

Thinking about Employment

The Federal Reserve in the 21st Century: A
Symposium for College Professors

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Disclaimer

The views in this presentation are those of the speaker and do not necessarily reflect the views of the Federal Reserve Bank of New York or the Federal Reserve System.

Agenda

1. Why does cyclical unemployment exist? (a quick reminder)
2. Why are labor market measures important for monetary policymakers?
 - “Maximum” employment is part of Fed’s dual mandate
 - Labor indicators tell us about economic activity relative to potential
3. What are the most important labor market indicators?
 - The BLS Employment Situation
4. Why it can be hard to judge labor market tightness/slack?
 - The NAIRU is unobservable and moves around
5. Current conditions in labor markets

1. Why do we observe cyclical unemployment?

Alternatively: Why don't wages fall until firms want to hire everyone who wants to work?

Cyclical unemployment occurs because the price of labor (wage) doesn't adjust that flexibly.

- Fixed wage contracts, human resources policies, and norms and ideas about what is fair can make it difficult for firms to change wages (especially to cut them).
- If wages can't adjust, a significant drop in demand for the nation's output will tend to result in (1) layoffs which raise unemployment and (2) a reduced rate of employment growth.

Not all unemployment can be addressed through monetary policy

There can be unemployment in even the tightest labor markets (unemployment rates are never zero):

- Frictional unemployment
- Structural unemployment

Although certain labor market policies might be helpful, monetary policy is not the way to address these sources of unemployment.

2. Why are labor market measures important for monetary policymakers?

- The Fed's legal mandate is “to promote effectively the goals of maximum employment, stable prices, and moderate long term interest rates.”

<http://www.federalreserve.gov/aboutthefed/section2a.htm>

- => Along with stable prices, employment is one target of monetary policy

Unemployed workers are costly for the economy and for families

- Output below potential is production/income that is permanently “lost”
- Output below potential may reduce investment and future output
- High unemployment is associated with decreased wellbeing, lower living standards, and increases in poverty
 - Unemployment for some disadvantaged demographic groups rises disproportionately in recessions and shrinks disproportionately in expansions. (Bradbury, *New England Economic Review*, 2000)
 - High unemployment has been implicated in higher incidence of divorce, increased rates of violent crime, and other social and individual ills

Labor indicators are measures of overall economic activity relative to potential

- Labor's share of GDP is 75 percent
- Therefore, slack in the labor market is a key indicator of slack in the economy as a whole

The bottom line for monetary policy:

- The Fed takes the mandate of maximum employment as maximum **long-run sustainable** employment.
 - Unsustainably high levels of output raise inflation
- Or alternatively, compares its assessment of the economy with
 - “full-employment” output
 - the rate of GDP growth where
output gap = actual output - potential output = 0

In labor market terms, the yardsticks are:

- The non accelerating inflation rate of unemployment (NAIRU)
- Job growth rate consistent with maintaining full employment output

3. What are the key labor market indicators?

There are a wide range of reports:

Bureau of Labor Statistics

- **Employment Situation (monthly—first Friday)**
- Employment Cost Index (quarterly)
- Real Earnings (monthly)
- Productivity and Costs (quarterly)
- Job Openings and Labor Turnover Survey (monthly)

Employment and Training Administration

- Unemployment Insurance Weekly Claims (weekly)

Employment Situation is the most closely watched

- Frequent and timely
 - The first Friday in the month for the previous month
 - The latest release was on January 12, 2010
- Two large, careful surveys
- Two independent readings of conditions
- Analysts track and write about them
- Economic models use them
- Releases and data are available at: www.bls.gov

Employment Situation reports on two surveys:

1. **Household Survey**

- Also called the Current Population Survey (CPS)
- Surveys 60,000 households
- Records labor market activity (or non-activity) of household members during week containing the 12th of month
- As reported by person answering phone

Employment Situation surveys, continued:

2. Establishment Survey

- Also called the Current Employment Statistics (CES) or Payroll Survey
- Includes 160,000 businesses and agencies at 400,000 worksites (covers 1/3 of non-farm workers)
- Records **jobs**, hours and earnings in pay period containing 12th of month
- Reported by employers

Employment Situation's two main indicators

- **Unemployment rate**

- From the household survey (CPS)
- Records share of labor force looking for work in last four weeks
- Provides detail by demographics, occupation, duration of unemployment, etc.
- Probably the most widely used indicator of degree of tightness or slack in the labor market (and by extension the overall economy)

- **Payroll growth**

- From the establishment survey (CES)
- Counts jobs in pay period, not people
- Provides detail by industry

Dec 2009

Table A

Table A. Major indicators of labor market activity, seasonally adjusted
(Numbers in thousands)

