

# Understanding **ECONOMIC INDICATORS:** *origin and impact*

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*The views and opinions expressed in this presentation are the author's  
and do not necessarily represent those of the University of Colorado.*



# Economic Indicators: What Are They?

- ❖ Statistical data that tell the story of a dynamic economy
  - Can be analyzed to provide predictions of economic performance



# What do they indicate?

- ❖ The status and trends of economic activity
  - where we've been
  - where we are
  - where we may be headed



# Origin

- ❖ Early 1900s: Very Little Data Collection
- ❖ 1919: Consumer Price Index
- ❖ 1926: Standard and Poor's 90
  - The first US-focused Stock Composite Price Index computed daily
- ❖ 1926: Hemline Index
  - Economist George Taylor
  - Noted that women's hemlines seemed to rise and fall with the economy or stock market



# Catalyst for Change

## ❖ 1929-1936: Great Depression

- The economy was in dire shape, but the government lacked adequate tools to gauge its progress.
- Limited information: Stock price indices, freight car loadings, and incomplete industrial production figures

## ❖ Simon Kuznets

- Develops estimate of nation's income
- Creates original formulation of Gross Domestic Product (GDP)

## ❖ 1937: Gross National Product (GNP)



# Evolution

As the economy changes and evolves, so do the metrics used to measure it

- 1940 Current Population Survey
- 1946 Survey of Consumer Sentiment
- 1967 Unemployment Insurance Claims
- 1986 Big Mac Index
- 2001 Lipstick Index



# Challenge

## Structural changes in the economy

- Services account for more than 2/3 of GDP and Manufacturing 1/5, yet more data on latter
- Labor market



# Economic Outlook

## ❖ 2014 Colorado Business Economic Outlook

*Leeds School of Business, Business Research Division*

- slower economic growth is the new normal ...  
but expecting an improving economy in 2014





# Positive Signals

- increased job and business creation
- higher personal income and wages
- record-setting measures of wealth
- increasing consumer confidence
- individuals' willingness to move residences, increase spending, and in general take more risks



# Risks to Growth

- fiscal policy
- monetary policy
- health care reform
- slow eurozone economic growth
- slowing economic growth in China
- international conflicts



