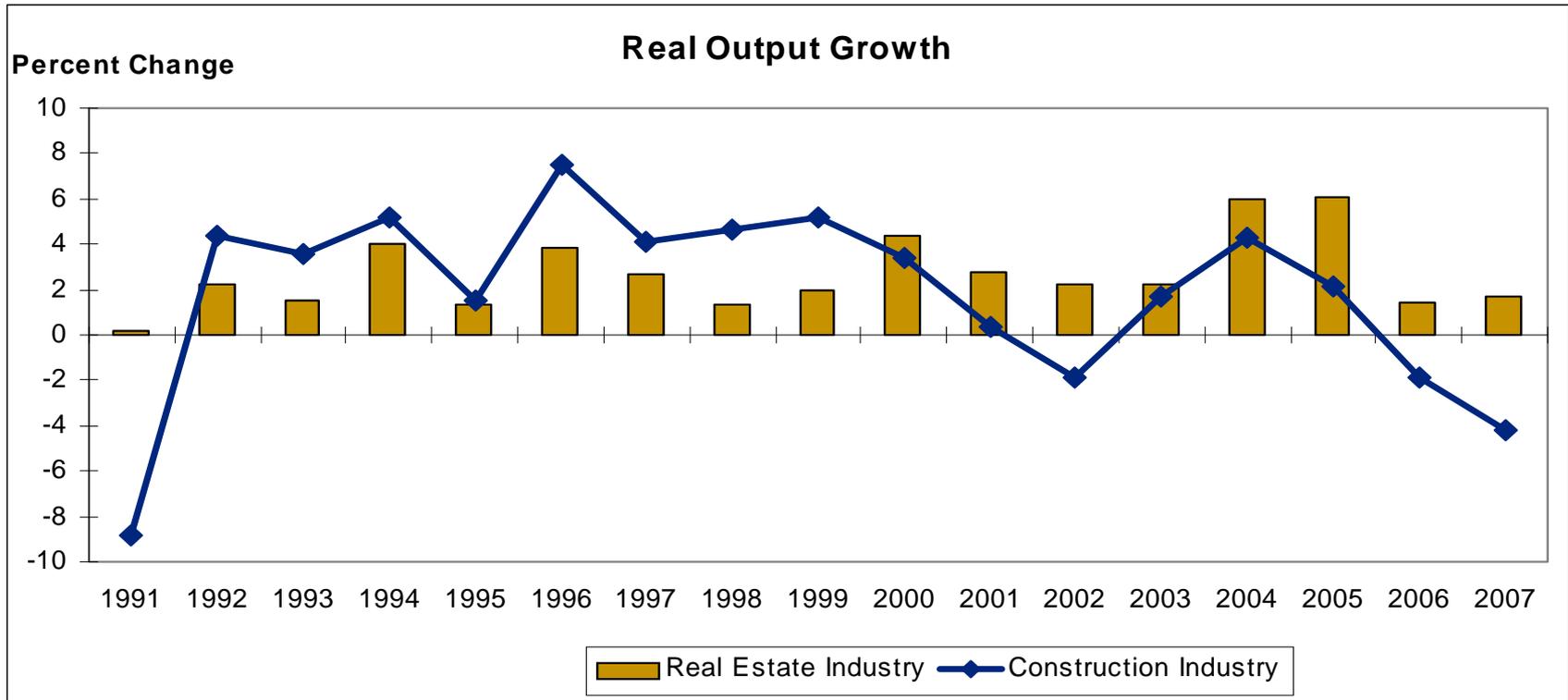


Real Measures of Financial Services

- Limited prices for deflation
 - BLS CPIs for personal financial services
 - Input prices as proxy for output prices
 - Average wage growth
- Limited quantity measures
 - BLS banking quantity index
 - BLS employee hours worked
- Not always accounting for productivity growth
- Not capturing price differences between business and persons

