

***AASA / ARAMARK
Symposium***

Economic Briefing

***Paul Traub
December 2, 2008***

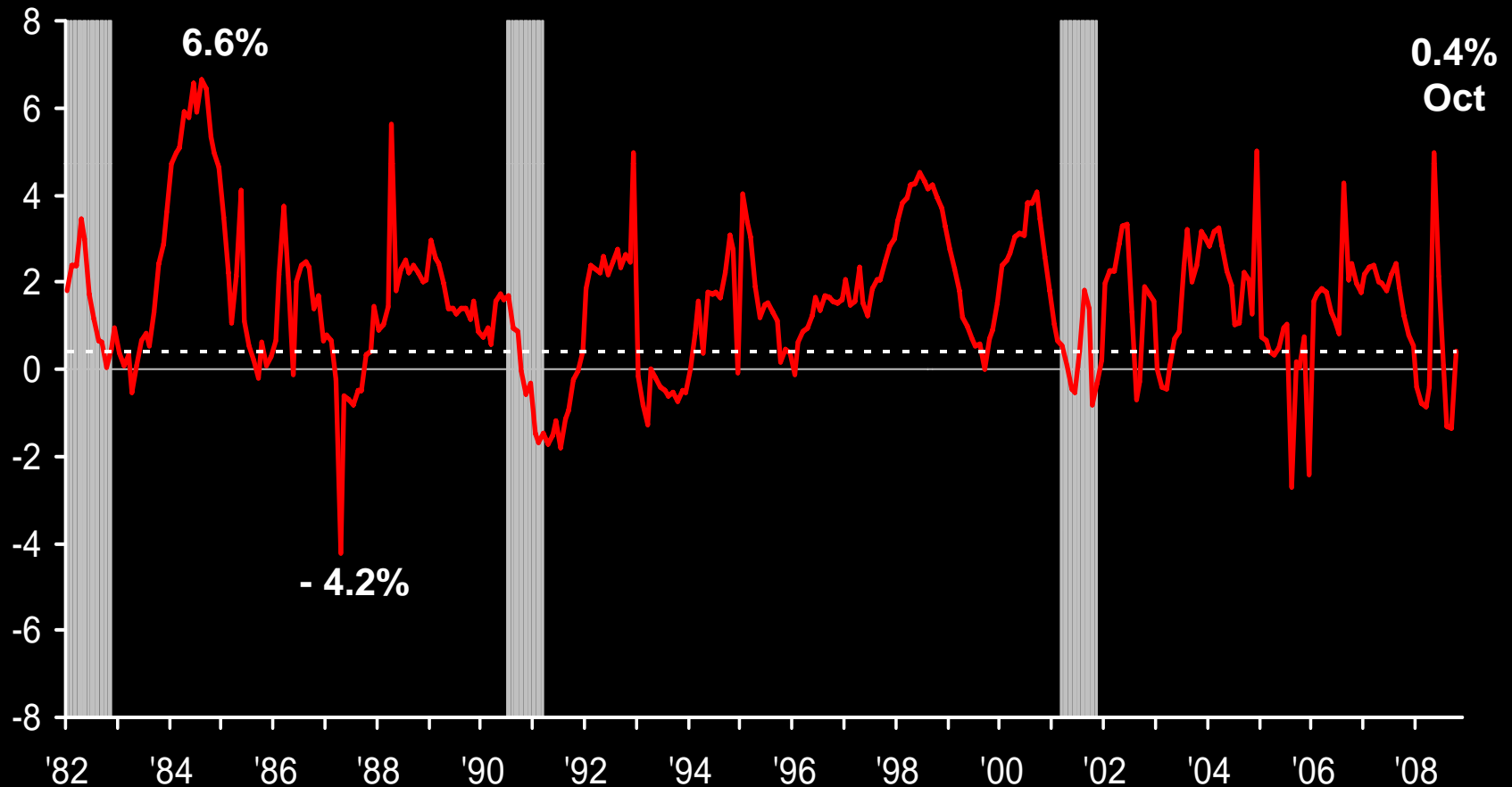
Ability Leading Indicators

	<u>Nov '07</u>	<u>Nov '08</u>
Disposable Income	Green	Red
Household Debt	Red	Yellow
Yield Curve	Yellow	Green
Inflation	<u>Yellow</u>	<u>Red</u>
Composite	Yellow	Red

