

Economic Development in the Real Economy

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Measuring Regional Change

- The Big 4
 - **Employment**
 - Wage & Salary Employment
 - Total Employment
 - W&S + Self Employment + Farm + Military
 - **Gross Domestic Product**
 - GDP & GDP-S
 - Value Added
 - **Personal Income**
 - W&S + Supplements to Wage + Proprietors Income + Dividends, Interest, Rent + Transfer Payments
 - **Population**
 - Decennial Census
 - Population Estimates

Challenges to Measuring Economic Development

- Results of Economic Development Programs
- Clusters
- Changes in Income Inequality
- Quality Jobs

Data Concepts

What is the value of what we produce?

- **Gross Domestic Product- State**
 - Value Added
 - Sales less intermediate inputs
- Available by Industry
- Geographies
 - US
 - State
 - Metro Area

What is the value of what we earn?

- **Personal Income**
 - Income from *Current Period* Economic Activity
 - Earnings
 - Dividends, Interest, Rents
 - Proprietor's Income
 - Farm
 - Non Farm
 - Supplements to Income
 - Transfer Payments
- Geographies
 - US
 - State
 - County
 - Metro Area

What is the value of Employment?

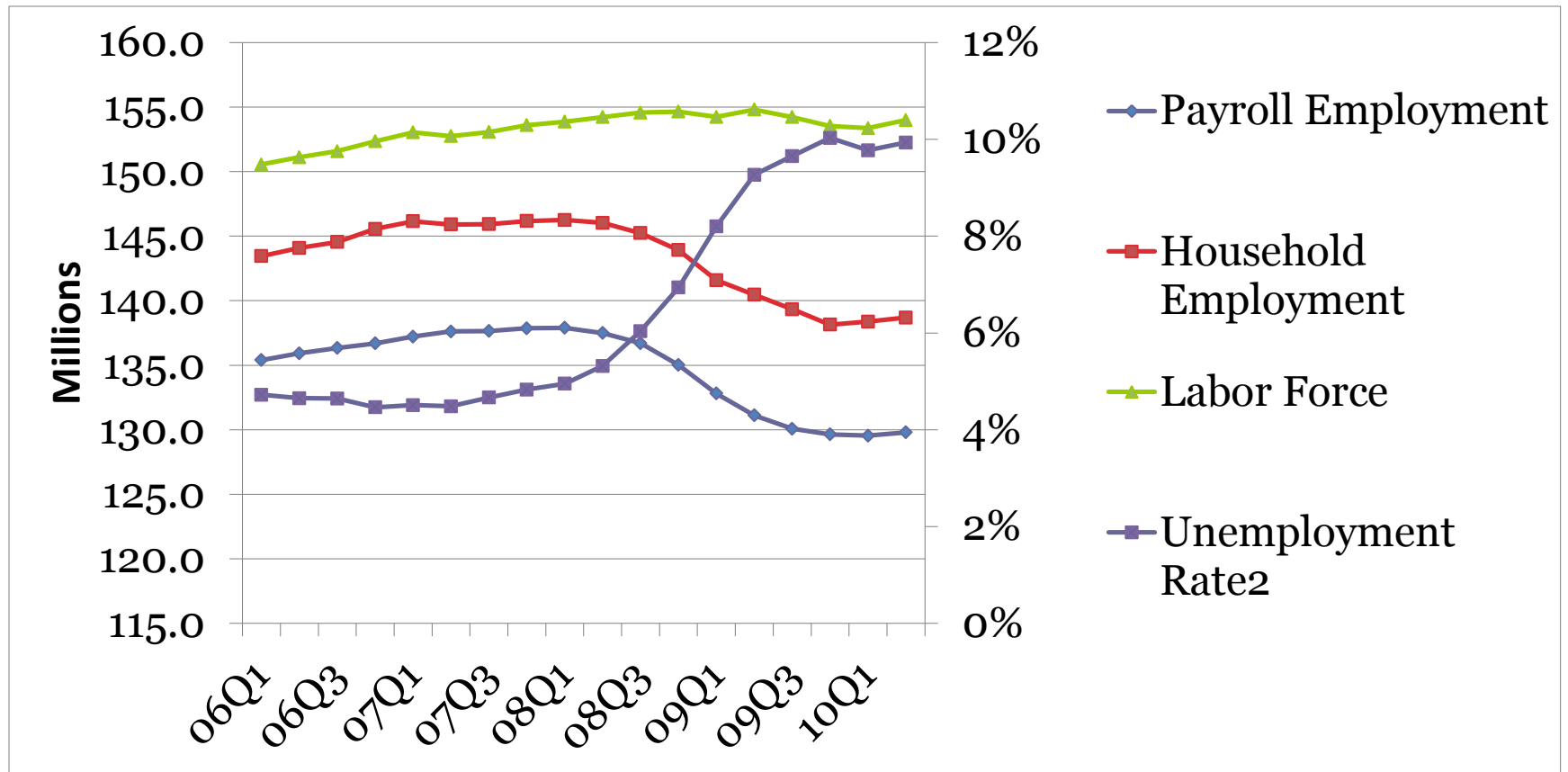
- Different Concepts
 - Wage & Salary (Payroll)
 - Residence (Household)
 - Total
- Labor Force
 - Labor Force
 - Unemployed
- Sources:
 - BLS/State Departments of Labor
 - BEA
 - Census
- Geographies
 - US
 - State
 - County
 - Metro Areas
 - Labor Market Areas
 - Minor Civil Divisions (New England)
- Confidentiality
 - The finer the detail the more suppressions
 - Imputations

Wage & Salary and Proprietors Employment

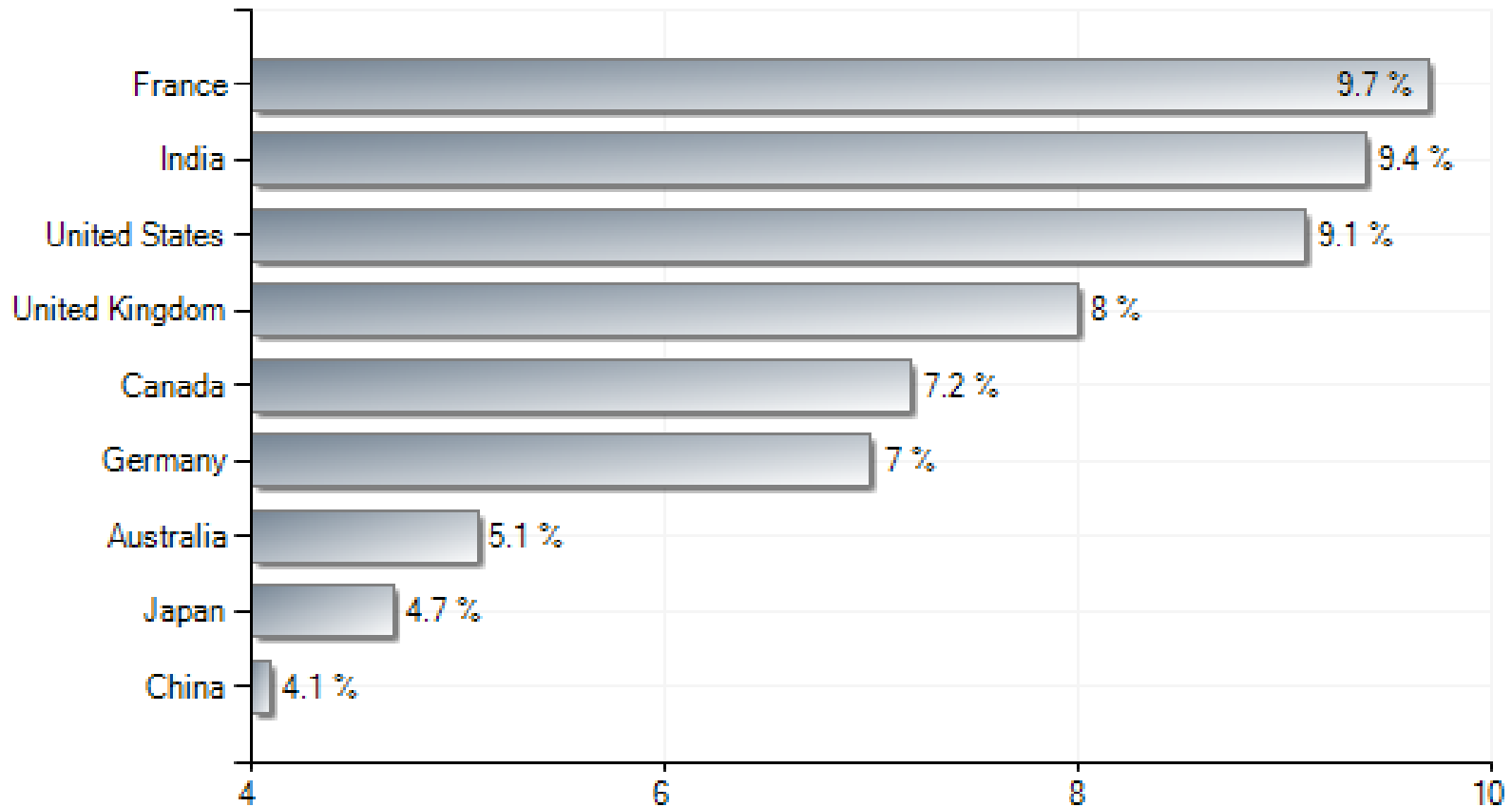
Change in Wage & Salary and Proprietors Employment - U.S.
(millions of jobs)