Category	Quarterly averages		Monthly data			Nov.-Dec. change
	III 2009	IV 2009	Oct. 2009	Nov. 2009	Dec. 2009	
HOUSEHOLD DATA						
Labor force status						
Civilian labor force	154,235	153,544	153,854	153,720	153,059	-661
Employment	139,339	138,138	138,242	138,381	137,792	-589
Unemployment	14,895	15,406	15,612	15,340	15,267	-73
Not in labor force	81,858	83,195	82,696	83,022	83,865	843
Unemployment rates						
All workers	9.7	10.0	10.1	10.0	10.0	0.0
Adult men	10.1	10.4	10.6	10.4	10.2	-.2
Adult women	7.7	8.1	8.1	8.0	8.2	.2
Teenagers	25.4	27.2	27.6	26.8	27.1	.3
White	8.9	9.2	9.4	9.3	9.0	-.3
Black or African American	15.1	15.8	15.7	15.6	16.2	.6
Hispanic or Latino ethnicity	12.7	12.9	13.1	12.7	12.9	.2
ESTABLISHMENT DATA						
Employment						
Nonfarm employment	131,262	p 130,965	130,991	p 130,995	p 130,910	p -85
Goods-producing ¹	18,595	p 18,313	18,379	p 18,321	p 18,240	p -81
Construction	6,100	p 5,951	5,987	p 5,960	p 5,907	p -53
Manufacturing	11,786	p 11,660	11,692	p 11,657	p 11,630	p -27
Service-providing ¹	112,667	p 112,652	112,612	p 112,674	p 112,670	p -4
Retail trade ²	14,720	p 14,634	14,647	p 14,633	p 14,623	p -10
Professional and business service	16,628	p 16,751	16,675	p 16,764	p 16,814	p 50
Education and health services	19,307	p 19,420	19,384	p 19,421	p 19,456	p 35
Leisure and hospitality	13,172	p 13,117	13,134	p 13,121	p 13,096	p -25
Government	22,470	p 22,480	22,484	p 22,488	p 22,467	p -21
Hours of work ³						
Total private	33.1	p 33.1	33.0	p 33.2	p 33.2	p 0.0
Manufacturing	39.9	p 40.3	40.1	p 40.4	p 40.4	p .0
Overtime	3.0	p 3.3	3.2	p 3.4	p 3.4	p .0
Indexes of aggregate weekly hours (2002=100) ³						
Total private	99.0	p 98.9	98.5	p 99.1	p 99.1	p 0.0
Earnings ³						
Average hourly earnings, total private	\$18.64	p \$18.77	\$18.74	p \$18.77	p \$18.80	p \$0.03
Average weekly earnings, total private	617.10	p 621.91	618.42	p 623.16	p 624.16	p 1.00



Caveats: What gets revised or is noisy?

- **Unemployment rate**

- Not revised (only minor seasonal adjustment fixes)
- But volatile--numbers can jump around, especially for smaller demographic groups (e.g., teens and Blacks)

- **Payroll growth**

- Sampling noise is minimal—huge sample
- Newest 2 months are preliminary; late-reporting employers cause revisions (*usually* not too big)
- Annual benchmarking can cause end-of-year revisions

Usually CPS and CES tell the same story. But they can diverge due to:

- Revisions or sampling error
- Different treatment of self-employment, moonlighting, job-changers
- Omission of new firms in CES (“bias adjustment factor”)
- Labor force participation decisions (can affect job growth and unemployment rate differently)
- Population estimates used in CPS

4. Judging labor market tightness or slack

Compare labor market measures with the NAIRU and the rate of job growth consistent with full employment

This is not an exact science:

- Potential output and the NAIRU are unobservable and change over time
- Affected by demographics, preferences, efficiency of labor markets, the tax code, immigration, etc.

4. Labor market slack, continued

- Estimates suggest the NAIRU shifted down in the late 1960s, up after 1970, and down in the 1990s
 - In 1980s, the NAIRU was probably above 7%
 - Estimates as recently as a year ago put it in the neighborhood of 5.0%.
 - Will a protracted recession cause it to rise as labor market skills among those not working depreciate
- Based on labor force growth trends, full-employment job growth is estimated to be approximately 150,000 jobs per month, 50,000

4. Labor market slack, continued

- The behavior/timing of labor market activity over the cycle is not always the same.
- In the past, recessions slowed activity but jobs returned quickly when demand and production rose
- Recent recessions are associated with more structural change; jobs are redistributed among firms and industries (Groshen and Potter, *Current Issues*, 2003)
 - Leads to “jobless” recoveries; production rises before job growth as it takes time for firms to establish new positions and hire new workers
 - Riskier environment, so firms may hesitate
 - Affects the speed and timing of labor market recovery

4. How to judge labor market slack, continued

Finally, measures of actual activity are necessarily imprecise:

- Any labor market measure can be noisy and/or volatile
- Different measures may paint a slightly different picture
- Especially since labor force participation is also cyclical

It's not surprising there can be disagreements about the appropriate monetary policy stance

- The gap between the NAIRU and the unemployment rate is subject to problems on both ends:
- The NAIRU is a moving target, estimated imprecisely, and with a lag that may be long enough to make it an uncertain guide for policy.
- Unemployment and employment measures are subject to noise, volatility, and revision.