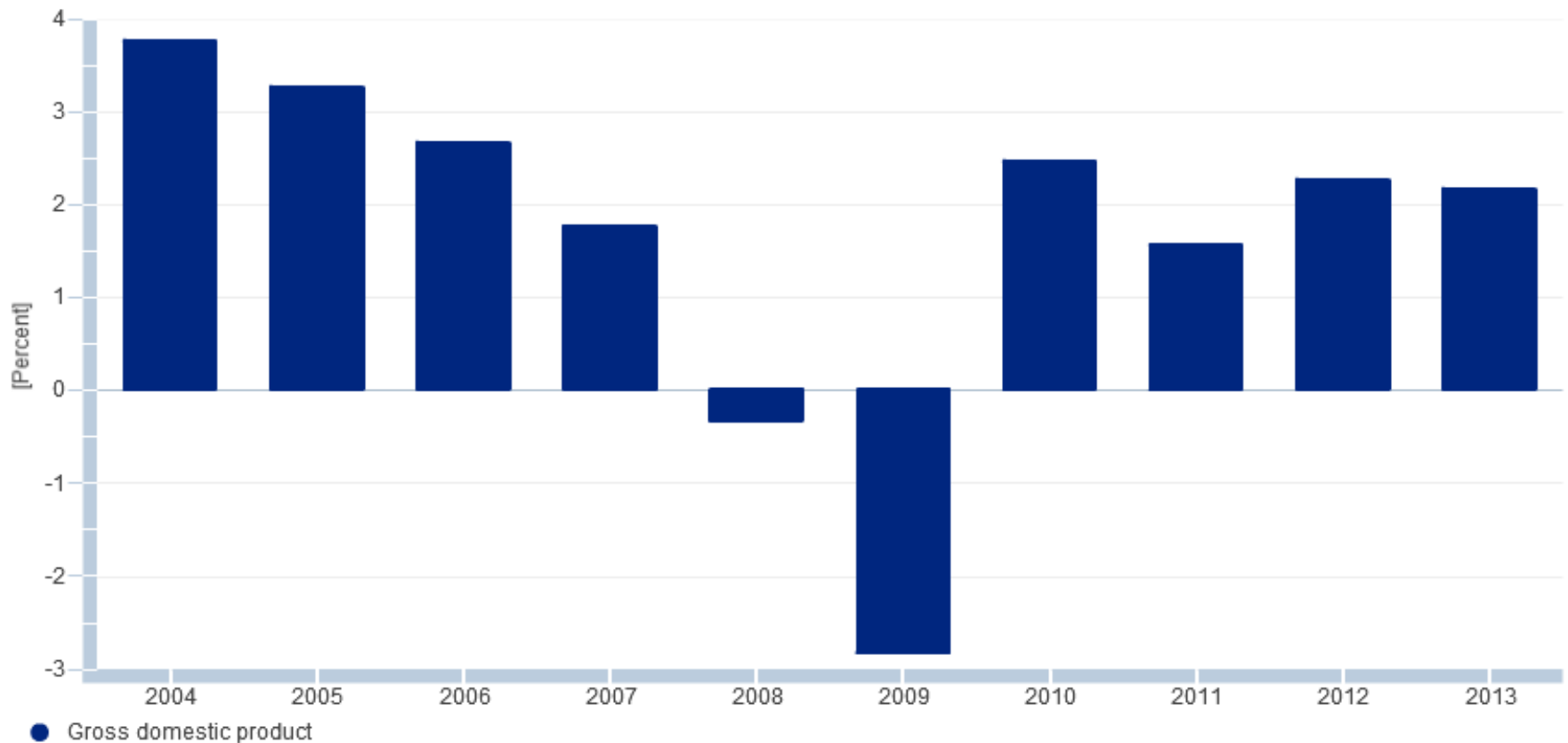
# The Economy's Vital Signs

- ❖ Economic Growth Rate
- ❖ Unemployment Rate
- ❖ Inflation Rate



Table 1.1.1. Percent Change From Preceding Period