U.S. Employment

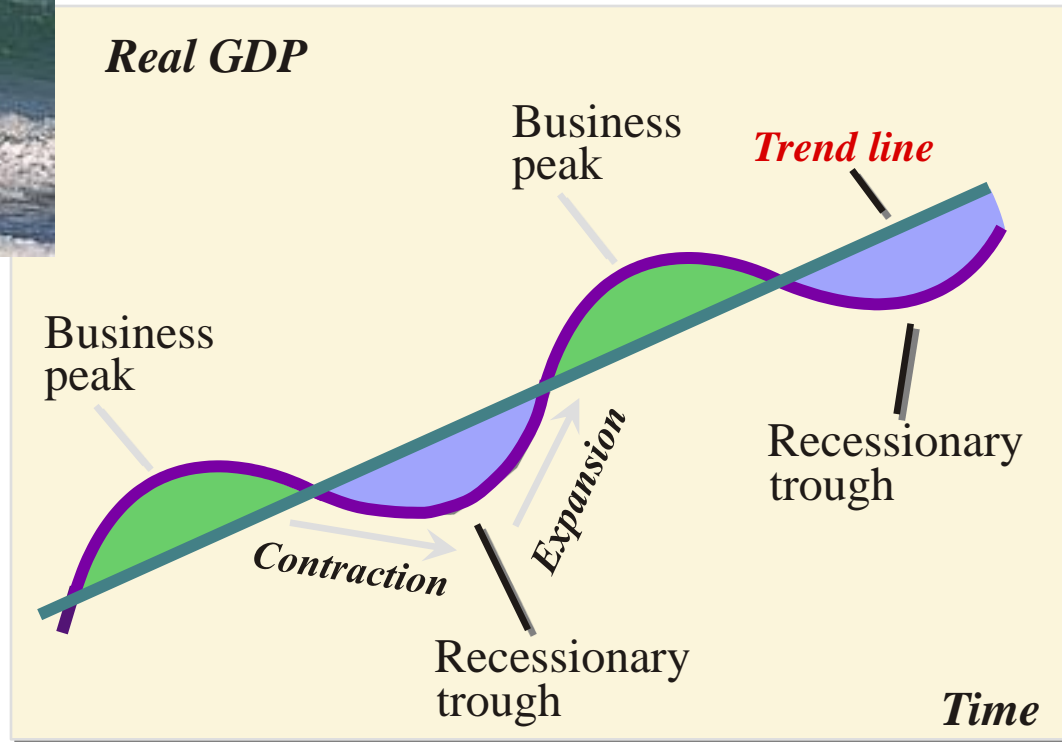


World Unemployment





- Trend
- Cycle
- Structure



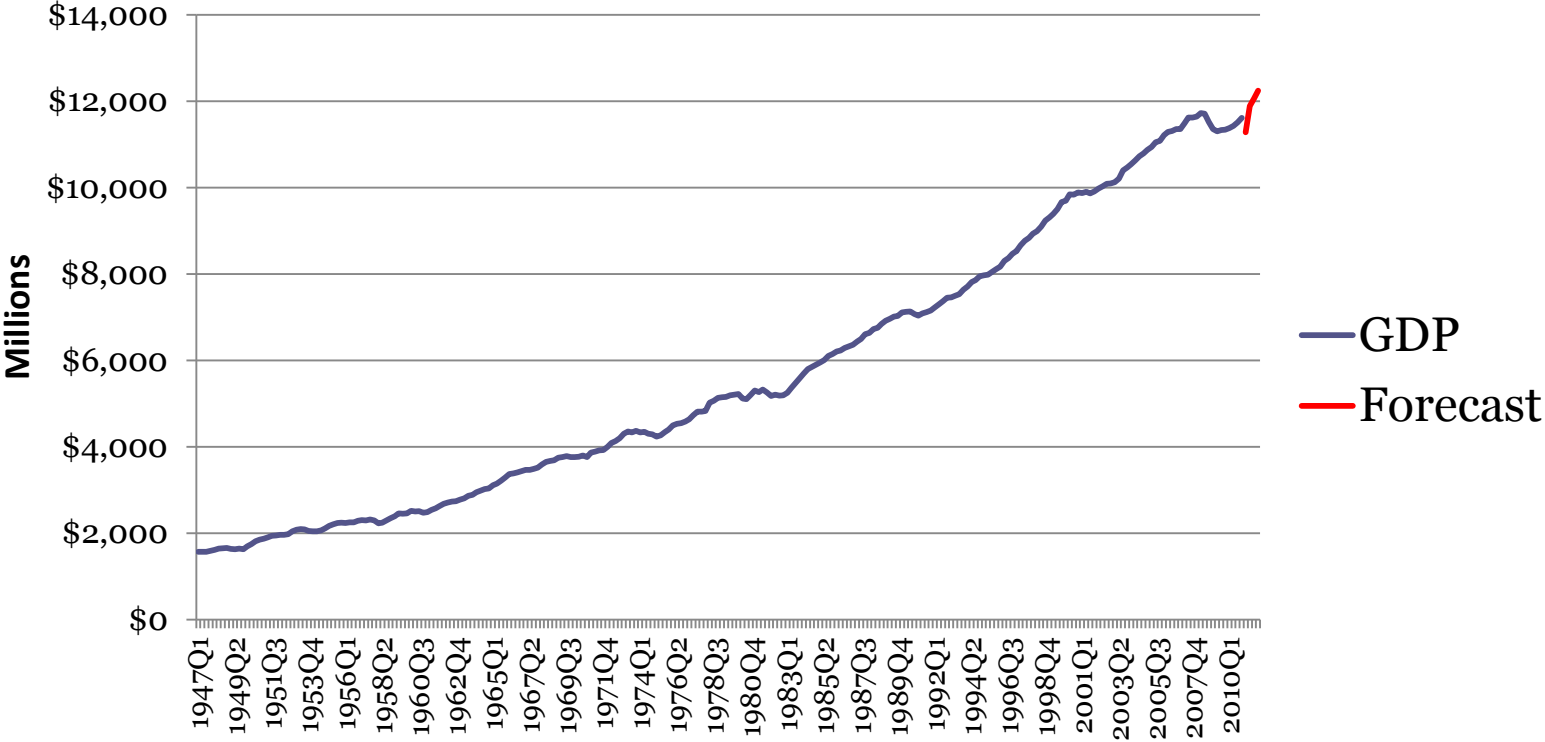
The Dimensions of Economic Change:

Economic Development always takes place against a backdrop of other changes.

