

# **IAS 107 Lecture: Wrong Theories of the Recession**

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IAS107 Lecture Notes

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

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Resolution for screencast capture: 1024x768

# Office Hours

- Today: 12:30-2:00 FSM Café
- Wednesday: 2-4 Evans 601

# To Your iClickers...

$$Y = \frac{c_0 + I + G + GX}{1 - (1 - t)c_y + im_y}$$

- **Suppose  $I = \$2$  trillion,  $G = \$2$  trillion,  $GX = \$2$  trillion,  $im_y = 0.267$ ,  $c_y = 0.8$ ,  $t = 0.25$ ,  $c_0 = \$2$  trillion. What is  $Y$  going to be?**
- A. \$13.5 trillion
- B. \$22.5 trillion
- C. \$12.0 trillion
- D. \$17.5 trillion
- E. \$20.0 trillion

# To Your iClickers...

$$\Delta Y = \frac{\Delta A_0 + \Delta G - (I_r + X_\varepsilon \varepsilon_r) \Delta r}{1 - (1 - t)c_y + im_y}$$

- Suppose  $im_y = 0.1$ ,  $c_y = 0.8$ ,  $t = 0.25$ ,  $I_r = 25$ ,  $X_\varepsilon = 1$ ,  $\varepsilon_r = 10$ . What is the multiplier:  $1/[1 - (1 - t)c_y + im_y]$ ?
- A. 1
- B. 0.5
- C. 2
- D. -1
- E. 3

# To Your iClickers...

$$\Delta Y = \frac{\Delta A_0 + \Delta G - (I_r + X_\varepsilon \varepsilon_r) \Delta r}{1 - (1 - t)c_y + im_y}$$

- Suppose  $im_y=0.1$ ,  $c_y=0.8$ ,  $t=0.25$ ,  $I_r=25$ ,  $X_\varepsilon=1$ ,  $\varepsilon_r=5$ . Suppose that the Federal Reserve and financial markets together raise the long-term risky real interest rate  $r$  by 3%. What will happen to  $Y$ ?
- A.  $Y$  will rise by \$1.5 trillion/year
- B.  $Y$  will fall by \$1.5 trillion/year
- C.  $Y$  will rise by \$1.8 trillion/year
- D.  $Y$  will fall by \$1.8 trillion/year
- E.  $Y$  will fall by \$2.4 trillion/year

# The Right Model of the Great Recession

- Sources of the downturn
  - Irrational exuberance
  - Overleverage
  - Misregulation
- Consequence: panic and flight to quality
- Excess demand for high-quality assets
- This produces a “general glut”: shortage of demand for currently-produced goods and services and labor
- And then total spending  $Y = C + I + G + GX - IM$  falls short of the amount needed to provide full employment...

# The Right Cure for the Great Recession

- Regulatory reform
- Government stands up via spending when private sector lies down
- Strategic interventions in financial markets to provide the private sector with the financial assets it wants
  - Liquidity (Federal Reserve)
  - Quality (Federal Reserve and bank regulation)
  - Savings vehicles (deficit spending and investment)

# The Right Cure for the Great Recession II

- Fiscal policy:  $\Delta G$
- Strategic interventions:
  - Liquidity:  $\Delta i$
  - Quality:  $\Delta \rho^r$
  - Supply of savings vehicles:  $\Delta \rho^t, \Delta \pi, \Delta G$

$$\Delta Y = \frac{\Delta A_0 + \Delta G - (I_r + X_\varepsilon \varepsilon_r)(\Delta i + \Delta \rho^t + \Delta \rho^r - \Delta \pi)}{1 - (1 - t)c_y + im_y}$$

# Wrong Models of the Great Recession

- Low marginal product workers (Ferguson, Cowen)
- Structural unemployment (Kocherlakota)
- Overaccumulation of capital (Marx-Mellon-Hayek-Hoover)
- Uncertainty caused by government deficits and overregulation (Republicans)
- Need to control inflation/avoid crowding out (Cochrane)
- Banking and fiscal policy unnecessary (Lucas)
- Banking and fiscal policy ineffective (Scholes and Fama)