Real Disposable Income

Per Household

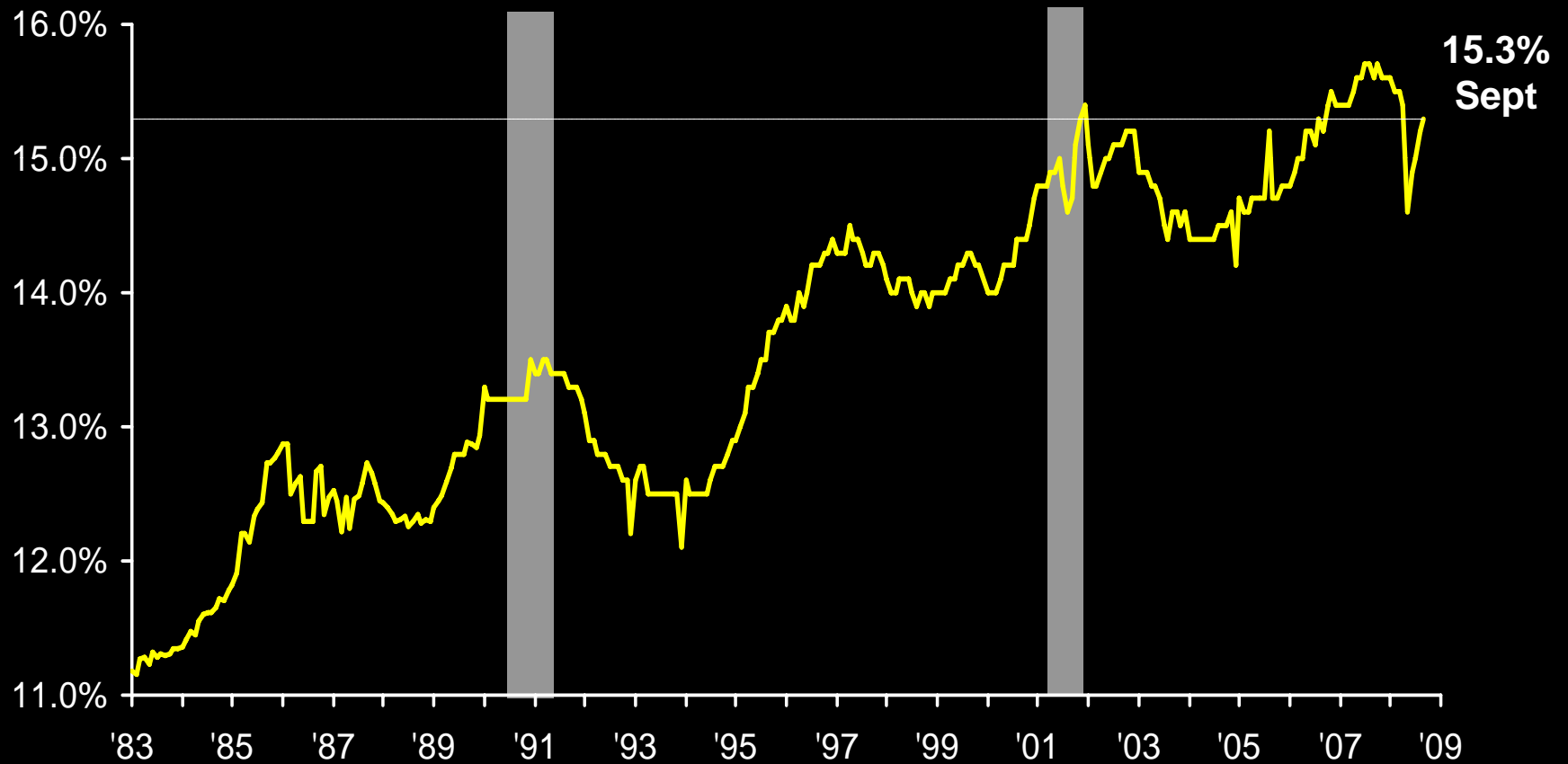
% Change
Year Over Year



Consumer Debt Payments

Installment, Mortgage & Auto Leases

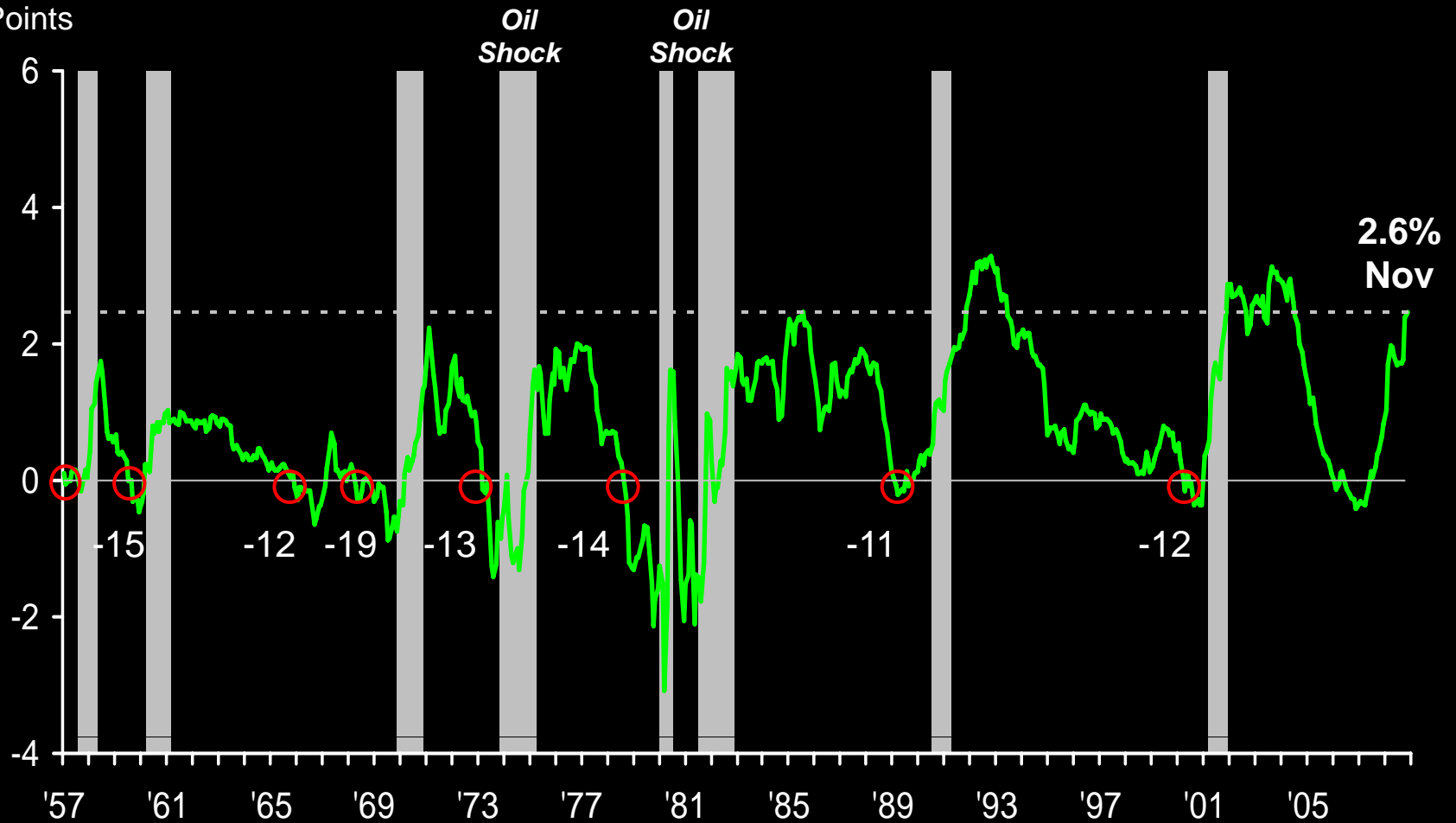
% of Disposable
Personal Income



The Yield Curve

10 Yr Minus 1 Yr Treasuries

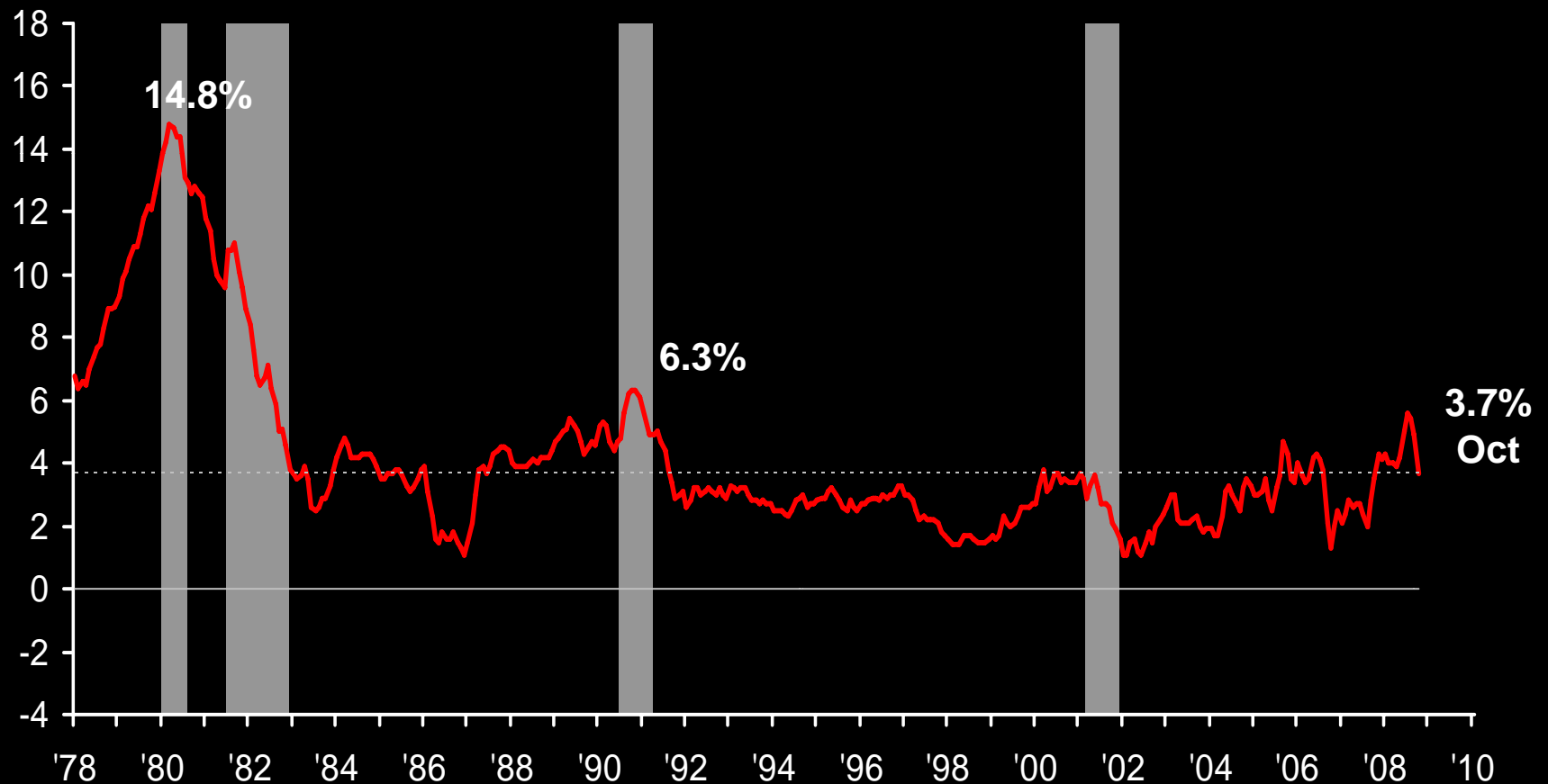
Percentage
Points



Consumer Prices

All Items, Not Seasonally Adjusted

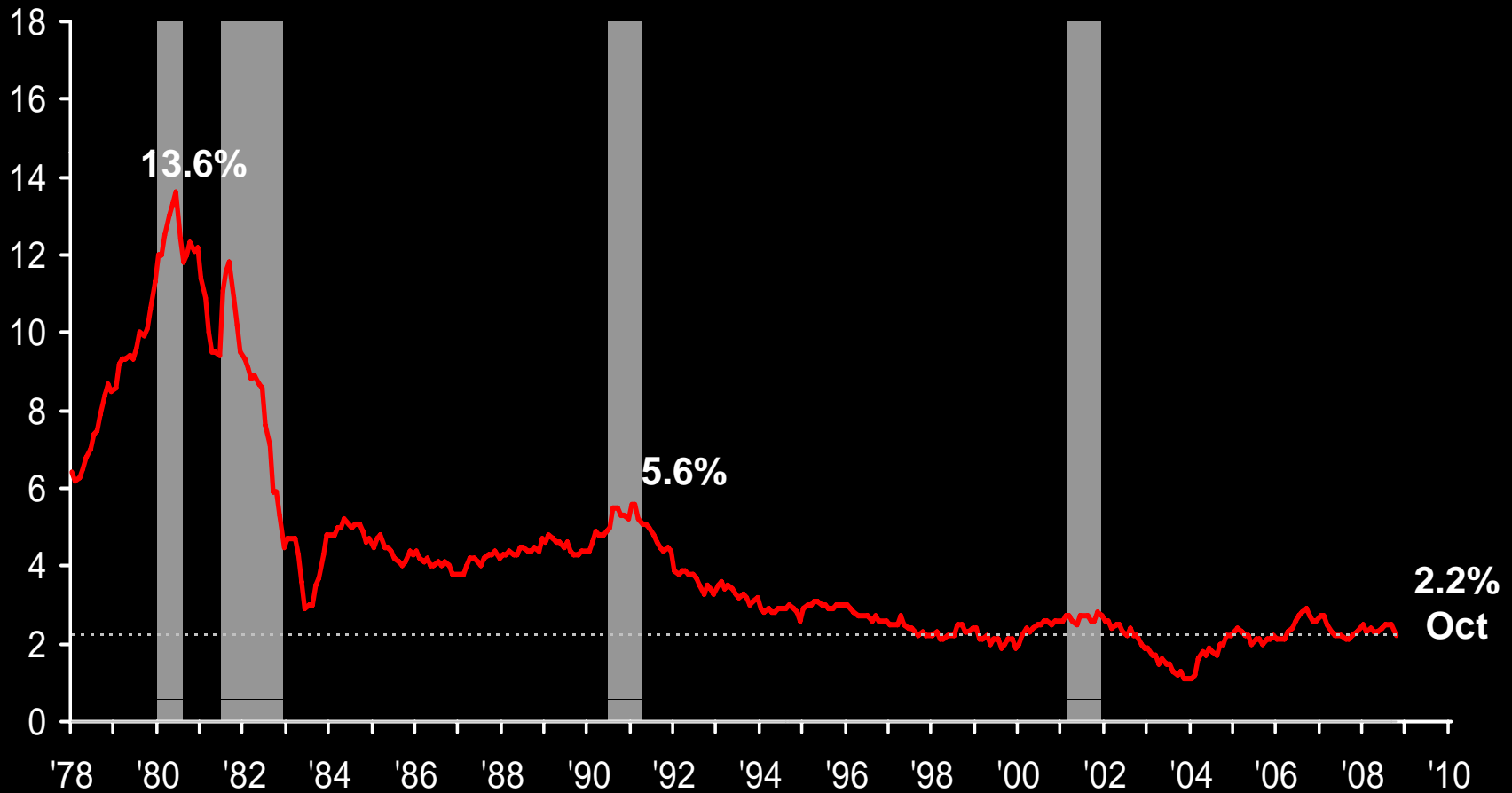
% Change
Yr/Yr



Consumer Prices: Core Inflation

All Items Less Food & Energy, NSA

% Change
Yr/Yr

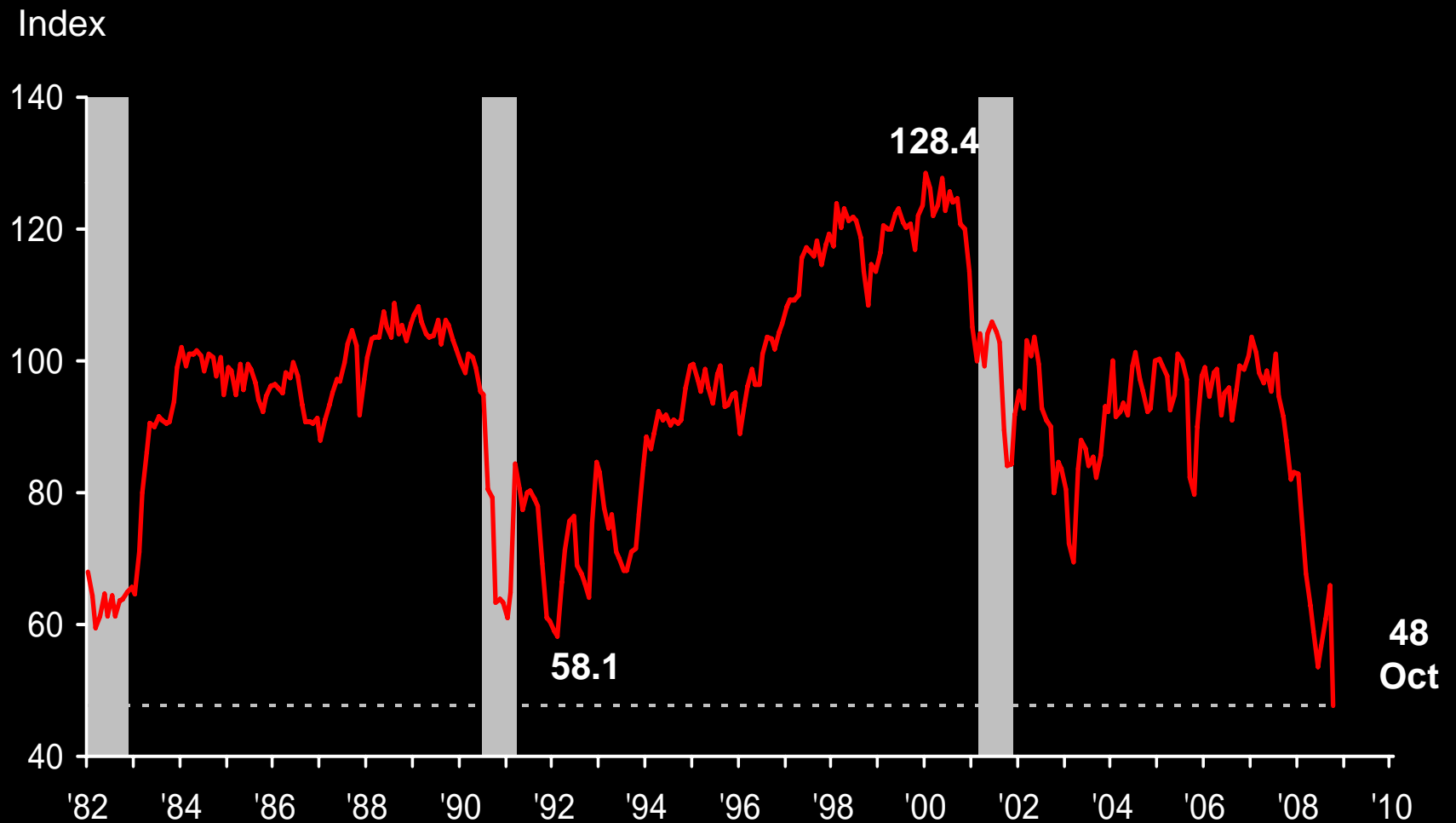


Willingness Leading Indicators

	<u>Nov '07</u>	<u>Nov '08</u>
Consumer Attitudes	Red	Red
Unemployment Claims	Green	Red
Workweek	Green	Yellow
Stock Market	<u>Green</u>	<u>Red</u>
Composite	Green	Red