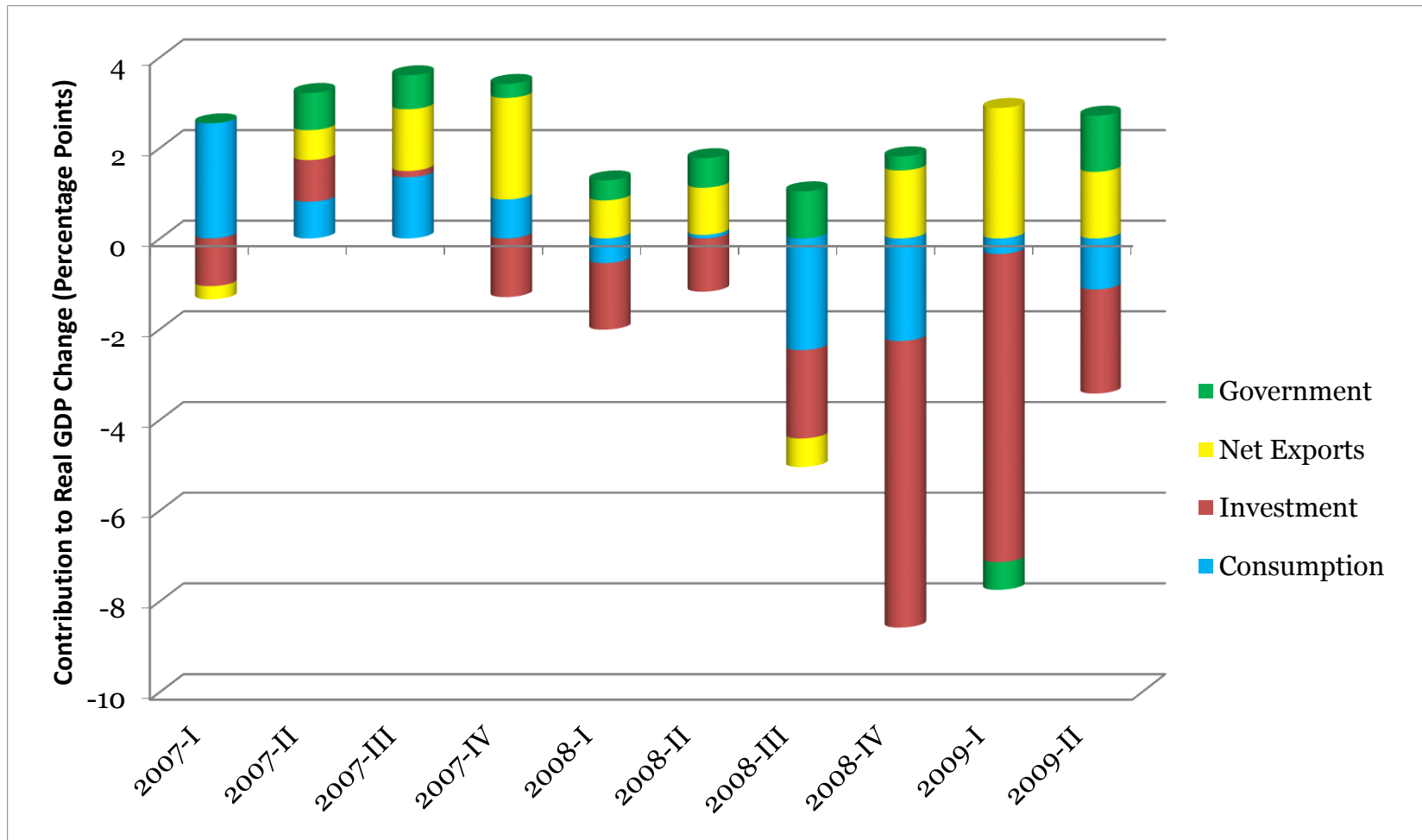


Cycle

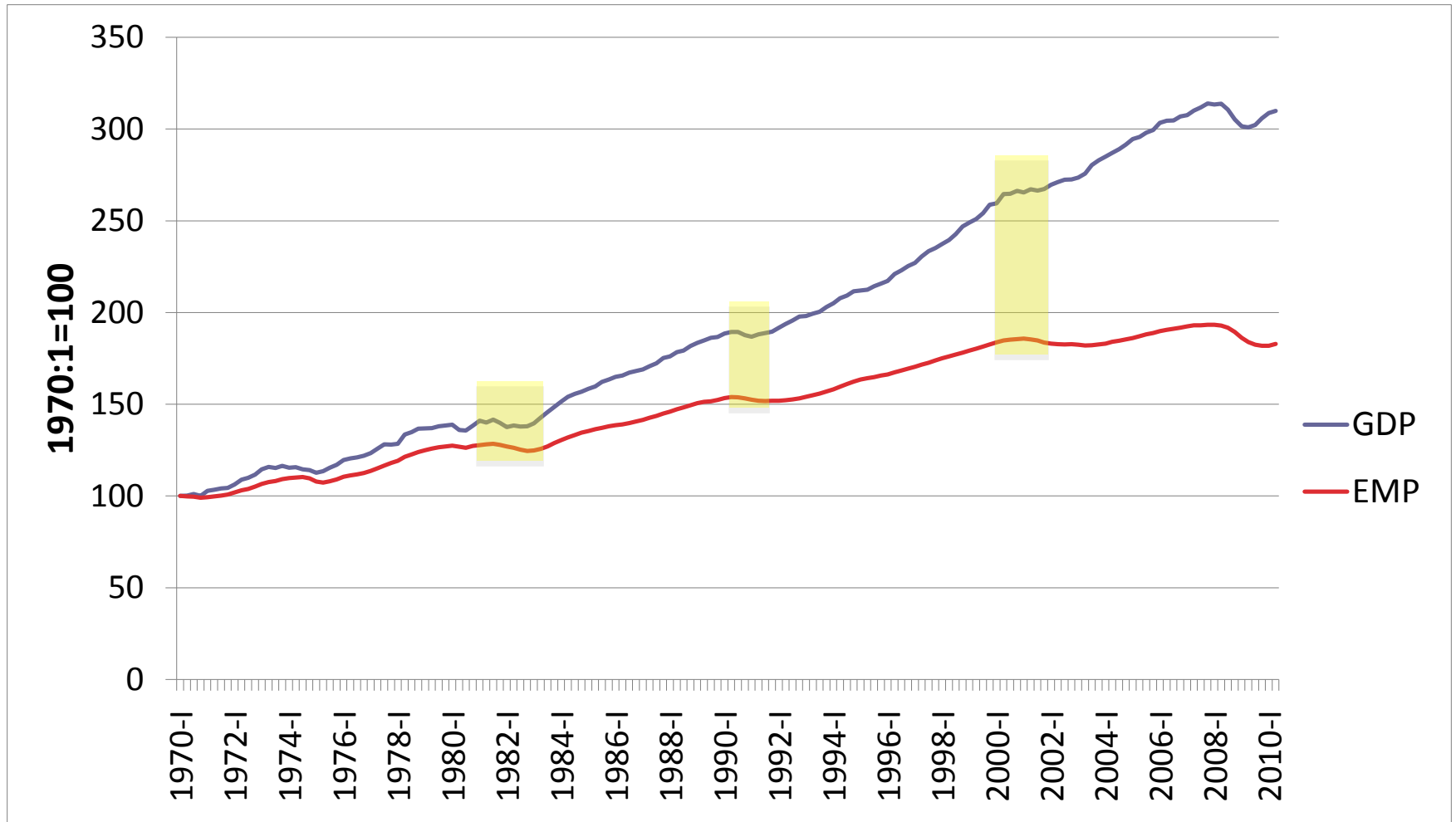
The Great Recession in Perspective



The Anatomy of a Recession



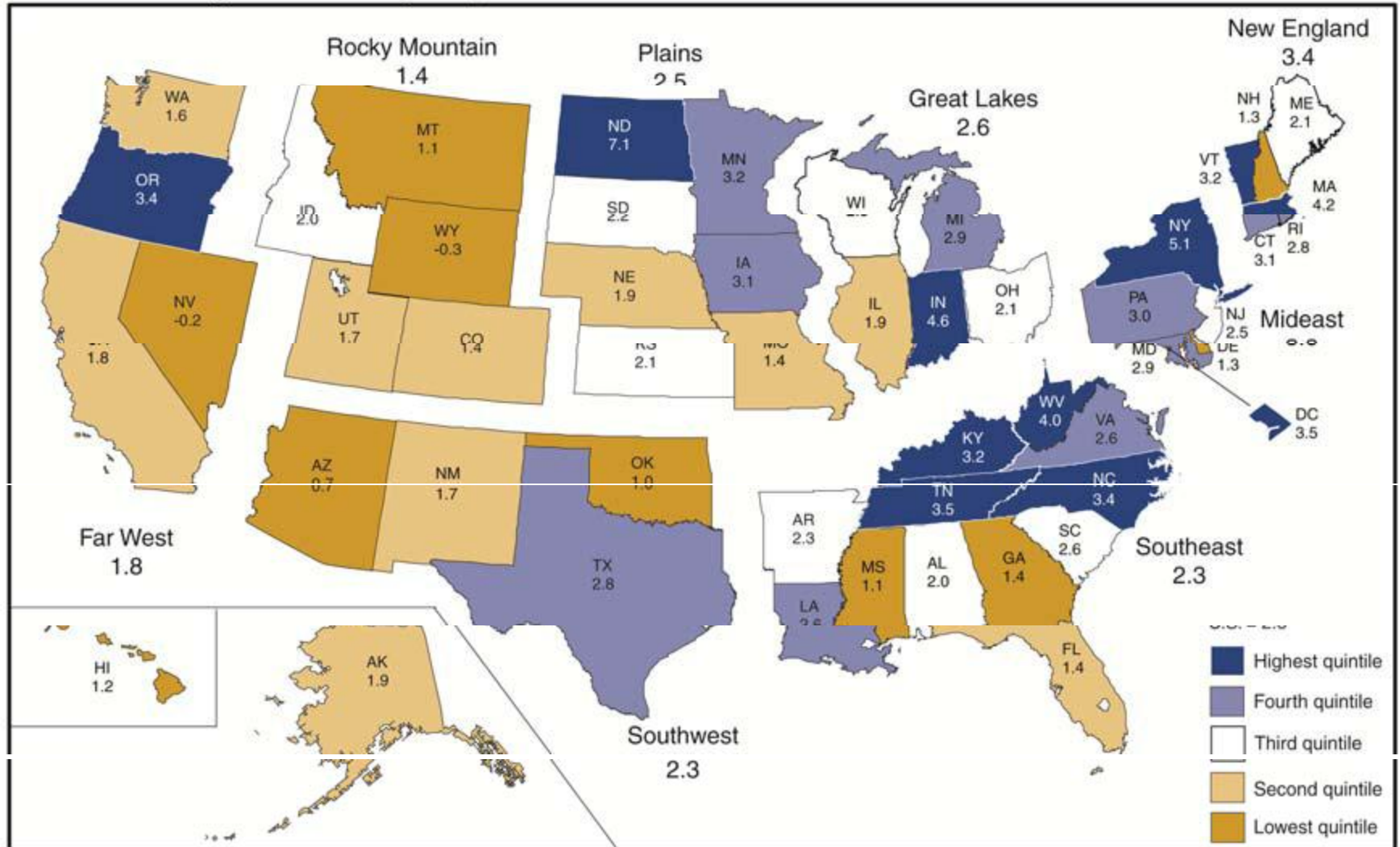
Employment and Output Growth in the Business Cycle



The Business Cycle in the US and Regions

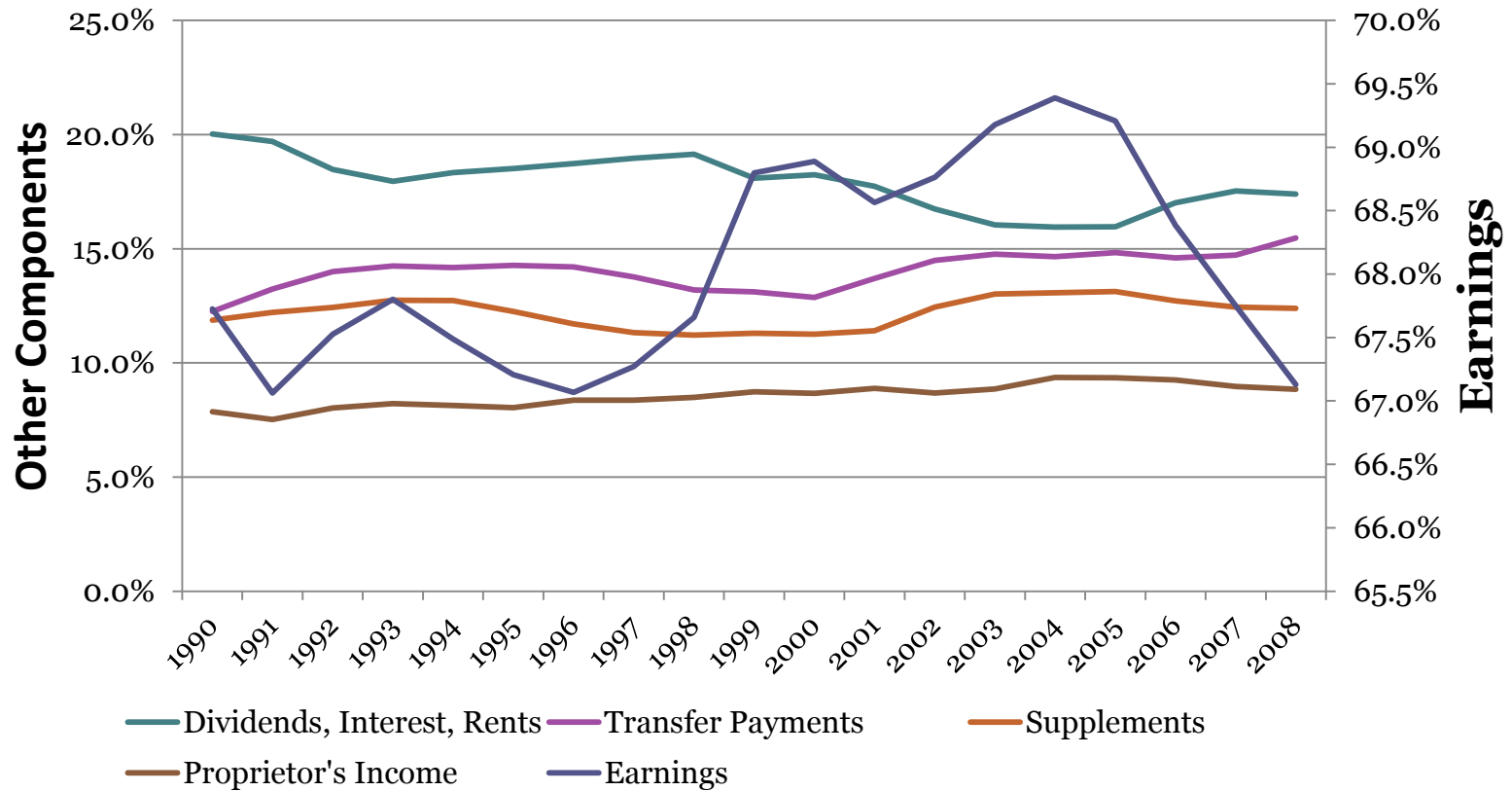
Real GDP

Chart 1. Percent Change in Real GDP by State, 2009-2010

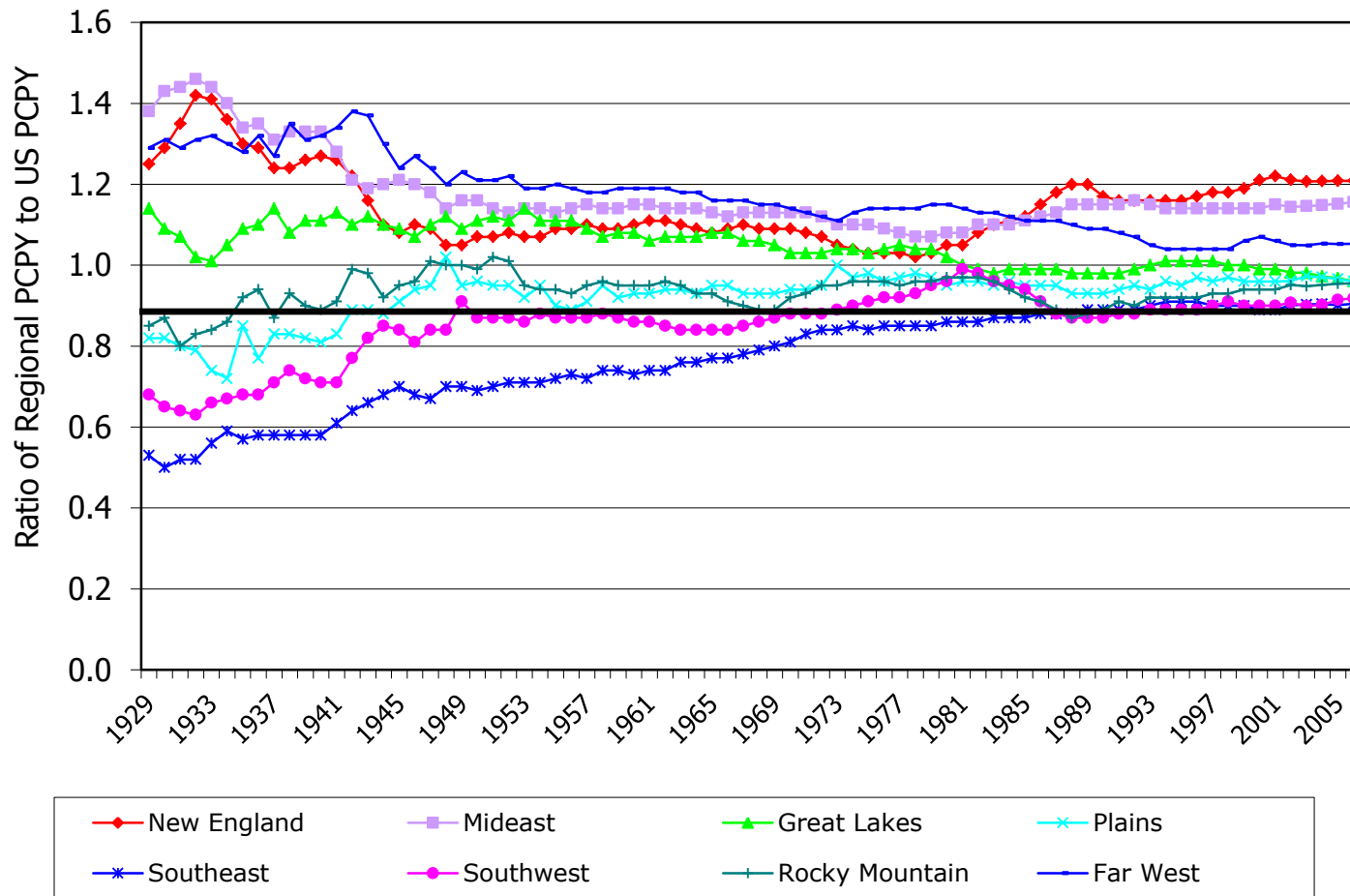


Trend

Changes in Composition of Personal Income:

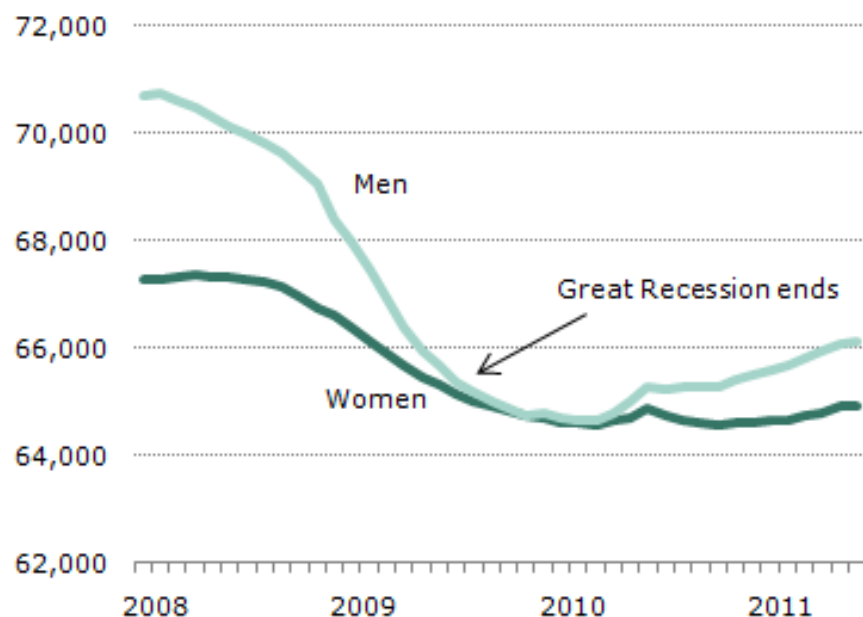


Income Convergence and Divergence 1929-2006



Employment, by Gender, December 2007 to May 2011

in thousands



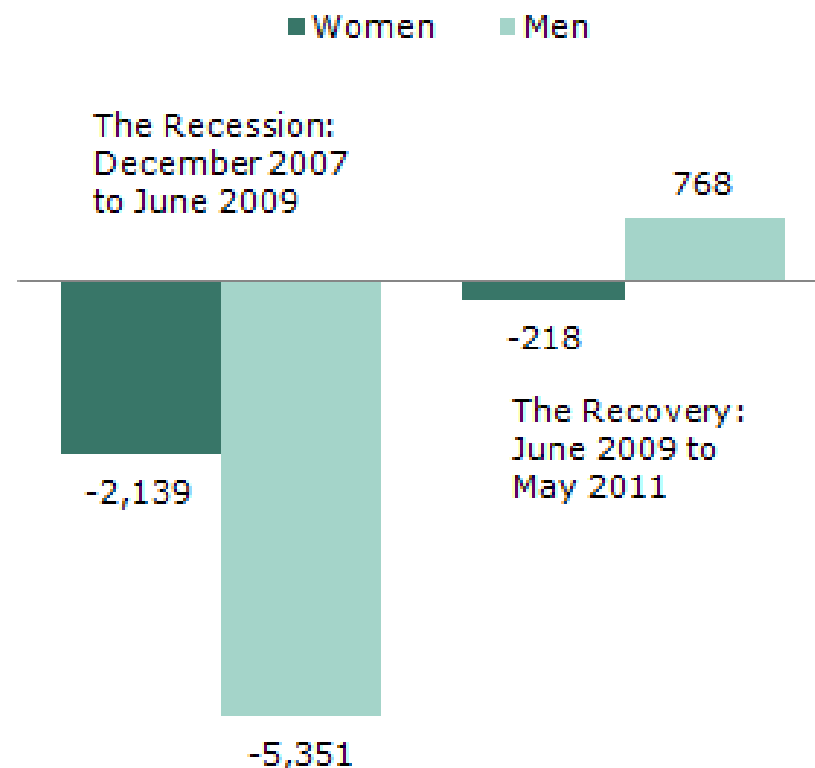
Note: Data are seasonally adjusted. Estimates for May 2011 are preliminary and subject to revision.

Source: Bureau of Labor Statistics, Current Employment Statistics (CES)

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Change in Employment in the Recession and Recovery, by Gender

in thousands



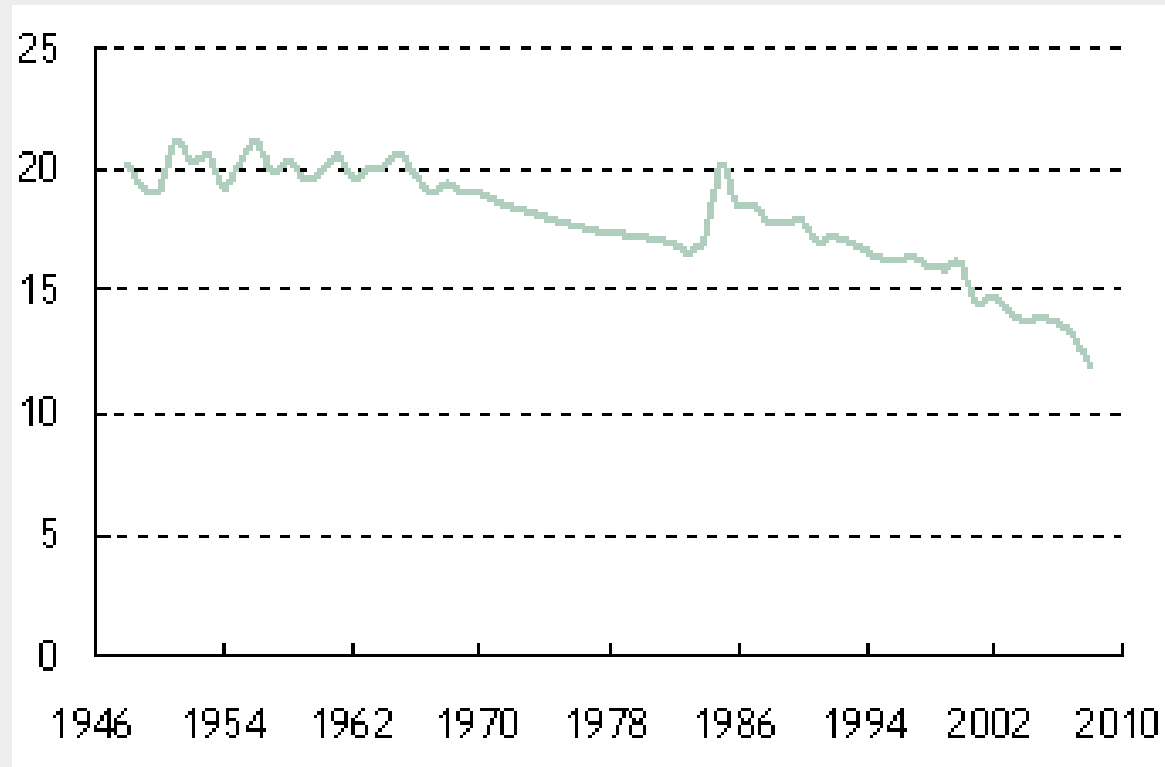
Note: Data are seasonally adjusted. Estimates for May 2011 are preliminary and subject to revision.

Source: Bureau of Labor Statistics, Current Employment Statistics (CES)

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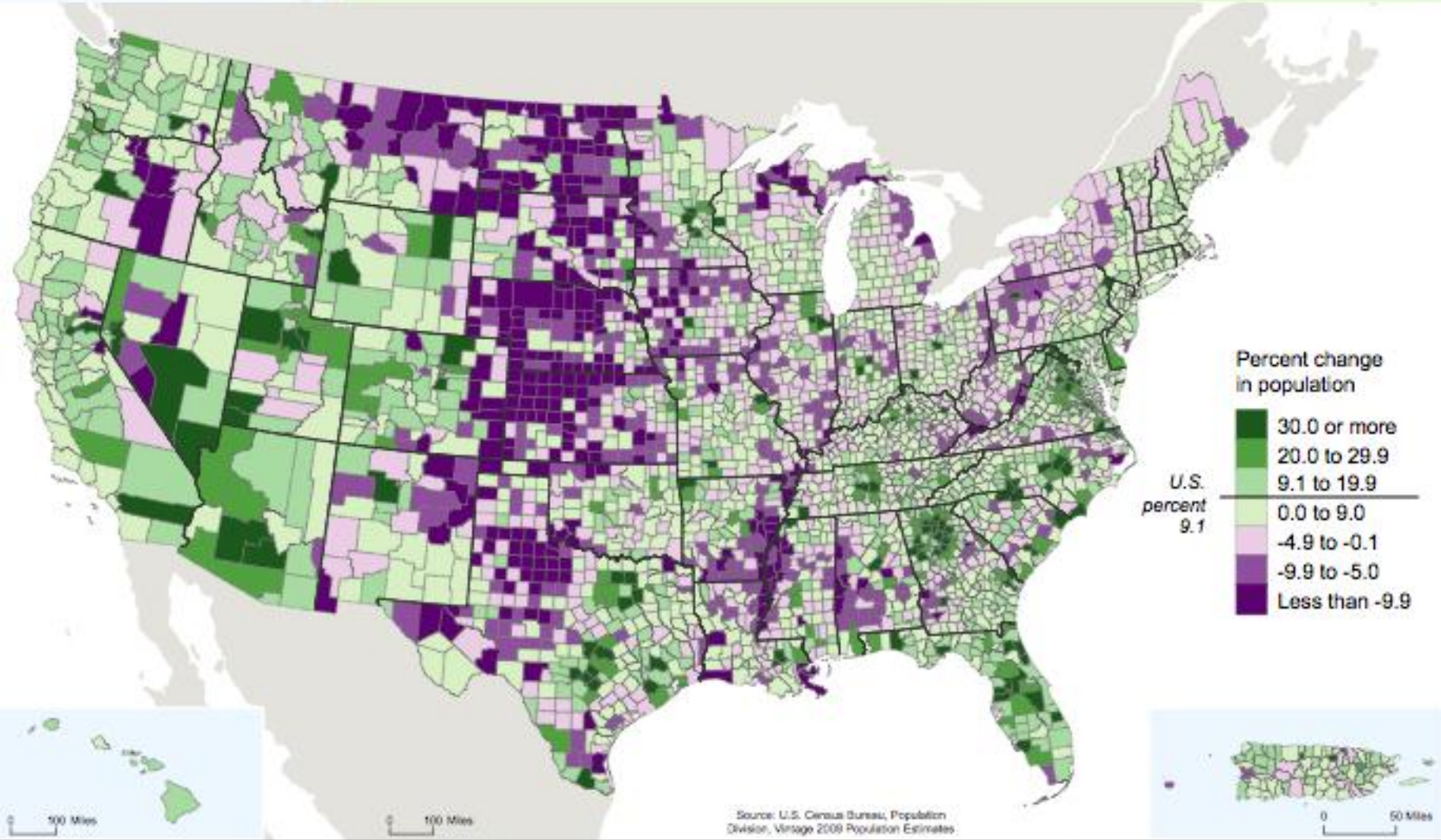
Settling Down