# Why These Wrong Models?

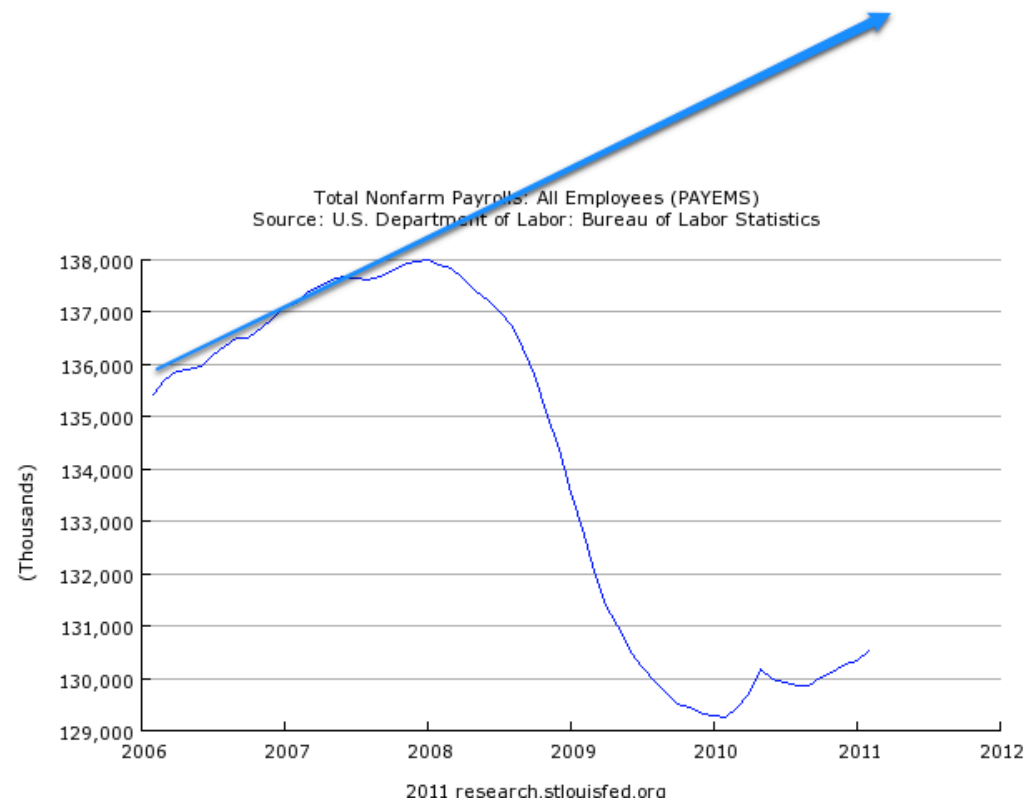
- I blame Milton Friedman
- Because he made things much, much too simple
  - Simply stabilize the money stock via open market operations, and everything will be fine: there will then be no shortage of aggregate demand
- Why? In an attempt to hide how close to the Keynesians his own monetarist-libertarian model of the business cycle was
- So when it turned out that Friedman's model was wrong, a lot of economists found themselves trying to think complicated issues through on the fly from scratch

# Why Was Friedman Wrong?

- Because stabilizing the money stock via open market operations is not enough
- What happens if there is a shortage of aggregate demand due to an excess demand for high quality assets and so  $i$  has hit zero?
  - People will then be holding money as a high-quality asset rather than as a liquid asset
  - And so the economy will be short of money for transactions
  - Further open-market operations don't raise the amount of high-quality assets: they just swap one HQA for another
- What happens if there is a shortage of aggregate demand due to a shortage of savings vehicles?
  - People will then be holding money as a savings vehicle rather than as a liquid asset
  - And so the economy will be short of money for transactions
  - And further open-market operations won't raise the supply of savings vehicles either