Consumer Attitudes

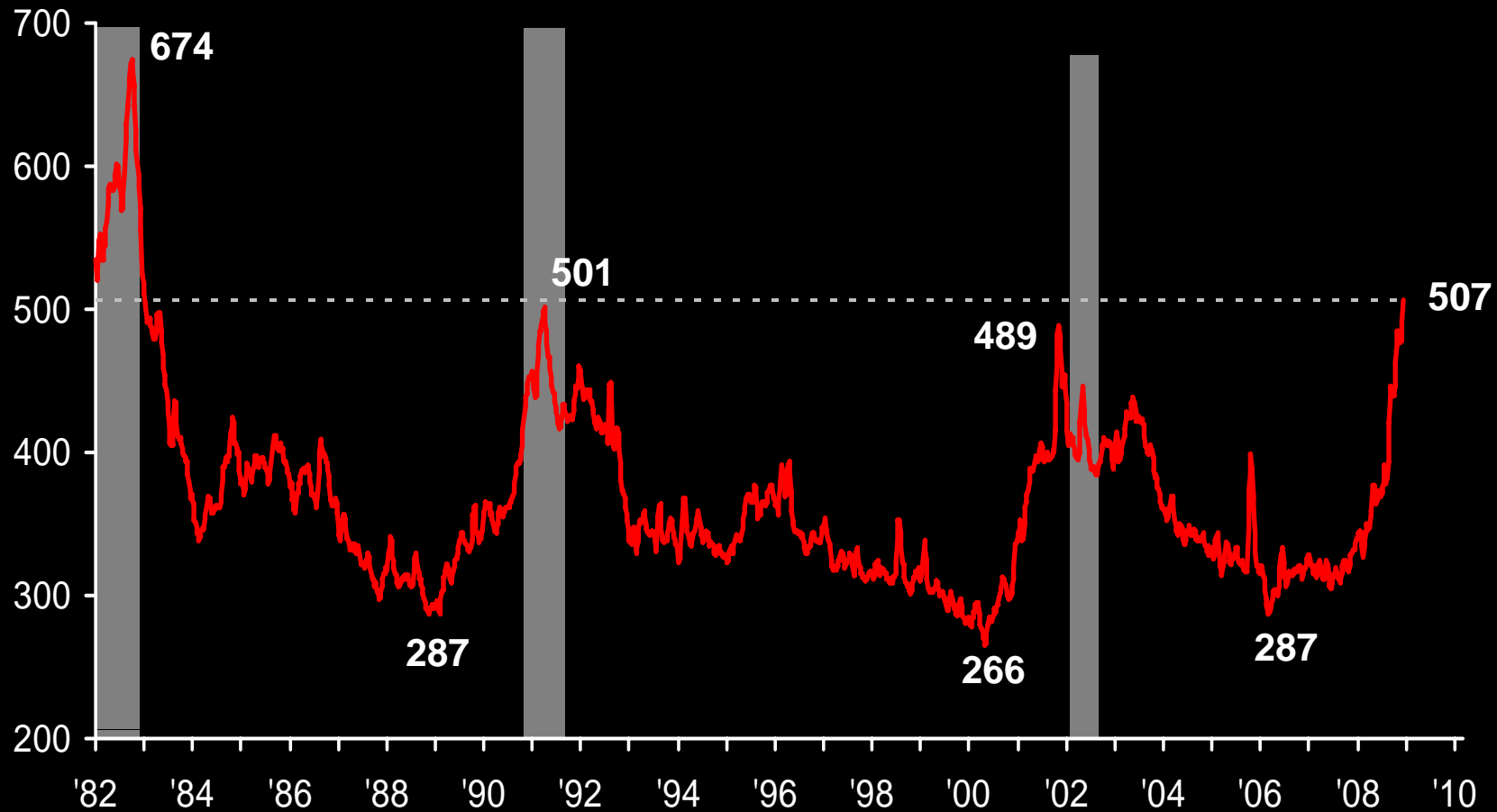
Average of U of M & Conference Board



Initial Unemployment Claims

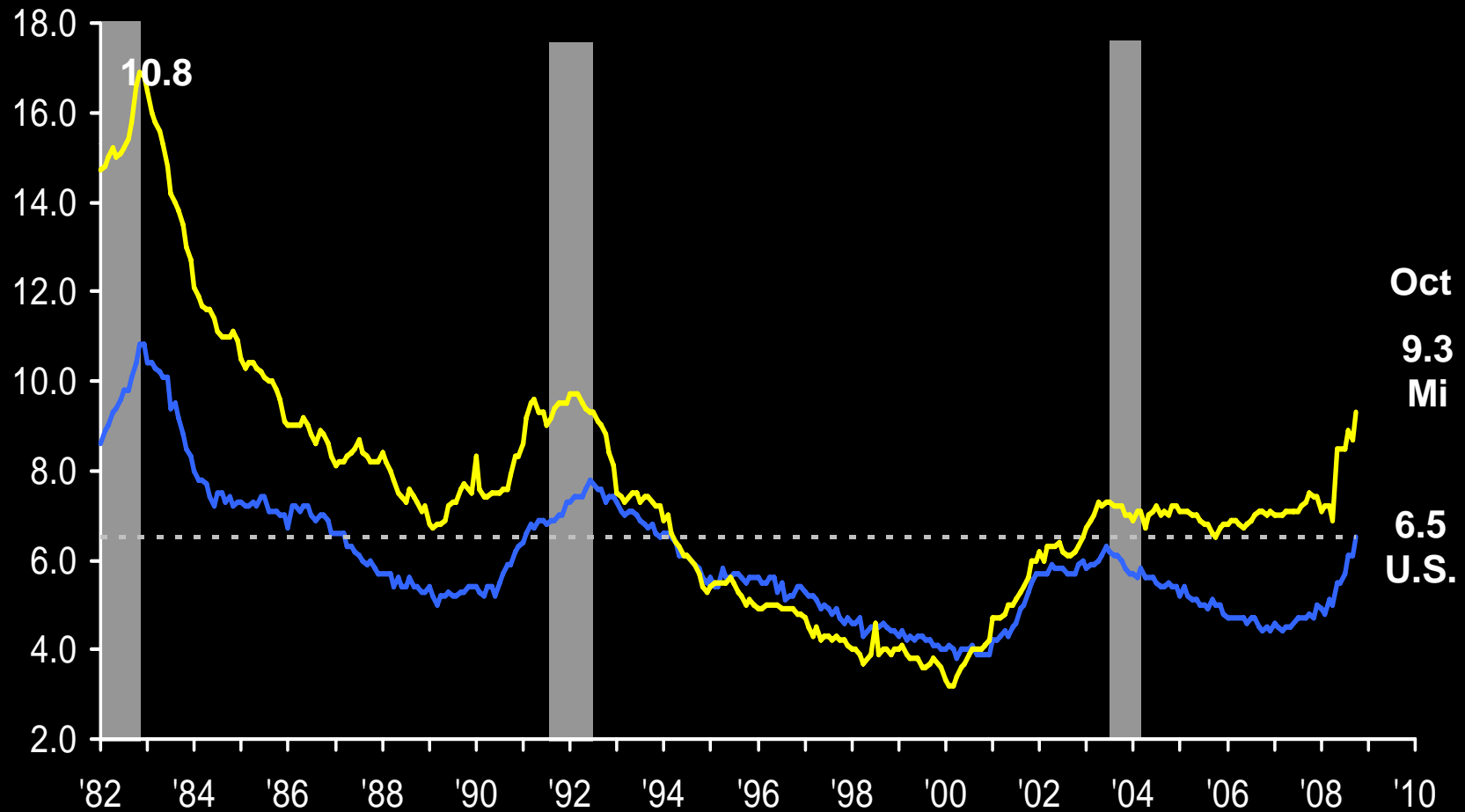
4 Week Moving Average

Thousands

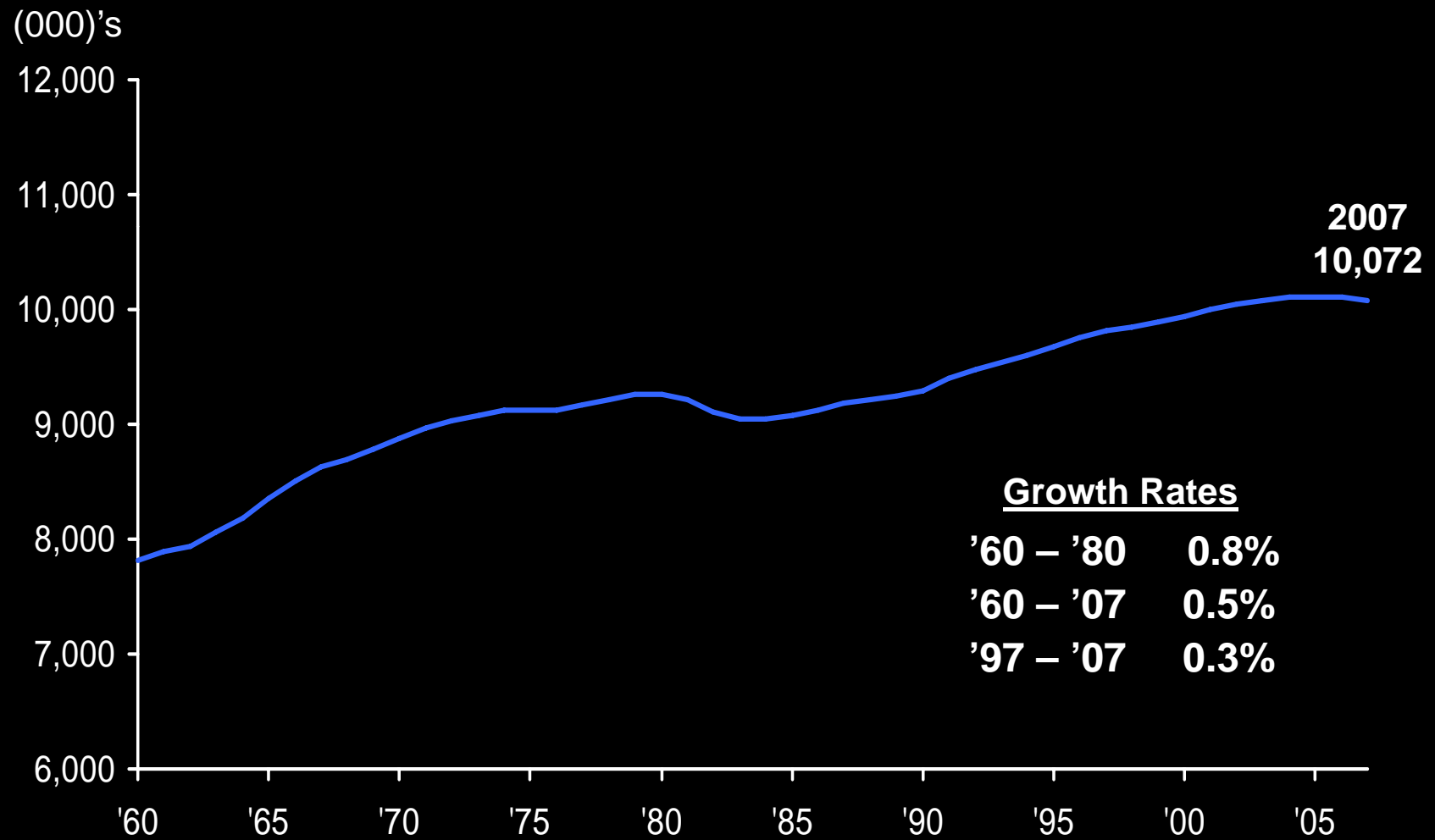


Unemployment Rate

Percent



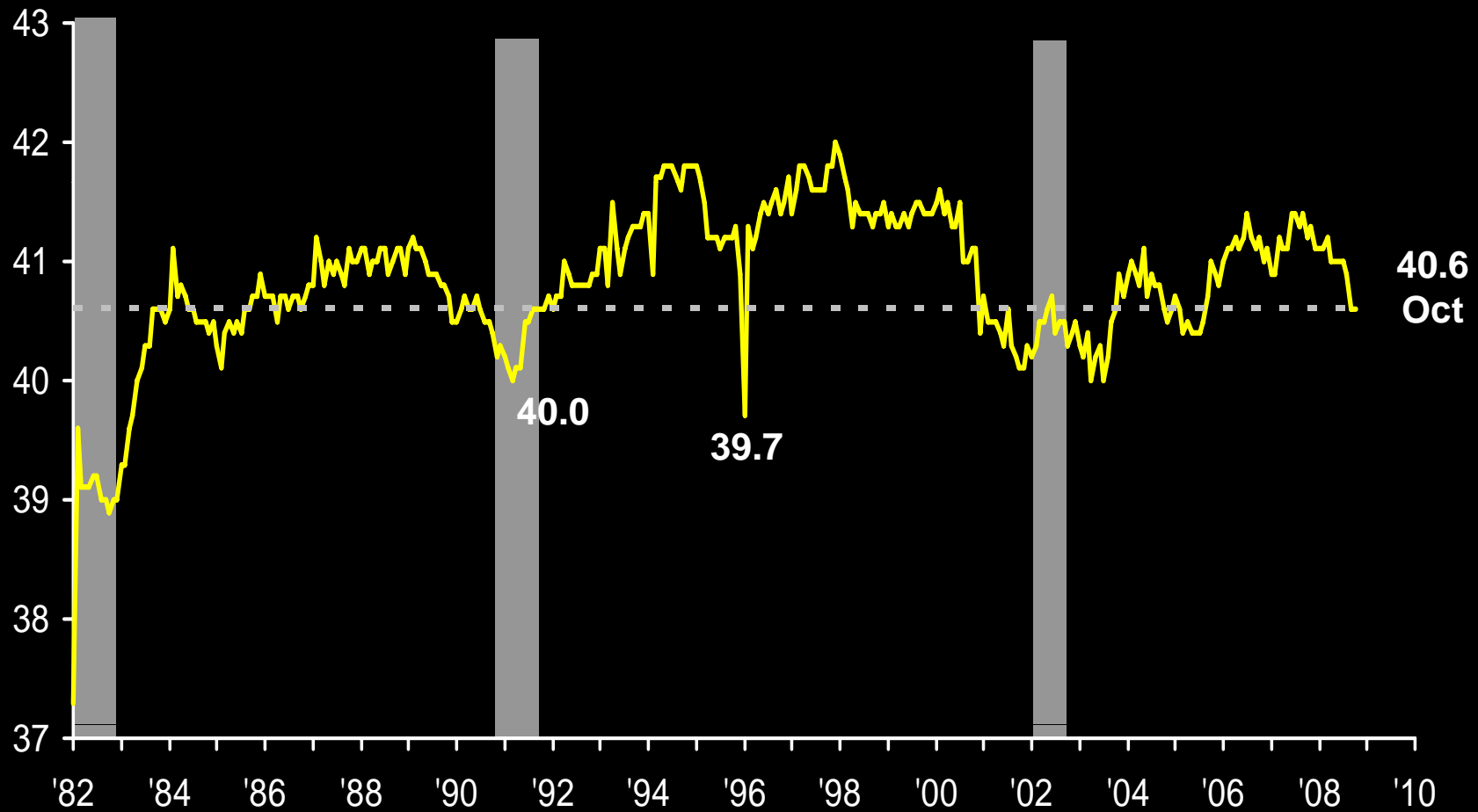
Michigan Population



Manufacturing Workweek

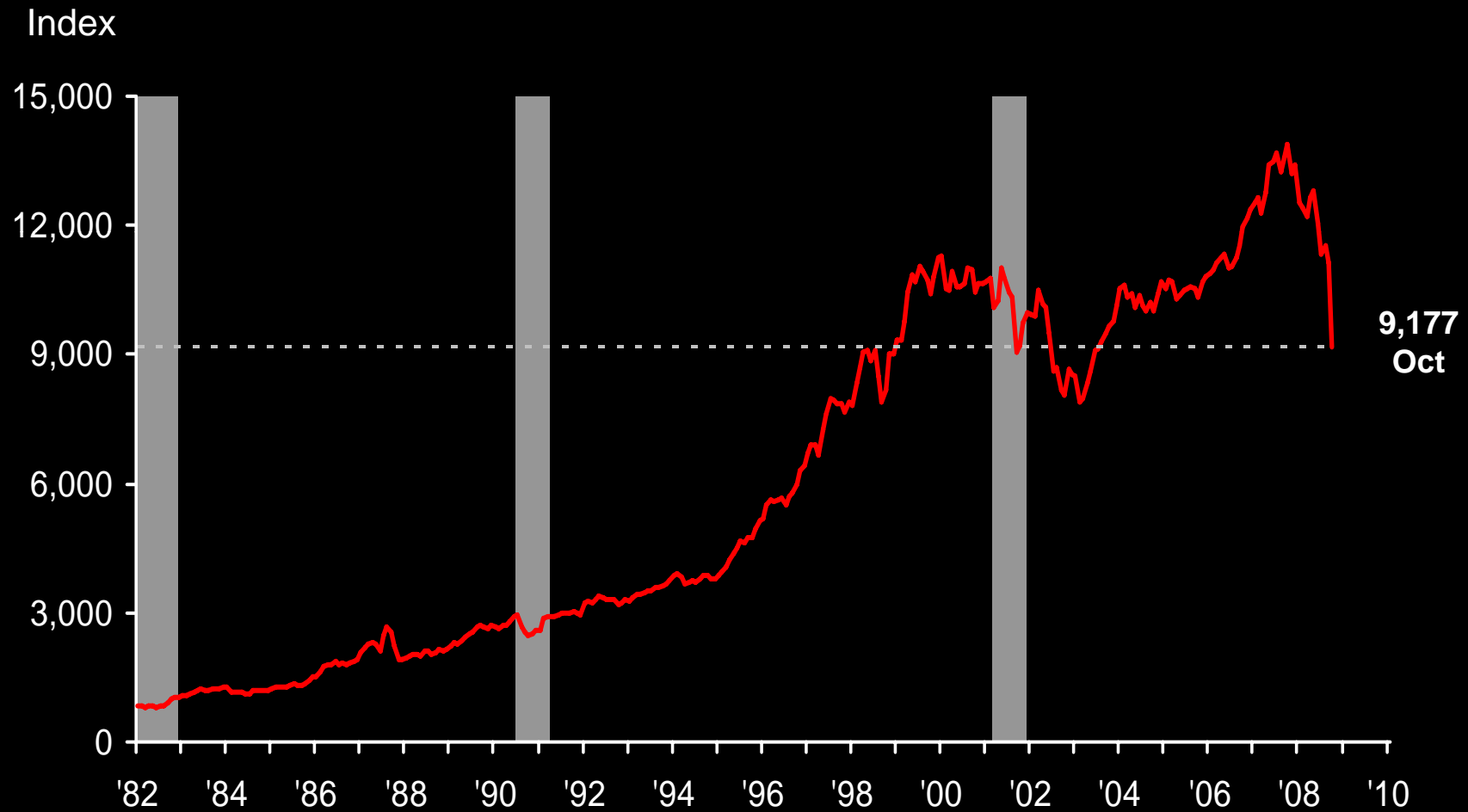
Includes Part-time & Overtime

Hours



Stock Market

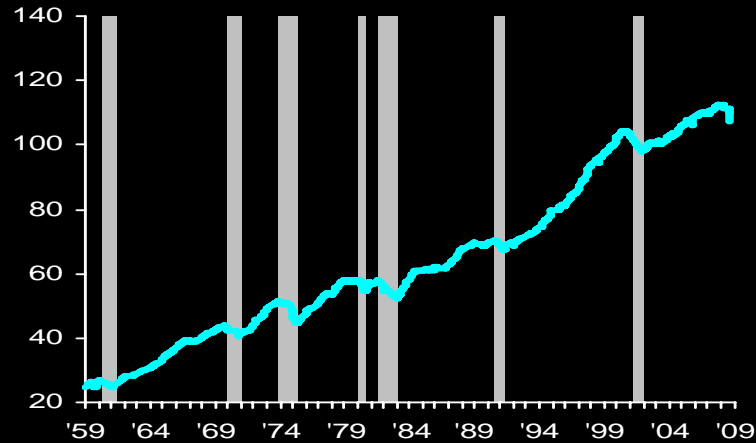
Dow Jones Industrial Average



Business Cycle Dating

Industrial Production

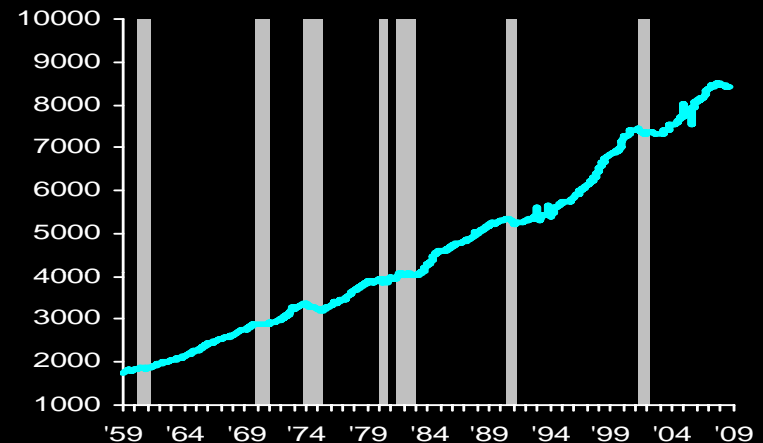
Units, 2002=100



Sources: Board of Governors of Federal Reserve

Personal Income

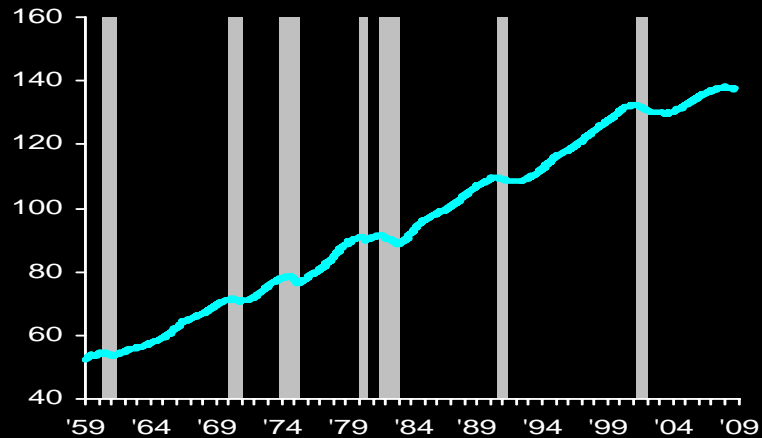
Real, Less Transfer Payments



Sources: The Conference Board, BEA

Payroll Employment

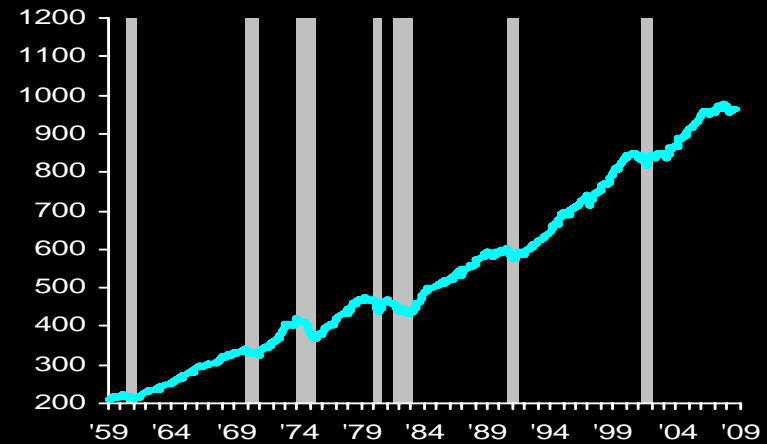
Millions, SA



Source: Bureau of Labor Statistics

Manufacturing & Trade Sales

Real, Billion Dollars