Share of Population Changing Residence, 1948-2008



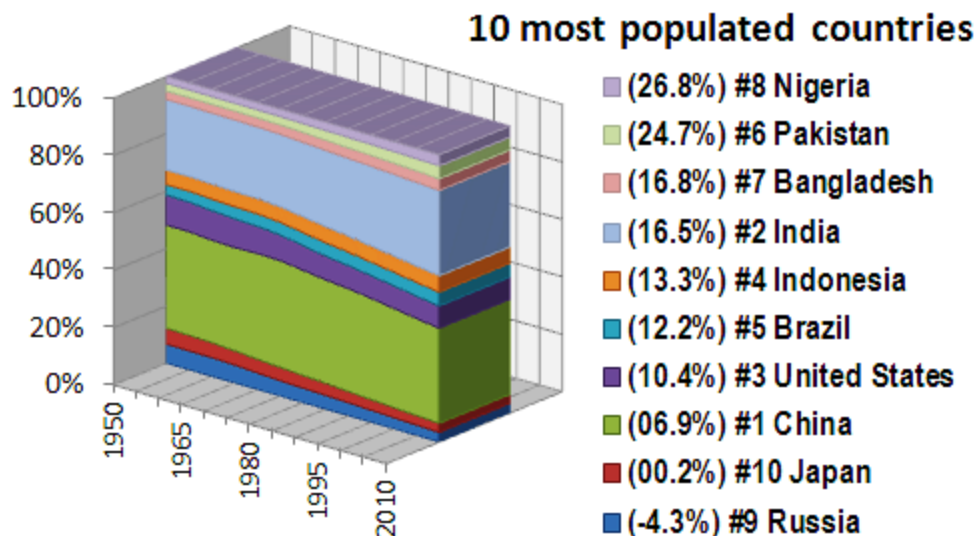
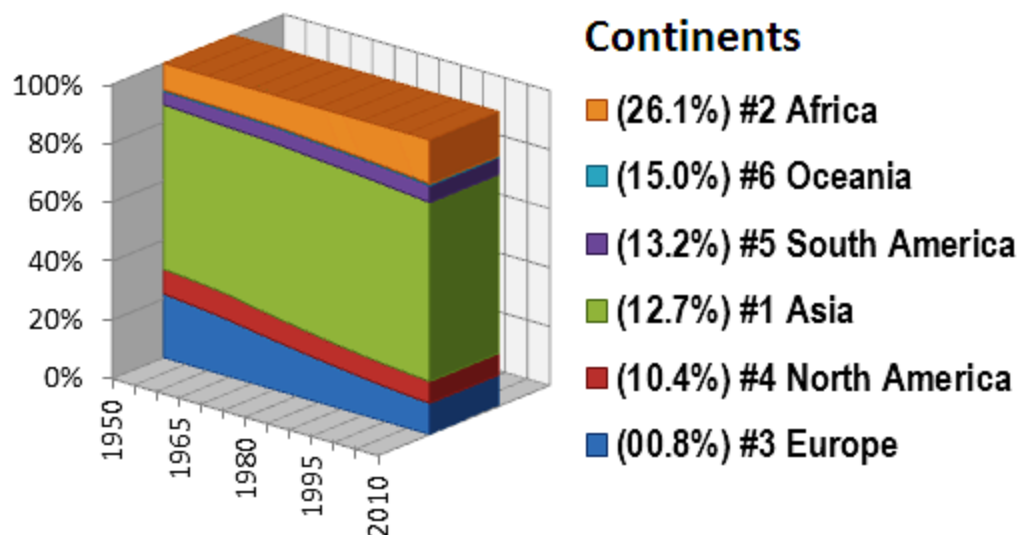
Note: The numbers, from the Current Population Survey, indicate percentage of the population who moved in the previous year.

Percent Change in Population for Counties and Puerto Rico Municipios: April 1, 2000 to July 1, 2009



Source: U.S. Census Bureau, Population Division, Vintage 2009 Population Estimates

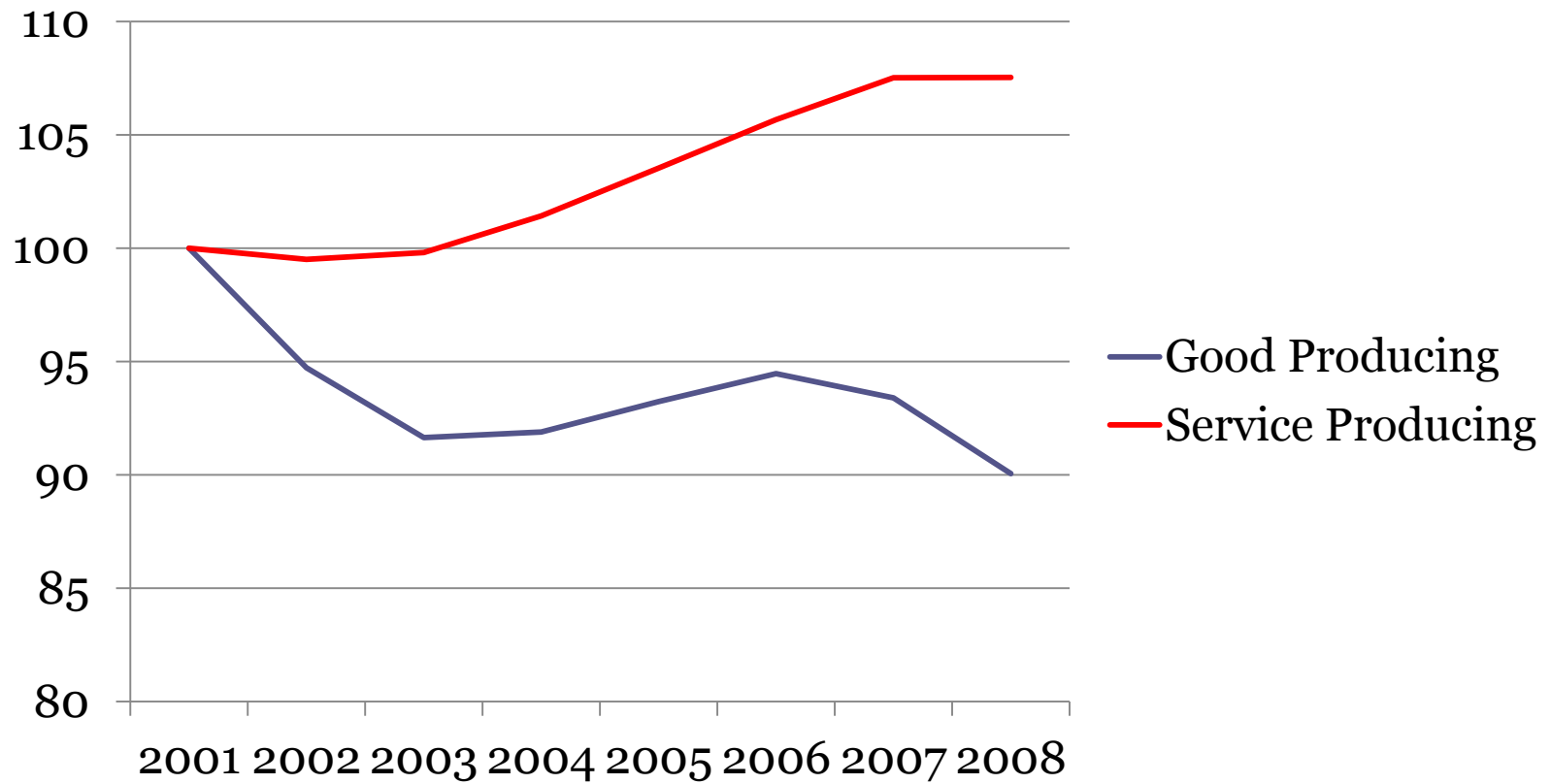
Share of Population from 1950 to 2010 & Population Growth in the 2000-2010 Decade



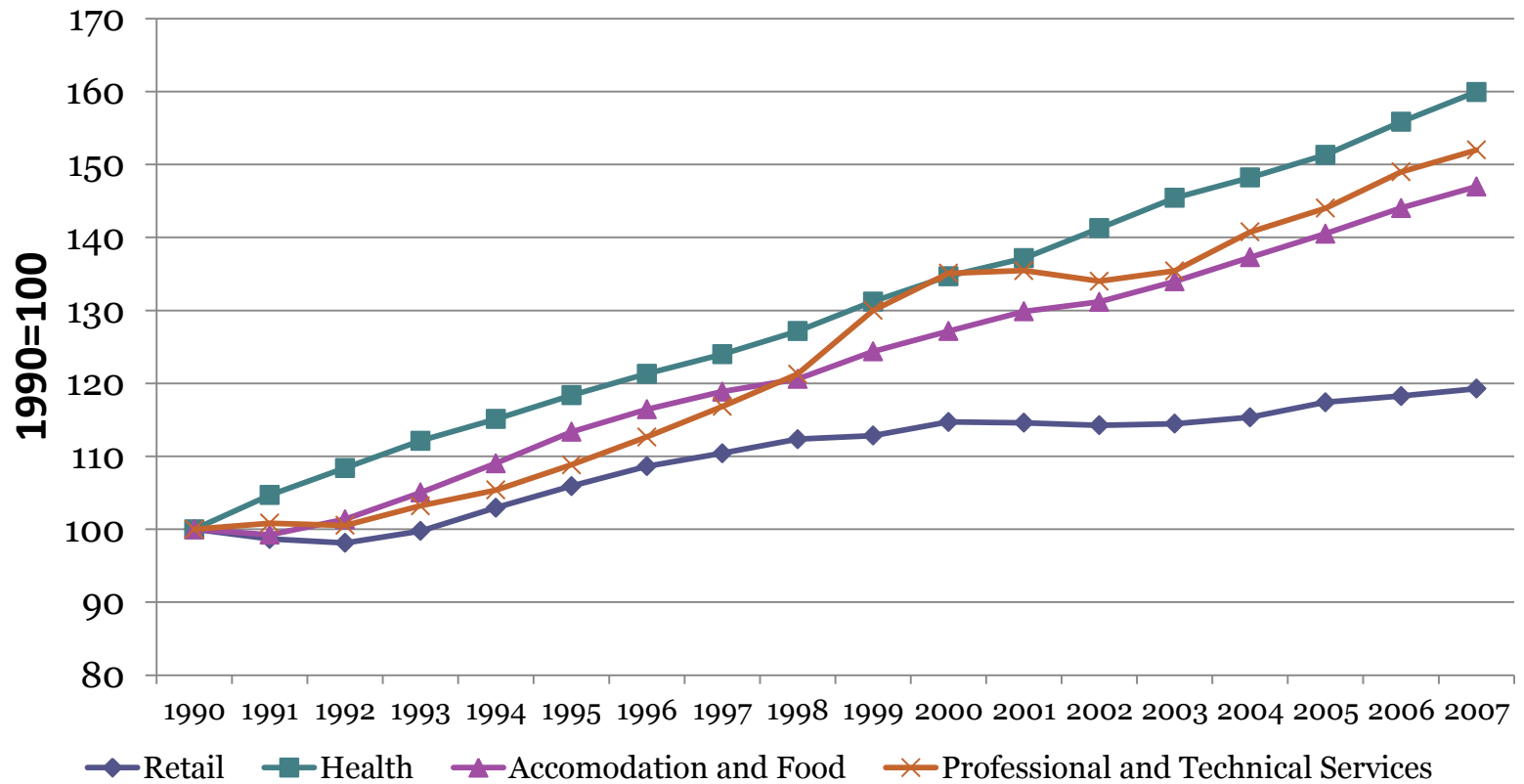
Source: Department of Economic and Social Affairs, United Nations Population Division (UNPD). 2010. Available on-line at: <http://esa.un.org/unpp/>

