

# Measuring the Macroeconomy

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IAS107 Lecture Notes

[http://delong.typepad.com/berkeley\\_econ\\_101b\\_spring](http://delong.typepad.com/berkeley_econ_101b_spring)

January 20, 2011

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# Problem Set 1

- **Due on Th Jan 27 at the beginning of lecture.**
- **Due at the start of lecture on Th Jan 27:**
- **A combination listen-to-lecture and data-scavenger-hunt problem set...**
- **Read the assigned chapters in the textbook.**
- **Look at the inside front and back covers of the textbook.**
- **Listen to the lectures/**
- **Browse the Federal Reserve Economic Data website <<http://research.stlouisfed.org/fred2/>> "Job Openings and Labor Turnover" and "Employment and Population: Household Survey".**
- **Browse the Gapminder Website <<http://www.gapminder.org/world/>>, and you will do fine.**
- **Other problem sets will involve model-building and computation. This one doesn't: this one is a warm-up.**

# GDP

- **Gross Domestic Product, made up of:**
- **Consumption spending by households**
- **Investment spending by businesses**
- **Government purchases**
- **Net exports as a balancing item**
- **We count final goods, not intermediate goods**

# Consumption Spending

- **By households**
- **Of currently-produced goods and services**
- **Things that make us happier**
- **Necessaries, conveniences, and luxuries**
- **Valued at market prices—not at willingnesses-to-pay or utility values**
- **Imputed rent on owner-occupied housing**

# Investment Spending

- **By businesses**
- **Seeking to expand their productive capacity by adding to their capital stock**
- **Or needing to replace or repair worn-out or obsolete capital**
- **“Depreciation”: GDP and NDP**
- **Inventories are a part of your capital stock**
- **Hence increases in inventories are part of investment**

# Government Purchases

- **Things the government buys to make citizens happier**
- **Don't want GDP to change if government role expands or contracts but consumers are still receiving the same goods and services**
- **Can't measure what government produces very well**
- **Can measure what government buys**

# Net Exports

- **Consumption plus investment plus government purchases is a measure of spending on currently-produced goods and services**
- **But we want a measure of production**
- **When we produce and export, that drives our production above our spending**
- **When we import and consume, that drives our spending above our production**
- **Net exports = exports minus imports**
- **Add net exports NX to C + I + G to get Y**
- **$Y = C + I + G + NX$**

# Intermediate Goods

- **What do we do when a business buys something?**
- **Is it going to add to the business's productive capacity?**
- **Or is it going to be used directly to produce a good or service that is then going to be part of final output?**
- **If the first, we count the purchase as part of investment spending I.**
- **If the second, we don't count the purchase—it is an intermediate good.**
- **We pick it up when we see the final good sold—the value of the intermediate good is incorporated into it.**

# Different Measures

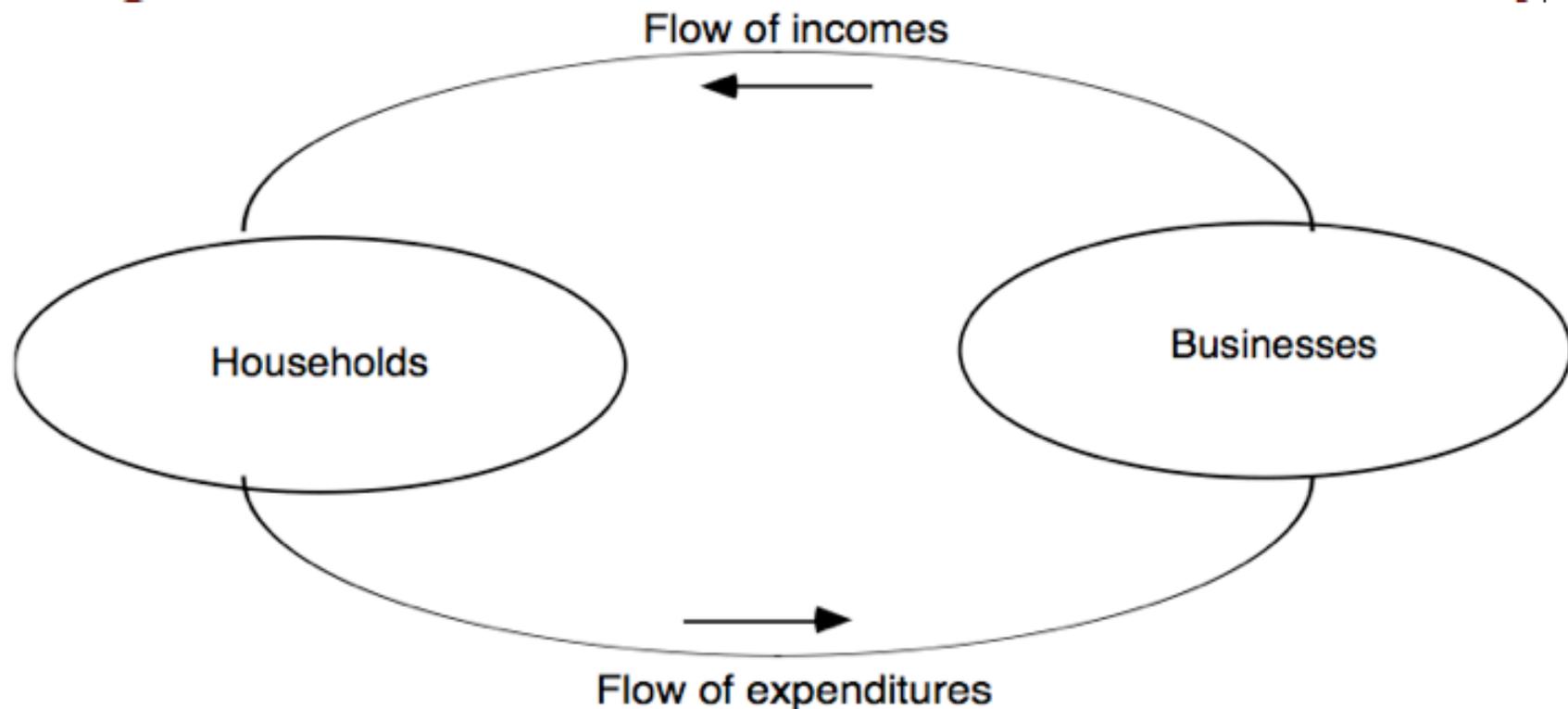
- **GDP minus depreciation equals NDP.**
- **GDP plus net earnings of factors owned by citizens and residents equals GNP.**
- **GDP minus change in inventories equals FSDP: Final Sales of Domestic Product**
- **FSDP minus NX equals FS: Final Sales.**

