

# Exploring the Divergence of Consumption and Income Inequality During the Great Recession

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*Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census Bureau. The research in this paper does not use any confidential Census Bureau information.*



# The Consumer Expenditure (CE) Surveys

- 1984-2011 Interview Surveys
- All four-quarter consumer units disaggregated to the individual using an equivalence scale.
- Weights adjusted to account for attrition across the four quarters.
- Adjusted to 2010\$ using CPI-U-RS.
- **We impute income for missing observations and estimate taxes for everyone** (Fisher, Johnson, and Smeeding, 2013; [econofish.wordpress.com](http://econofish.wordpress.com))

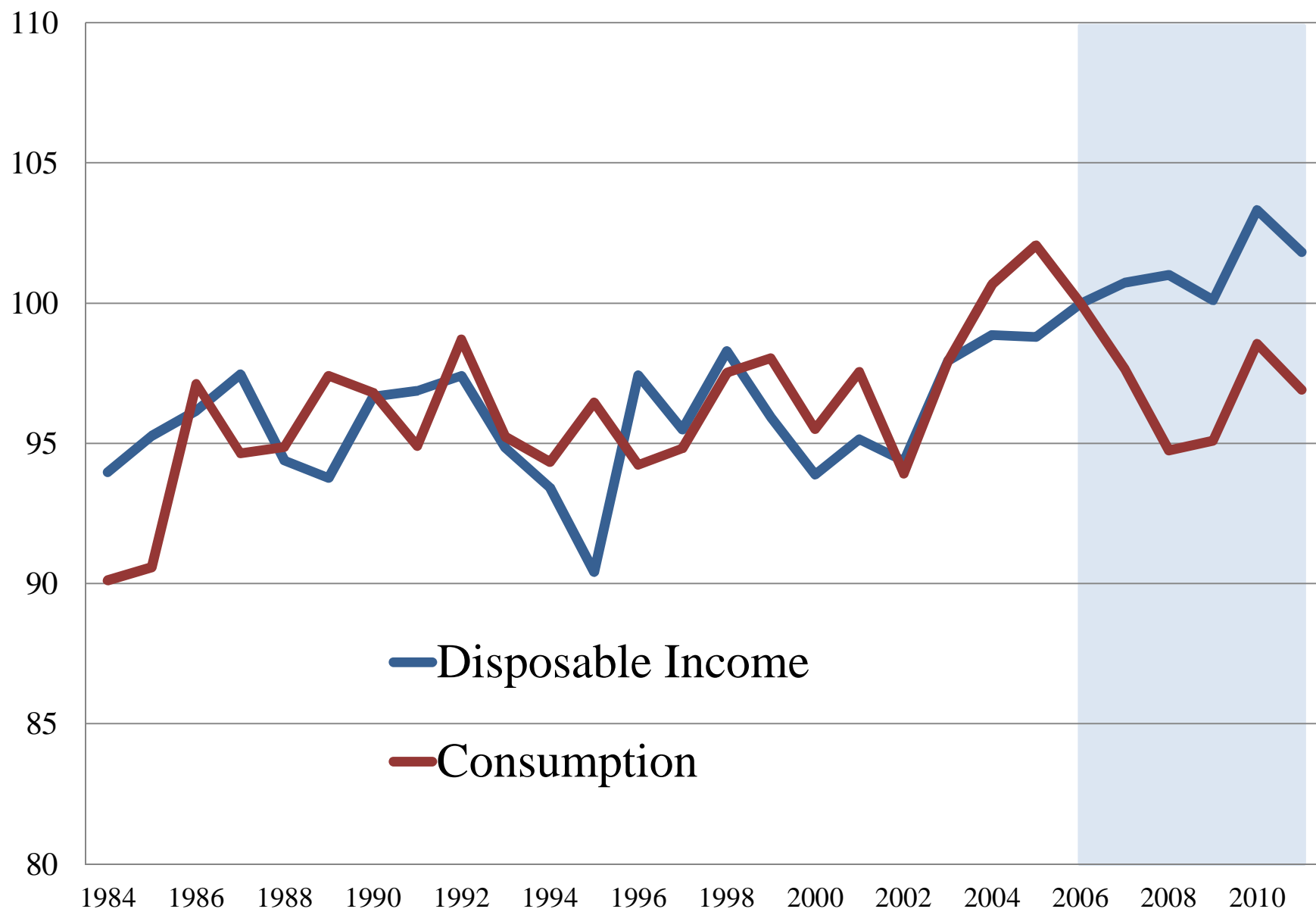


# Defining Income and Consumption

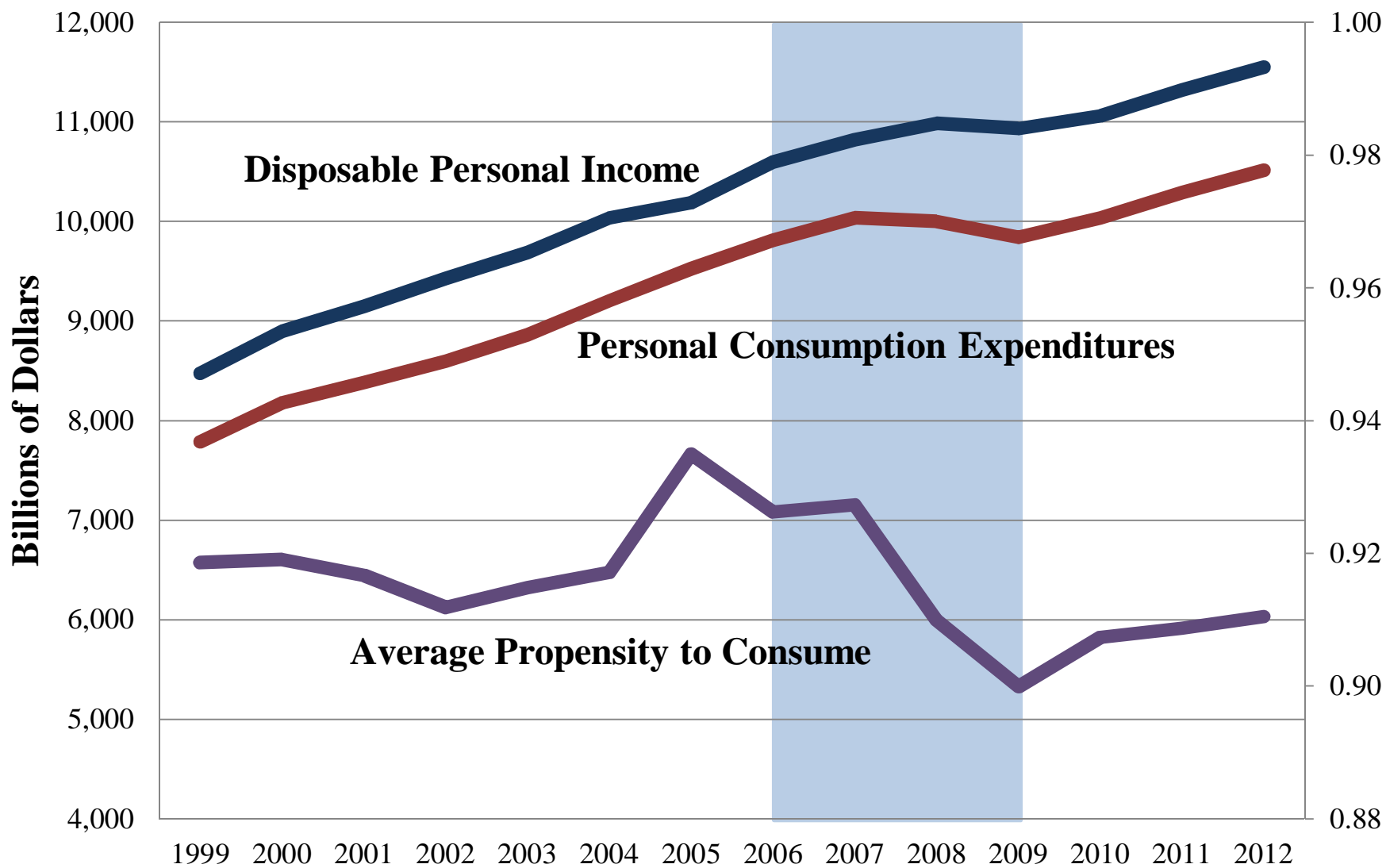
- **Disposable Personal Income (DPI):** income from employment, investment, government transfers, and inter-household transfers of money plus tax credits and food stamps, less income taxes and property taxes.
- **Consumption:** Outlays for non-durables, plus imputed rent, service flow from vehicles, and the dollar value of free or subsidized housing.