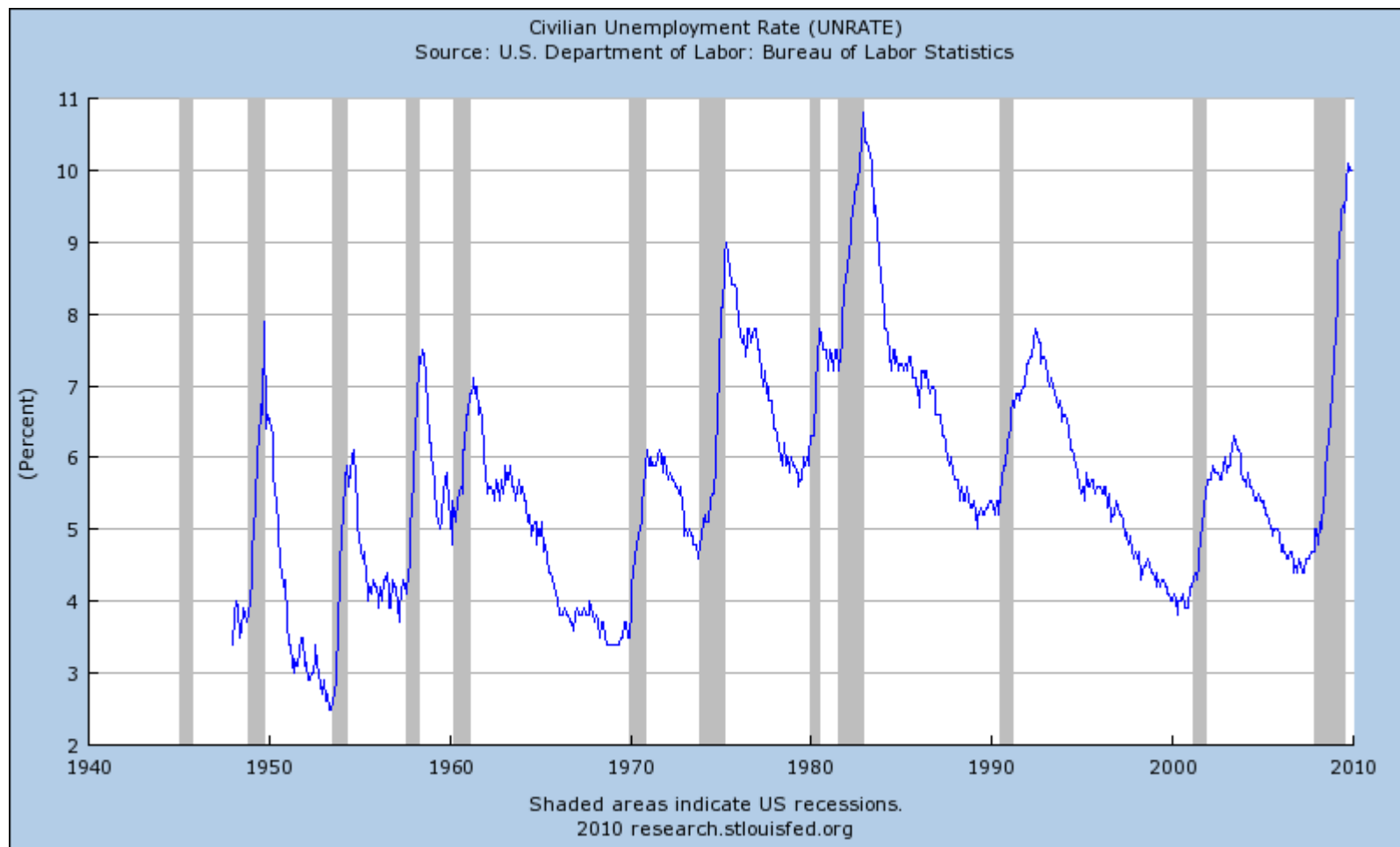
Still, it's hard to improve on it as a measure of tightness/slack:

- A composite measure of labor market tightness did not appreciably outperform the unemployment gap in tracking wage inflation in most periods. (Barnes et. al., *Public Policy Brief No. 07-2*, Federal Reserve Bank of Boston)