# Production in the Third Quarter of 2007 (Billions of Dollars at Annual Rates)

Gross Domestic Product:	\$14,179.9
- <u>change</u> in inventories	\$31.0
= <u>final</u> sales of domestic product	\$14,148.8
- <u>net</u> exports	- -\$698.4
= <u>final</u> sales to domestic purchasers	\$14,847.2

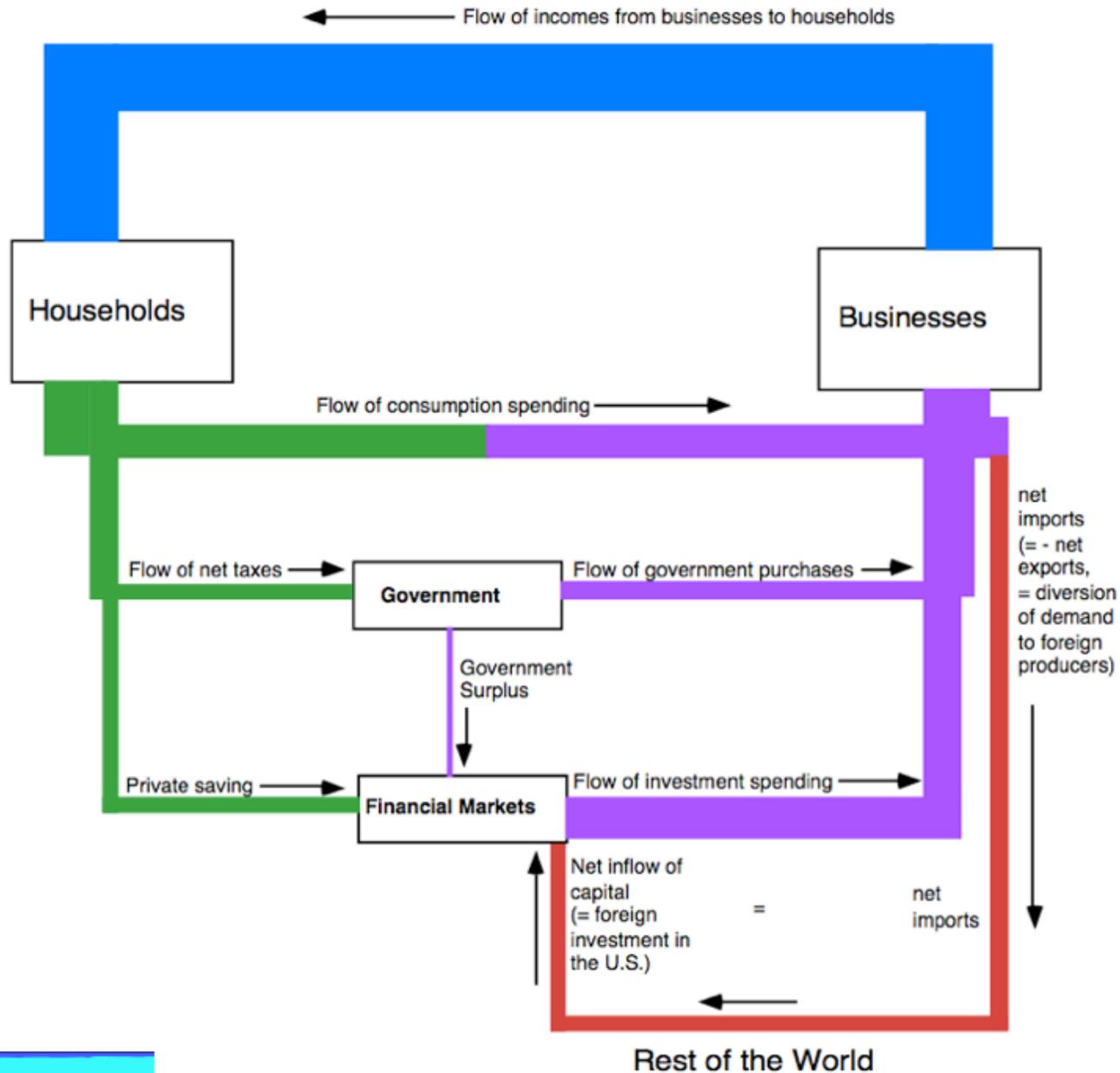
Gross exports	\$1,685.2
- <u>gross</u> imports	\$2,383.6
= <u>net</u> exports	-\$698.4