in Real Gross Domestic Product

Last Revised on: July 30, 2014 - Next Release Date August 28, 2014



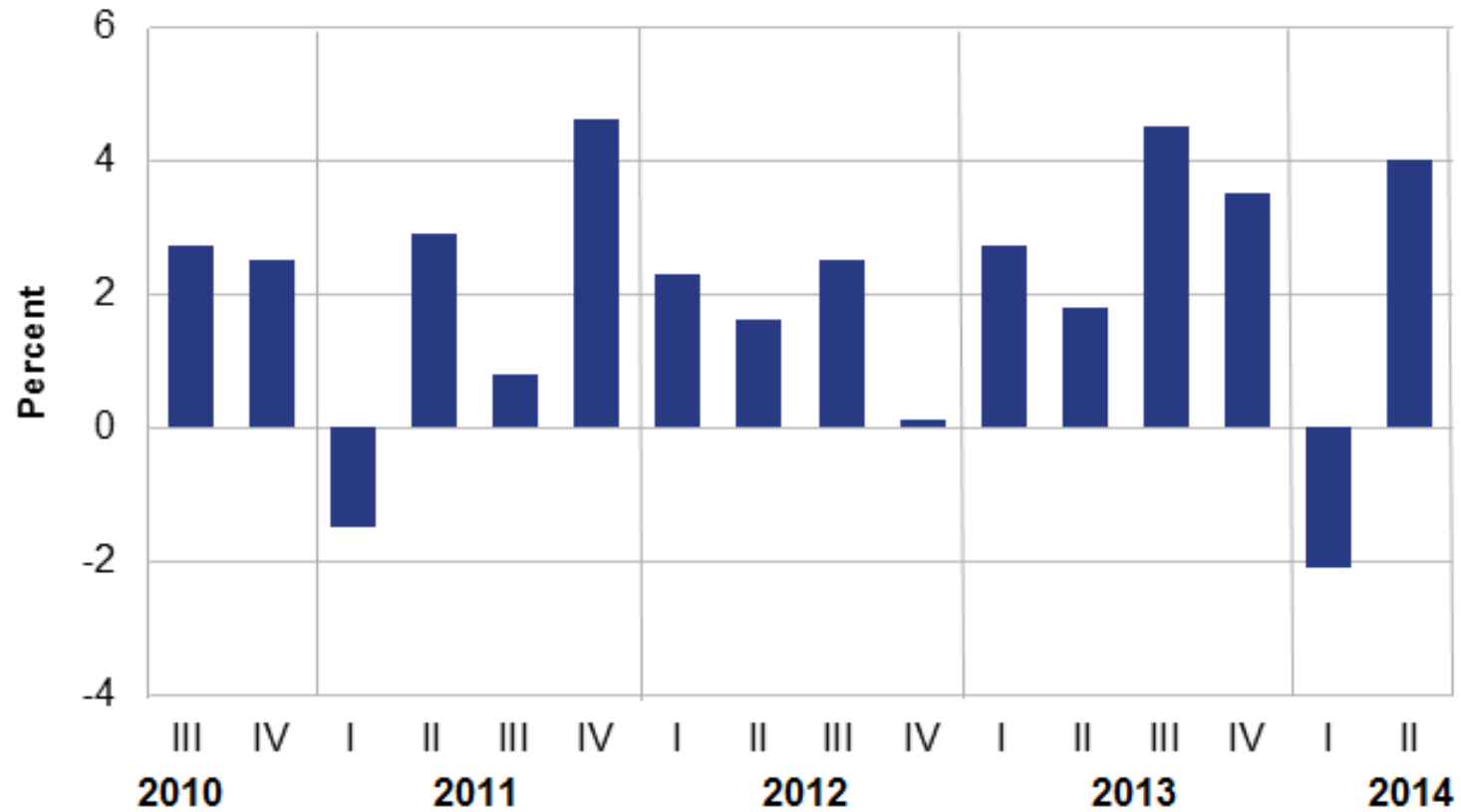
Source: U.S. Bureau of Economic Analysis