Structure

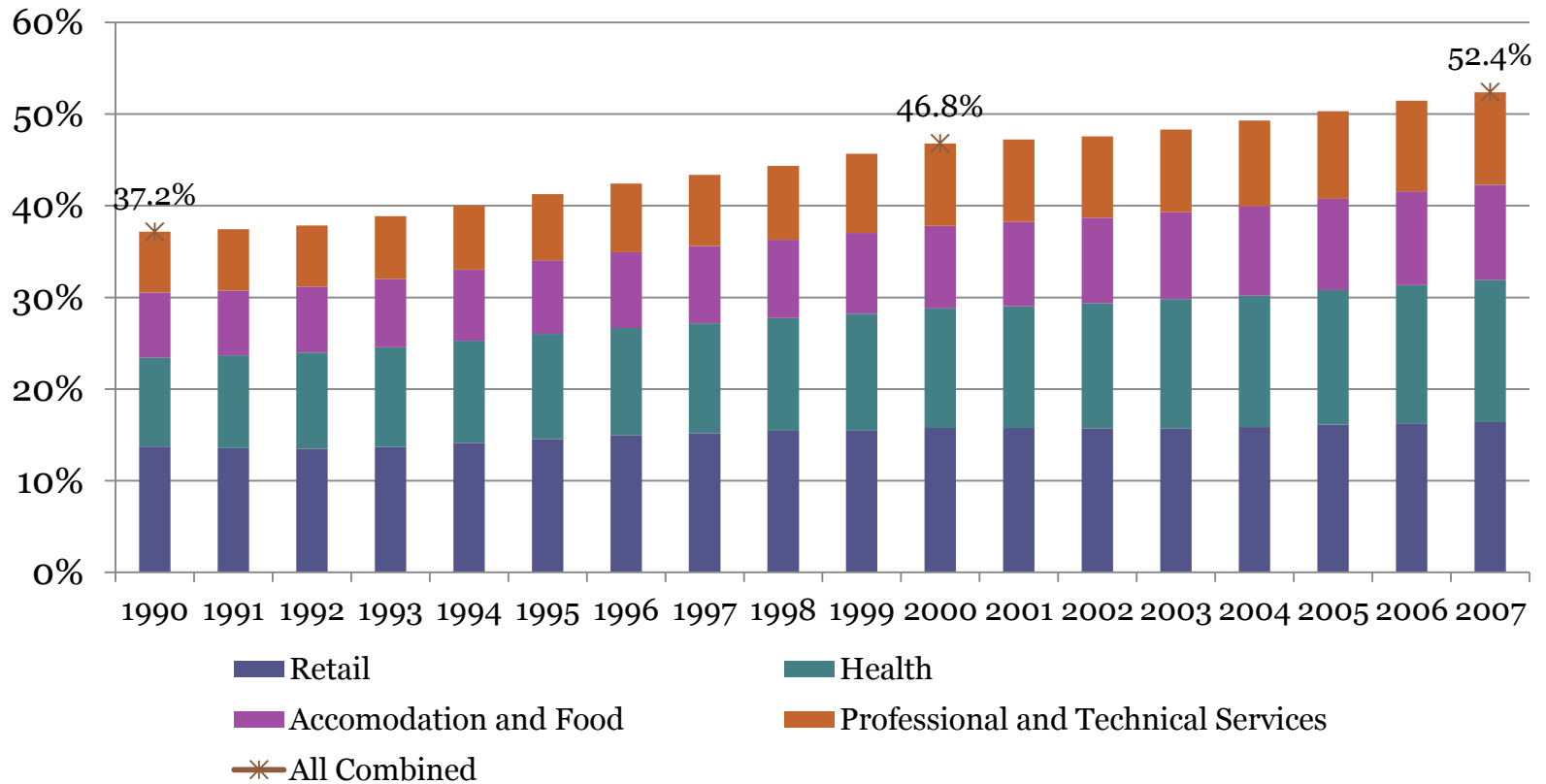
Trends in Employment: US



Key Sectors

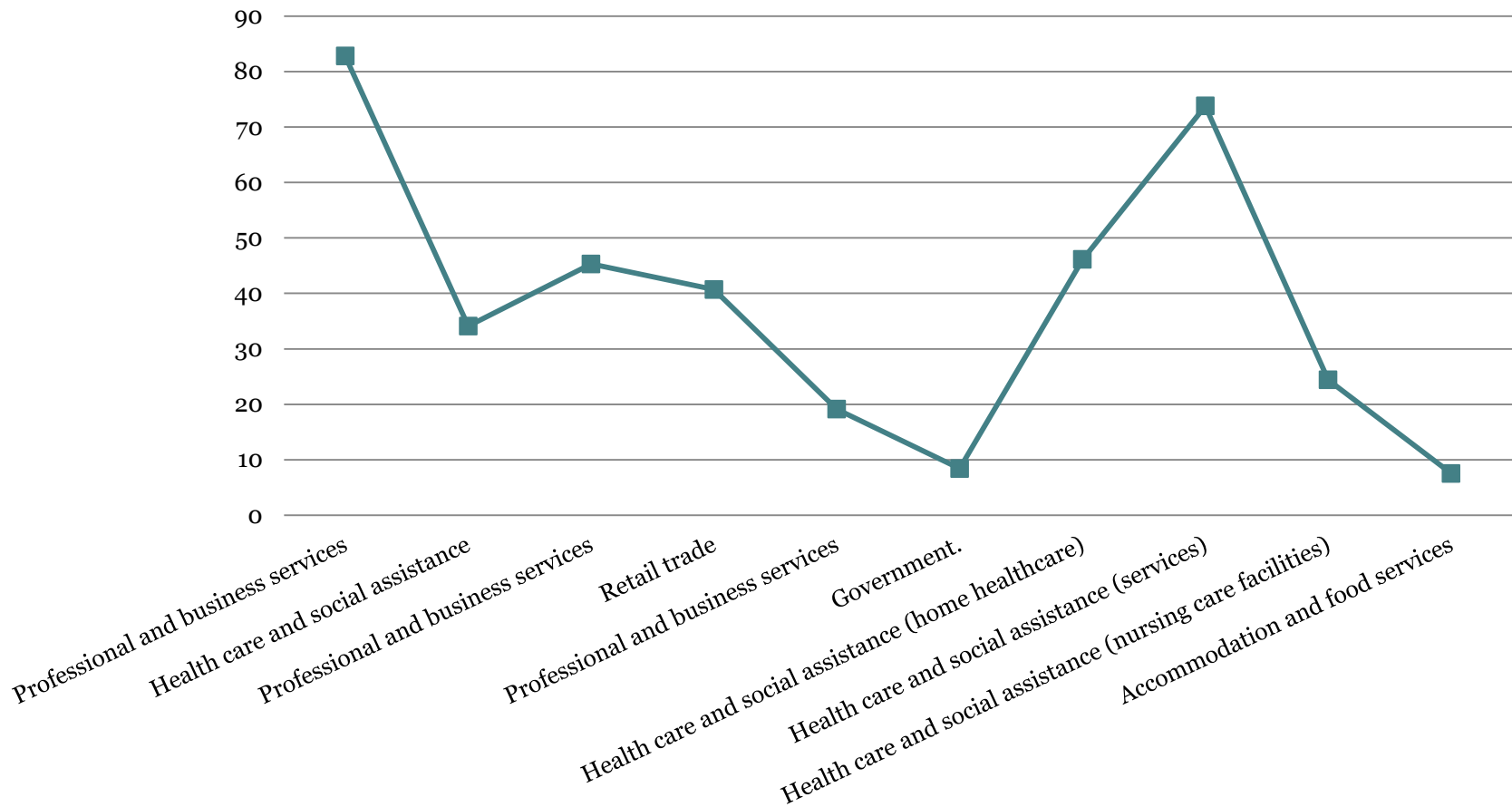


Key Sectors

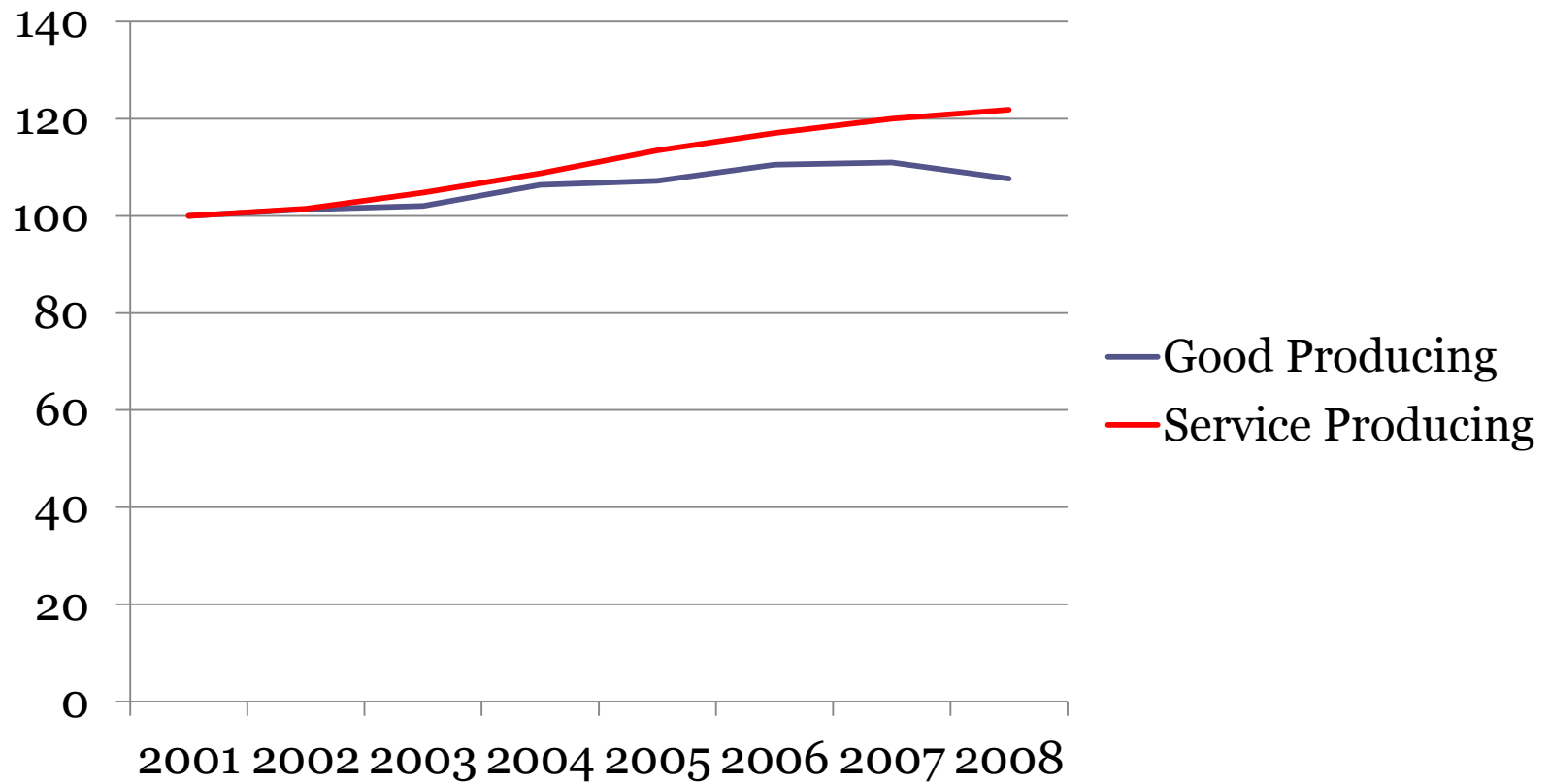


Projected Top Ten Employment Sectors

Percent change in employment 2008-2018 (projected)



Trends in Output: US



Analysis for Economic Development

- Specialization Ratios
 - (Location Quotients)
- Multipliers
 - Estimation and interpretation

HERE'S THE IDEA

Buying local products at locally owned businesses keeps money circulating closer to where you spend it. This creates a ripple effect as those businesses and their employees in turn spend your money locally. Corporate chains send most of your money out of town.



For every \$1 spent at a local business ...