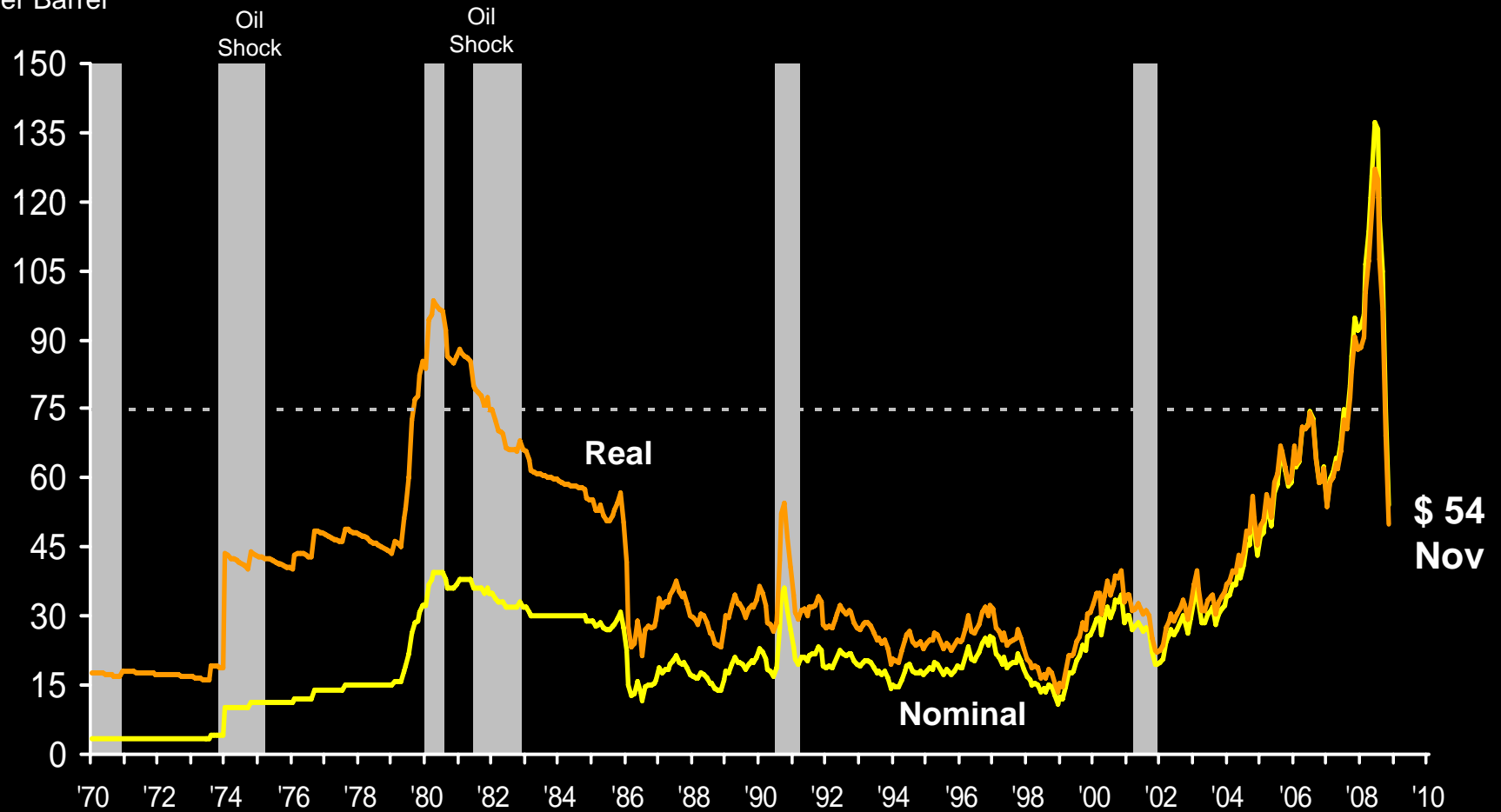
Source: Bureau of Economic Analysis

Energy and Other Commodities

Oil Prices

West Texas Intermediate

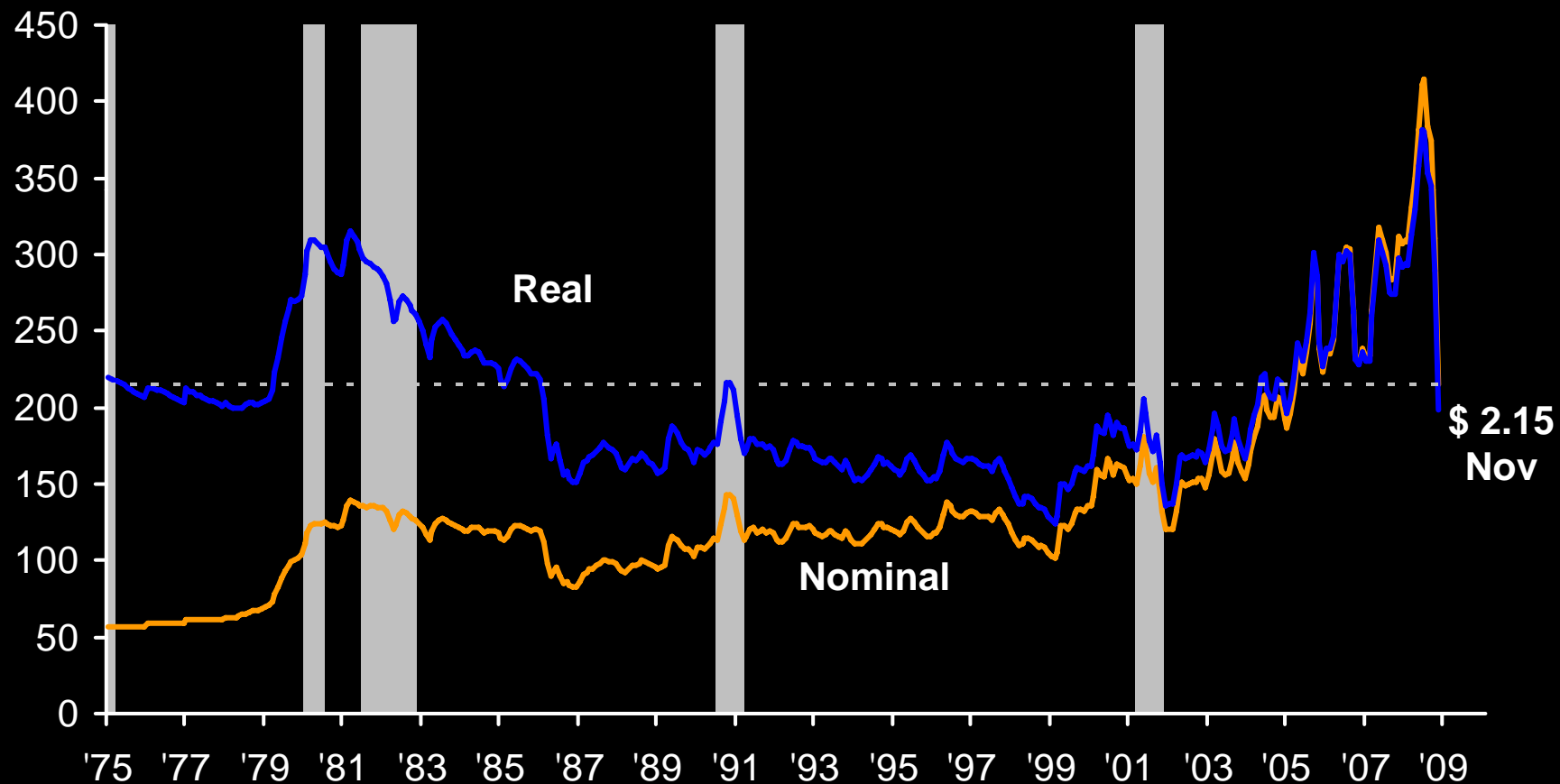
2006 Dollars
Per Barrel



Gasoline Prices

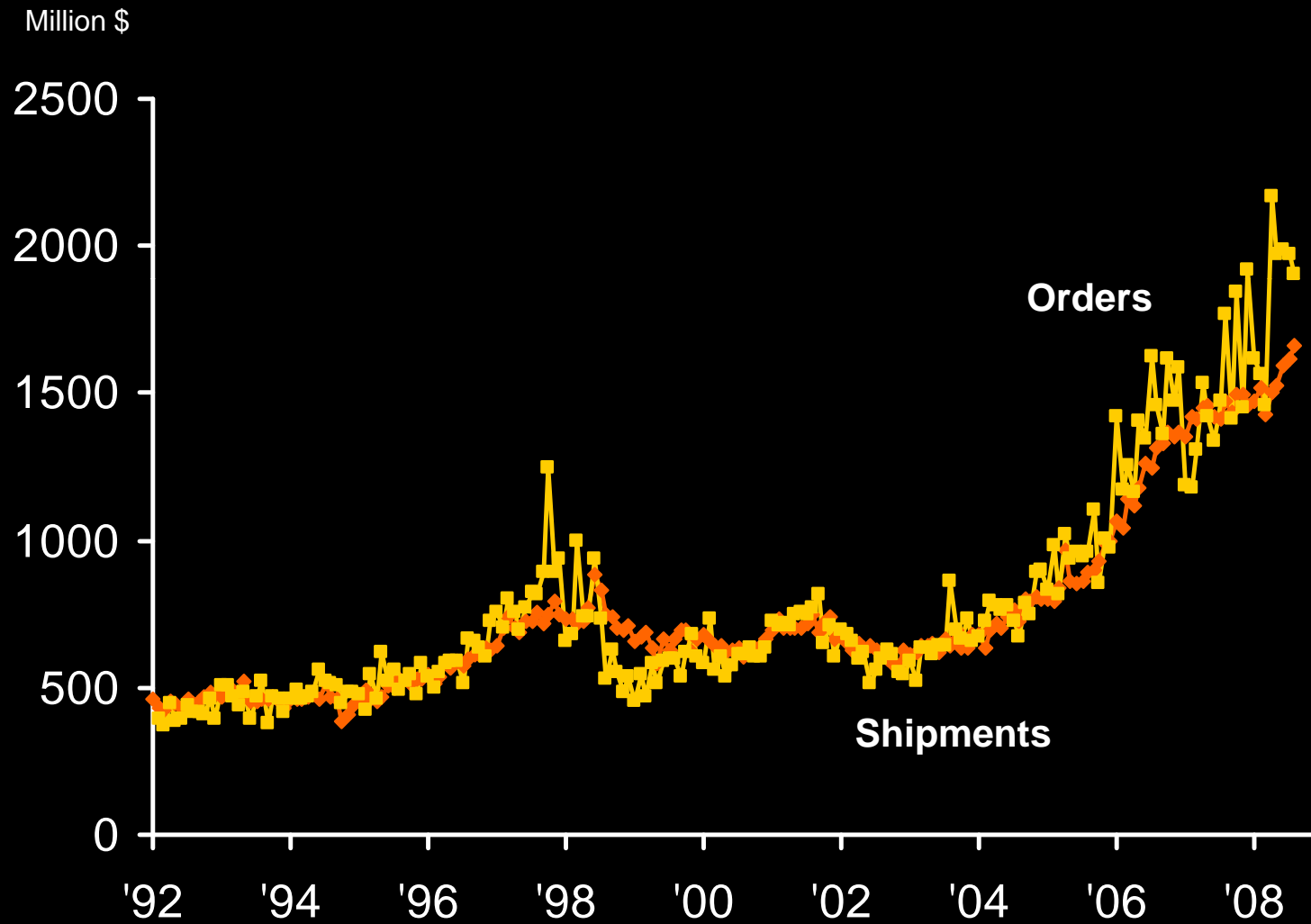
All Grades, Retail

Cents per
Gallon, 2006\$



Drilling Activity

Orders and Shipments of Oil Field, Gas Field, and Mining Equipment

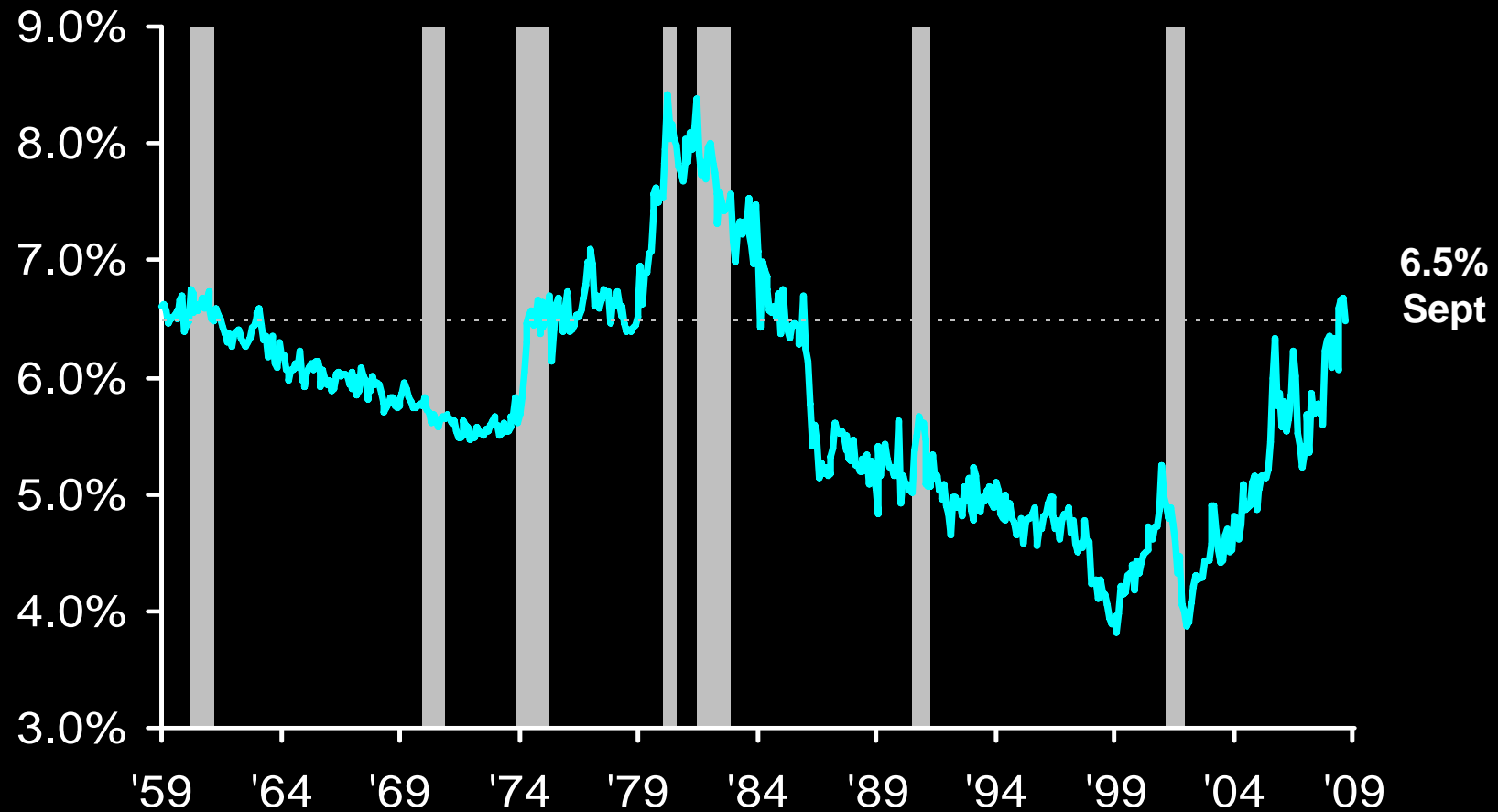


Source: Census Bureau

Consumer Spending

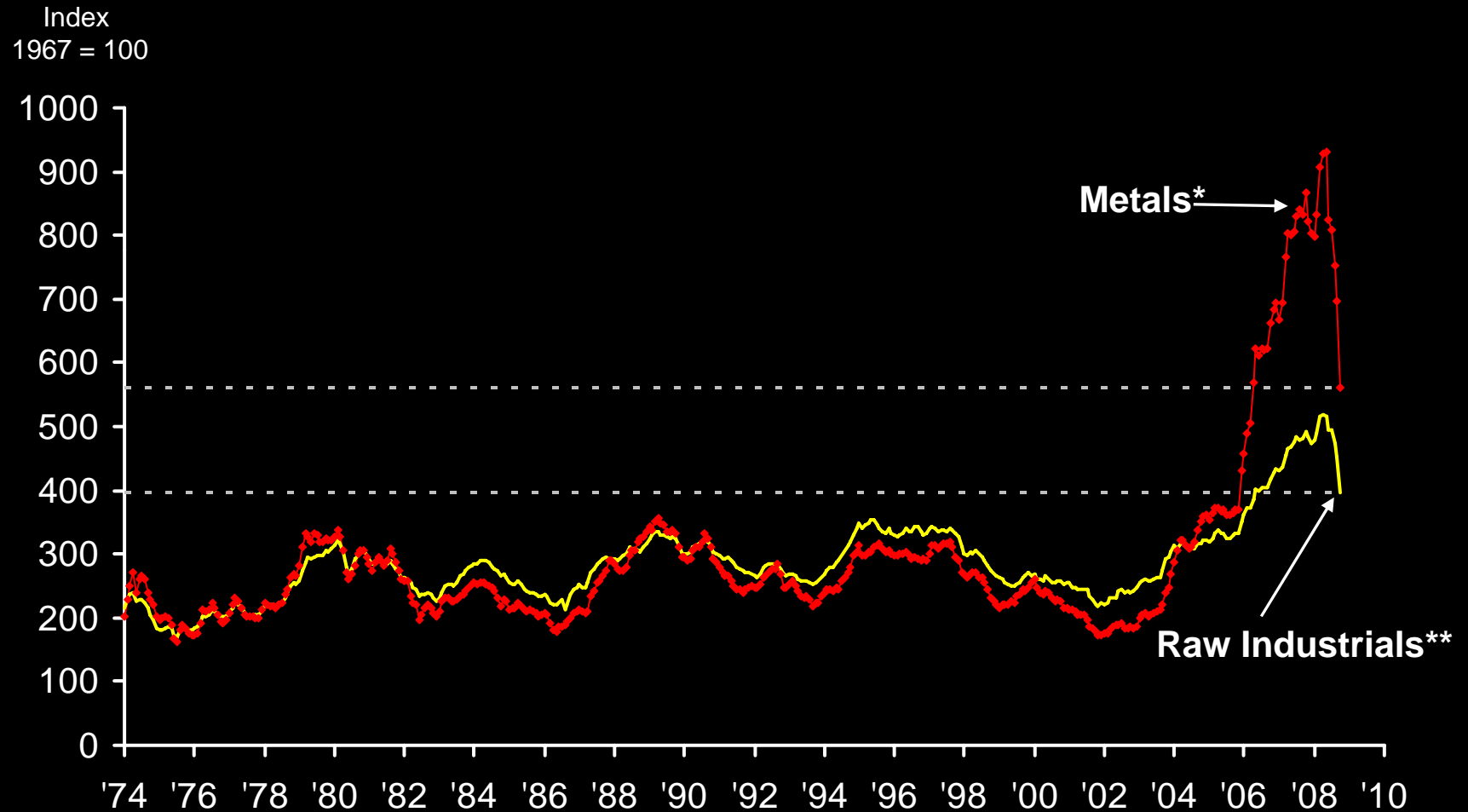
Energy Goods & Services

% of
Disposable Income



Commodity Prices

Commodity Research Bureau

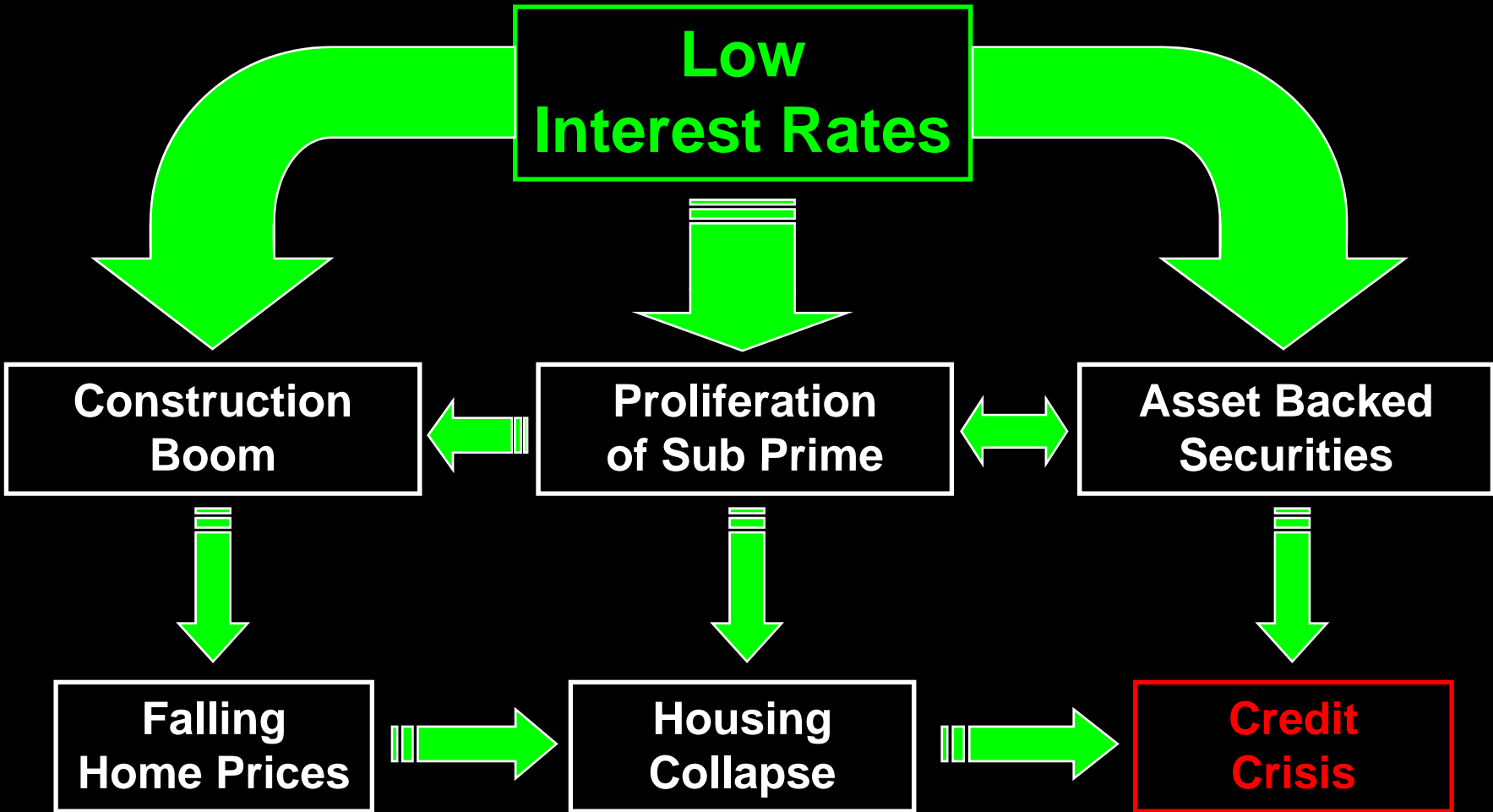


* Includes copper scrap, lead scrap, steel scrap, tin, and zinc.

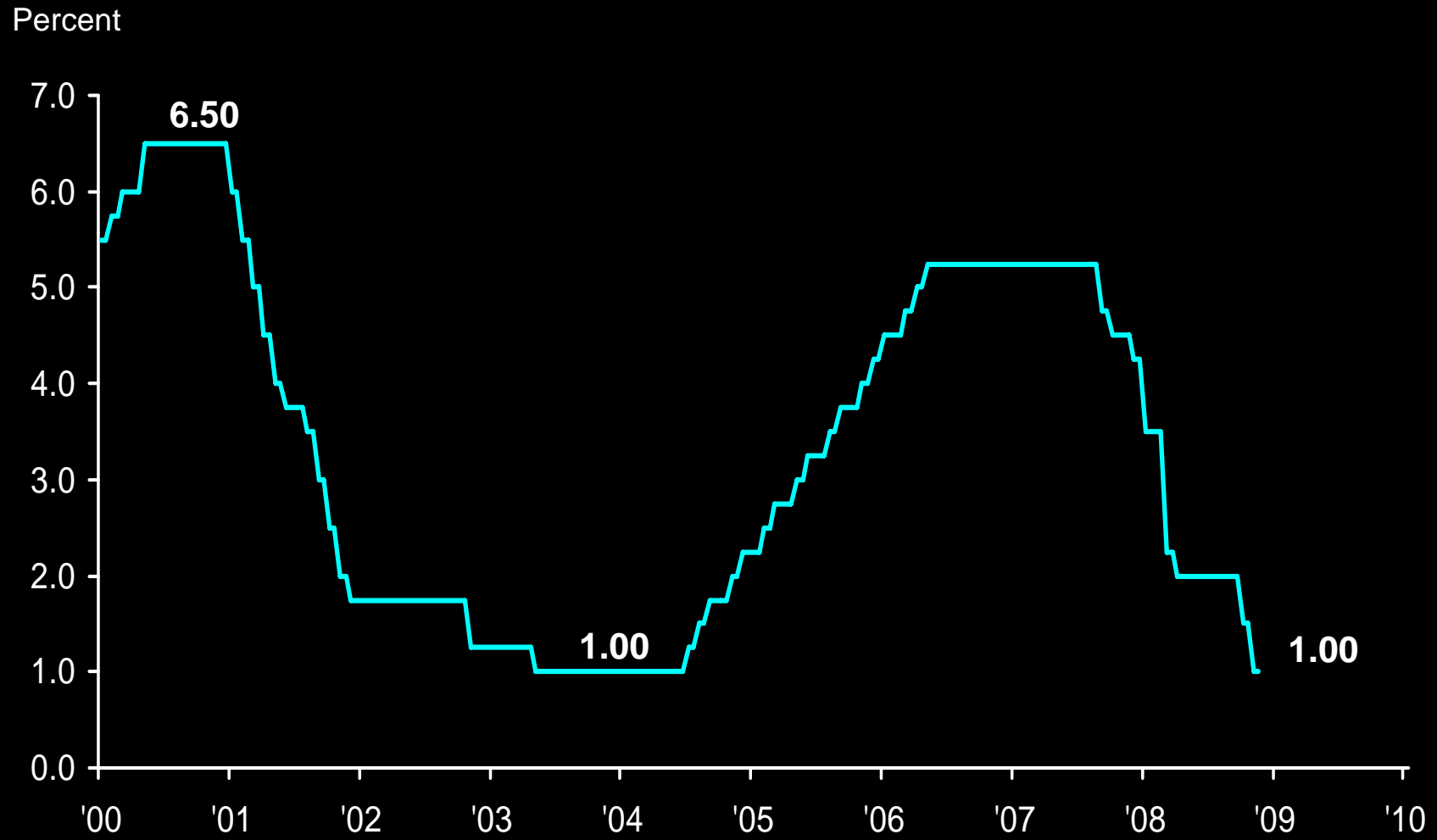
** Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow.

Financial Crisis

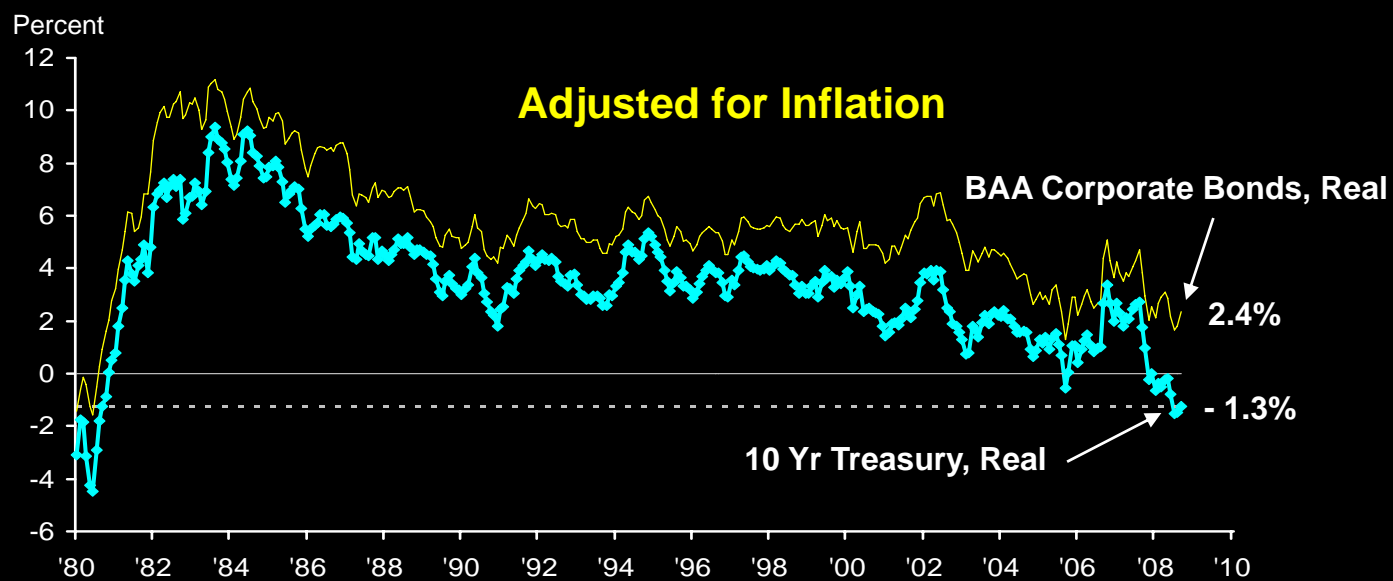
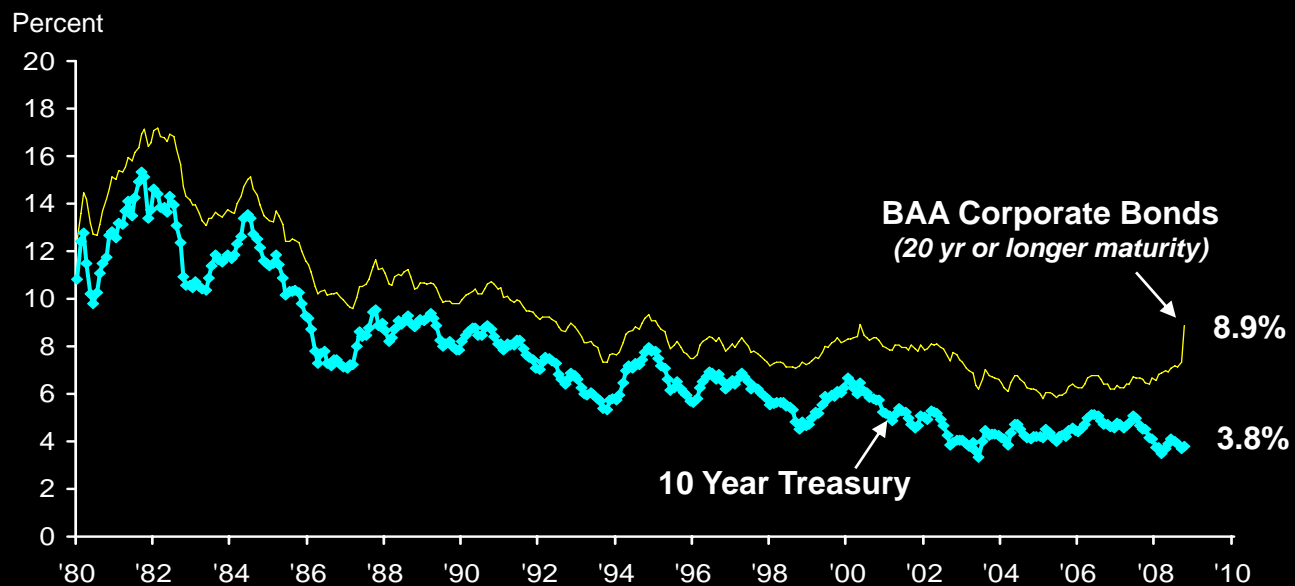
Evolution of Financial Crisis