# The Circular Flow of Economic Activity



*Figure Legend:* A version of the *circular flow diagram*. Households spend money buying the products made by businesses, and businesses turn around and spend the same money buying *factors of production*--workers' time and attention, finance, the use of land and other property--from households.

# The Circular Flow II



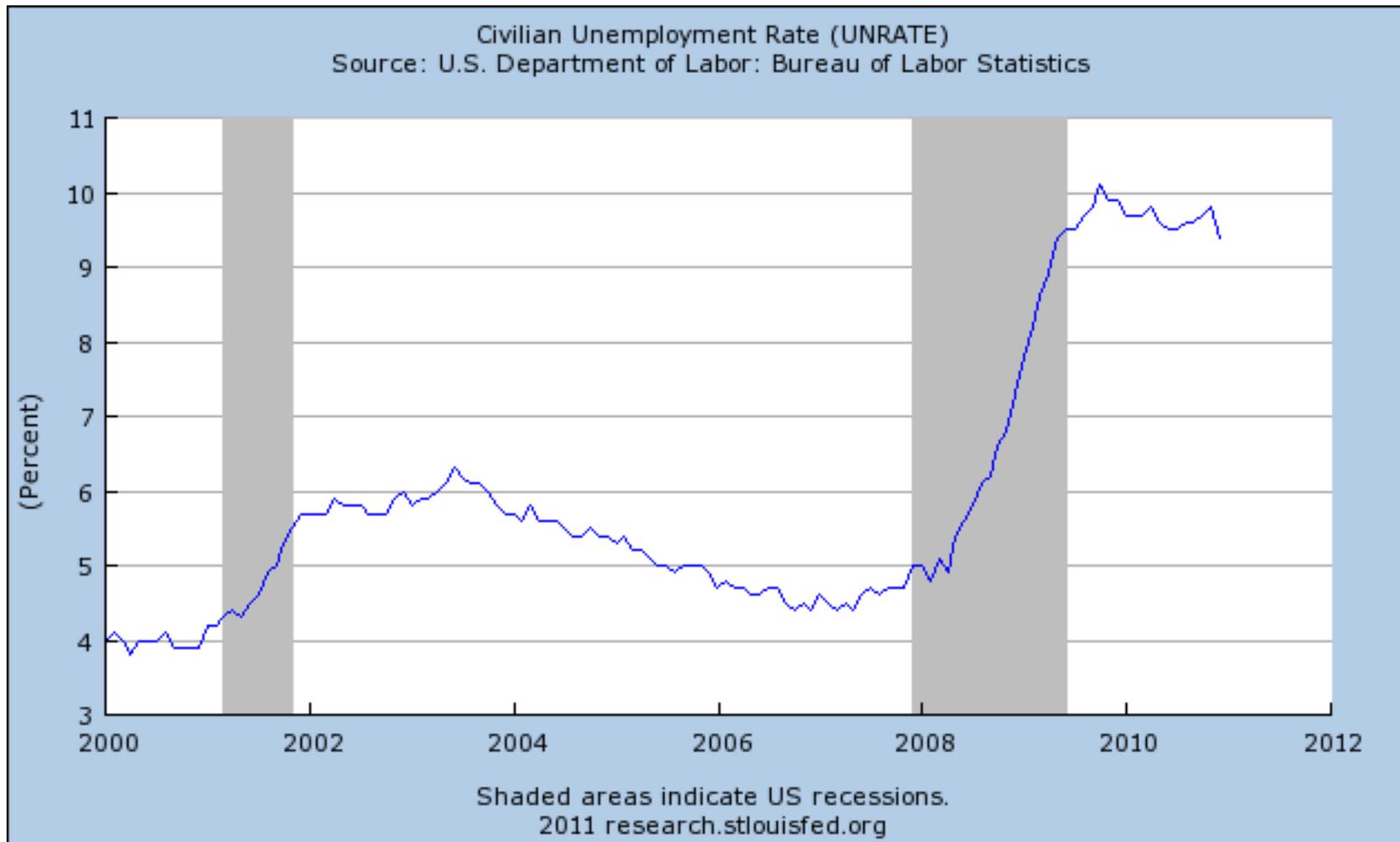
# The Macroeconomics of the Labor Market