Current labor market conditions

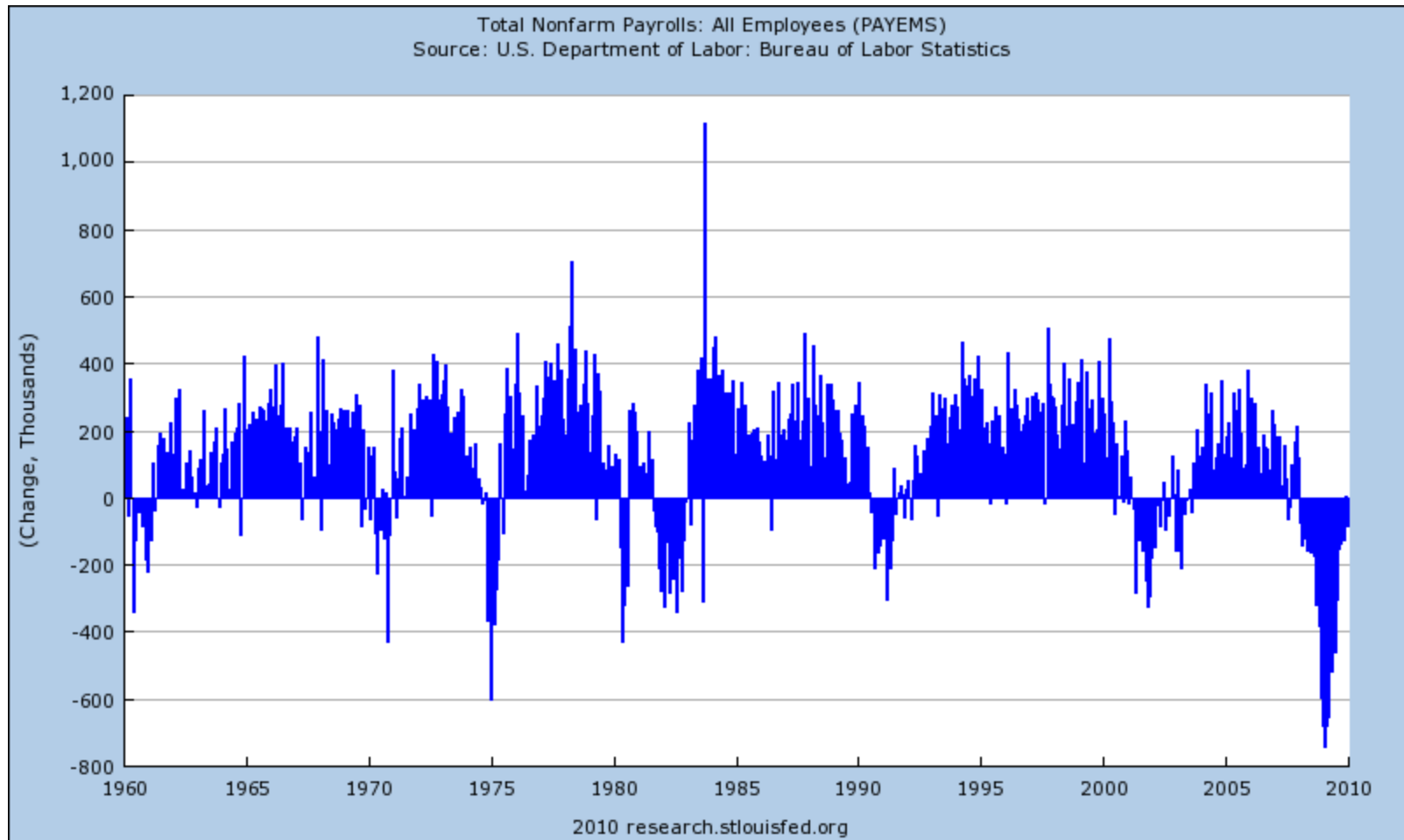
Unemployment remains at very high levels

- Unemployment rate in December was unchanged at 10.0 percent
- Note that in more recent recessions, unemployment recovery has lagged the end of the recession