## Inequality using Gini Coefficient (2006=100)



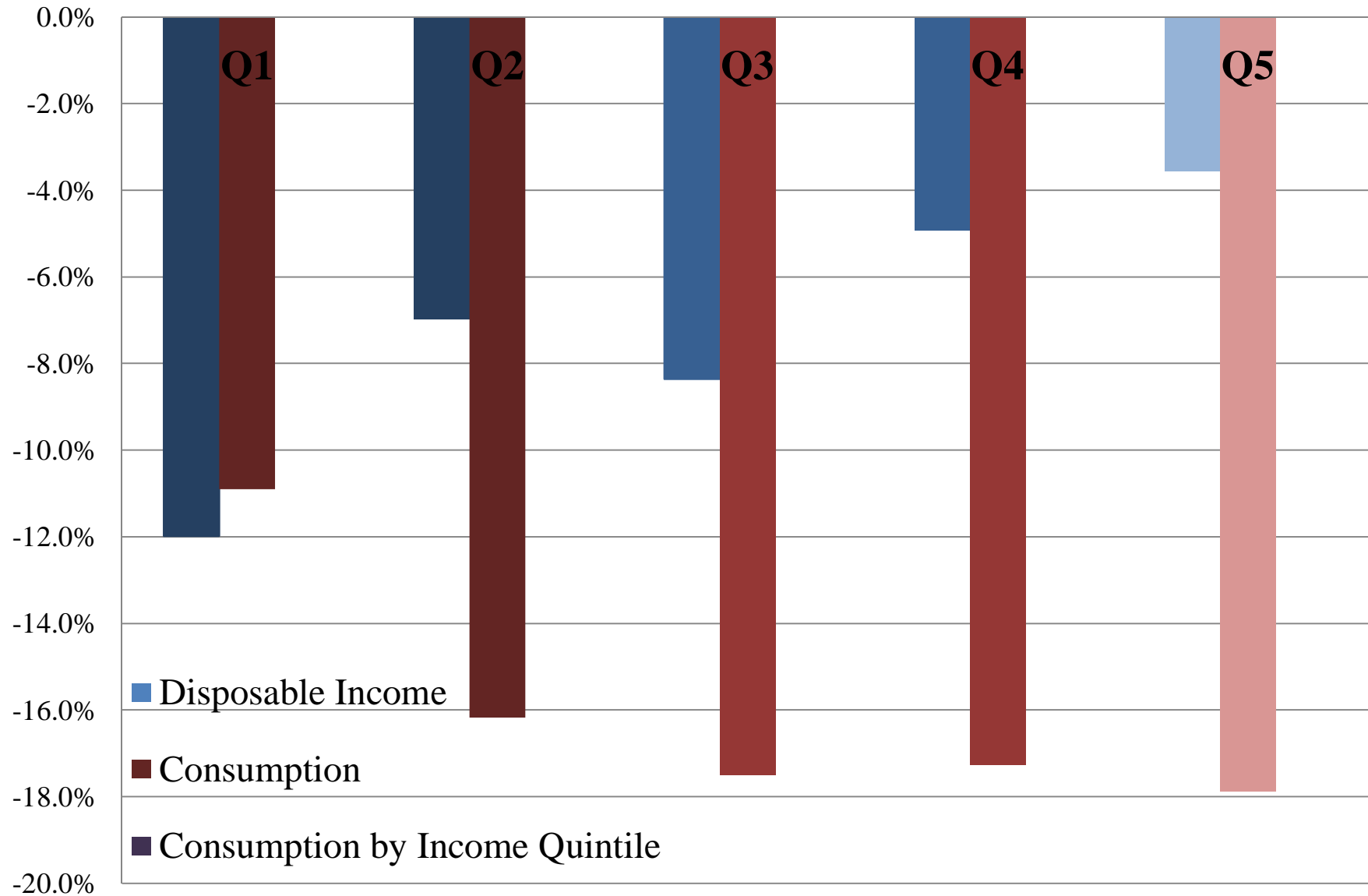
# The difference between consumption and income is seen in the NIPA/PCE data too



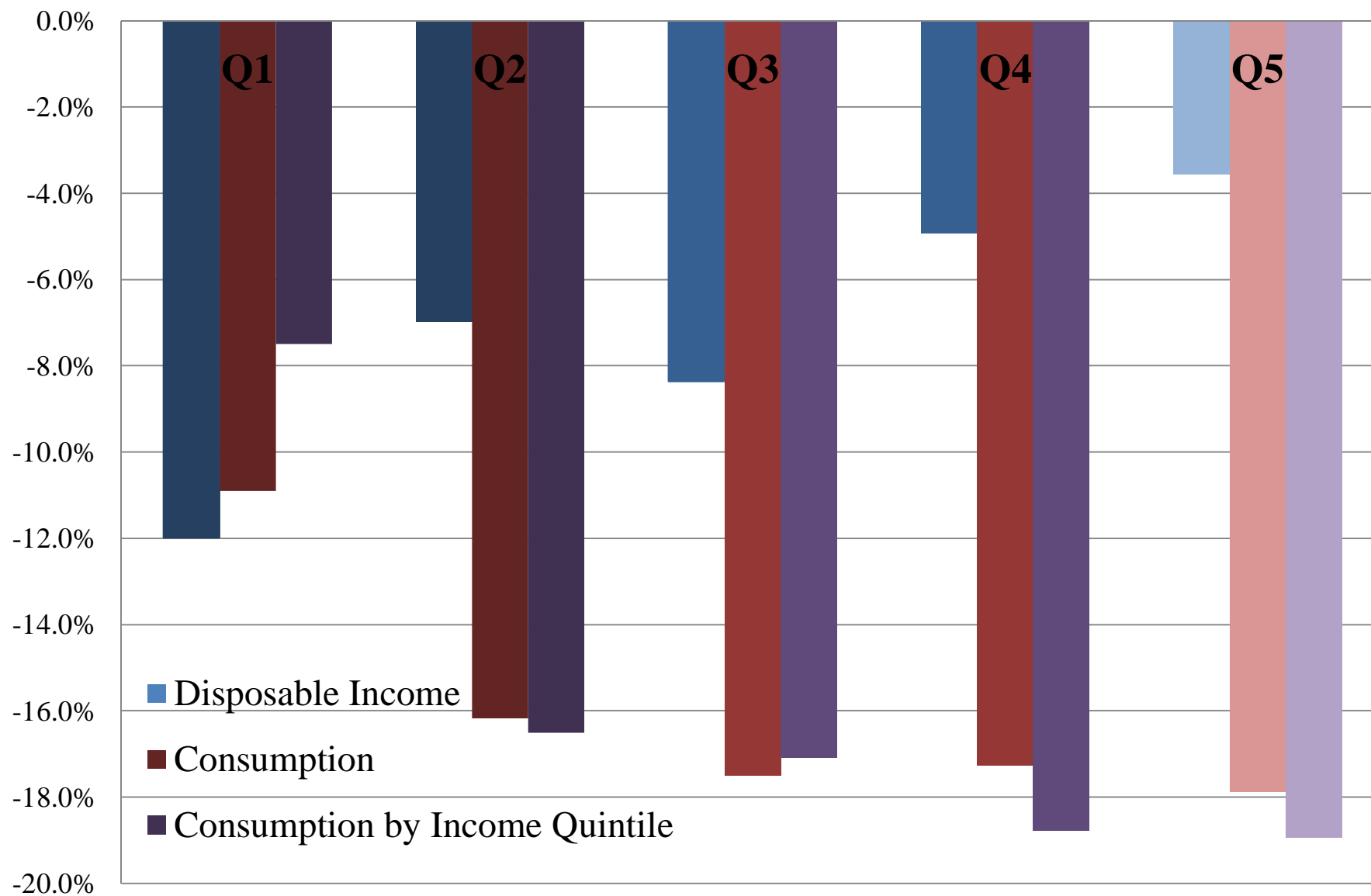
## Staircases going in opposite directions: Percent Change by Respective Quintile, 2006-2011