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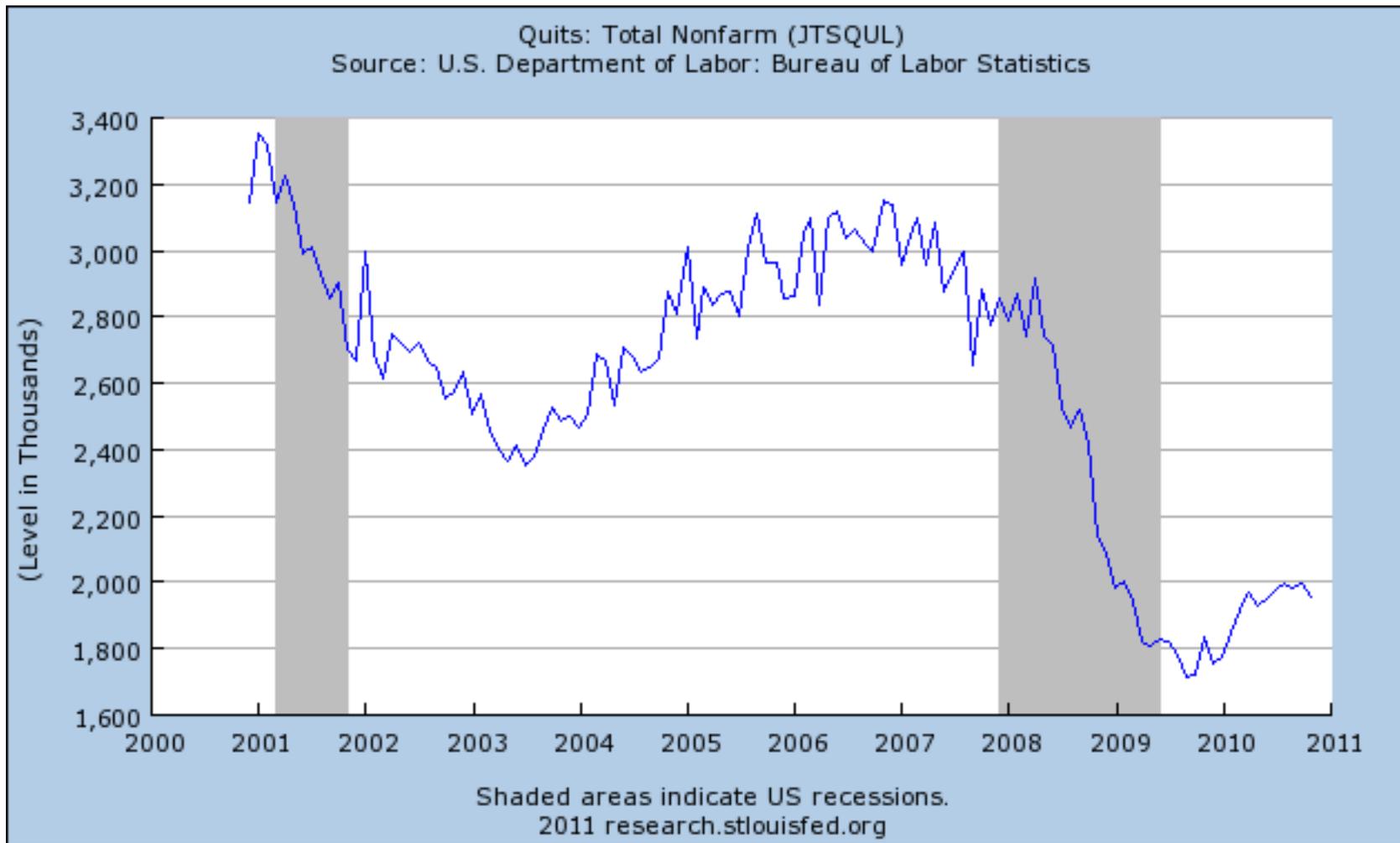
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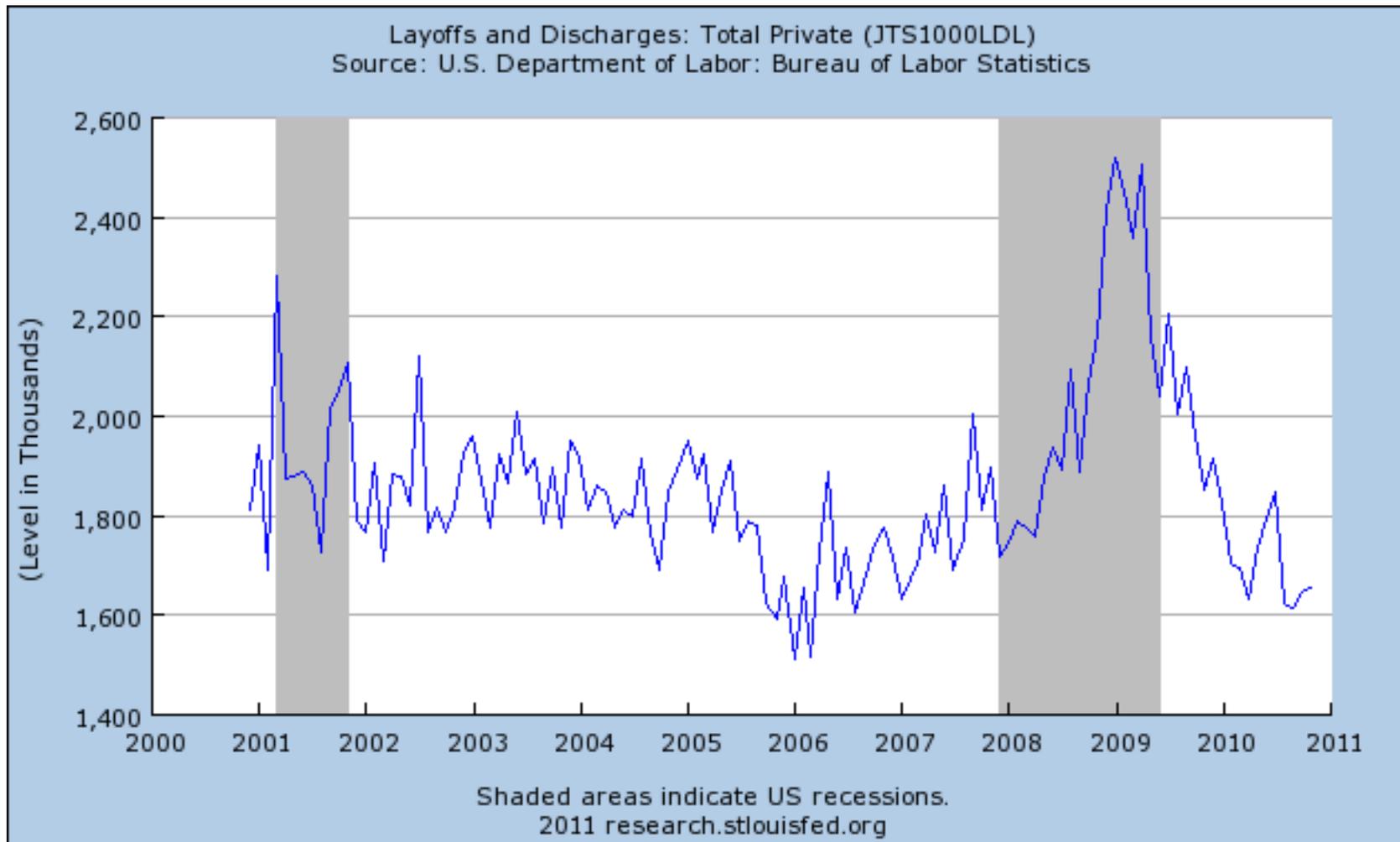
- The Unemployment Rate.
- Used to fluctuate between 4% and 6%.
- “Frictional” and “structural” unemployment.
- Now it is kissing 10%.
- Lots of people without work who would like jobs—why can’t they find them?