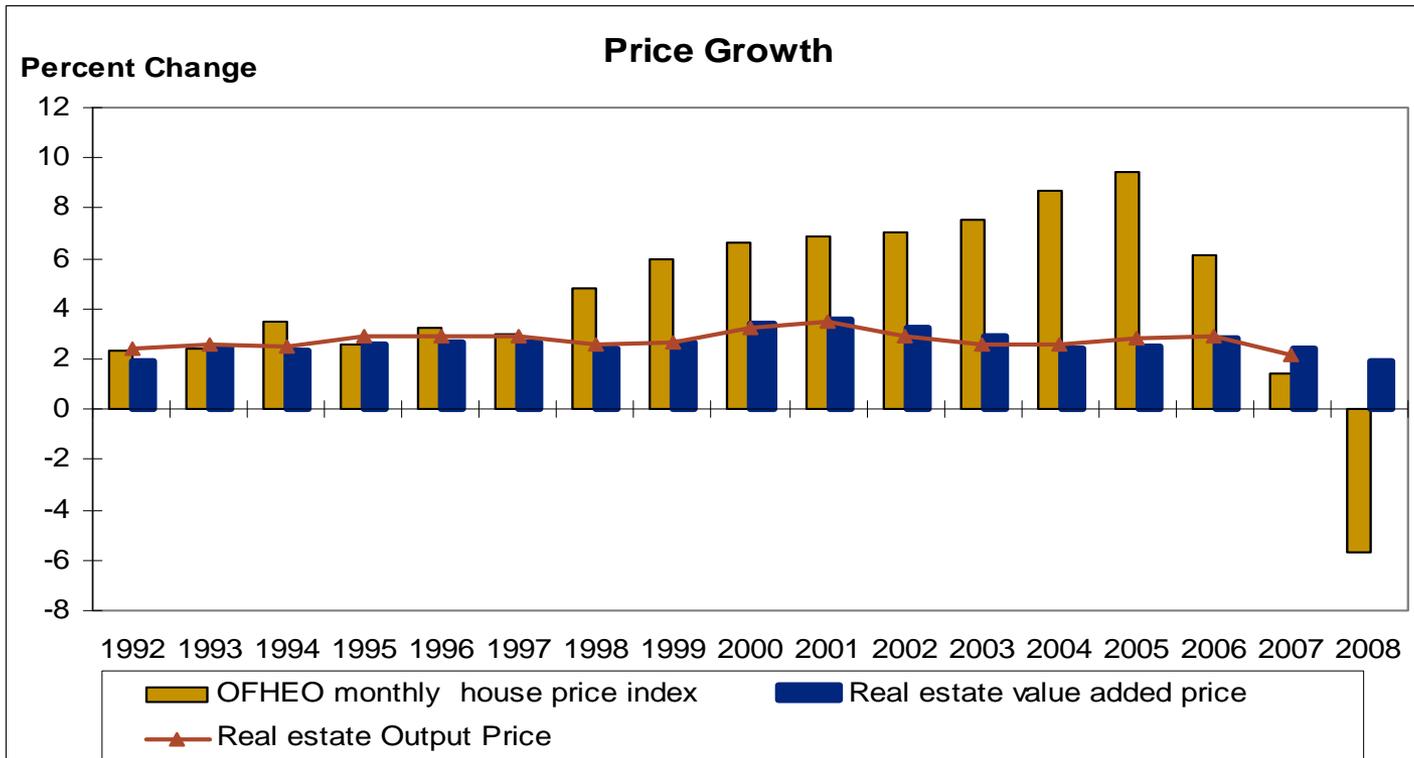
Case Study 2: Housing Related Industries

- Real estate: measures the service provided by real estate or “rental services”
- Construction: measures the value put in place of buildings, non building, and maintenance and repairs on buildings
- Does Not measure appreciation/depreciation of real assets



Housing Prices vs Real Estate Prices

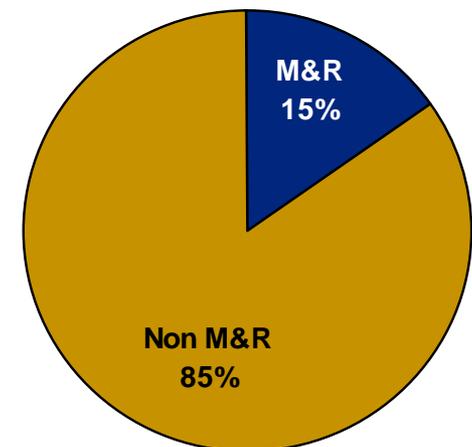
- Real estate output prices measure the price for shelter (residential rents or nonres rents – based on BLS CPIs and PPIs)
- Do not follow asset prices (like OFHEO house price index)



Data Needs for Construction

- Industry coverage is weak
 - Do not provide data by type of contractor
 - Small sample size
 - Lots of sole proprietors
 - Reporting difficulty
- Lacking data on maintenance and repair work
 - Expect demand to be counter cyclical,
more important during times of downturn
 - Nonres - extrapolated using net capital stock
 - Res - extrapolate using existing home sales
 - Priced using new structure prices

Construction Industry Output



Can We Improve our Statistics?

- Quarterly GDP by industry statistics – plans for release in 2011
- Integrated benchmark and annual I-O account time series
 - Improve timeliness and usefulness of the industry statistics
- Data sharing
 - Improve establishment classification between BLS and Census
 - Improve adjustments to company based data sets
- New Census Initiatives
 - Expanded SAS and QSS data (more financial industries)
- Other partnerships:
 - Expanded coverage of construction price indexes (BLS)
 - Joint BEA's and BLS industry output measures - provide robust data sets for measuring productivity.