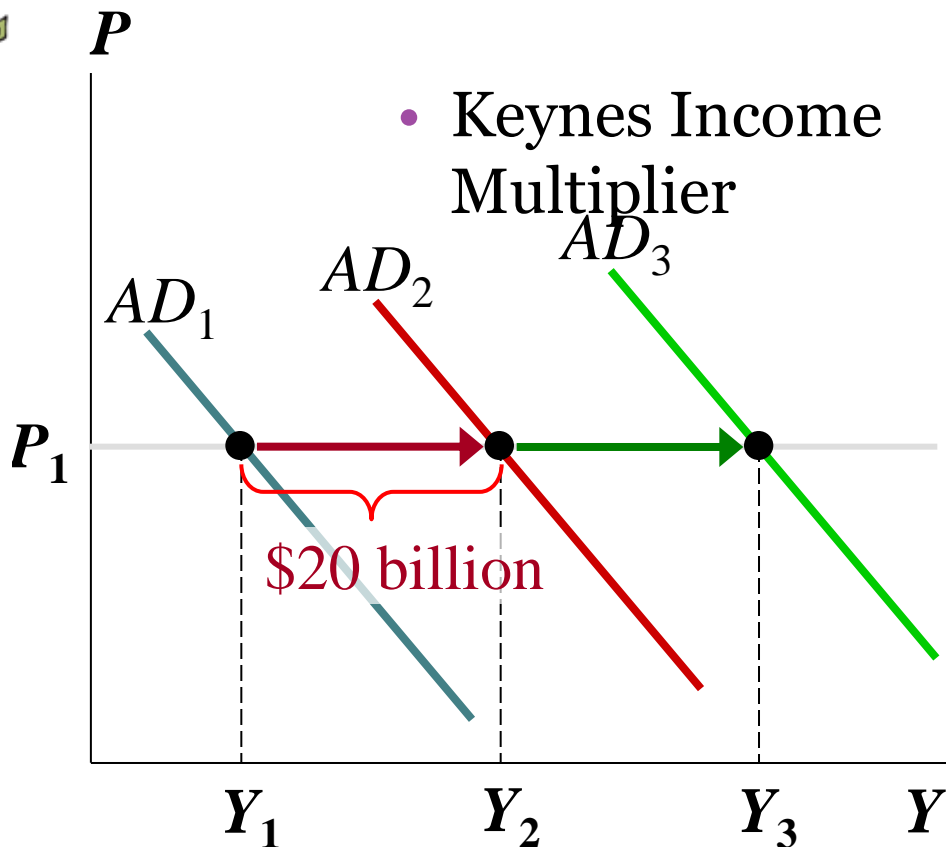


For every \$1 spent at a corporate chain ...