# Why Does the Labor Market Get So Out of Whack?

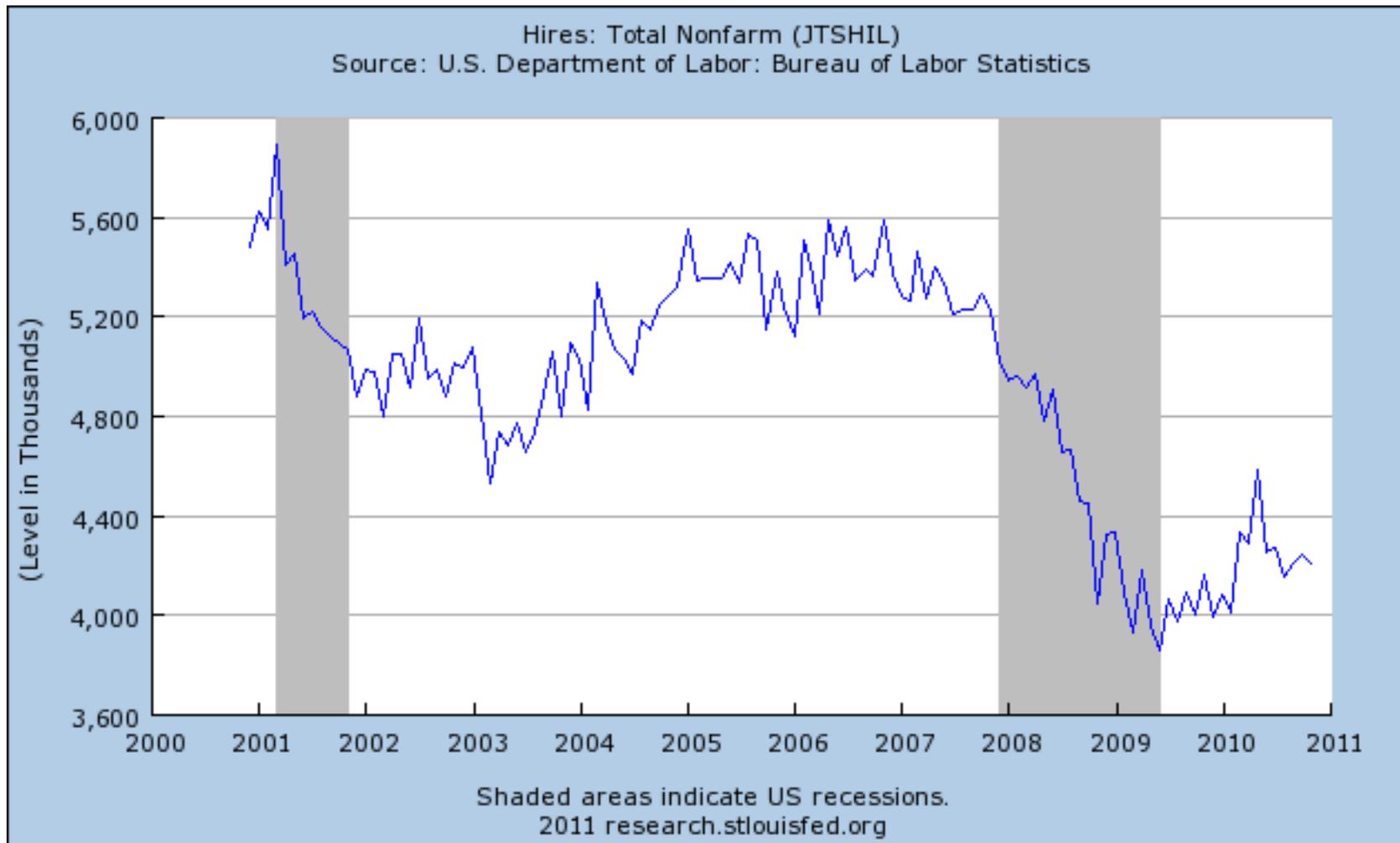
- An extraordinary “inventory” of excess workers looking for jobs—or a lack of jobs looking for workers.
- We don’t see this in many other markets.
- One set of theories: it’s not really out of whack:
  - Zero Marginal Product workers—a “Great Forgetting”
  - A “Great Vacation”
- I don’t believe that is what is going on at all.