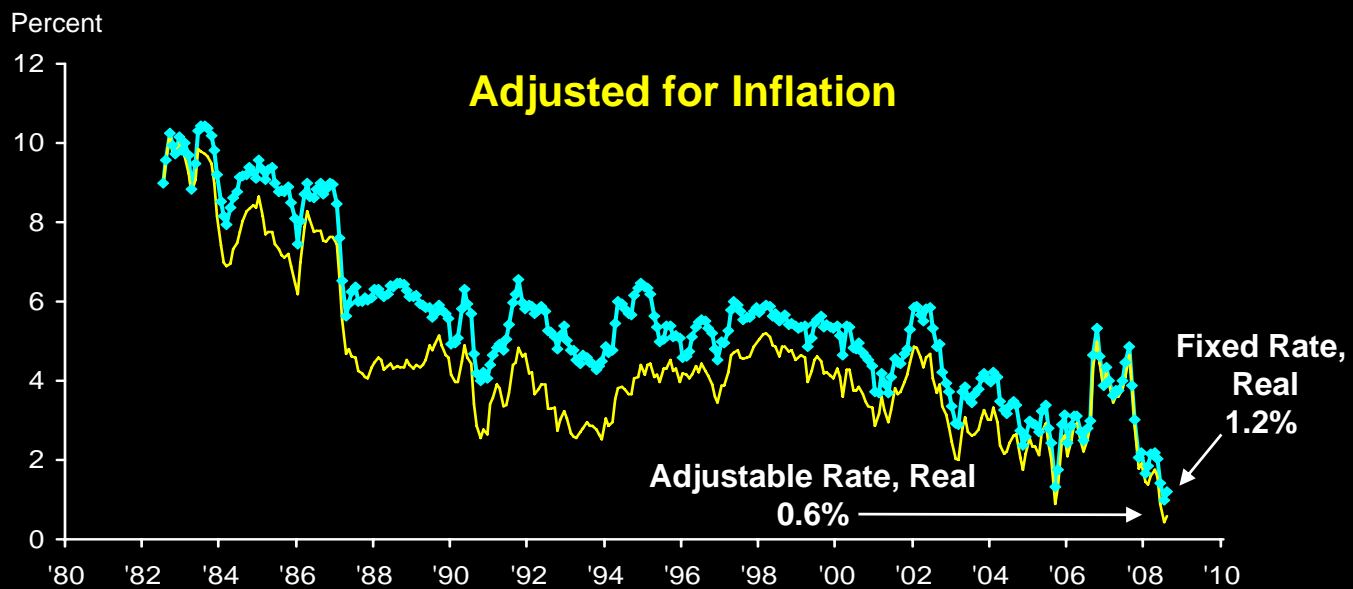
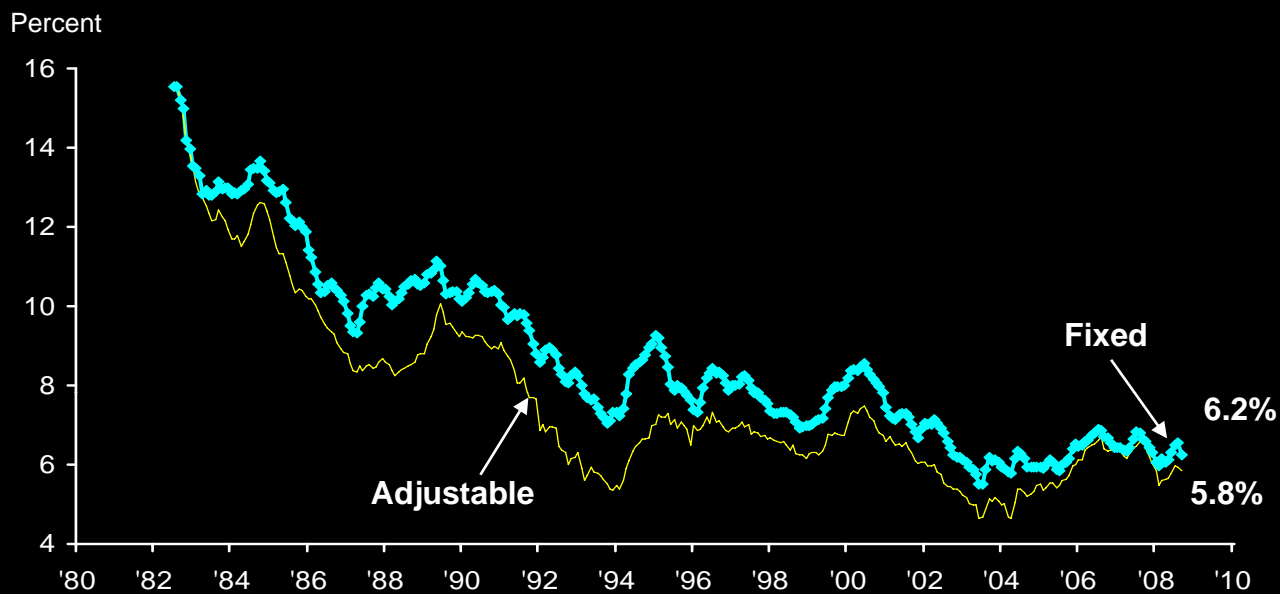
U.S. Federal Funds Target Rate