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## Quarter-to-Quarter Growth in Real GDP



*Real GDP growth is measured at seasonally adjusted annual rates.*

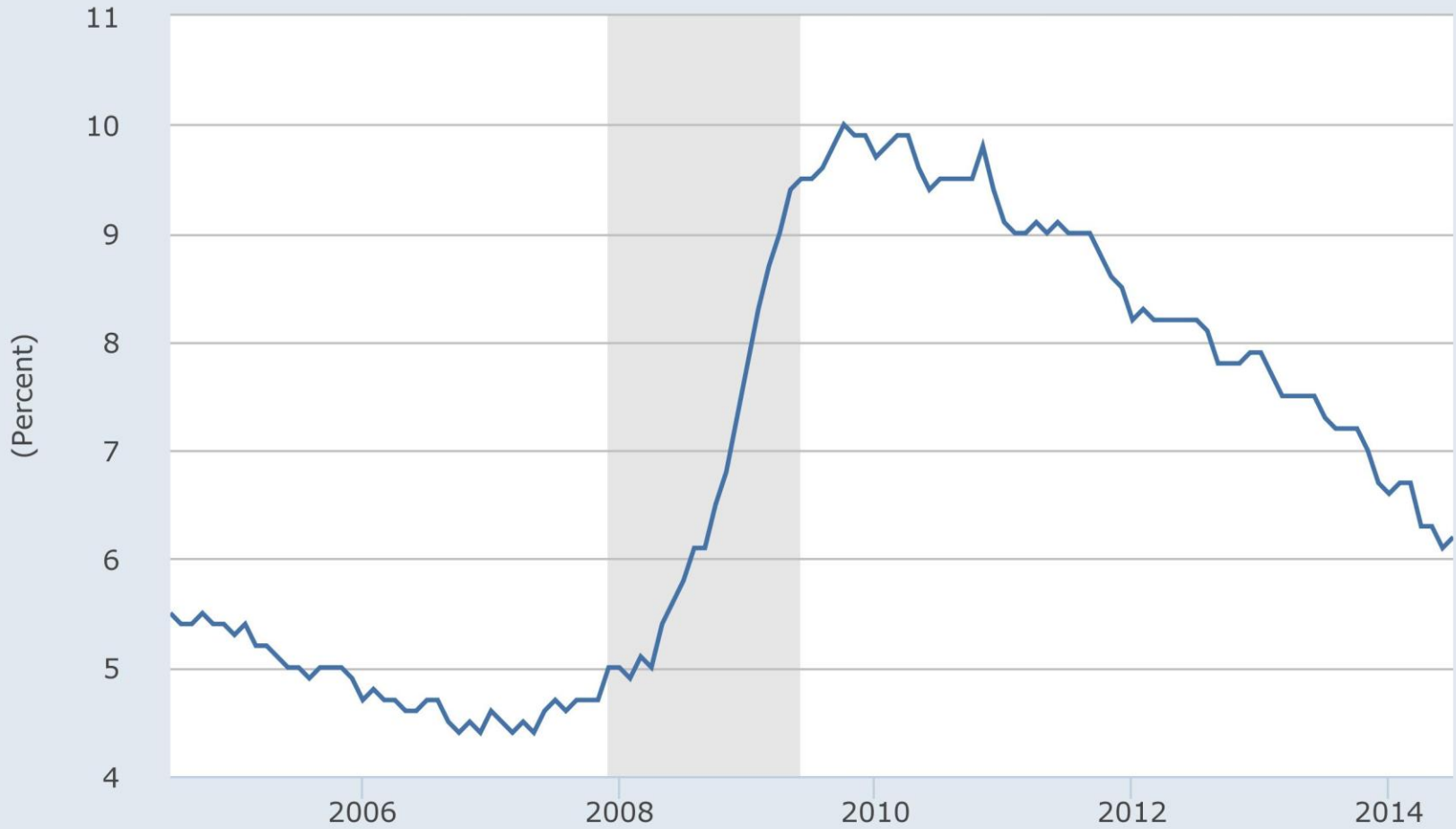
U.S. Bureau of Economic Analysis



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— Civilian Unemployment Rate



Source: U.S. Department of Labor: Bureau of Labor Statistics

Shaded areas indicate US recessions - 2014 [research.stlouisfed.org](http://research.stlouisfed.org)



— Total unemployed, plus all marginally attached workers plus total employed part time for economic reasons