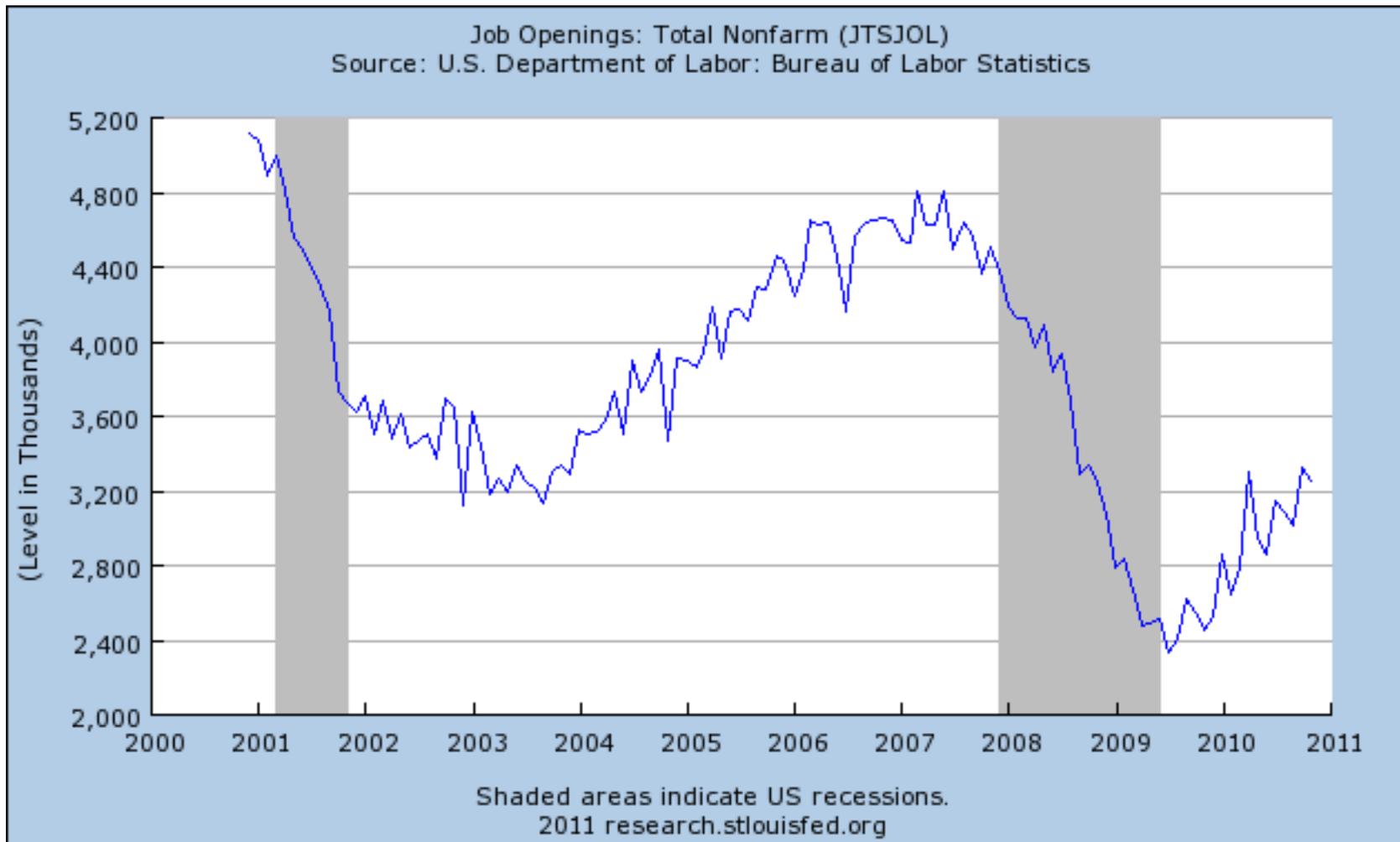
- Lots of people change jobs.
- Lots of people quit their jobs every month.
- Unemployment is not high right now because people decided in 2008 and 2009 to quit their jobs.
- Quits are a lot lower now than they usually are.
- No signs that unemployment is high because America is taking a “Great Vacation.”