Interest Rates



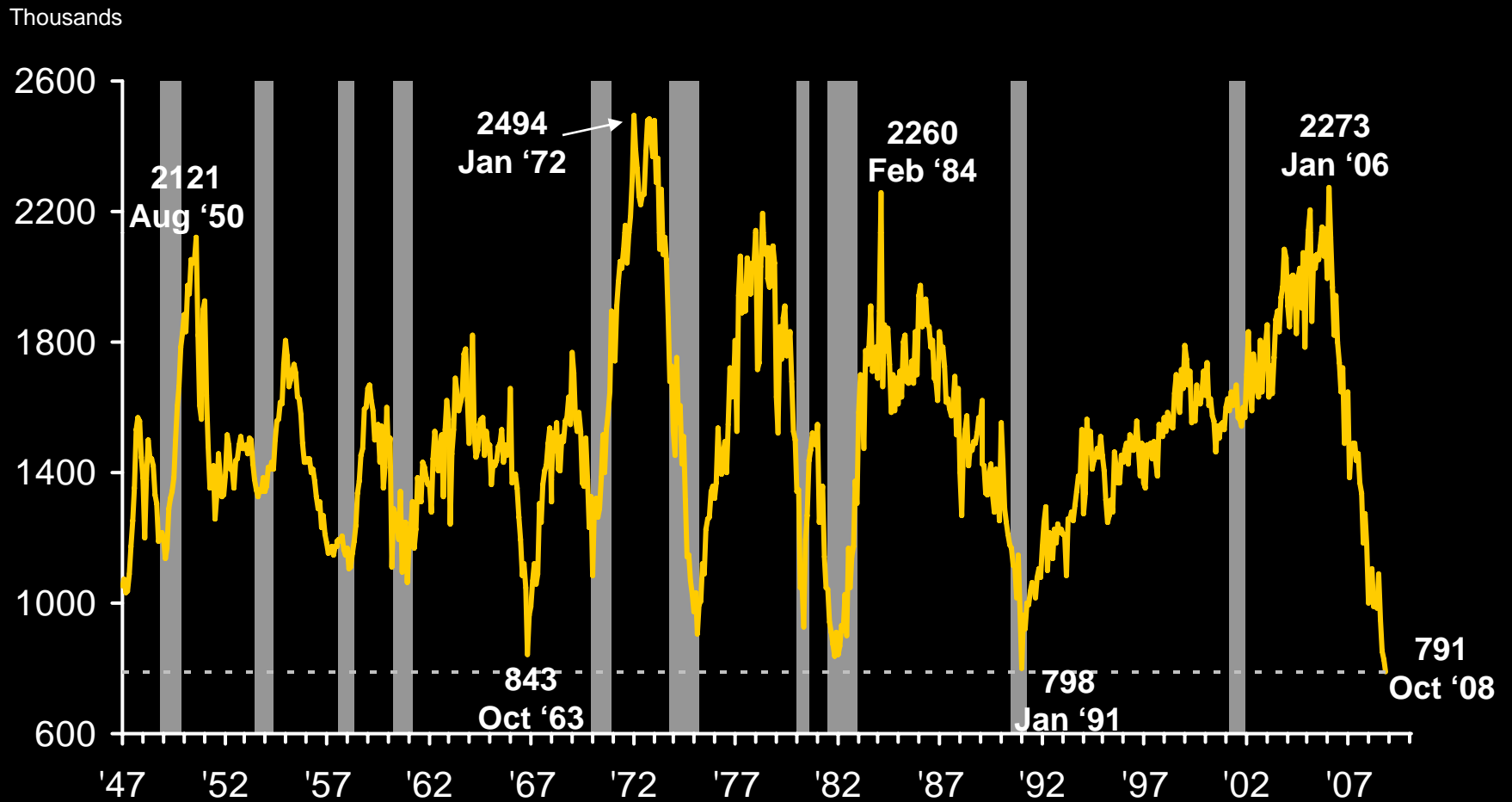
Mortgage Rates



Construction Boom

Housing Starts

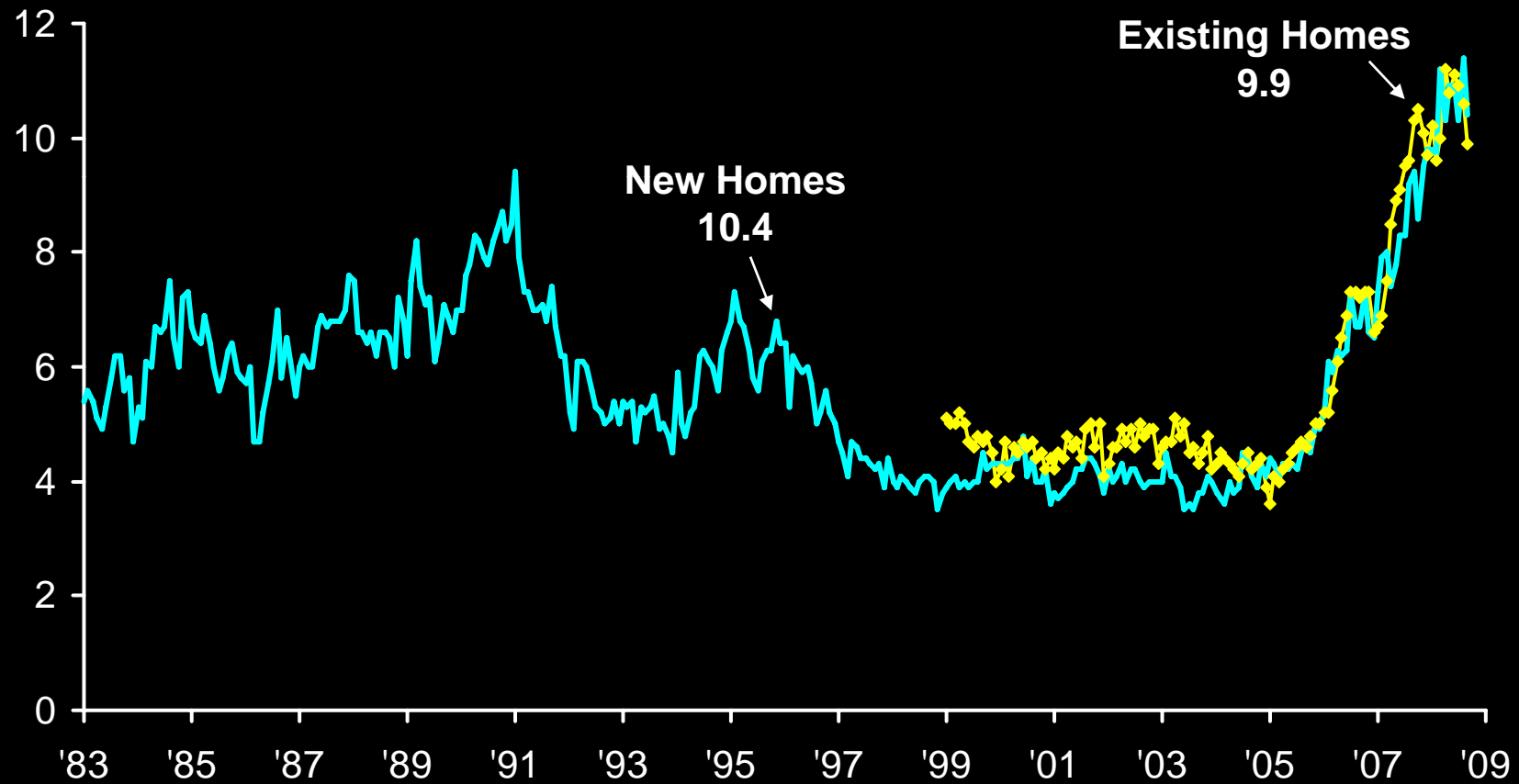
New Housing Units



Source: Bureau of Census

Home Sales Inventory

Months of
Supply, SA

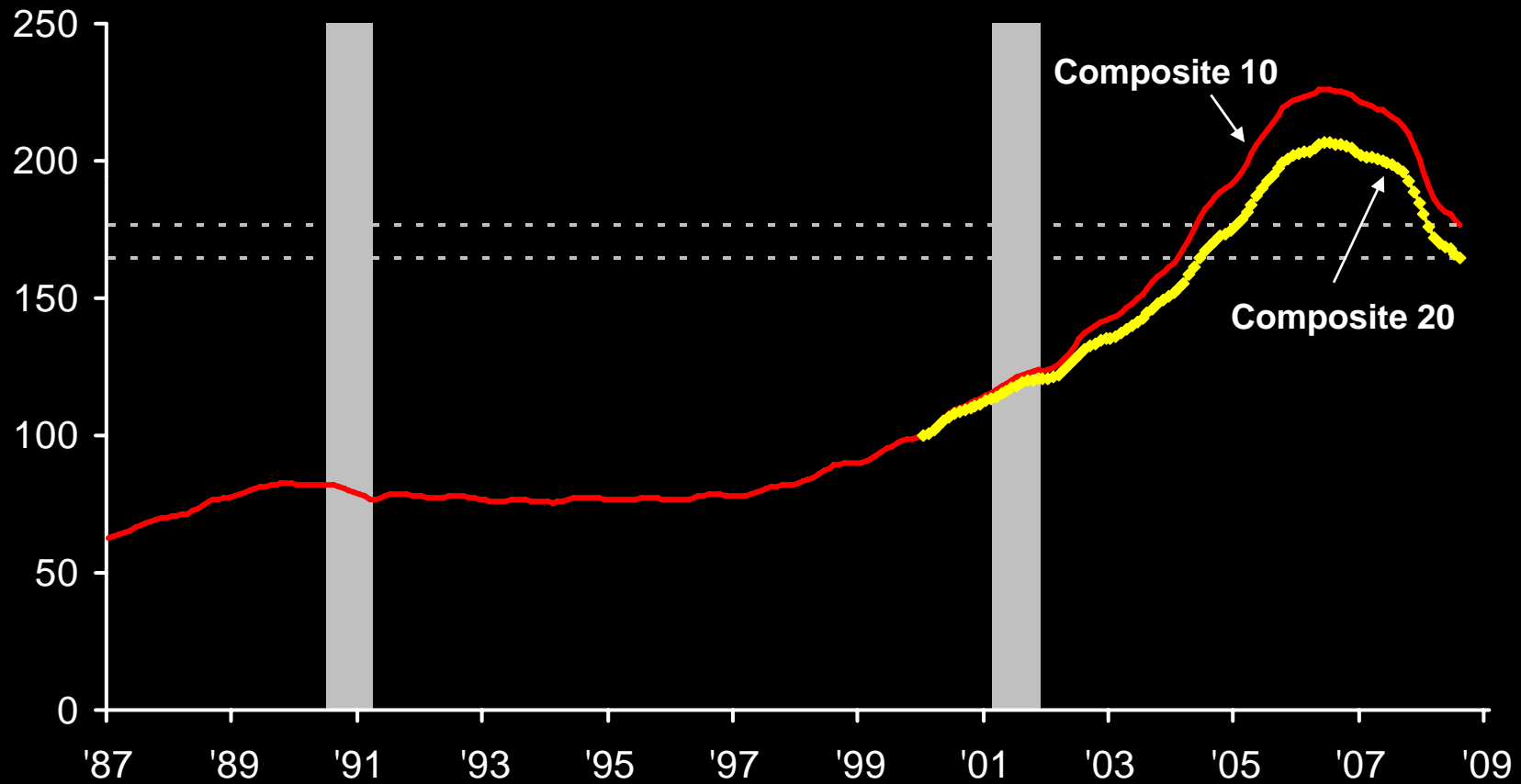


Source: Bureau of Census, NAR

National Home Price Index

S&P/Case-Shiller

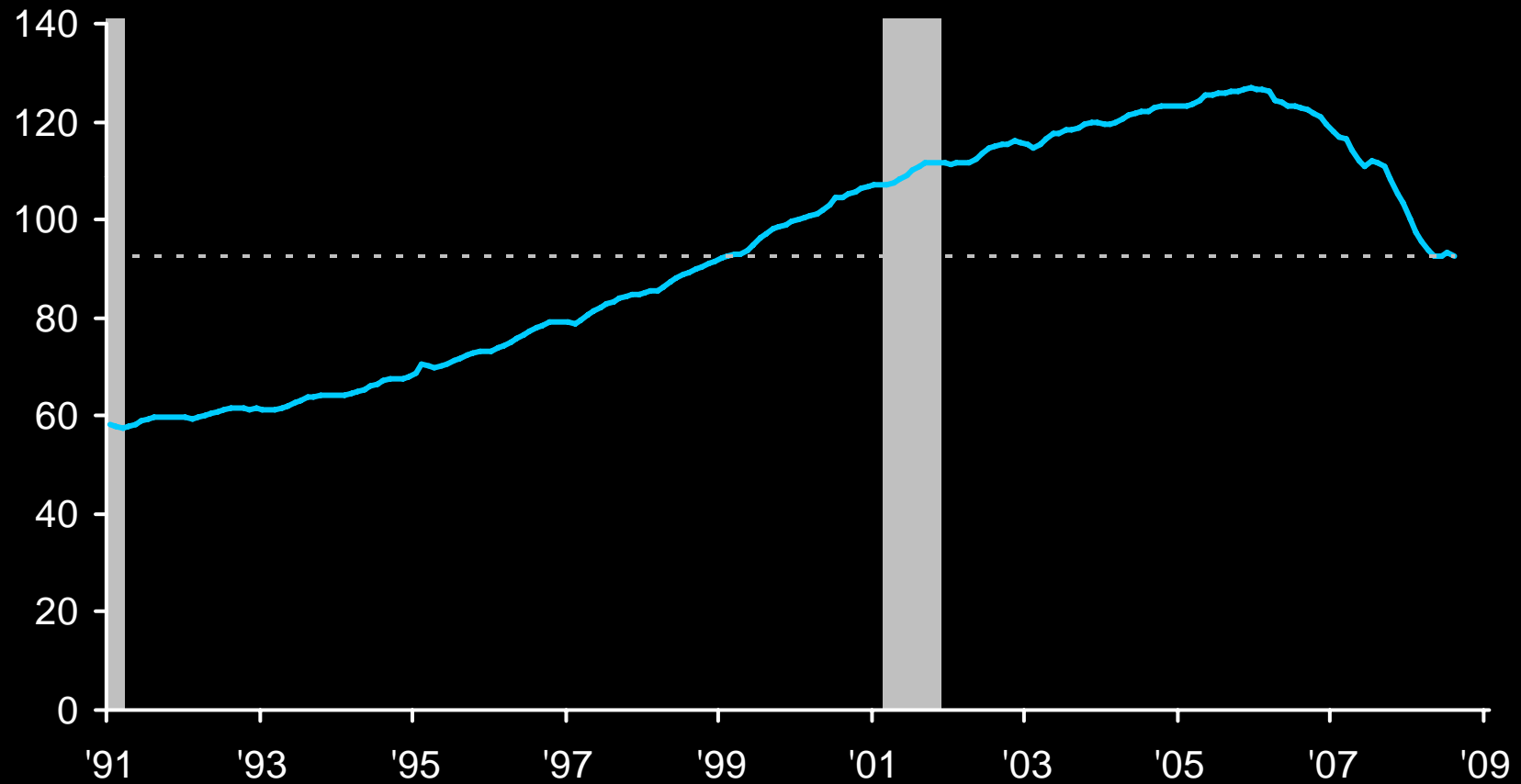
Index, NSA
Jan 2000=100



Detroit Home Price Index

S&P/Case-Shiller

Index, NSA
Jan 2000=100



Sub-Prime Mortgages

Buying Conditions for Houses

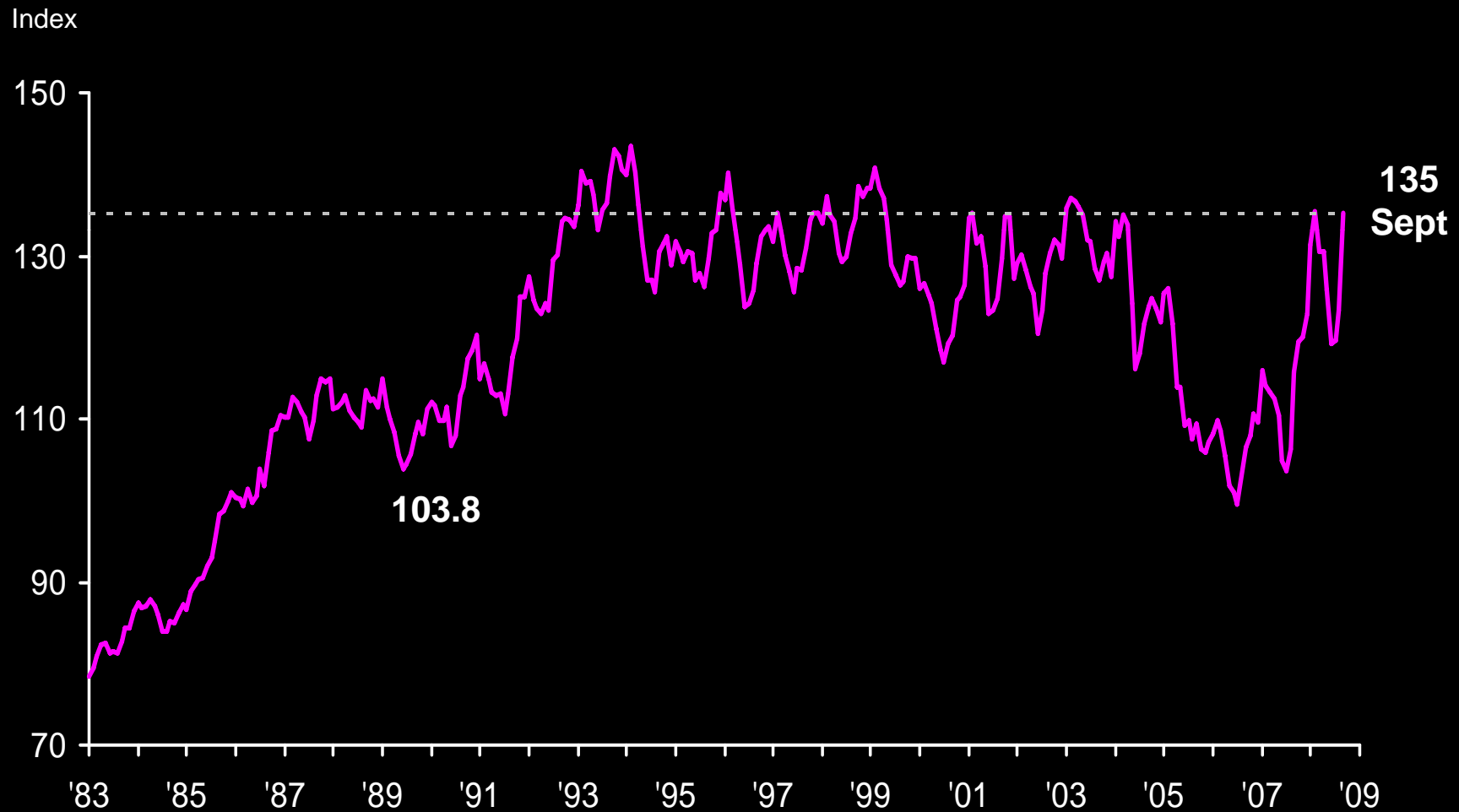
During Next 12 Months

Index



U.S. Housing Affordability Index

Existing Homes



Source: National Association of Realtors

Homeownership Rate

NSA

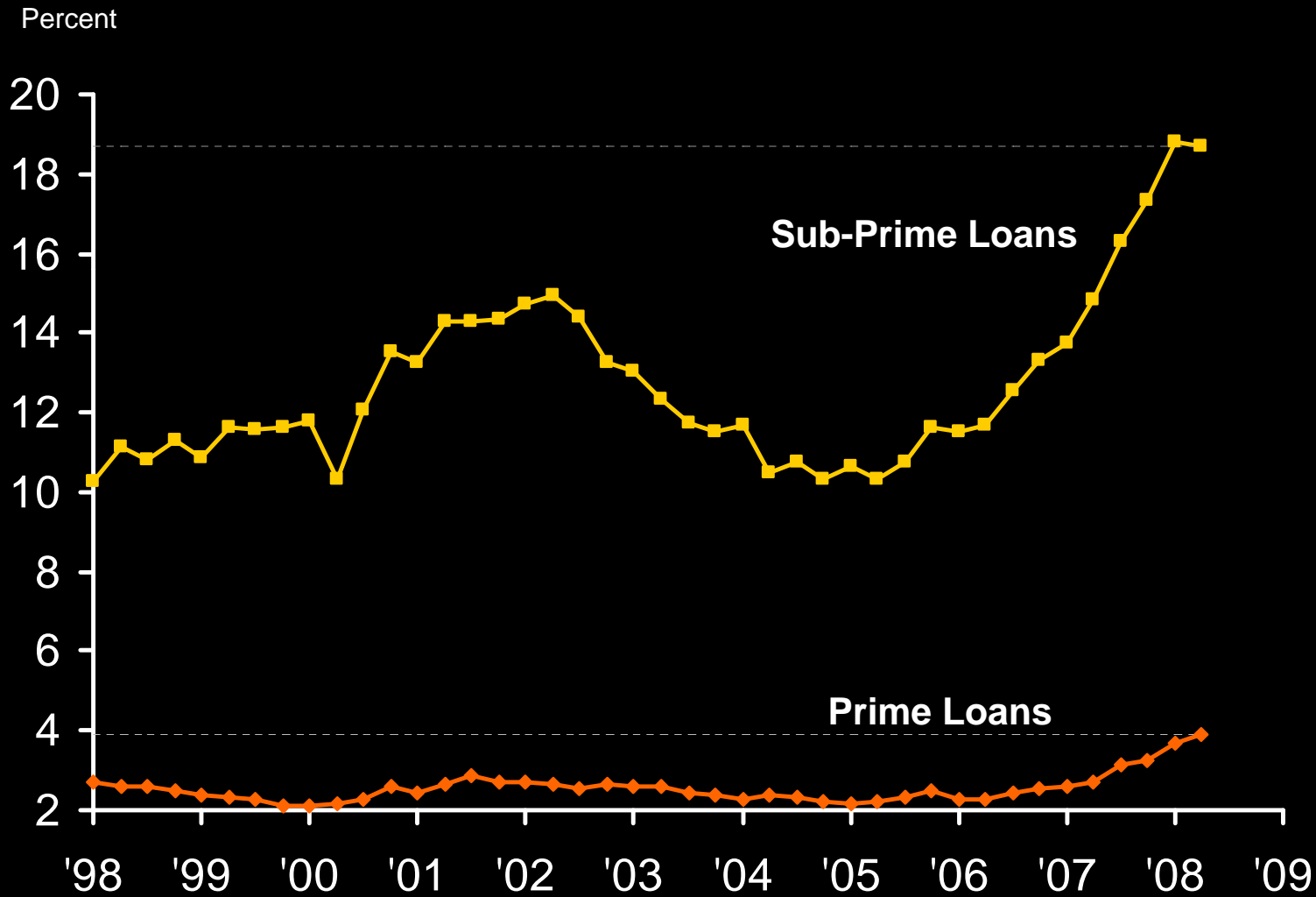
Percent



Source: Census

Mortgage Delinquencies

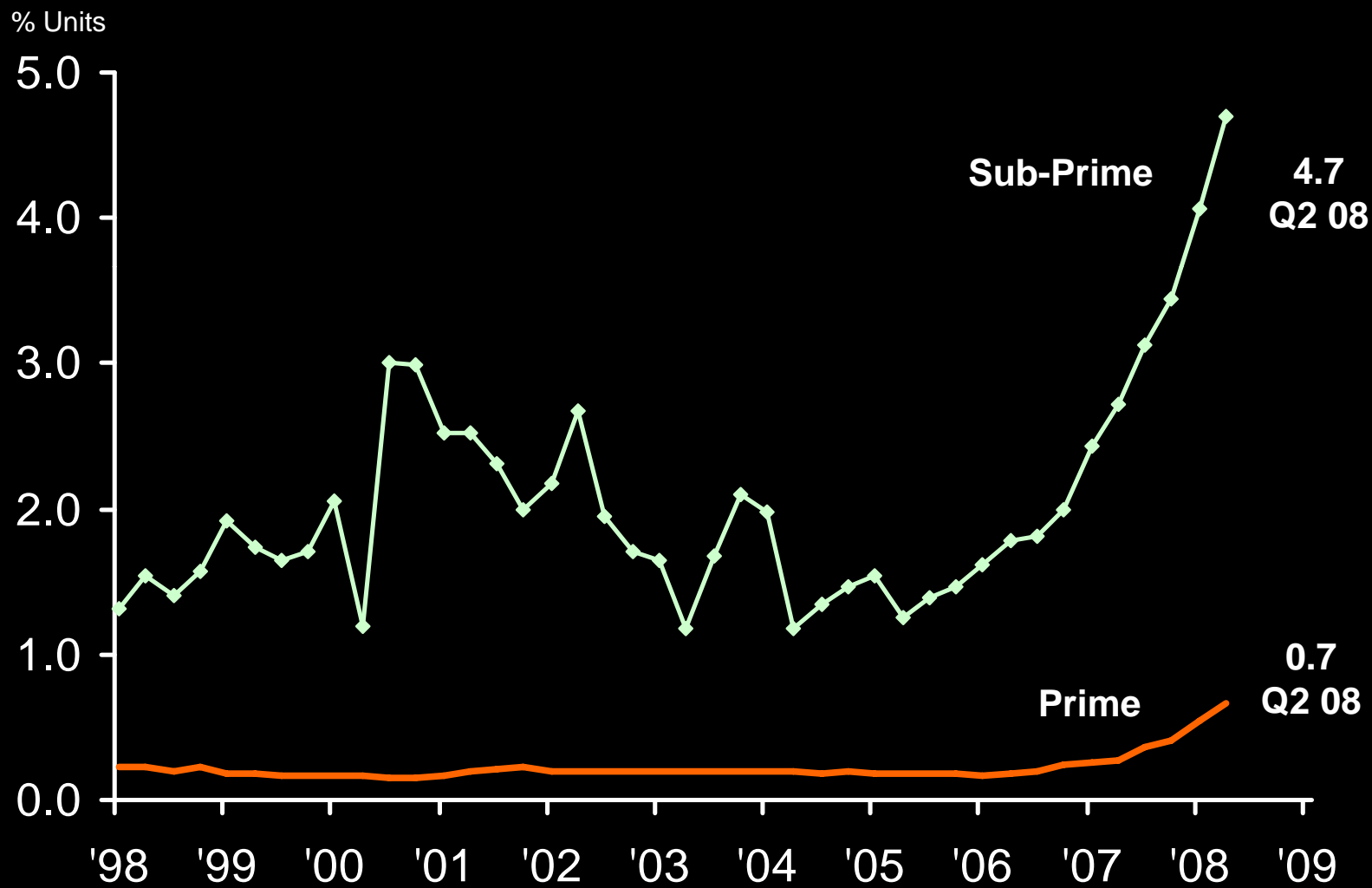
Total Loans with Installments Past Due, SA