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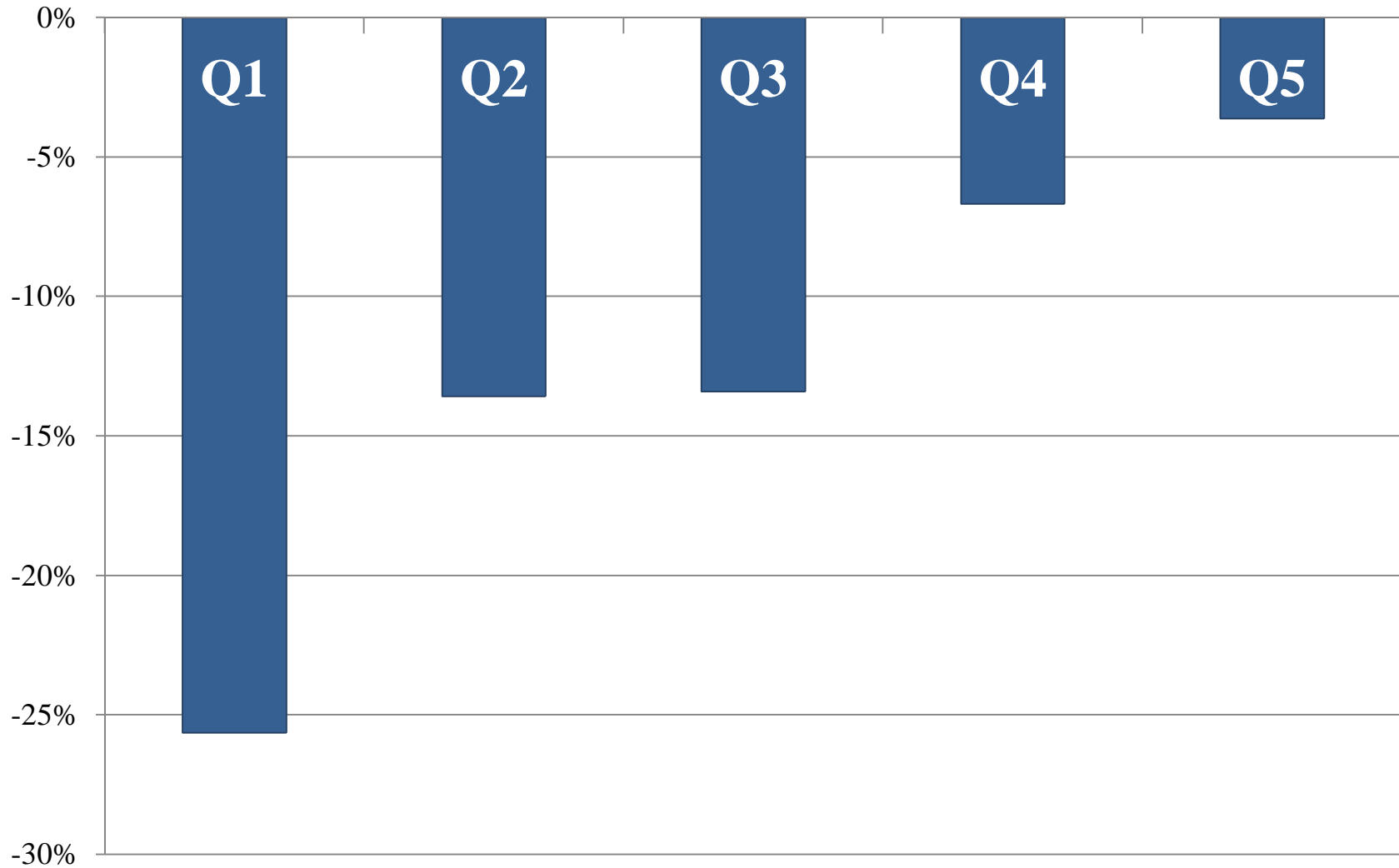


# What are the major forces of the Great Recession?

- High and persistent unemployment
- Large and persistent housing market crash
- Large but short-term financial market crash
- Loss in consumer confidence
- Policy response that increased transfers and tax credits aimed at lower half of distribution