Source: U.S. Department of Labor: Bureau of Labor Statistics

Shaded areas indicate US recessions - 2014 research.stlouisfed.org



# Consumer Price Index - All Urban Consumers

## 1-Month Percent Change

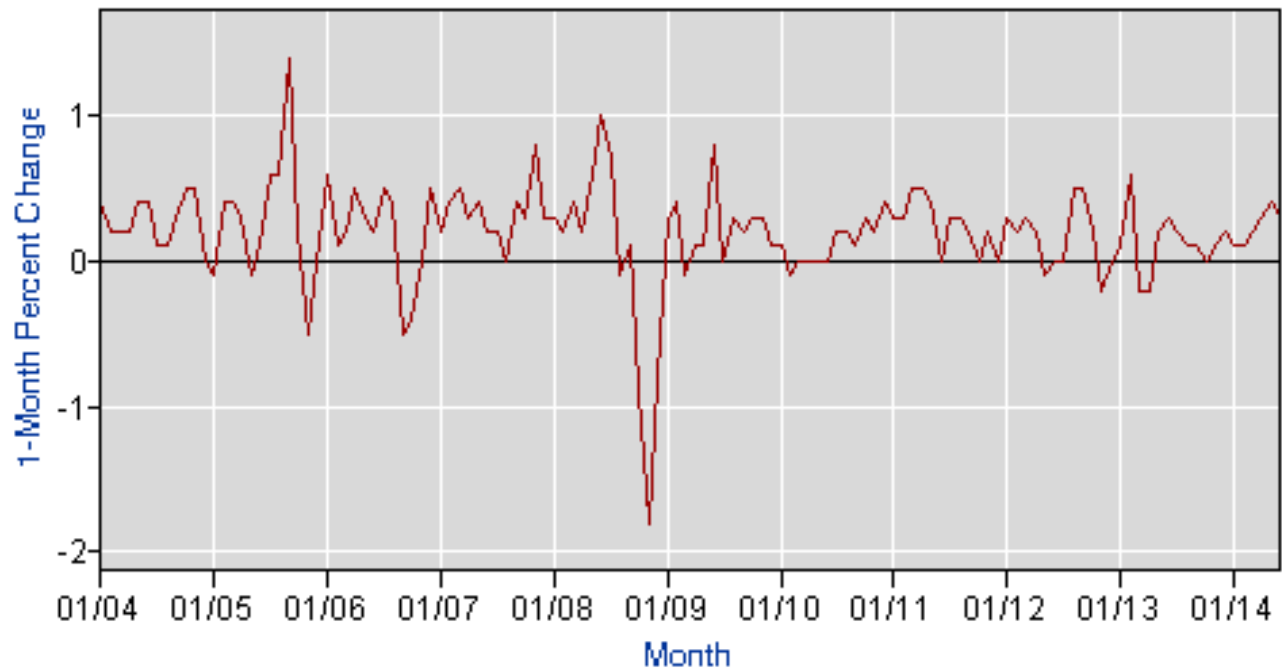
Series Id: CUSR0000SA0

Seasonally Adjusted

Area: U.S. city average

Item: All items

Base Period: 1982-84=100





# Leading Indicators

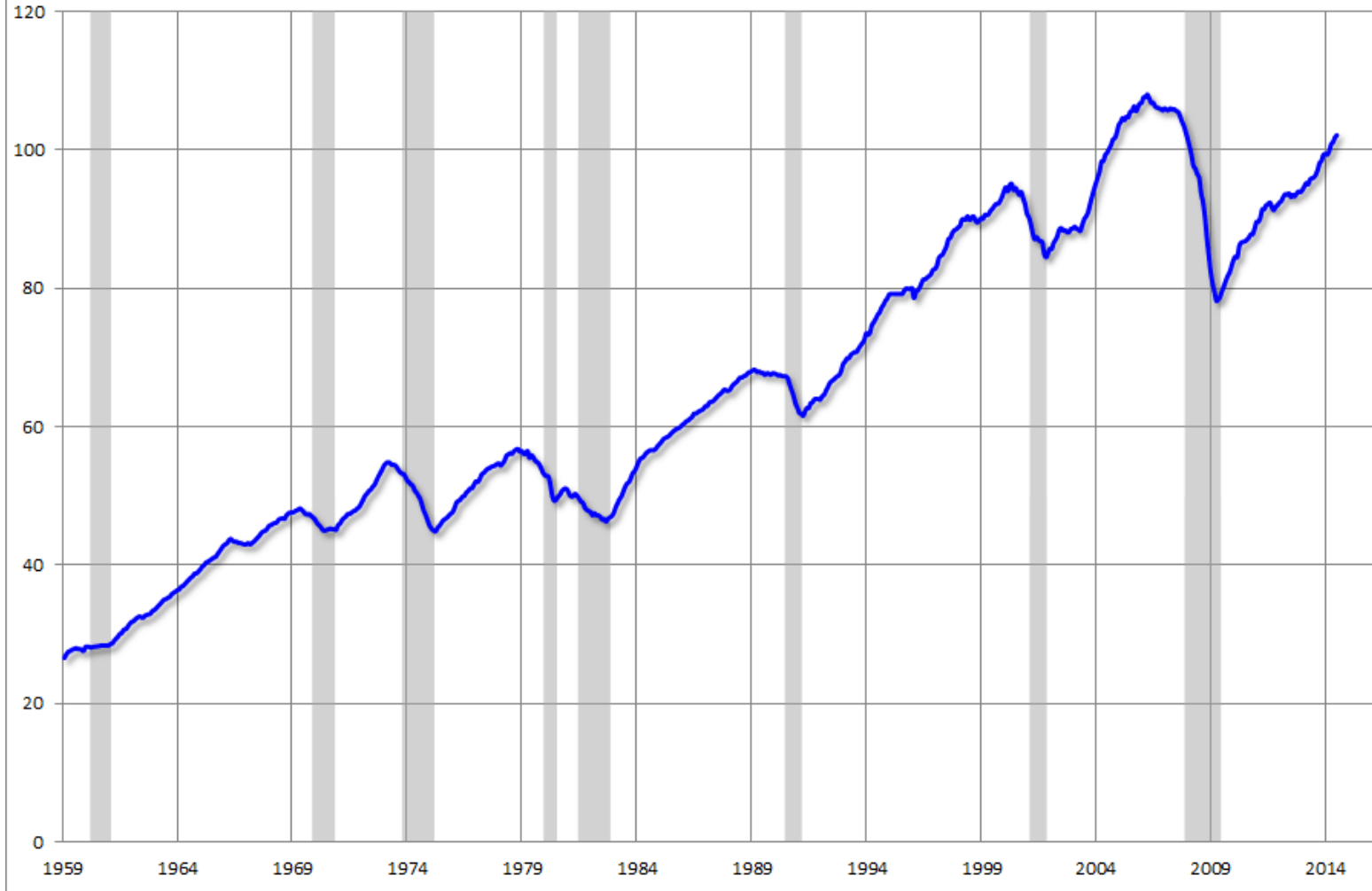
## The Conference Board Leading Economic Index