- Kahn's Employment Multiplier

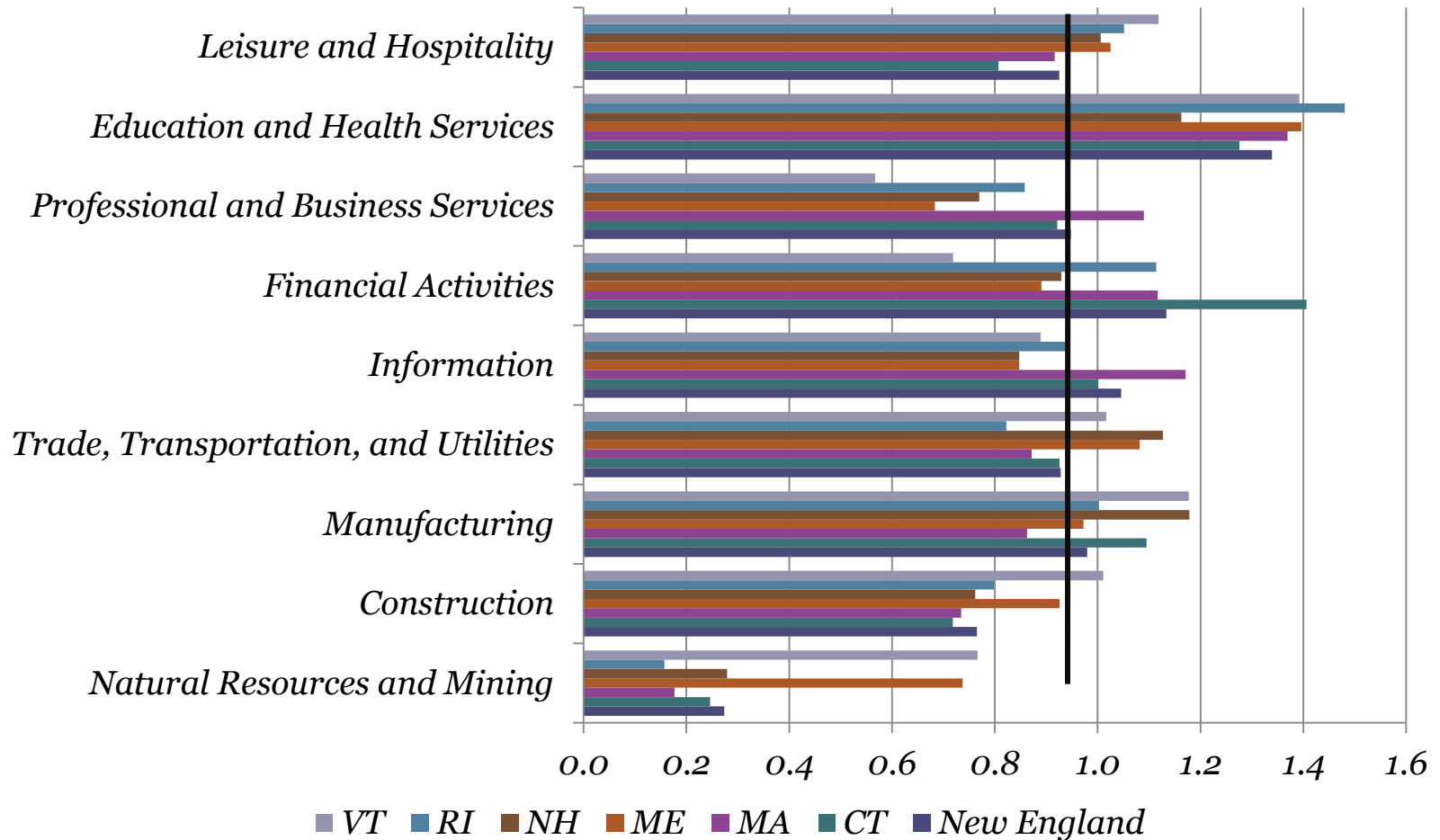
- Keynes Income Multiplier



$$\Delta Y = \frac{1}{1 - MPC} \Delta G$$

The multiplier

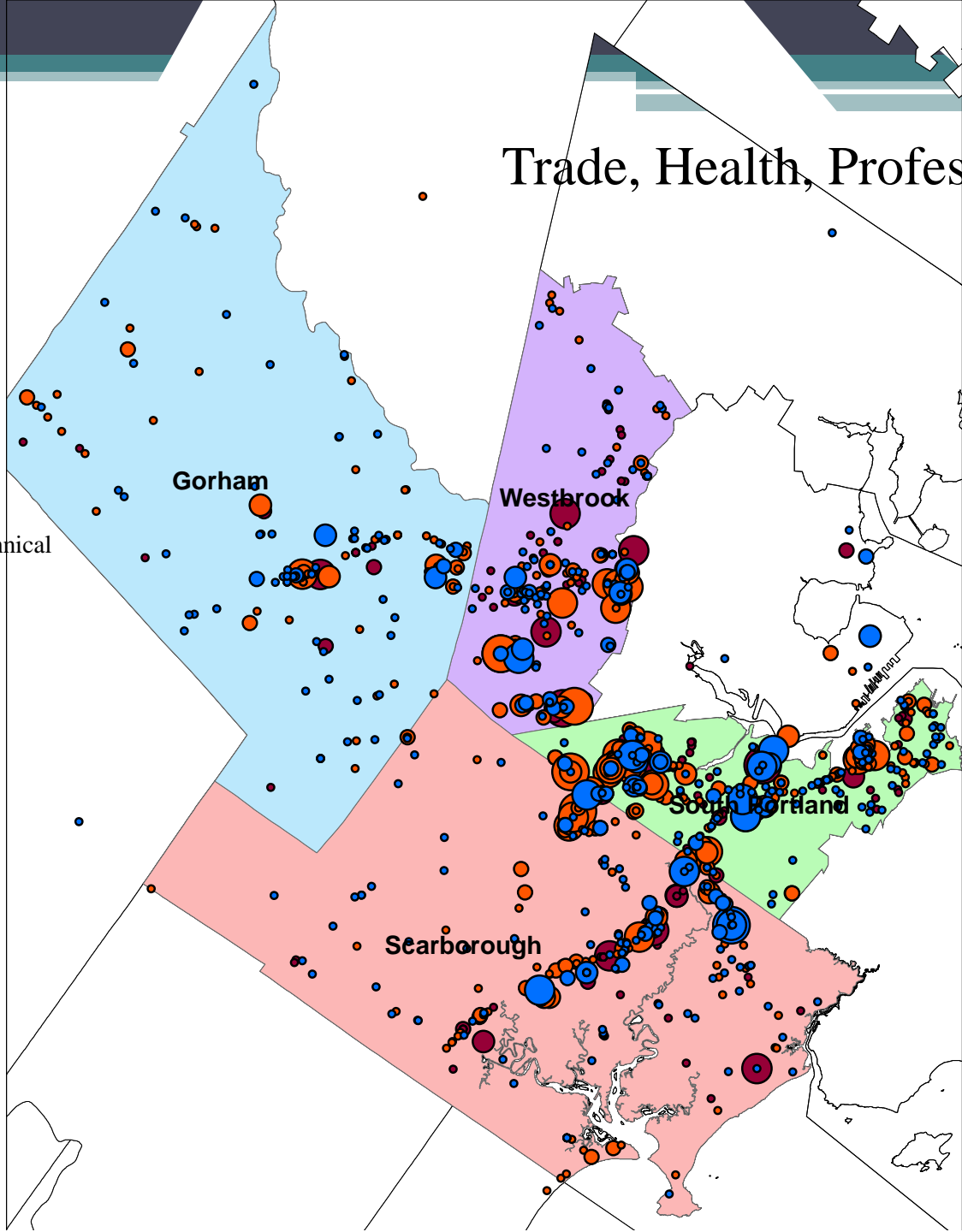
New England Specialization: 2007

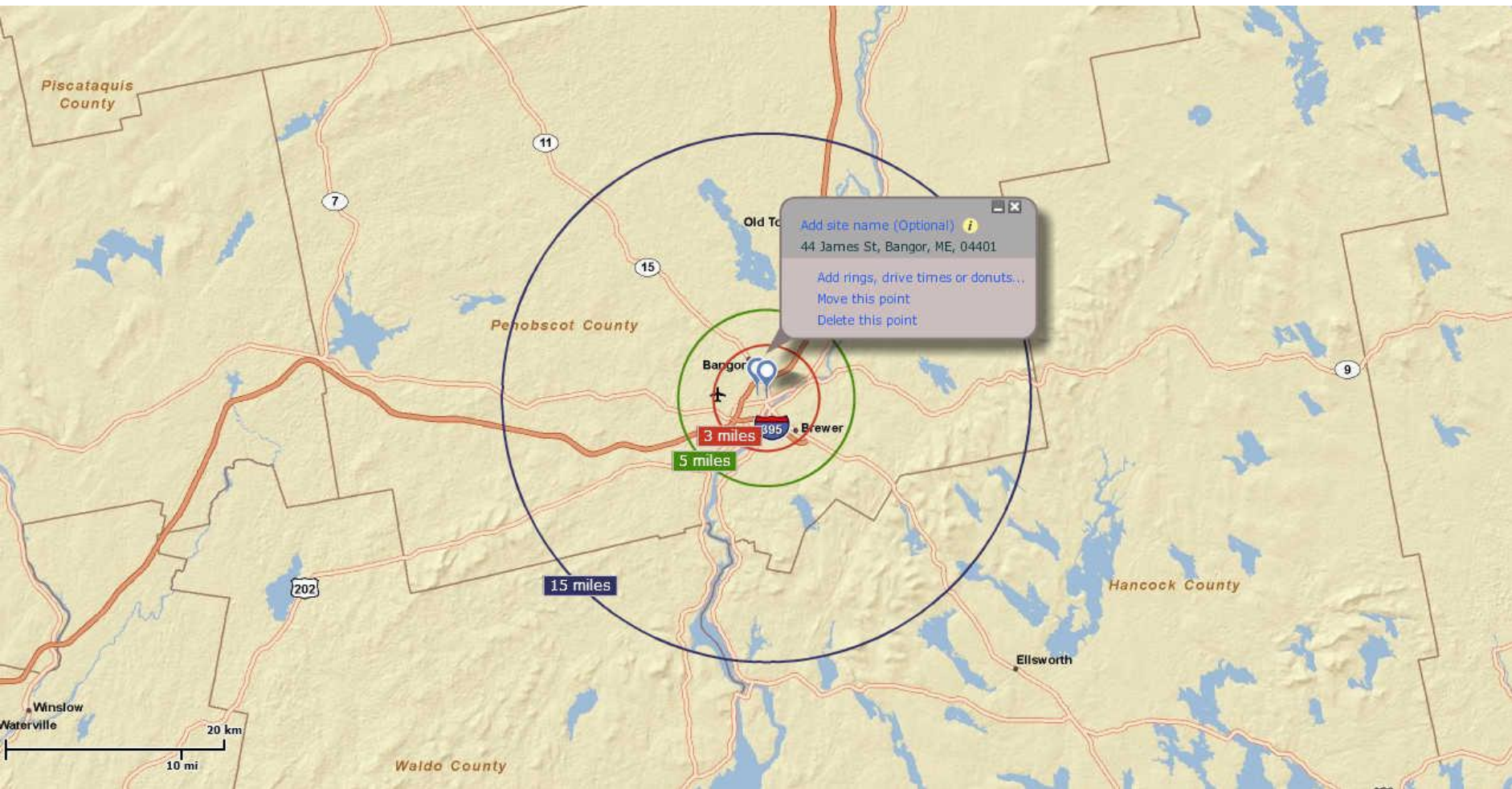


Trade, Health, Professional-Tech Services

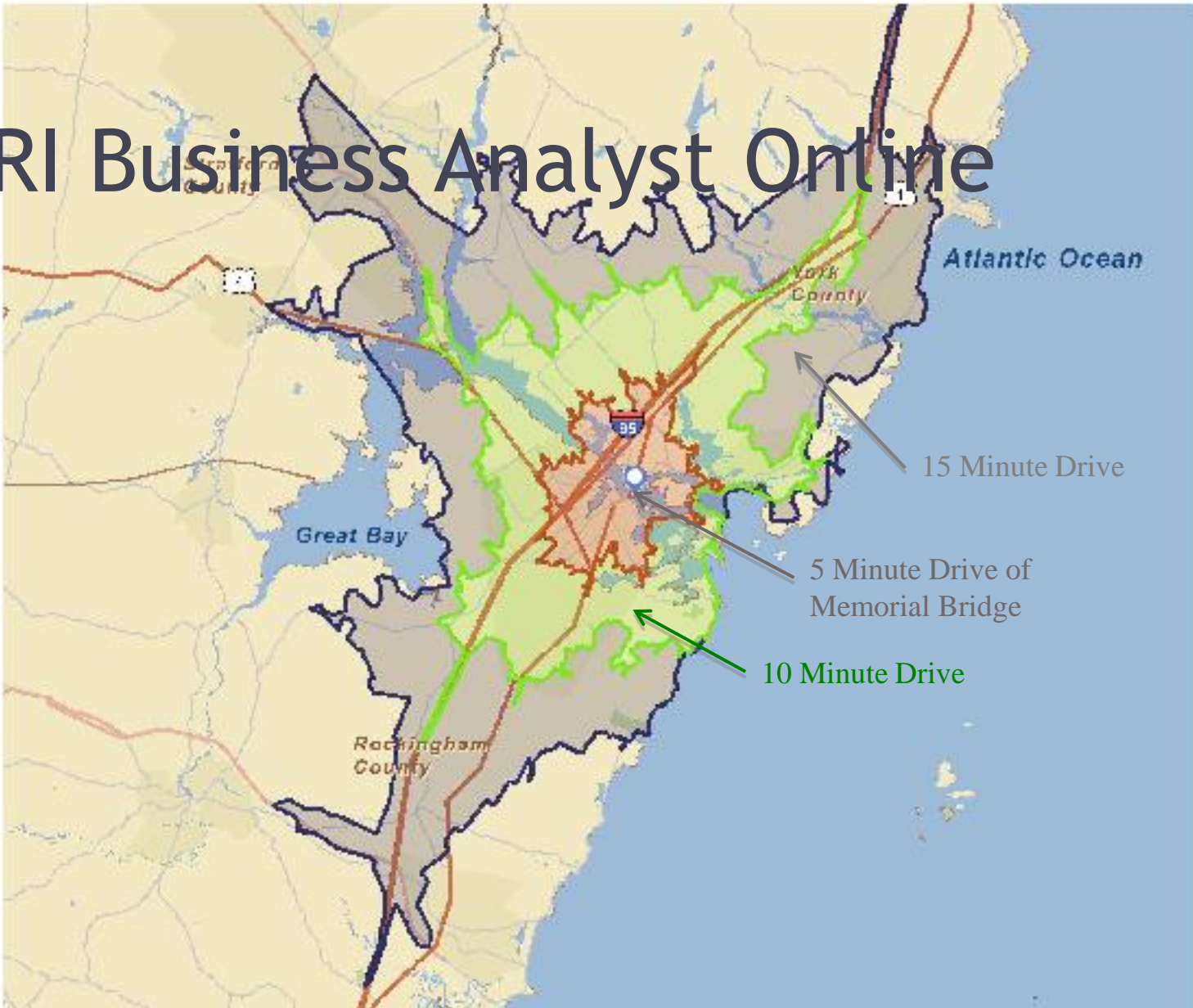
Thanks to:
Charlie
Colgan, USM

- Professional-Technical Services
- Trade
- Health-Social Assistance

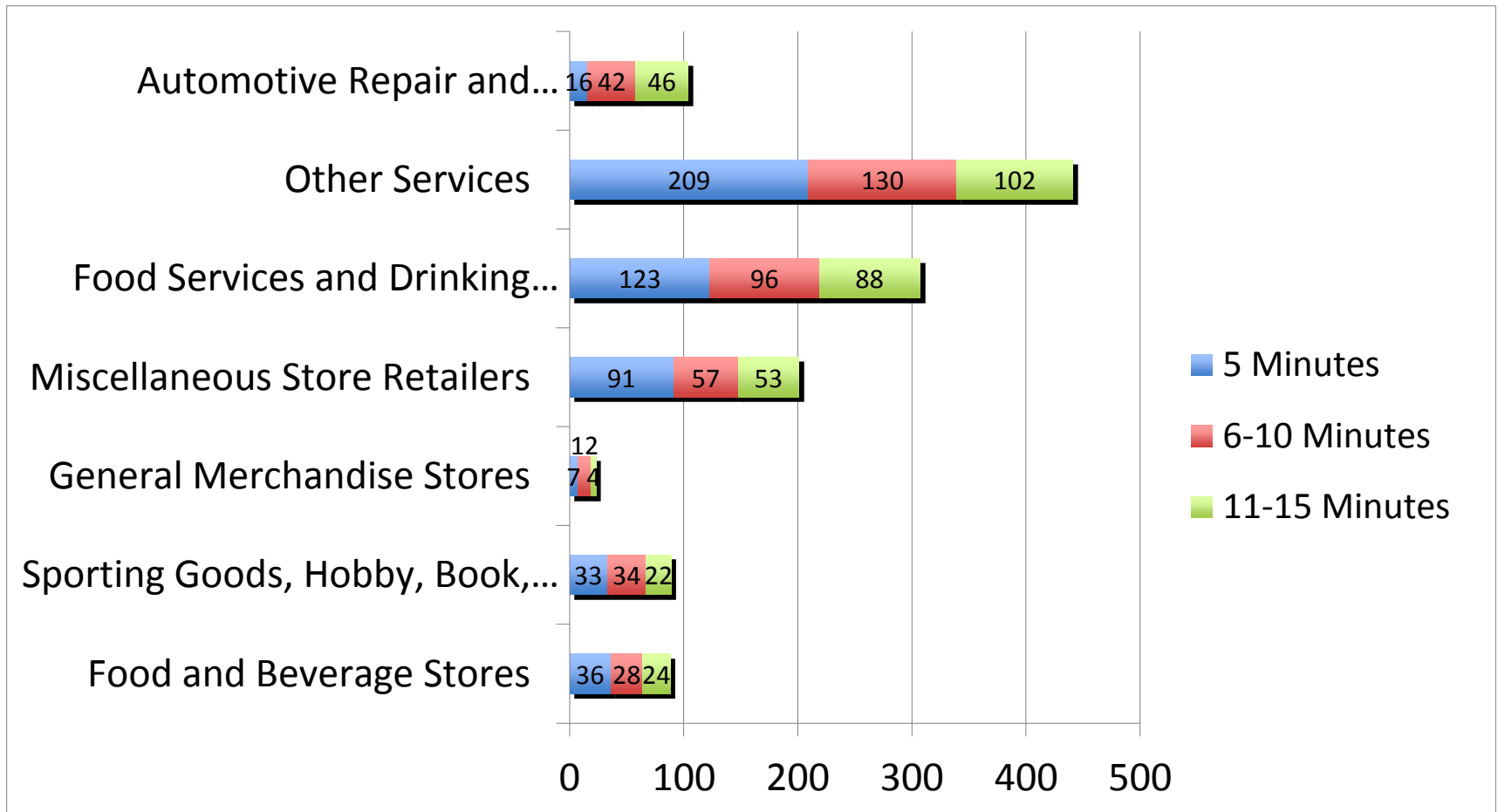




ESRI Business Analyst Online



Business Types by Travel Time to the Memorial Bridge



Thanks to: Charlie Colgan, USM

Measuring Economic Impacts

- The “multiplier”
- Three Major Impact Models
 - RIMS
 - County/Multi County
 - www.bea.doc.gov/bea/regional/rims/
 - IMPLAN
 - County & State
 - www.mig-inc.com/
 - REMI
 - County, Multi-County, State
 - www.remi.com

Rules of Thumb for Multipliers

- Higher the Industrial Density the Higher the Multiplier
- Urban areas have higher multipliers than rural areas
- Larger economies have larger multipliers than smaller economies

Key Data Sources

- Bureau of Labor Statistics
 - www.bls.gov
 - Labor Force
 - Unemployment
 - Price Indexes
 - Hours & Earnings
 - Specialization Ration (Location Quotient) Calculator
- Bureau of Economic Analysis
 - www.bea.gov
 - State Only:
 - Gross State Product
 - State, County, Metro:
 - Personal Income
 - Total Employment + Wage and Salary Employment
 - Population
 - RIMS II

Key Data Sources

- **Census**
 - www.census.gov
 - **Decennial Census of Population & Housing**
 - Summary File 1 (SF 1) contains data on age, sex, households, families, and housing units based on answers to the questions common to both the Census 2000 [Short-Form](#) and [Long-Form](#) Questionnaires
 - Short Form v. Long Form
 - **Public Use Microdata Sample (PUMS) Files**
 - 1-percent sample (information for the nation and states, as well as substate areas where appropriate)...
 - 5-percent sample (information for state and sub-state areas)....
 - **American Community Survey**

Special Note on Historical Data

- Standard Industrial Classification (SIC) v. North American Industrial Classification System (NAICS)
- NAICS implemented:
 - 1997 for GDP, Personal Income Etc.
 - 2001 for Employment
- Classification of Establishments:
 - SIC: Establishment by Enterprise Purpose
 - NAICS: Establishment by Establishment Purpose

Some take home messages: Issues to consider

- Economy is changing
 - Awareness of big picture happenings is crucial
- Sources and Methods must fit the evolving regional economy
 - Must be continuously evaluated (know your region, and your competitor regions)

Some take home messages

- Change methods to deal with changing economy
 - Assumptions in methods should be continuously assessed
 - Need to continually reevaluate the sources and methods used to make estimates