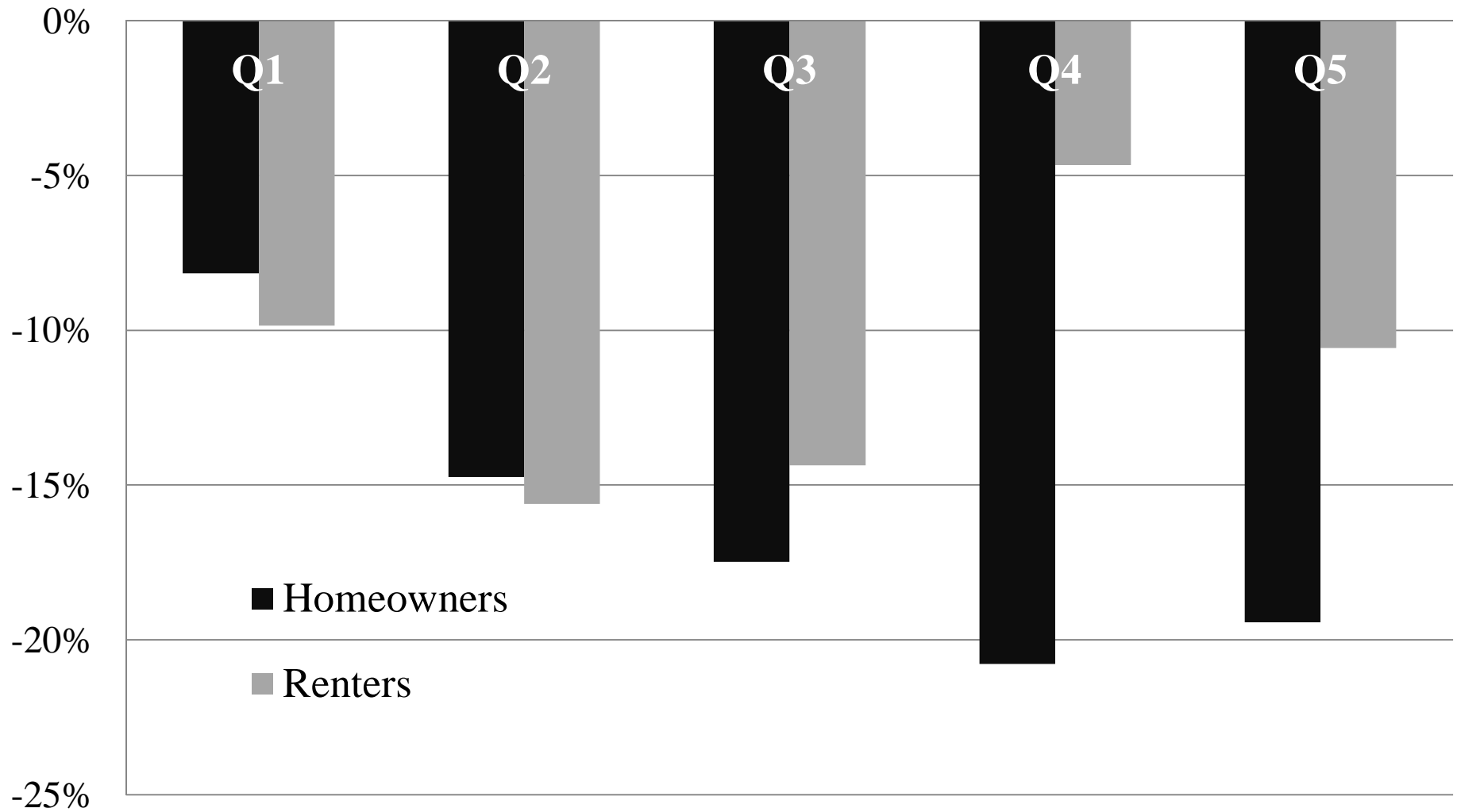


# Percent Change in Employment Income by Income Quintile, 2006-2011



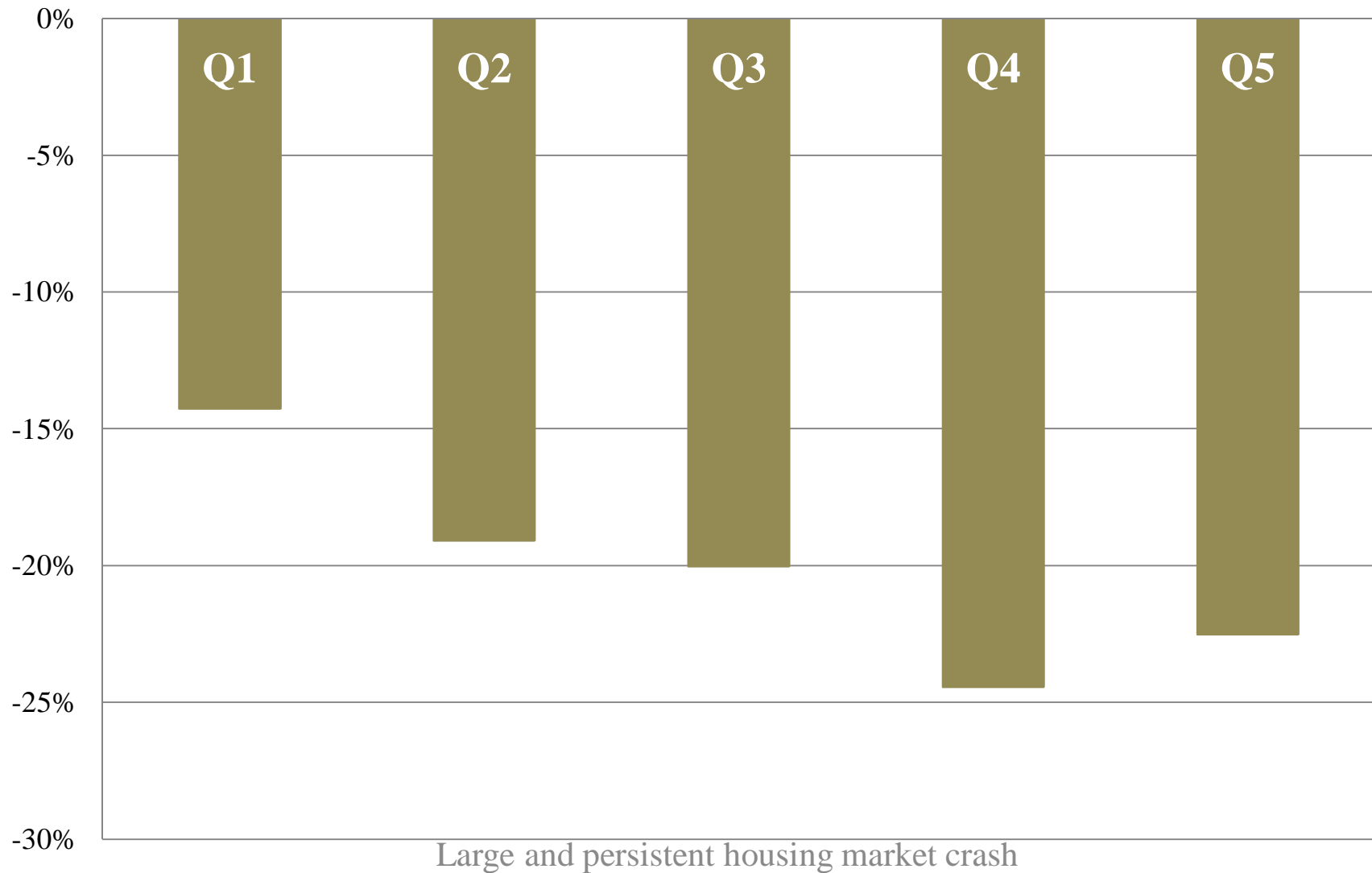
High and persistent unemployment

# Percent Change in Consumption by Income Quintile: Homeowners versus Renters (2006-2011)

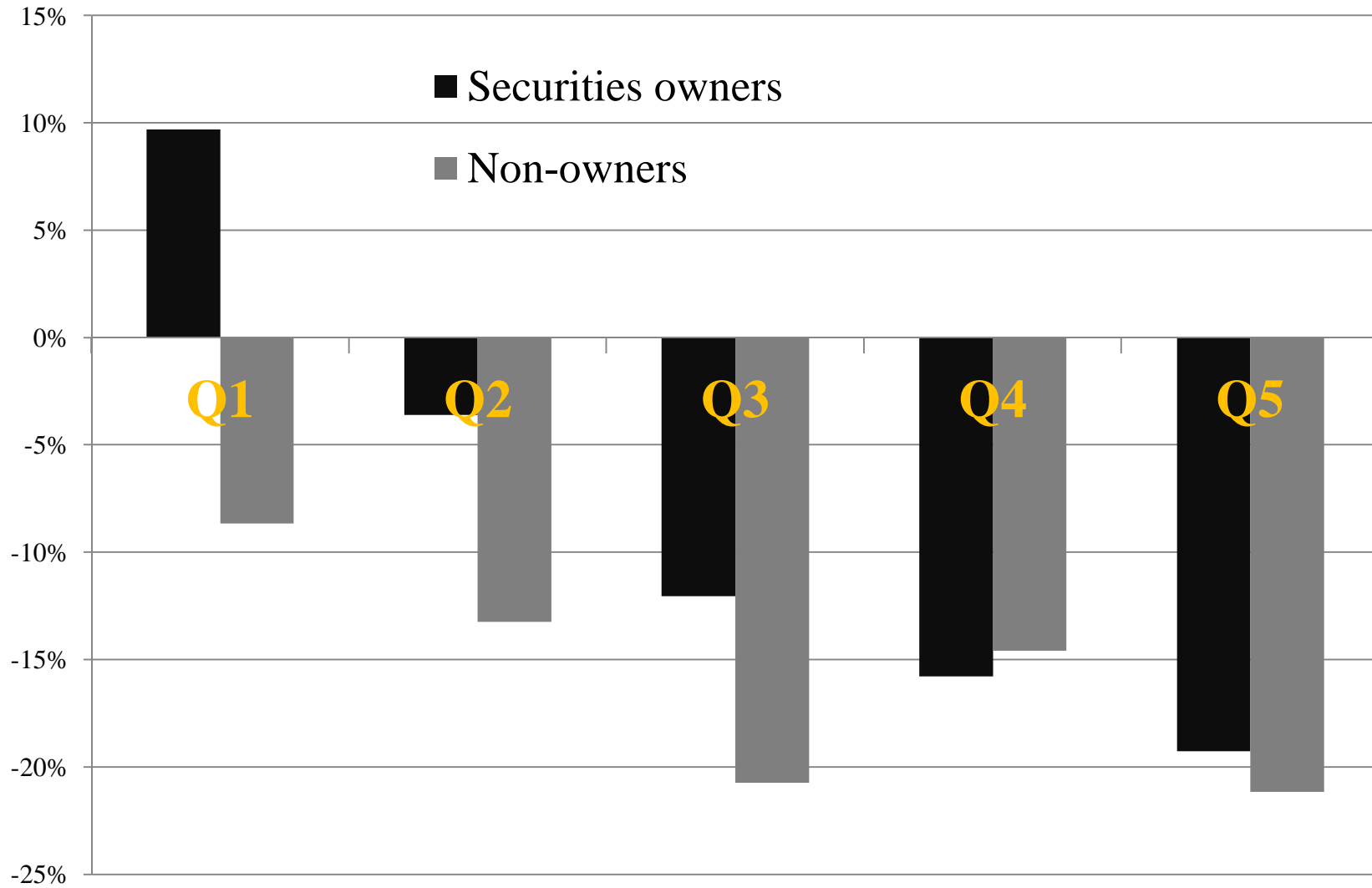


Large and persistent housing market crash

# Percent Change in Property Value by Income Quintile, 2006-2011

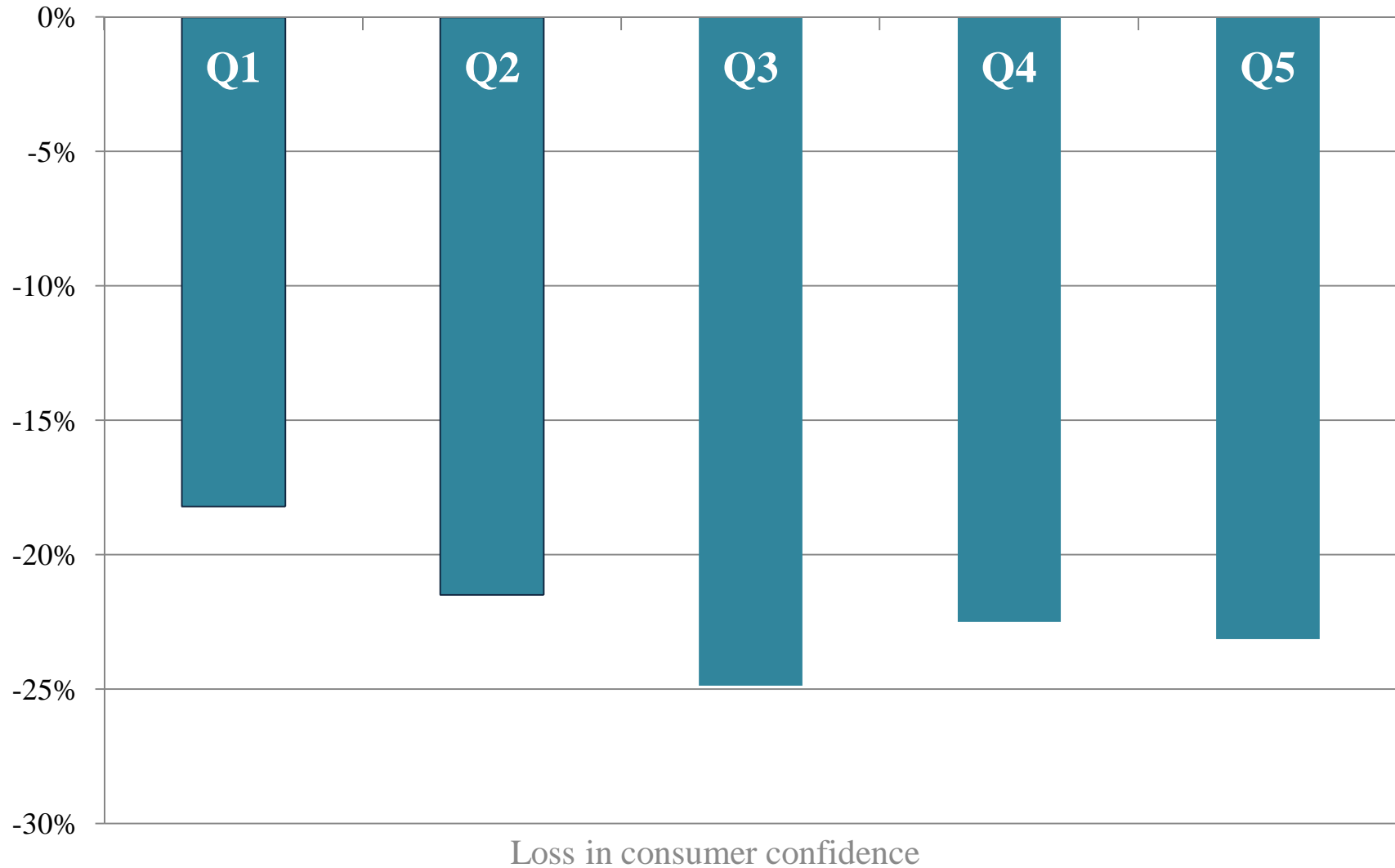


## Percent Change in Consumption by Income Quintile: Securities Owners vs Non-Owners, 2006-2011



Large but short-term financial market crash