Source: Mortgage Bankers Association

Foreclosures

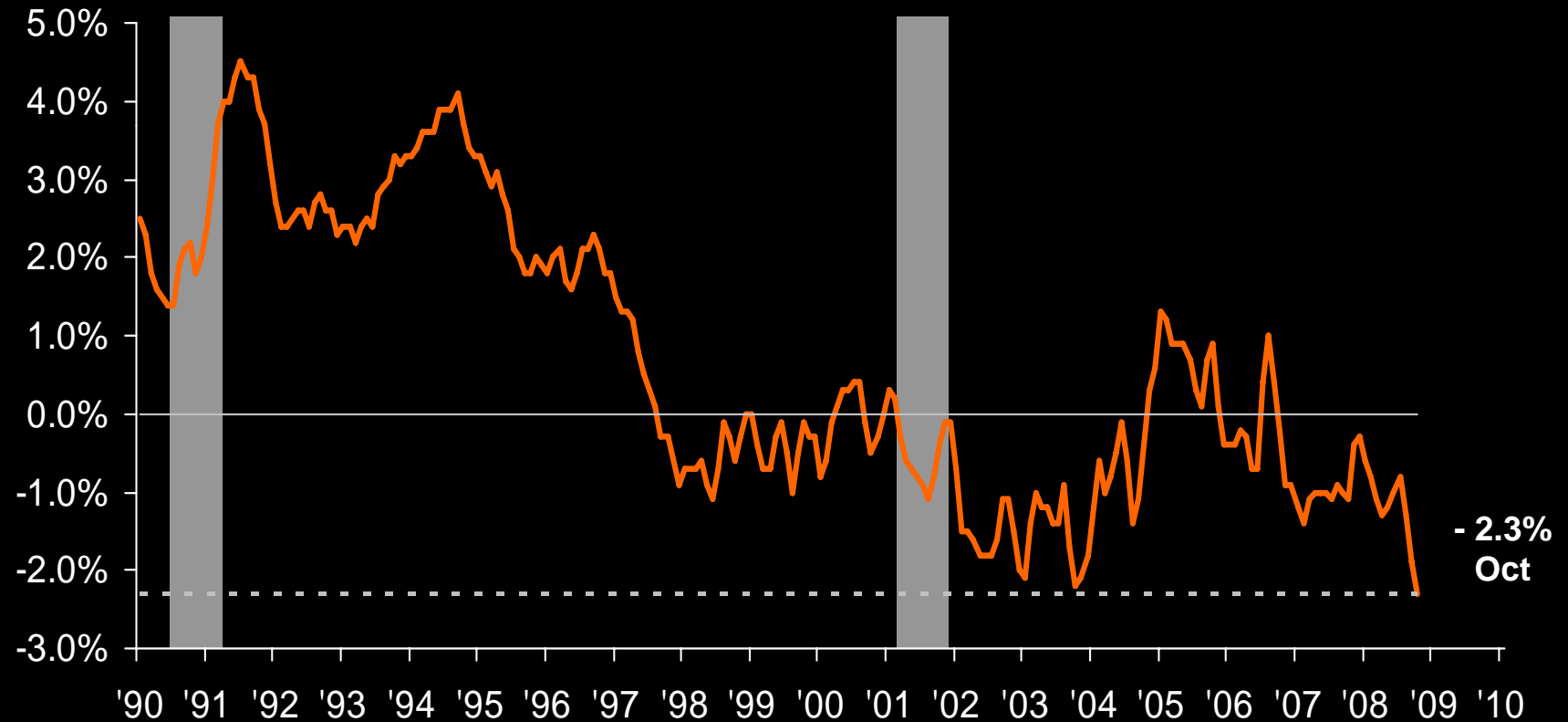
Started During Quarter, SA



Auto Industry

New Vehicle Consumer Prices

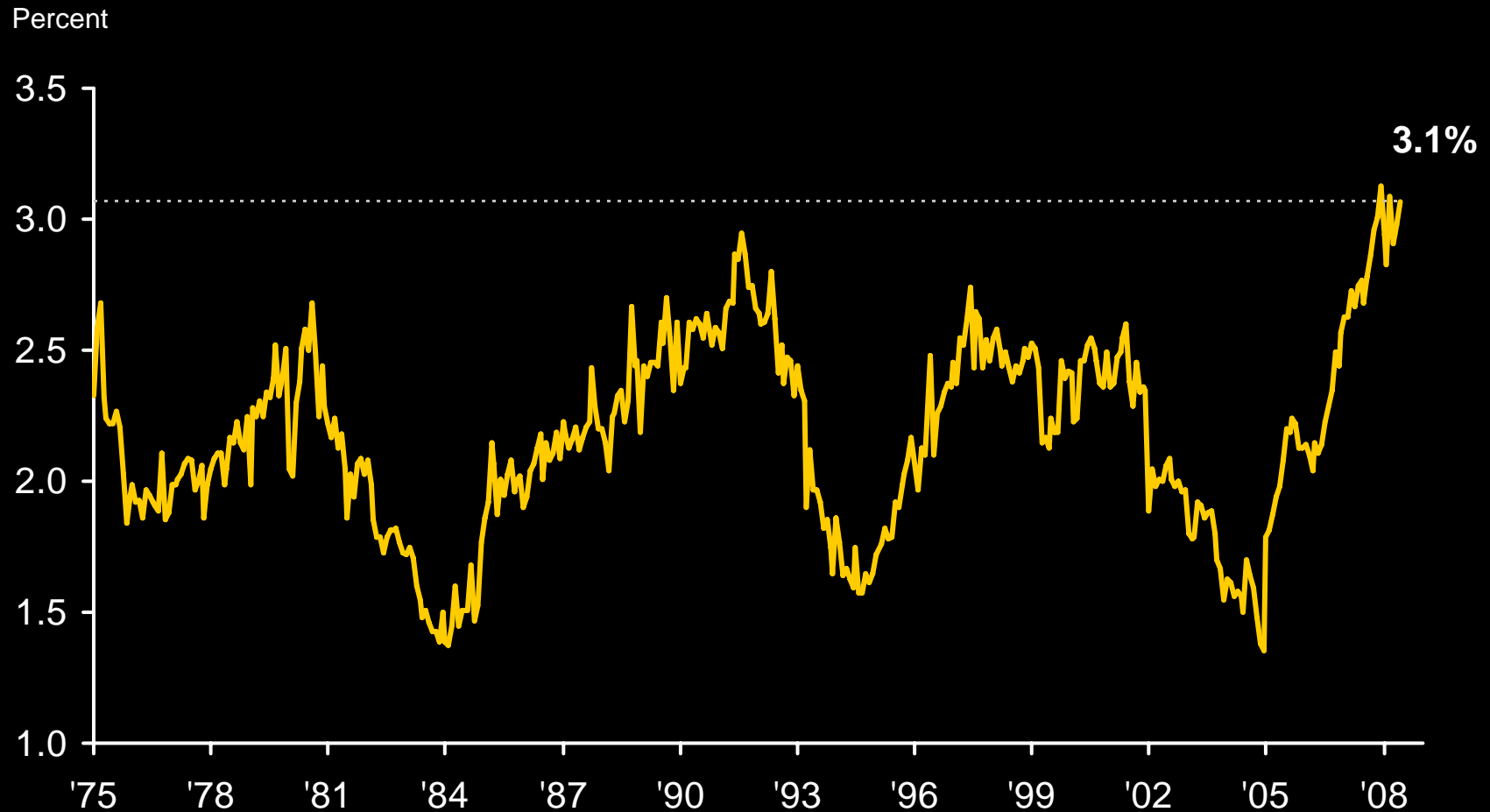
% Change
Year/Year



Monthly Data

Auto Loans Past Due 30 Days or More

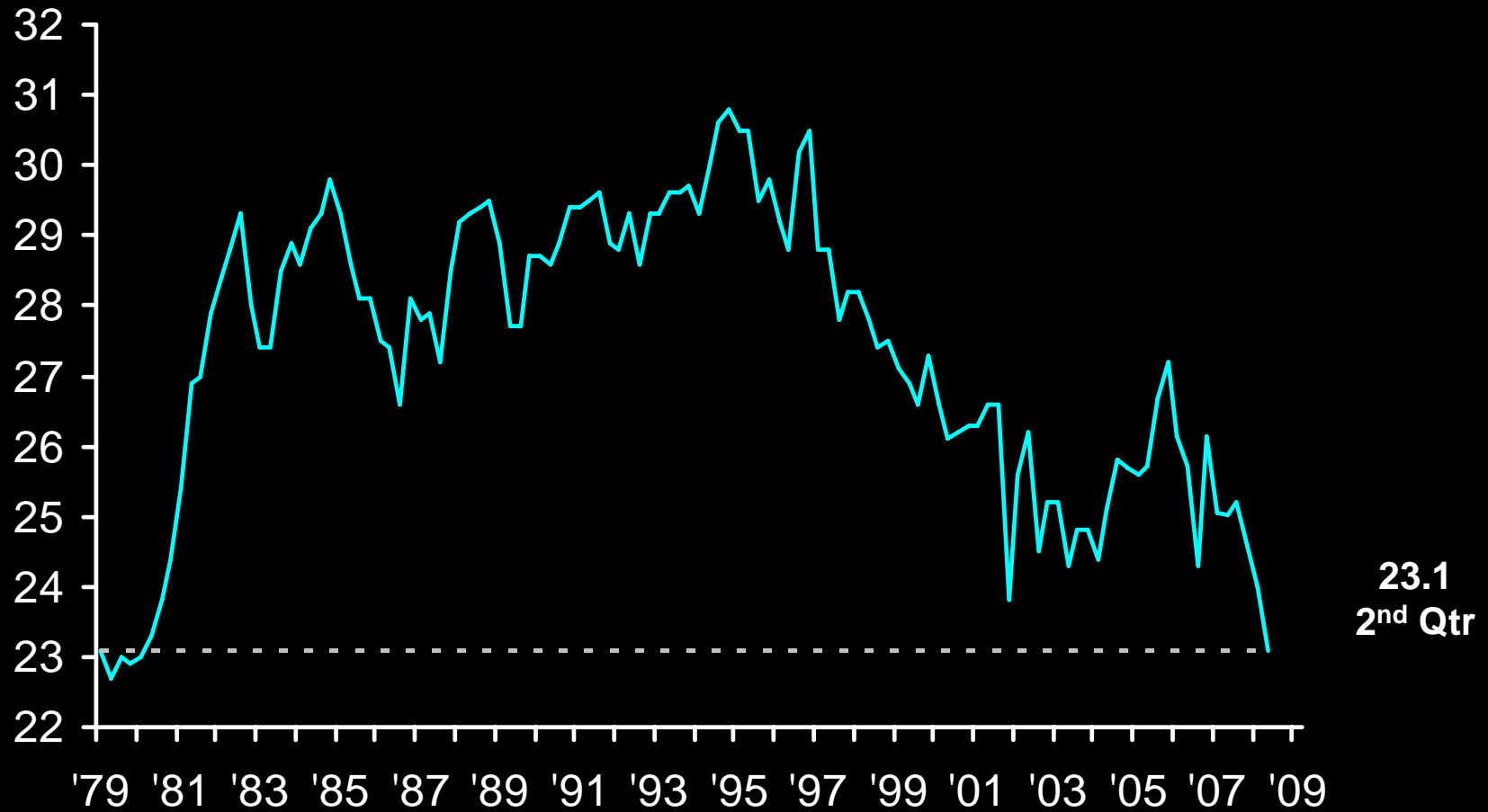
Indirect Loans, Closed-End



Source: American Bankers Association

Auto Affordability

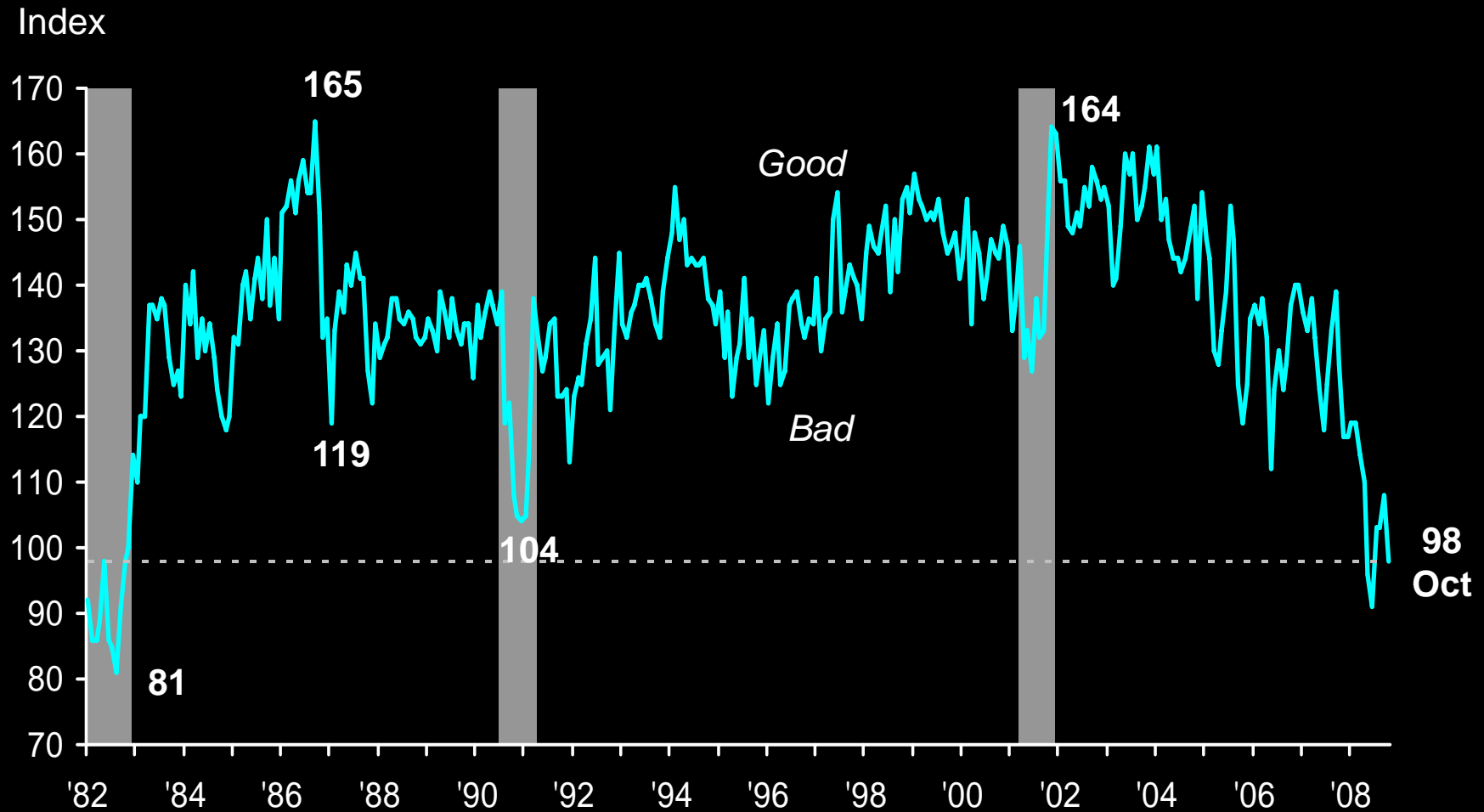
Weeks of Median
Income



Source: Comerica Bank

Buying Conditions for Vehicles

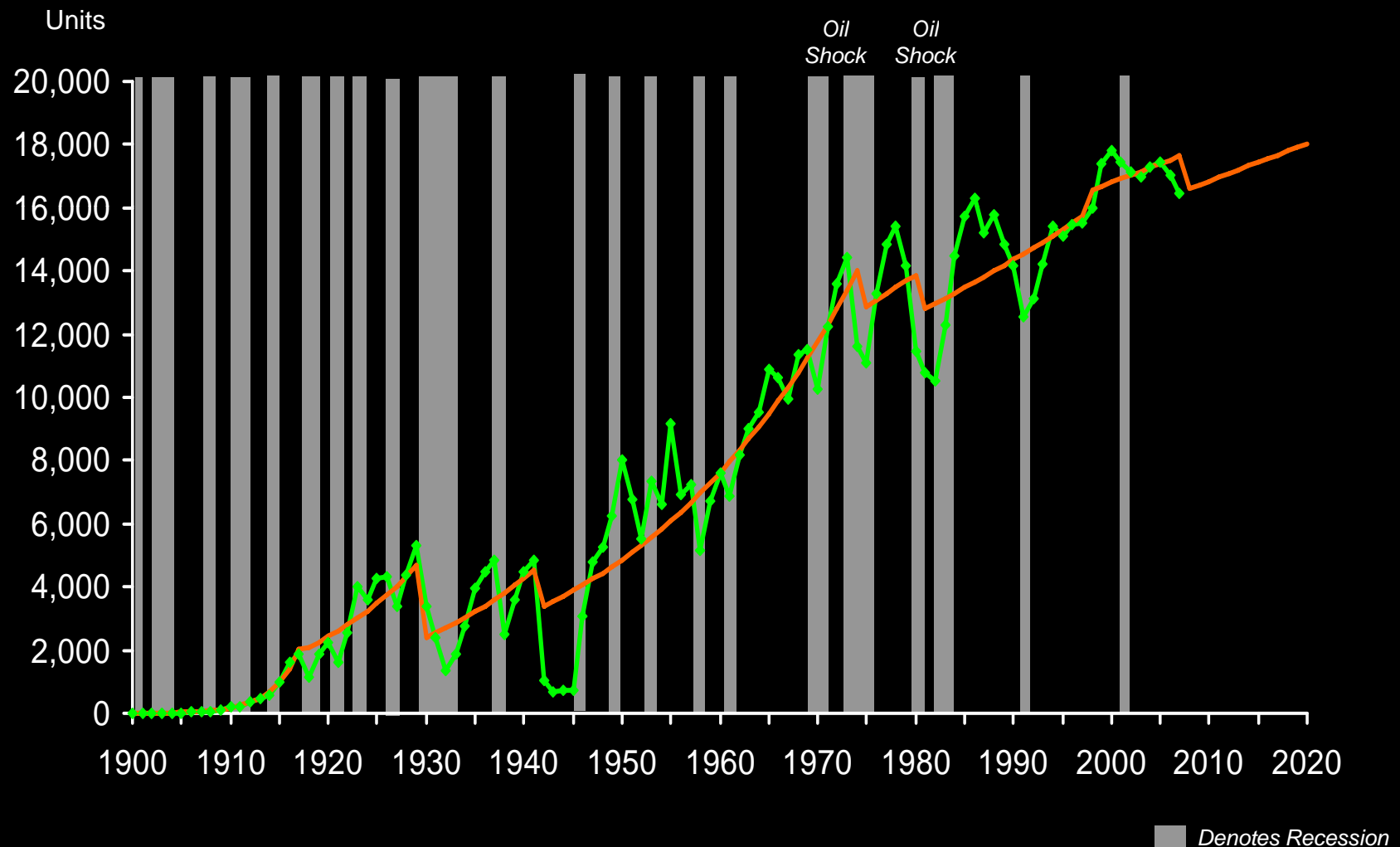
During Next 12 Months



Source: Reuters/University of Michigan

U.S. Auto Industry

Long Term Trend Analysis



U.S. Auto Industry

Long Term Trend Analysis

<u>Trend Ranges</u>	<u>Growth Rates</u>	<u>% Change In Intercept</u>	<u>Trend Changing Event</u>
1900-1917	43.7%		Ford Model T begins production 1908
1918-1929	7.5%		U.S. enters WWI, April 6, 1917
1930-1941	6.0%	- 49%	Stock Market Crash, October 29, 1929
1942-1959	4.6%	- 25%	Pearl Harbor, December 7, 1941
1960-1974	4.4%	n/c	Post WWII Baby Boomer Growth, 1960s
1975-1980	1.5%	- 8%	Oil Shock, 1974
1981-1997	1.3%	- 8%	Oil Shock, 1980
1998-2007	0.7%	+ 1%	Auto Incentive Wars & Negative Pricing
2008-2020	0.7%	- 6%	Credit Crisis, Housing Bubble, Oil Surge

Demand for New Vehicles

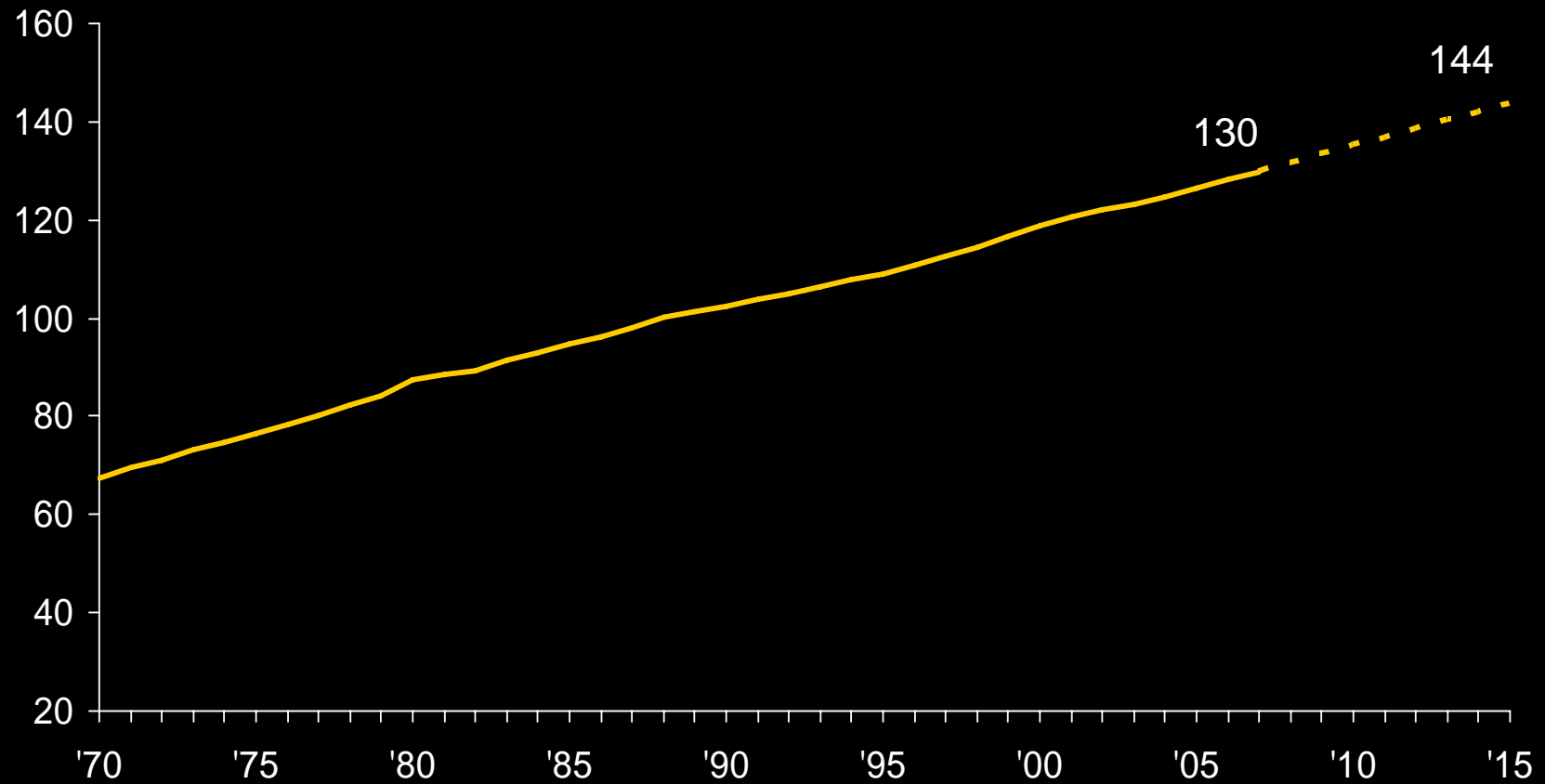
Three Determinants of Long-Run Trend

- 1. Change in number of households**
- 2. Change in number of vehicles per household**
- 3. Replacement of scrapped vehicles**