- Average weekly hours, manufacturing
- Average weekly initial claims for unemployment insurance
- Manufacturers' new orders, consumer goods and materials
- ISM Index of New Orders
- Manufacturers' new orders, nondefense capital goods excluding aircraft orders
- Building permits, new private housing units
- Stock prices, 500 common stocks
- Leading Credit Index
- Interest rate spread, 10-year Treasury bonds less federal funds
- Average consumer expectations for business conditions



# Conference Board Leading Economic Index with Recessions Highlighted

dshort.com  
July 2014  
Data through June



<http://www.advisorperspectives.com/dshort/updates/Conference-Board-Leading-Economic-Index.php>



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# Coincident Indicators

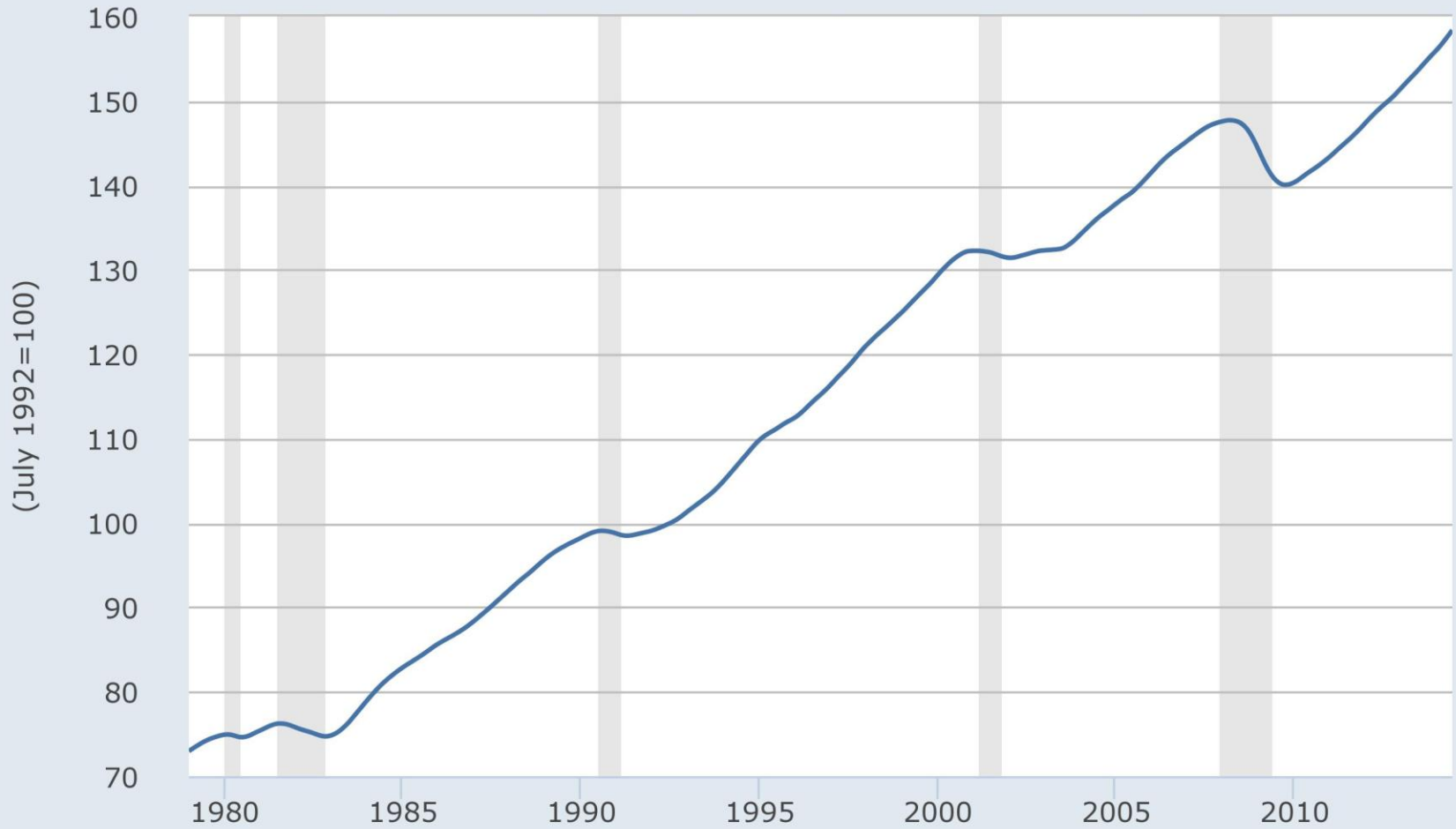
## ❖ The Conference Board Coincident Economic Index