# Percent Change in Consumer Confidence by Income Quintile, 2006-2011 (Survey of Consumers)

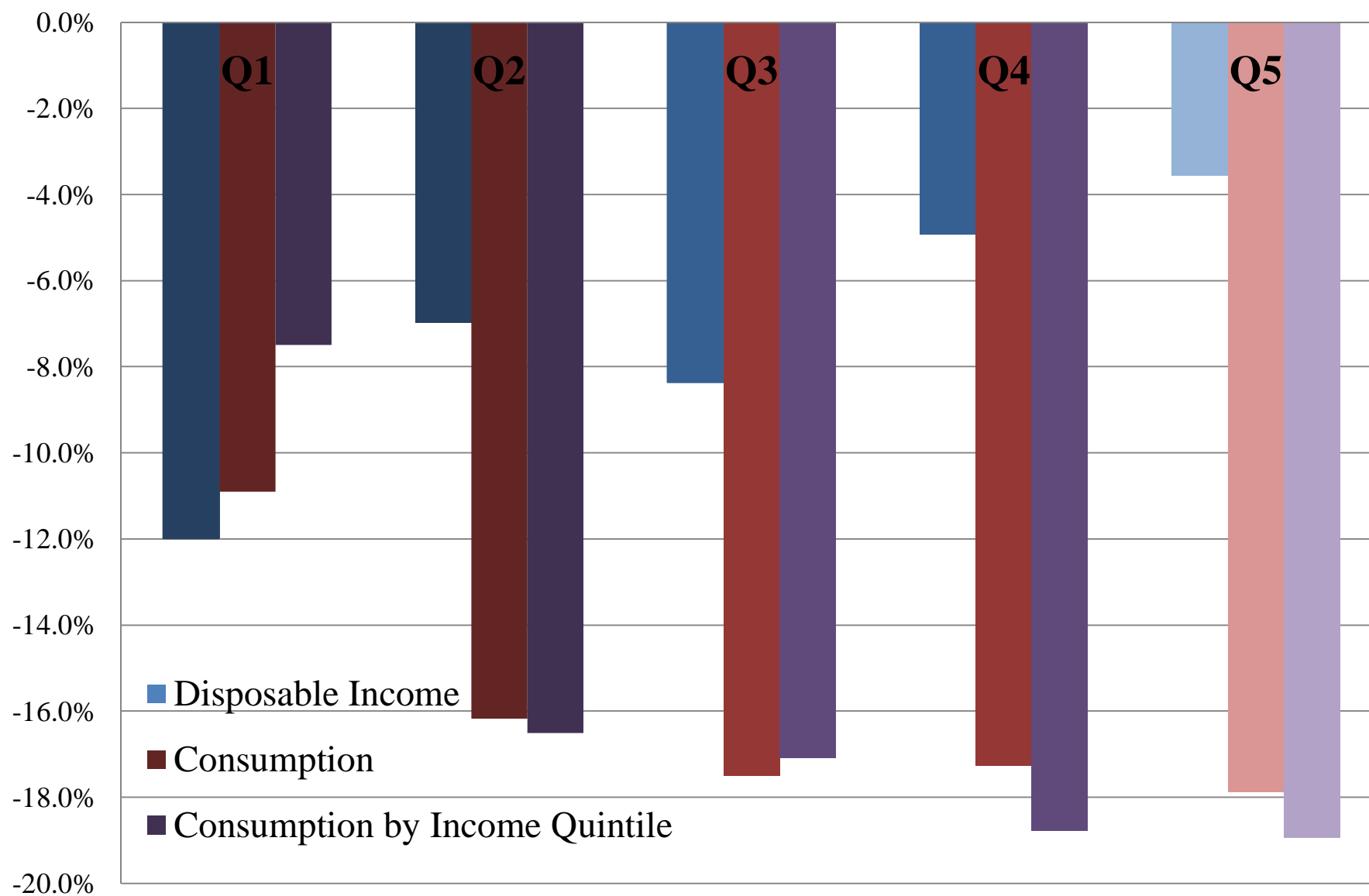


## Back-of-the envelope counterfactuals

- 1) How would consumption inequality have changed if the change in consumption equaled the change in income by quintile?
- 2) How would income and consumption inequality have changed if there were no transfer and tax policy response?
- 3) Housing wealth effect -- how would consumption inequality have changed if the change in consumption equaled the change in property value by income quintile, using a standard housing wealth elasticity (0.06)?