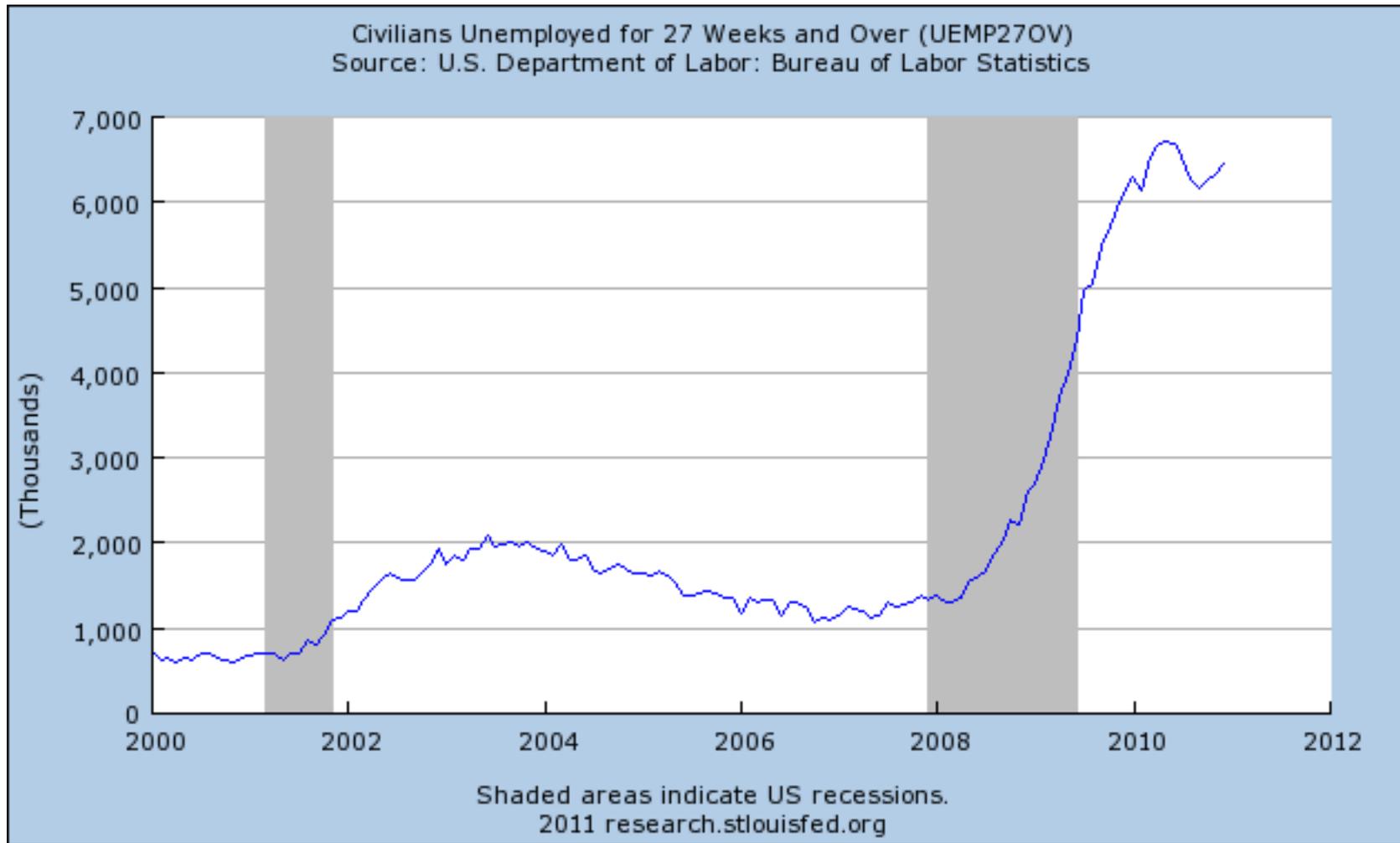
- Businesses fire a lot of people every month.
- Unemployment is high today because firms fired a lot more people than usual in 2008 and 2009.
- No sign that they fired people because the people had suddenly become worse at doing their jobs.