- Employees on nonagricultural payrolls
- Personal income less transfer payments
- Index of industrial production
- Manufacturing and trade sales

## ❖ Federal Reserve Bank of Philadelphia

- Employees on nonagricultural payrolls
- Unemployment rate
- Average hours worked in manufacturing
- Wages and salaries





Source: Federal Reserve Bank of Philadelphia

Shaded areas indicate US recessions - 2014 research.stlouisfed.org



# Lagging Indicators

## The Conference Board Lagging Economic Index

- Average duration of unemployment
- Ratio, manufacturing and trade inventories to sales
- Change in labor cost per unit of output, manufacturing
- Average prime rate charged by banks
- Commercial and industrial loans outstanding
- Ratio, consumer installment credit outstanding to personal income
- Change in Consumer Price Index for services





Jul 1973 to Jan 2005 <http://www.investopedia.com/university/conferenceboard/conferenceboard4.asp>



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# Impact of Economic Indicators

- ❖ Provide valuable information on which individuals, governments, firms, and nations can make choices with scarce resources
- ❖ Provide perspective on past and current conditions and inform decisions that impact the future
- ❖ Influence behavior
- ❖ Guide policymaking



# Additional Influences on Economic Behavior

## Uncertainty & Ambiguity in Fiscal Policymaking

Recent uncertainties:

- Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010
- Discussion surrounding the federal debt limit in 2011
- U.S. sovereign debt being downgraded by S&P
- Stark contrast of platforms in 2012 presidential election
- Affordable Care Act (ACA)
- October 2013 federal government shutdown





# Uncertainty & Ambiguity in Monetary Policymaking

## ❖ Federal Open Market Committee (FOMC) Statements

### ▪ Recent Approach

- Increased transparency
- ‘Constructive Ambiguity’
- Vague language and signals
  - » “sustained improvement in labor market conditions”

### ▪ Policy Measures

- Extended duration of highly accommodative policy measures
- Divergence of FOMC members’ interest rate forecasts



# Unintended Consequences of Uncertainty

- ❖ “52% of the firms that saw **demand fall** cited increased uncertainty about future tax rates or government regulations
  - July 2010 Business Outlook Survey, FRB Philadelphia



# Unintended Consequences of Uncertainty

- ❖ **“Output, consumption, investment, and working hours drop** when uncertainty spikes and then stay low for several quarters[...]while **price markups rise.”**
  - Research Briefs in Economic Policy, CATO Institute, June 2014, Number 4



# Unintended Consequences of Uncertainty

- ❖ “Increased uncertainty about the capital-income-tax rate of the magnitude that occurs roughly every 10 years has about the **same impact in lowering output as a 30-basis-point increase in the federal funds rate.**”
  - Research Briefs in Economic Policy, CATO Institute, June 2014, Number 4



# Unintended Consequences of Uncertainty

- ❖ “When the economy has very low nominal interest rates (known as the zero lower bound or ZLB), the effects of the same-sized increase in fiscal uncertainty is particularly large.”
  - July 2010 Business Outlook Survey (FRB Philadelphia)



# Economic Indicators to Watch

- ❖ Economic Policy Uncertainty Index
- ❖ Labor Force Participation
  - Recent attention: “Discouraged workers”
  - Present and future attention: Aging population
- ❖ Migration
  - Immigration: United States
  - In-migration: Colorado
- ❖ Online Data Collection
  - Google Trends



# Thank You

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