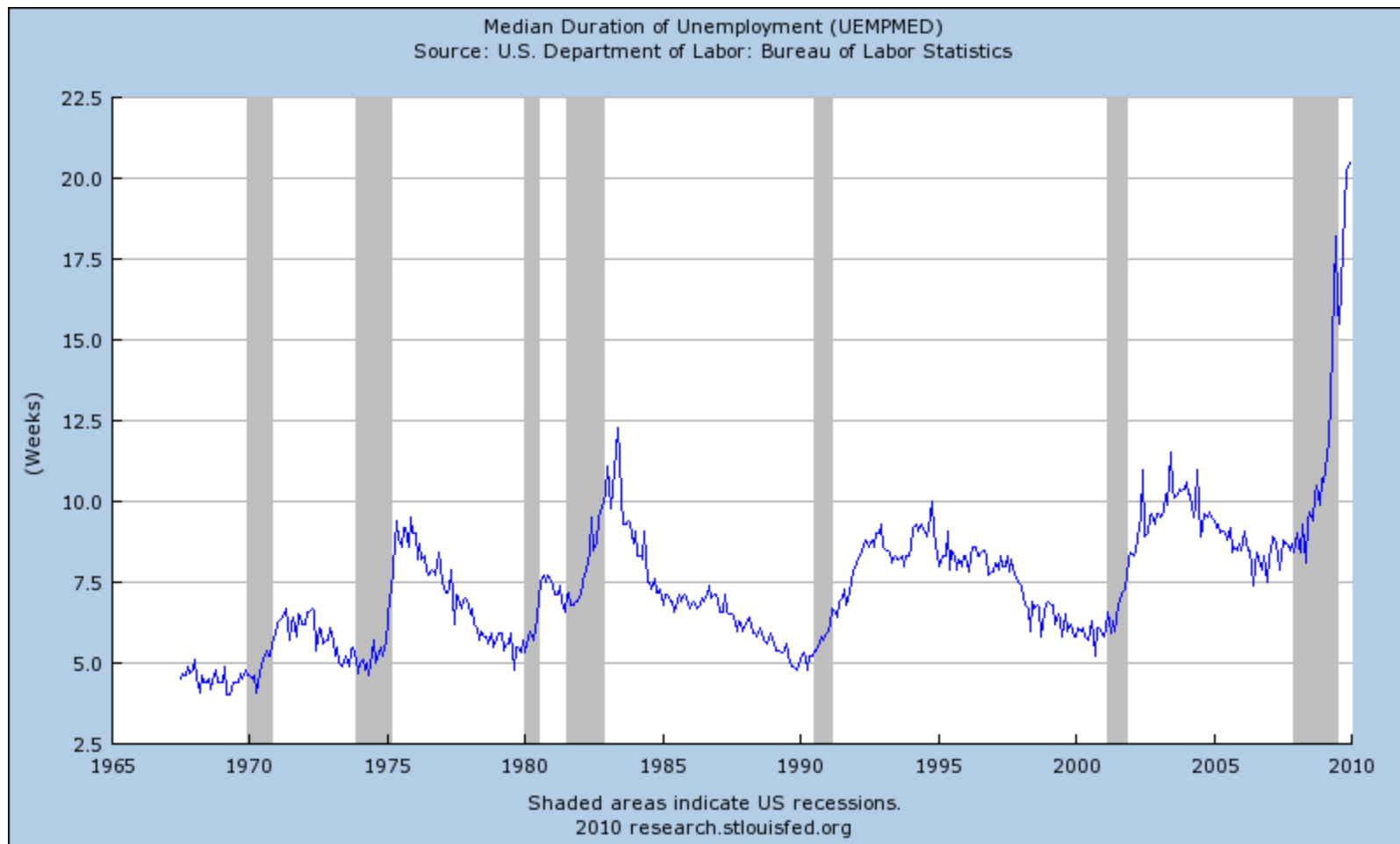


As of December, U.S. economy had lost 7.2 million jobs since peak in December 2007