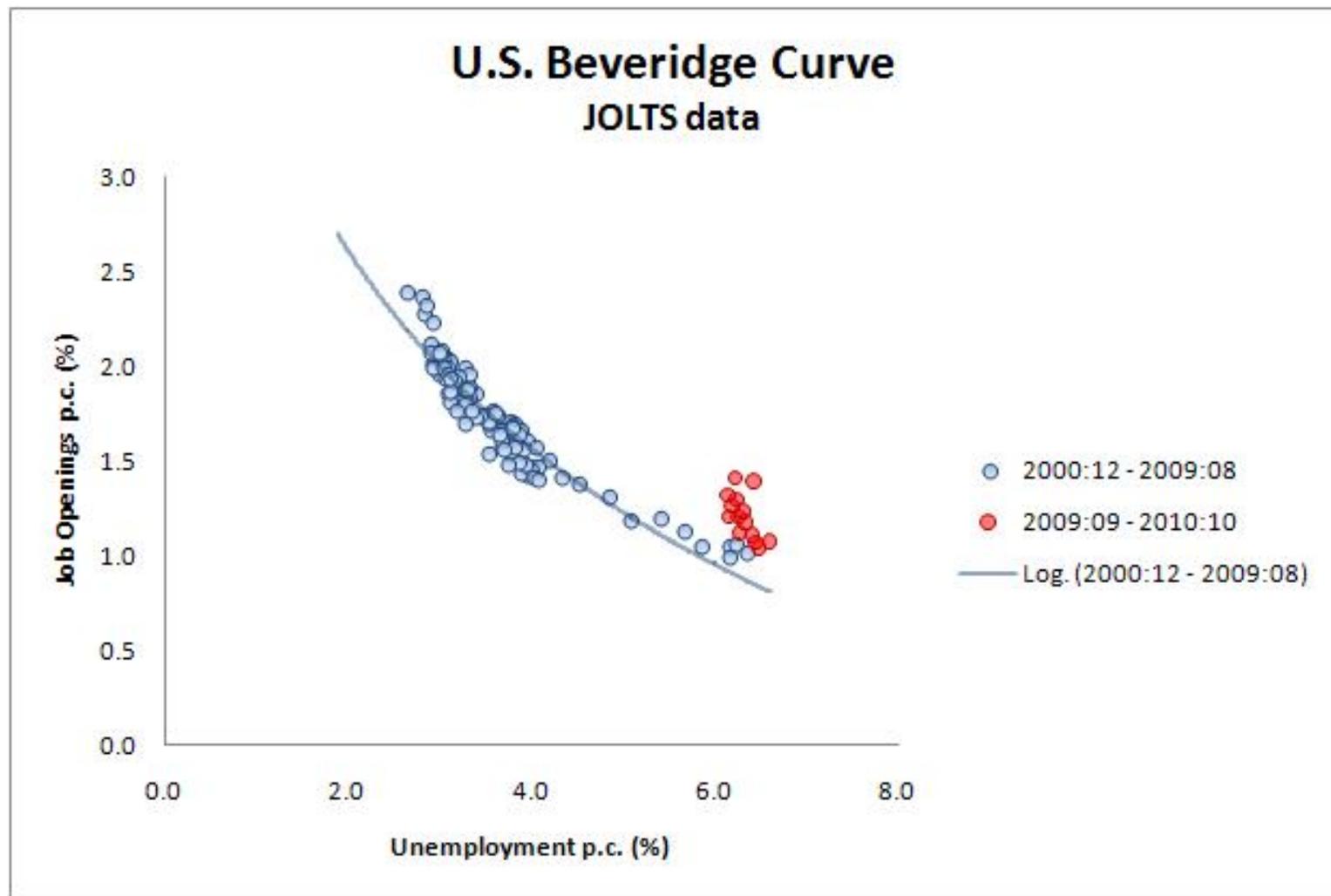
- Businesses hire a lot of people every month.
- But just when the number of people fired went up, the number of people hired went down.
- No sign that what is going on is accelerated structural change—a shift in demand that means that there is too much labor in some sectors (i.e., construction) and too little labor in other sectors (i.e., ??)



- The fall in hires is not the result of the fact that although firms want to hire they cannot find workers with the right skills.
- The downturn saw a big decline in the number of job openings that firms say that they have and are searching for as well.



- The net effect of more firings, fewer quits, and fewer hirings is more unemployed people.
- And a lot of the unemployed people have been unemployed for more than half a year.
- Back in 2006 you could argue that the million or so long-term unemployed were “structurally” unemployed—they did not have the skills to get the jobs that they wanted and they did not want the jobs that they could normally get.
- It’s a lot harder to argue that our now 6 million plus long-term unemployed are “structurally” unemployed.
- We think that if the flow of spending went back to normal they would find jobs just fine—just as most of those unemployed did in 2004, 2005, and 2006.



- The Beveridge Curve: the relationship between job openings and unemployment (as a percent of the total adult population, not just the labor force).
- The fear is that even when firms start to hire again the number of unemployed will not go down by very much.
- But that fear seems to me to be premature.
- If it were a real fear, we would see rising wages now as firms tried to hire—and found that they had to offer more to get good workers for their slots.