Consumer Households

United States

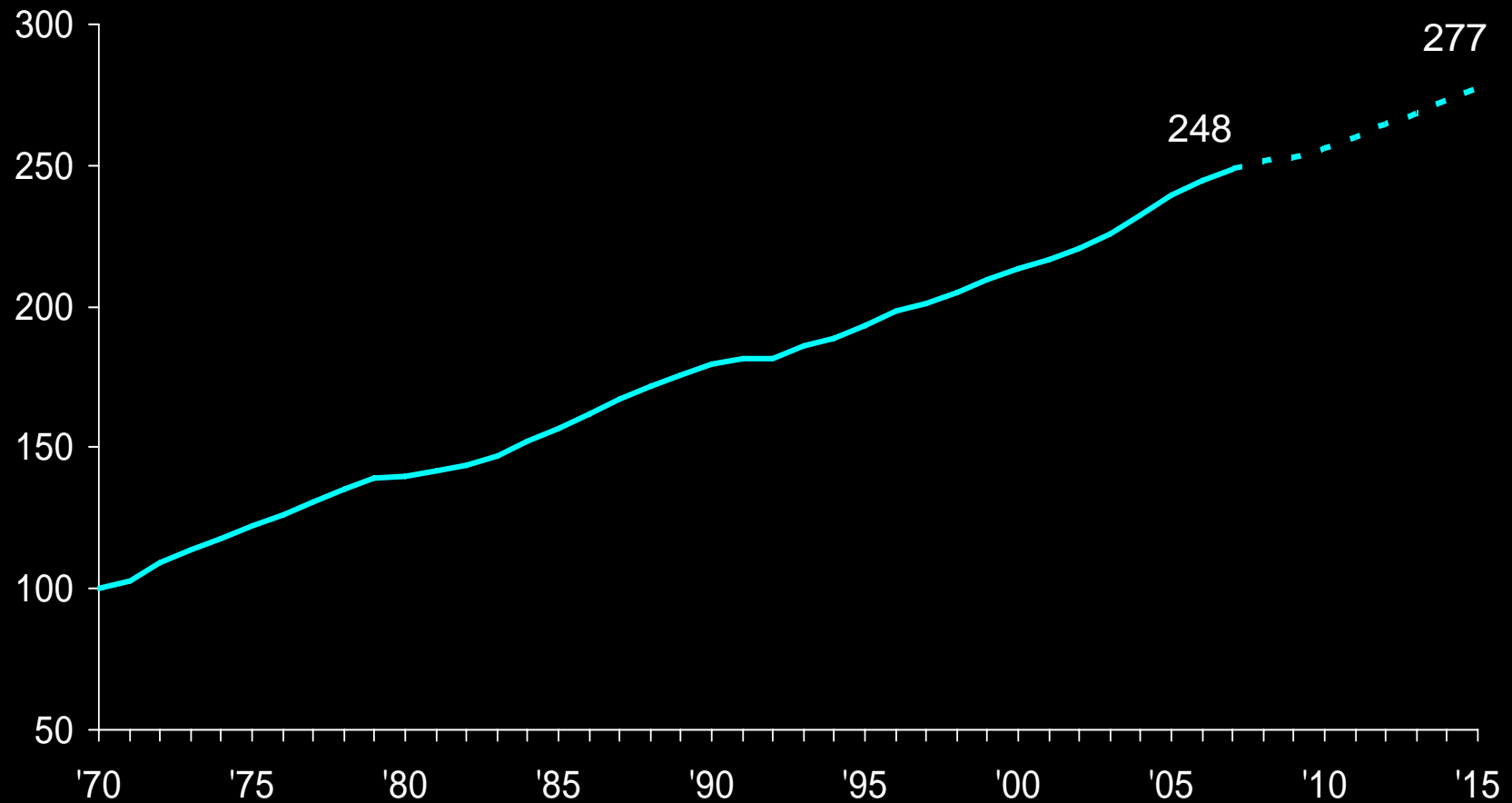
Millions



U.S. Vehicles in Operation

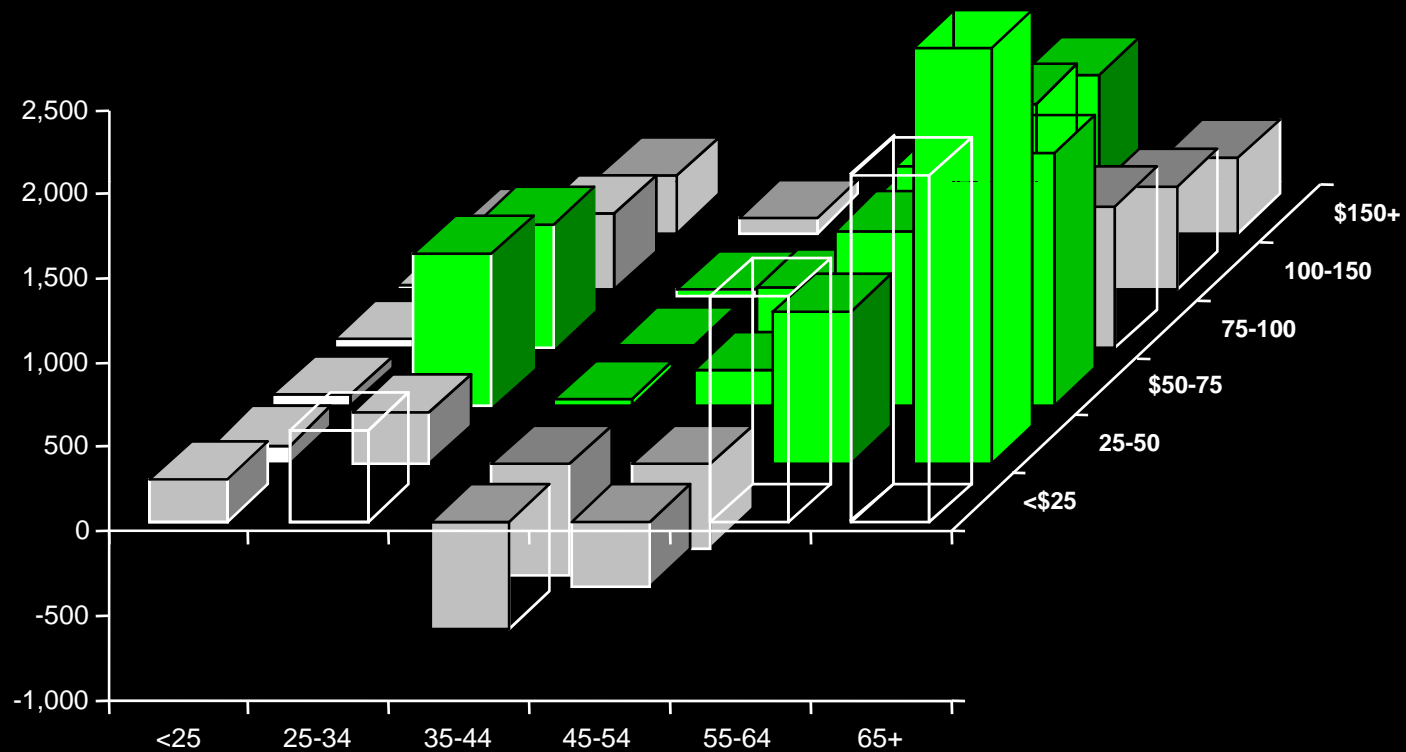
United States

Million Units



Strong Growth in New Car Buying Households

Change in Number of Households, 2006 to 2016

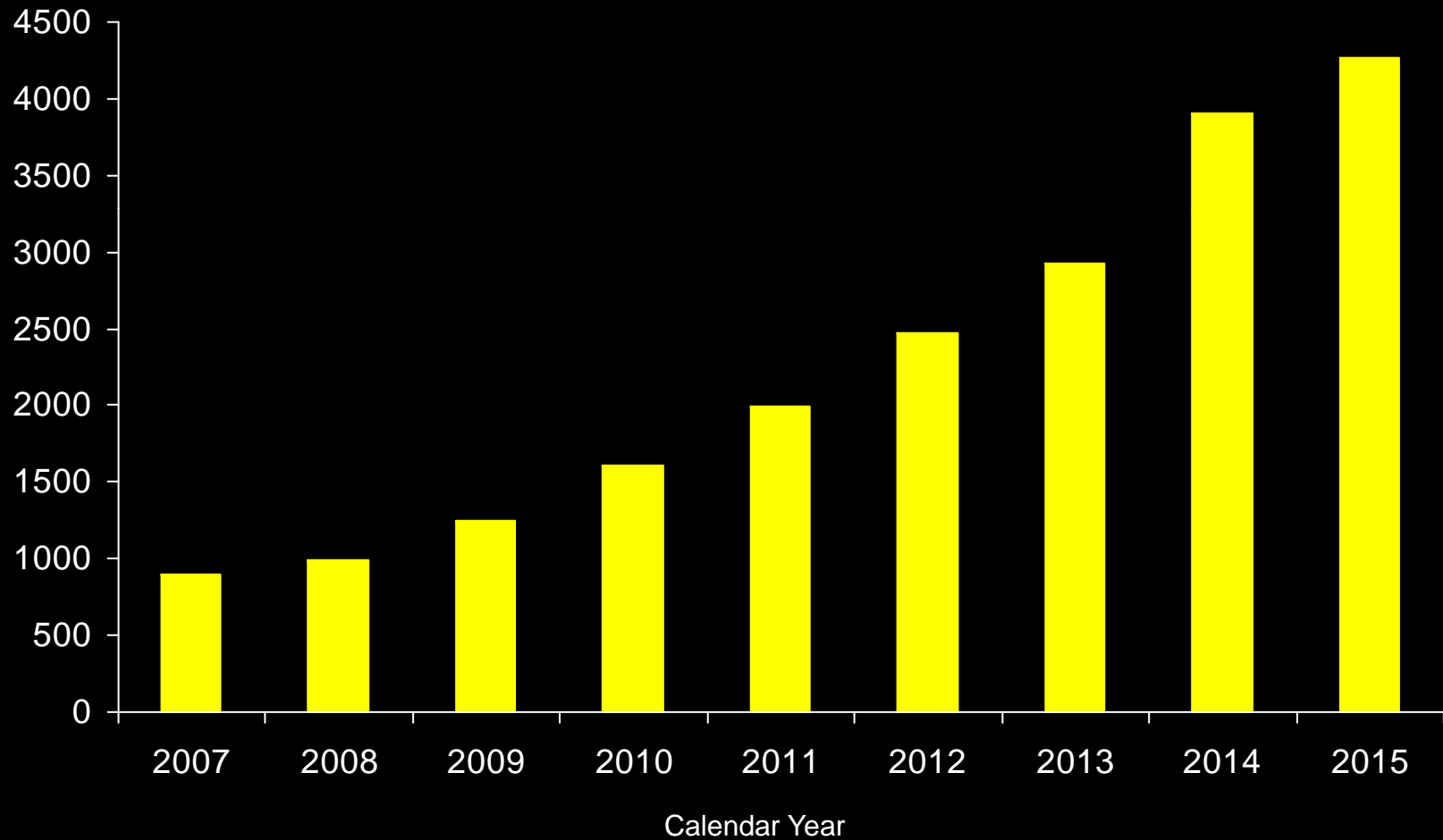


Note: Highlighted boxes are 70% of new vehicle sales.

The Millennials

Vehicle Purchases

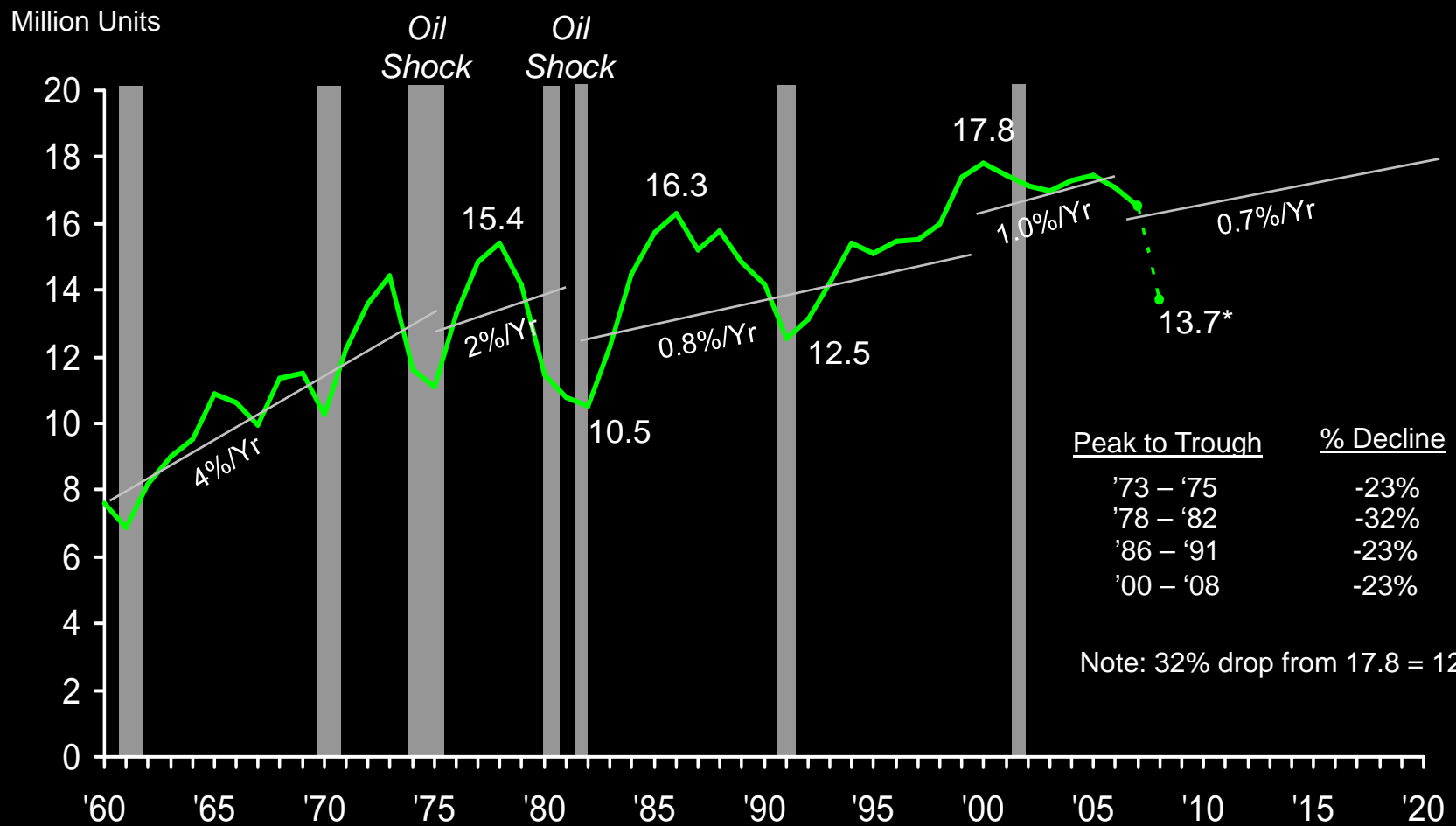
Thousands of Units



Source: Market Outlook & Strategic Vision NVES

U.S. Auto Industry

Number of Vehicles per Year



* Estimate

Necessary conditions for returning to normal rates of economic growth

U.S. Economy

- Housing prices find bottom
- Banks willingness/ability to borrow and lend
- Energy and commodity prices do not re-test recent highs
- Consumer Attitudes need to improve
- Consumer willingness to borrow and spend

Has the risk premium returned to normal?

Negative

- Longer ownership durations, lower vehicle scrappage rates and an aging fleet
- Lower long term growth in vehicle sales
- Decline in household ownership rates

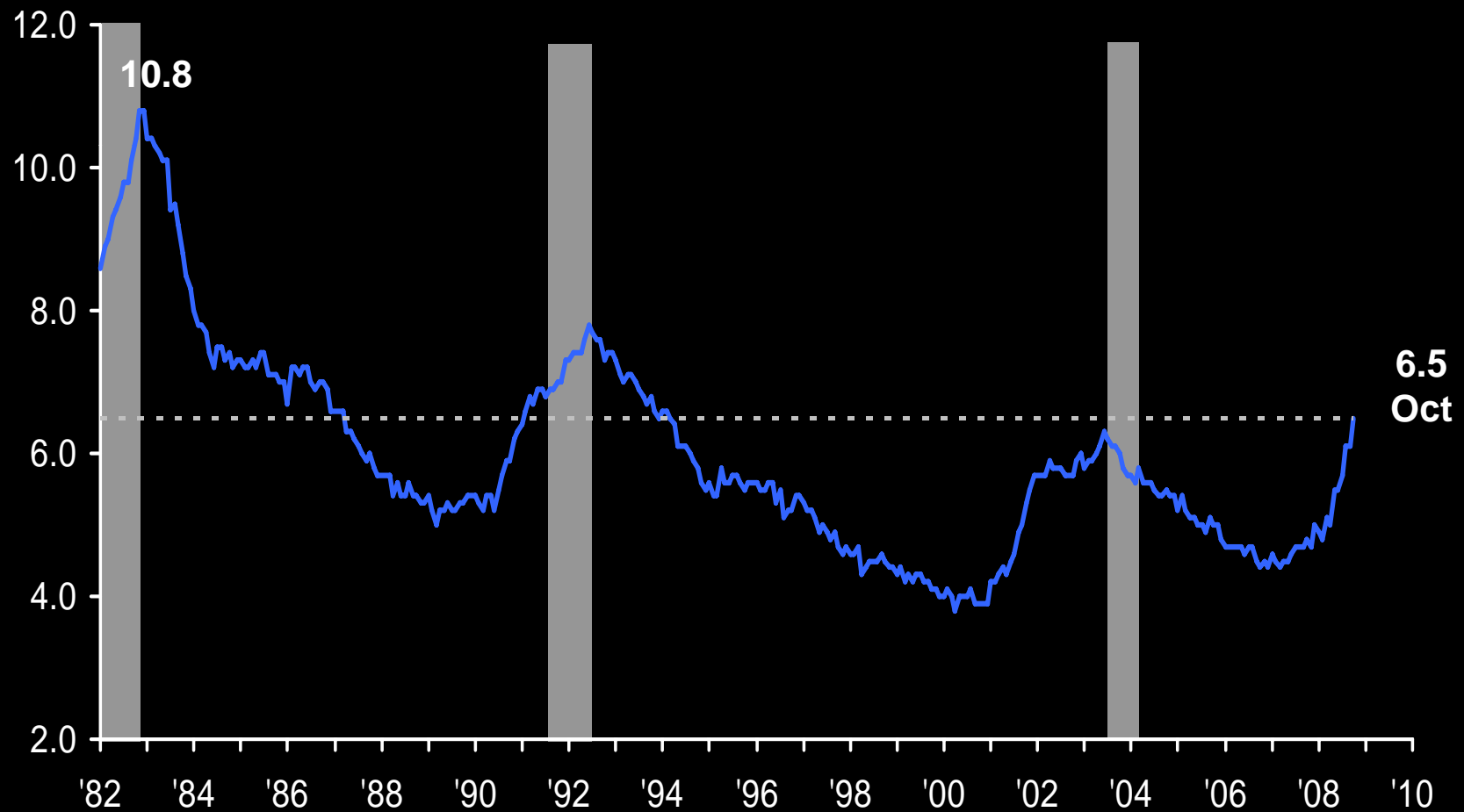
Positive

- Lower inflation
- Credit channels will evolve as always
- Strong cyclical recovery in auto industry

Thank You!

U. S. Unemployment Rate

Percent



Michigan Unemployment Rate

Percent