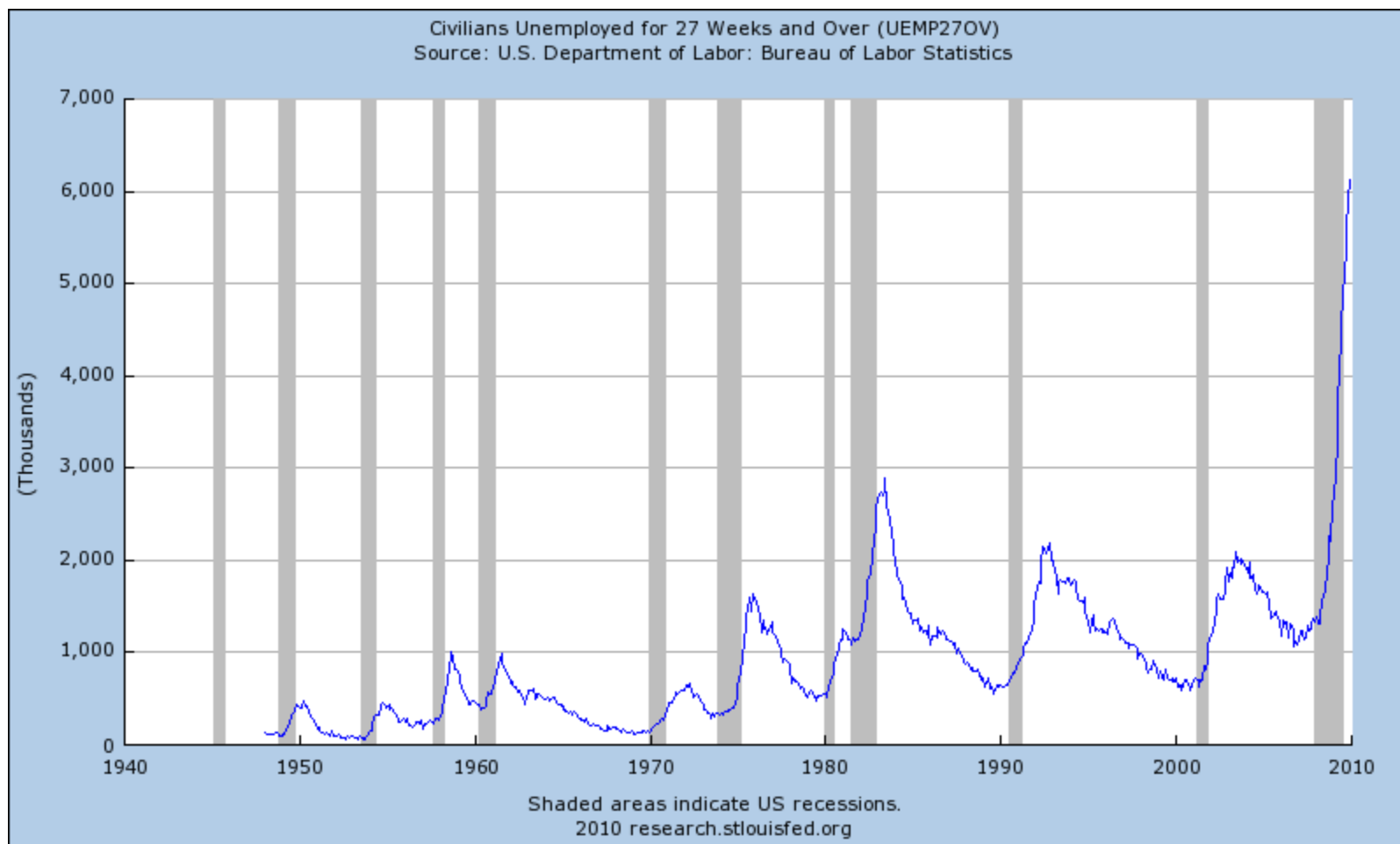
- Job decline in December (-85,000) larger than expected, but less than Q1 when losses averaged 691,000 a month
- Cumulative loss was 5.3% of peak (higher than 5 preceding recessions)
- Cumulative loss was more than 120% of gains during the prior expansion; in previous two recessions only about 7%