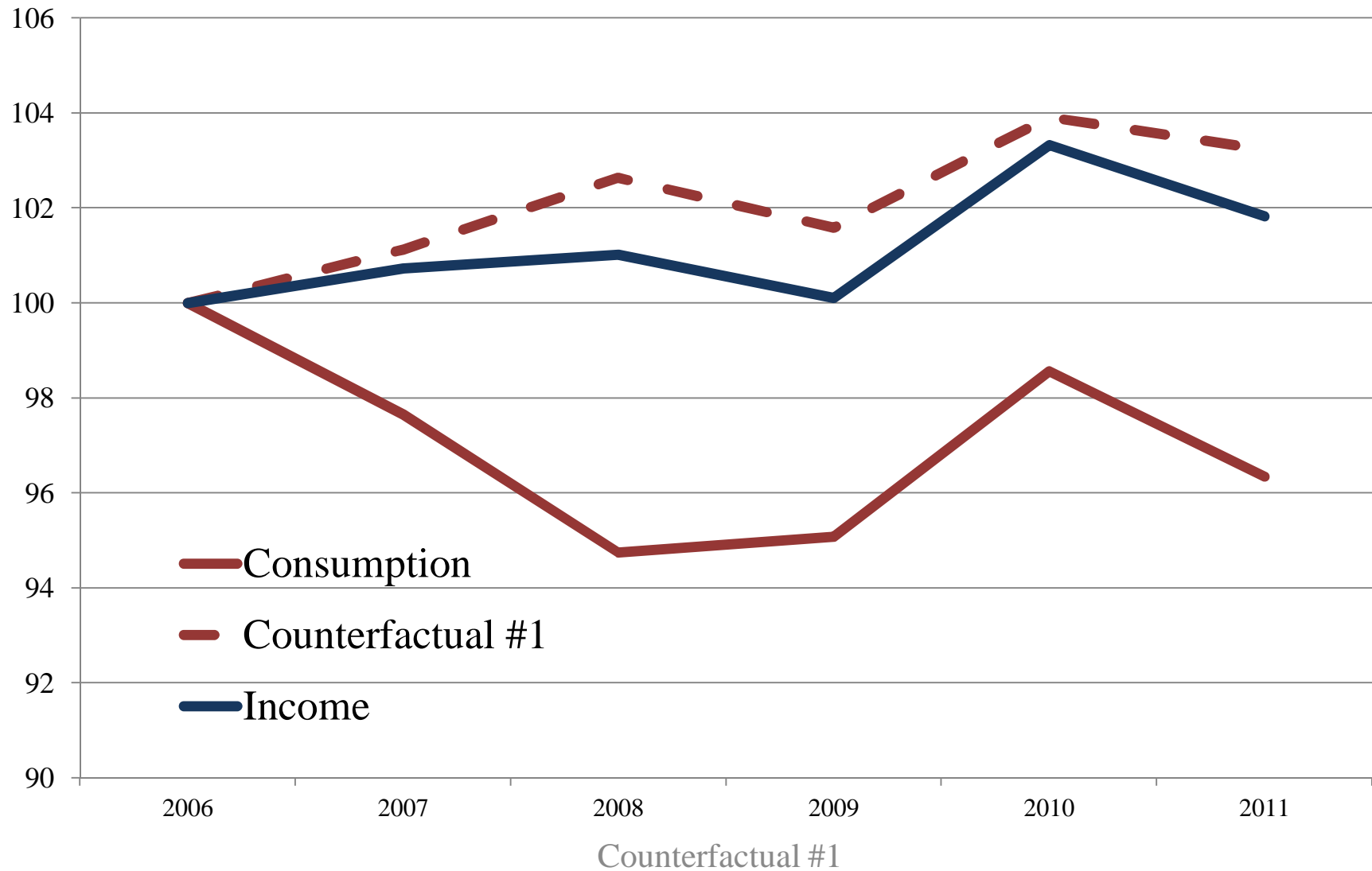


## Staircases going in opposite directions: Percent Change by Respective Quintile, 2006-2011



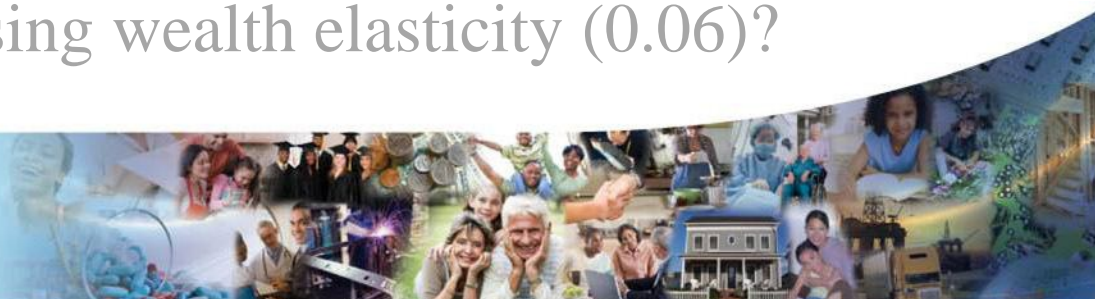


# Counterfactual change in consumption inequality assuming change in consumption is equal to the change in