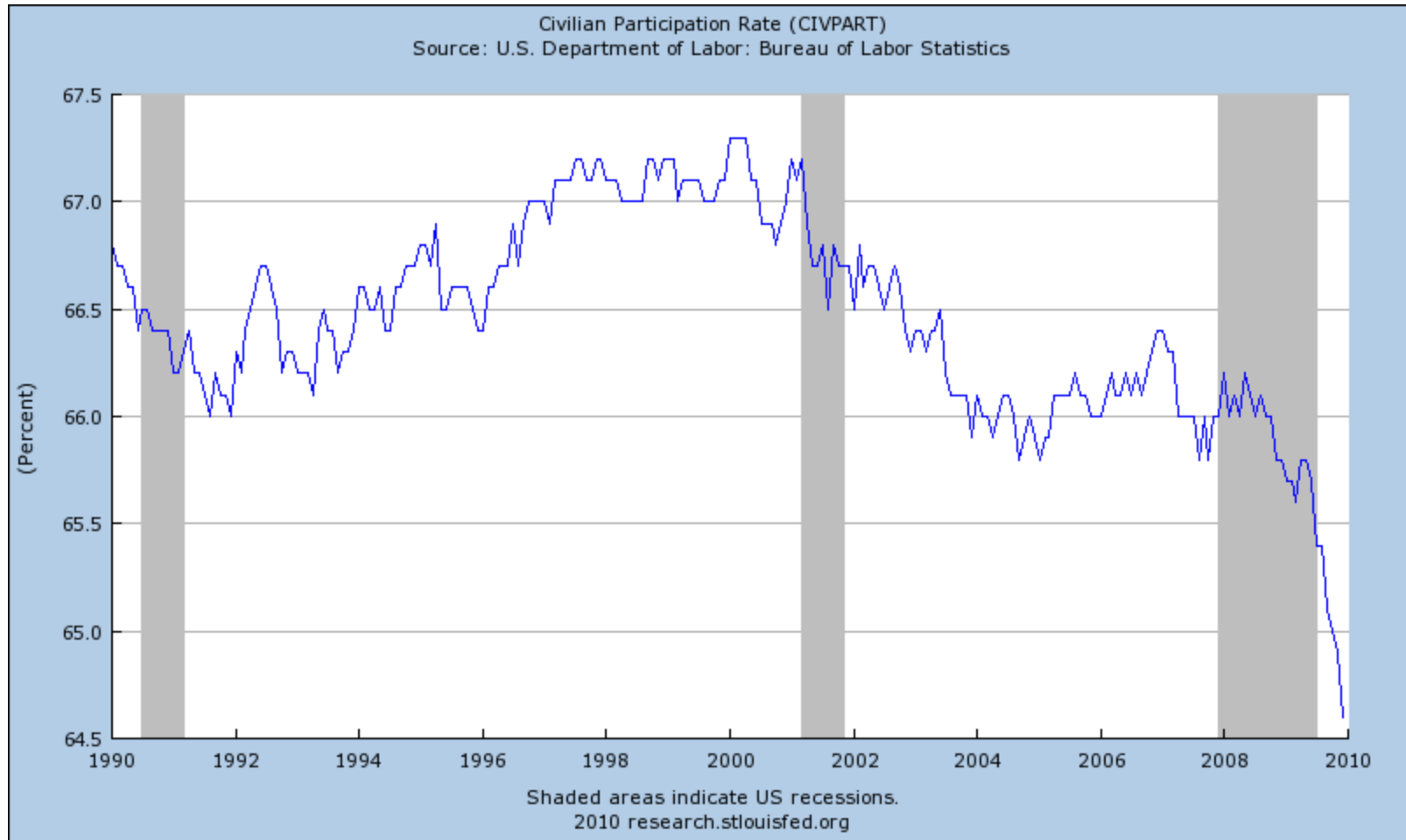
Duration of unemployment is extraordinarily high



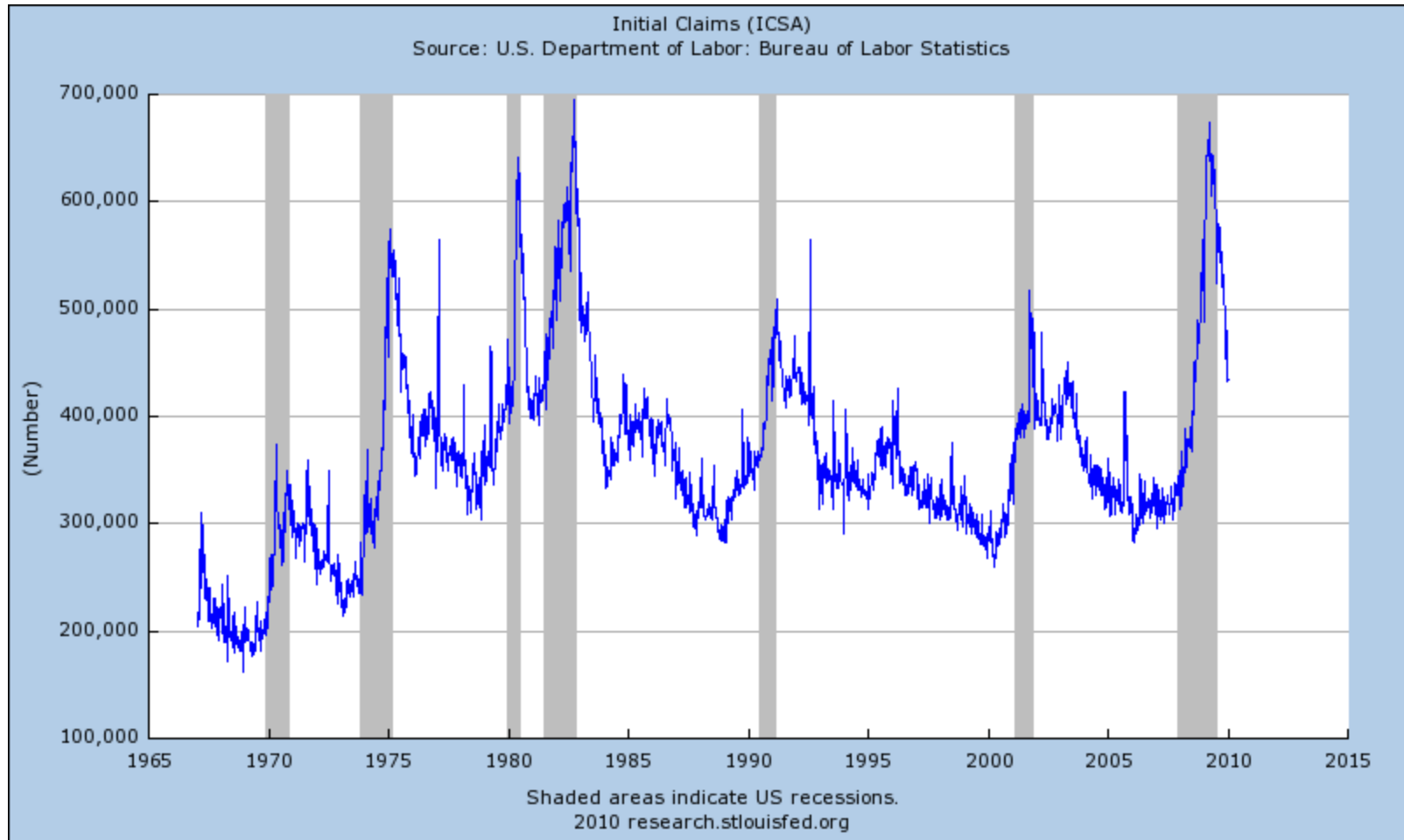
Dramatic increase in long-term unemployment