income by income quintile

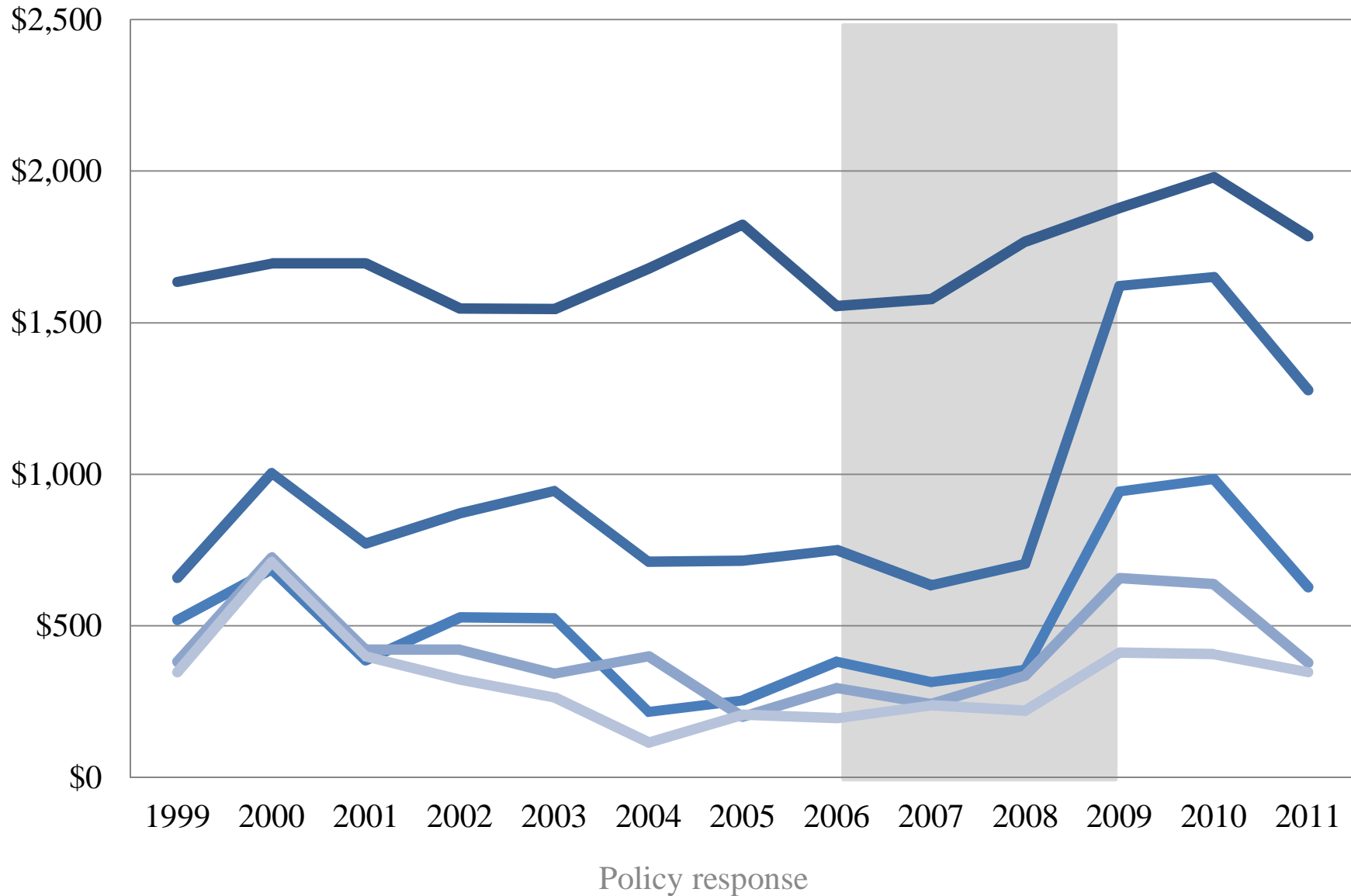


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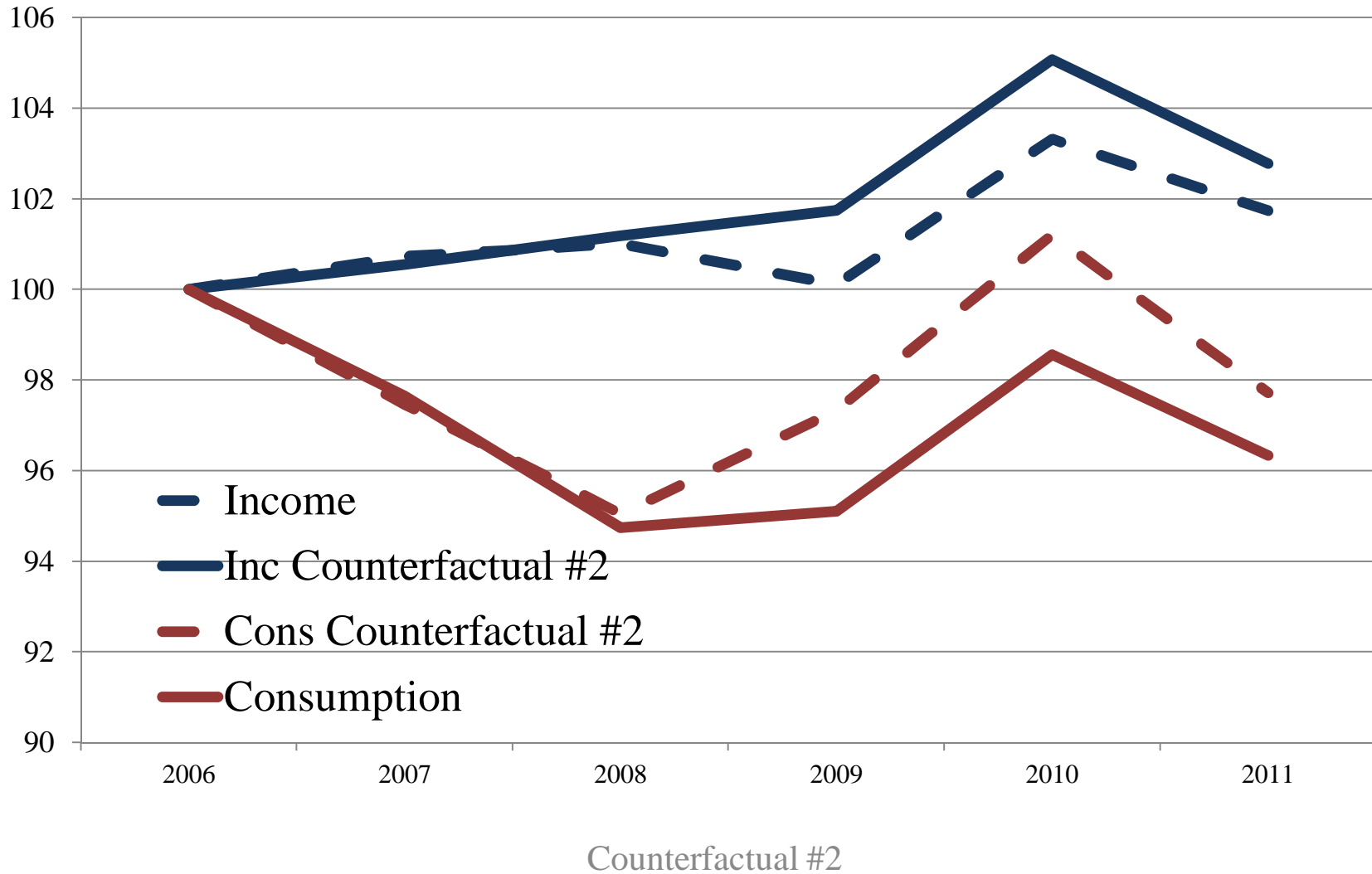
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# Mean Government Transfer Income by Disposable Income Quintile (\$)