Labor force participation continues to decrease



Recently some decline in initial claims



Going forward, the labor market recovery

- is likely to lag recovery in production;
- is likely to be slow;
- will involve some structural change – change in mix of industries and occupations;
- but also will involve substantial cyclical (reversible) job loss.

Where to find updated charts? www.newyorkfed.org

The screenshot shows a Microsoft Internet Explorer browser window displaying the Federal Reserve Bank of New York's National Economic Indicators page. The browser's address bar shows the URL: http://www.newyorkfed.org/research/national_economy/nationalindicators.html. The page header includes the Federal Reserve Bank of New York logo and navigation links for Banking, Markets, Research, Education, Regional Outreach, and About the Fed. A sidebar on the left lists various research categories, with 'National Economy' selected. The main content area is titled 'National Economic Indicators' and provides a link to 'View all charts in a single document'. Below this, there are several sections with PDF links: 'Economic Growth and Output', 'Business Income and Finance', 'Business Inventory', 'Business Investment', 'Consumption', and 'Housing Investment'. A callout box on the right side of the page, with a blue border and a downward-pointing arrow, contains the text: 'Scroll down to see charts on employment and wages'. The browser's status bar at the bottom shows an 'Error on page' message and a 'Trusted sites' icon. The Windows taskbar at the very bottom displays the Start button and several open applications, including Firefox, Microsoft Office, and Adobe Reader.

Where to find more data? www.research.stlouisfed.org

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Select:		Observation Range		Freq.	Units	Seas. Adj.	Updated
All	None	Start	End				
<input type="checkbox"/>	CC4WSA	4-Week Moving Average of Continued Claims (Insured Unemployment)		W	Number	SA	2009-10-01
<input type="checkbox"/>	IC4WSA	4-Week Moving Average of Initial Claims		W	Number	SA	2009-10-01
<input type="checkbox"/>	CCNSA	Continued Claims (Insured Unemployment)		W	Number	NSA	2009-10-01
<input type="checkbox"/>	CCSA	Continued Claims (Insured Unemployment)		W	Number	SA	2009-10-01
<input type="checkbox"/>	COVEMP	Covered Employment		W	Number	NSA	2009-10-01
<input type="checkbox"/>	ICNSA	Initial Claims		W	Number	NSA	2009-10-01
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<input type="checkbox"/>	IURSA	Insured Unemployment Rate		W	%	SA	2009-10-01

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Abbreviations

Conclusions and questions to consider:

- Although judging labor market tightness can be open to interpretation, current labor market conditions are weak by any measure
- Behavior and timing of labor market indicators over the cycle have varied over time, with recent cycles characterized by “jobless” recoveries in the early stages
- How will things play out this time?
 - Will labor mobility necessary for the economy to adjust be slowed by problems in housing markets?
 - Will high levels and duration of unemployment slow the housing market recovery?

Reference Slides

Table A—Household data

- Labor force status (in thousands, seasonally adjusted)
 - Civilian labor force
 - Employment
 - Unemployment
 - Not in labor force
- Unemployment rates (seasonally adjusted)
 - All
 - Adult men and women, teens, white, Black, Hispanic

Table B—Establishment data

- Employment (in thousands, seasonally adjusted)
 - Total nonfarm
 - By industry (now NAICS-based)
- Hours of work (seasonally adjusted)
 - Average Private, Manufacturing (with overtime)
 - Aggregate Index
- Average earnings (seasonally adjusted)
 - Hourly and weekly