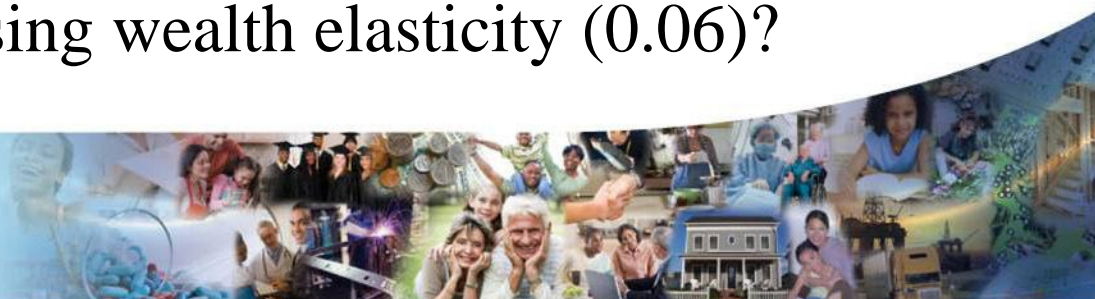


# Counterfactual change in C&Y inequality assuming no increase in transfer benefits or tax credits

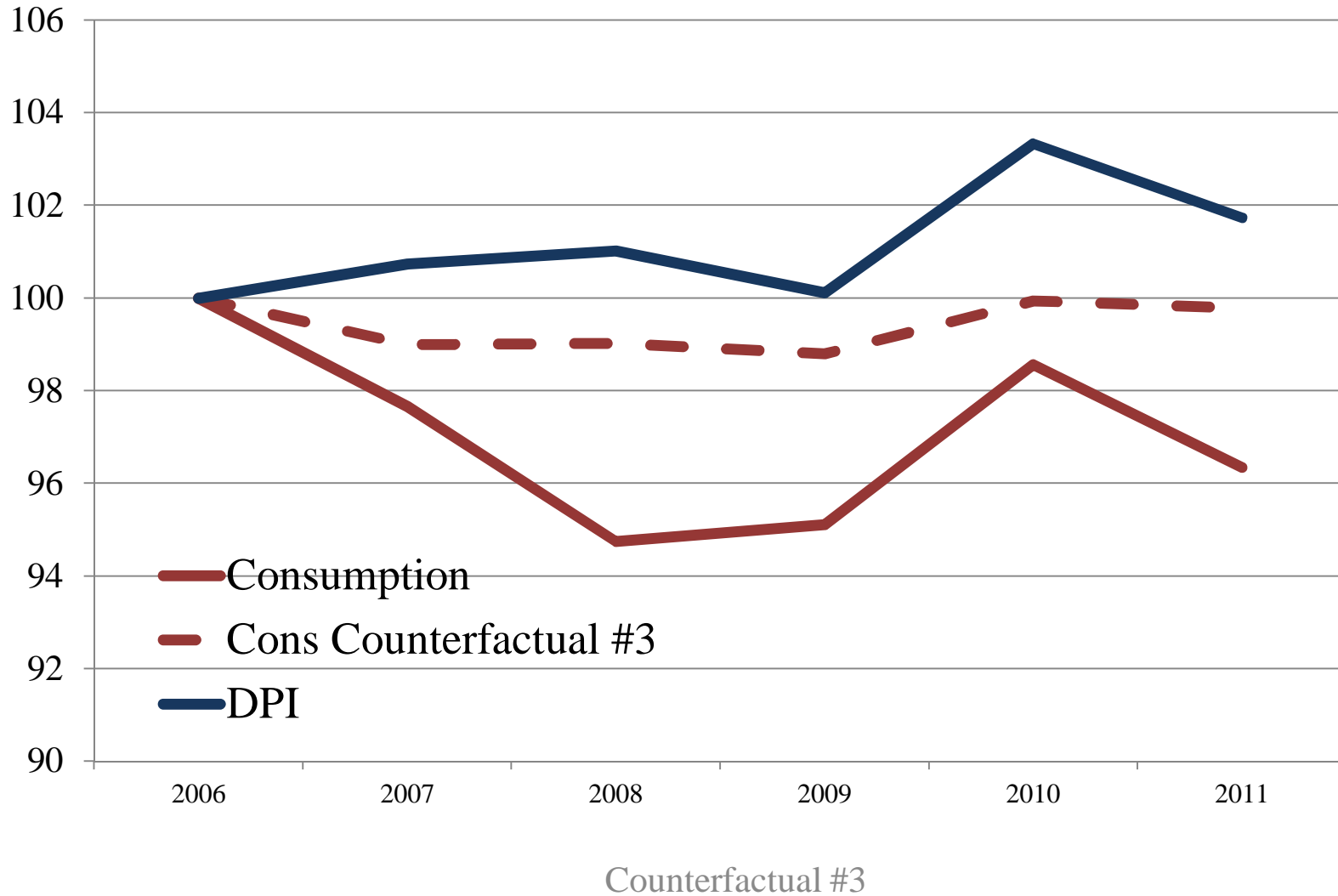


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# Counterfactual change in consumption inequality assuming standard housing wealth effects by income quintile



# Why might have income and consumption inequality diverged during the Great Recession?

- It was generated by a drop in consumption at the top of the income distribution.
  - Loss in housing wealth was higher for high income households.
  - Drop in consumer confidence was higher for high income households.



# Tax and transfer changes were effective

- Tax and transfer policies during the Great Recession:
  - helped lower income inequality;
  - helped preserve consumption in the bottom half of the distribution.
  
- How will the removal of these more generous benefits affect inequality going forward?
  - Cut in SNAP
  - Removal of UI benefit extension
  - Return of full payroll tax