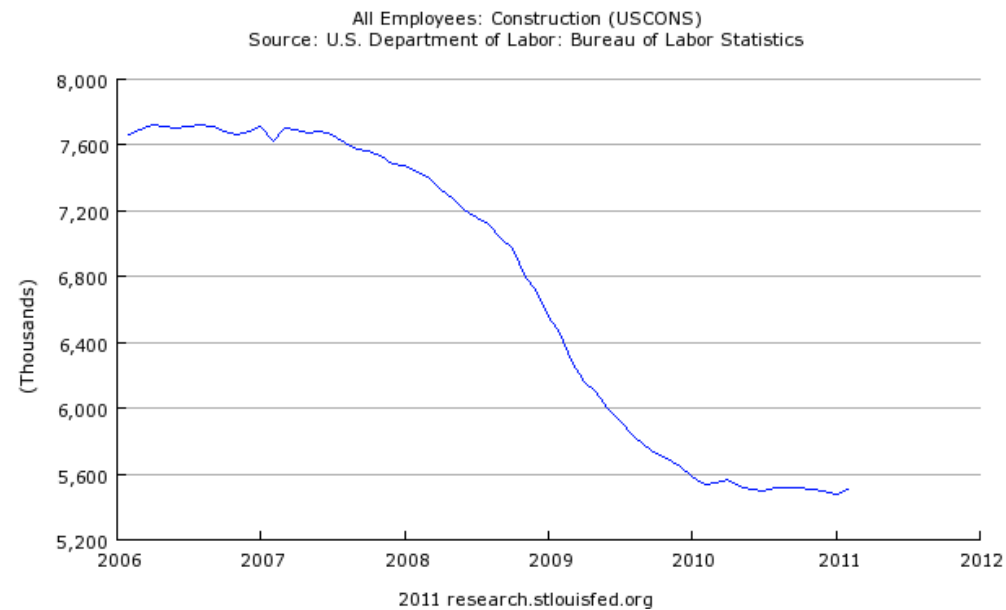
# Low Marginal Product Workers

- Employment has fallen by 7,000,000 over the past four years
- It should have grown by 5,000,000 in such a time span
- That's 12,000,000 missing jobs
- We have 12,000,000 workers whose productivity is zero (or less than the minimum wage)
- And they will be a millstone around the neck of our economy forever



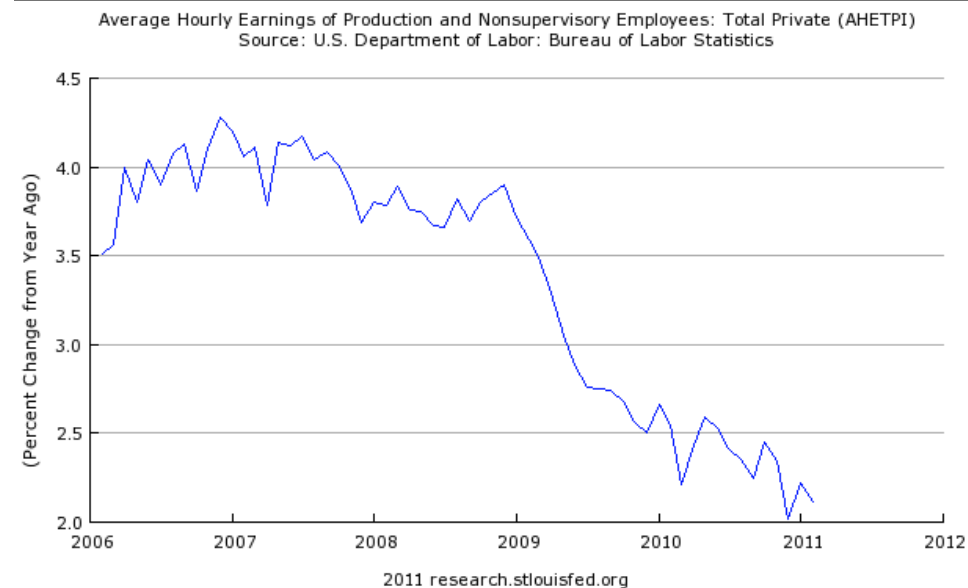
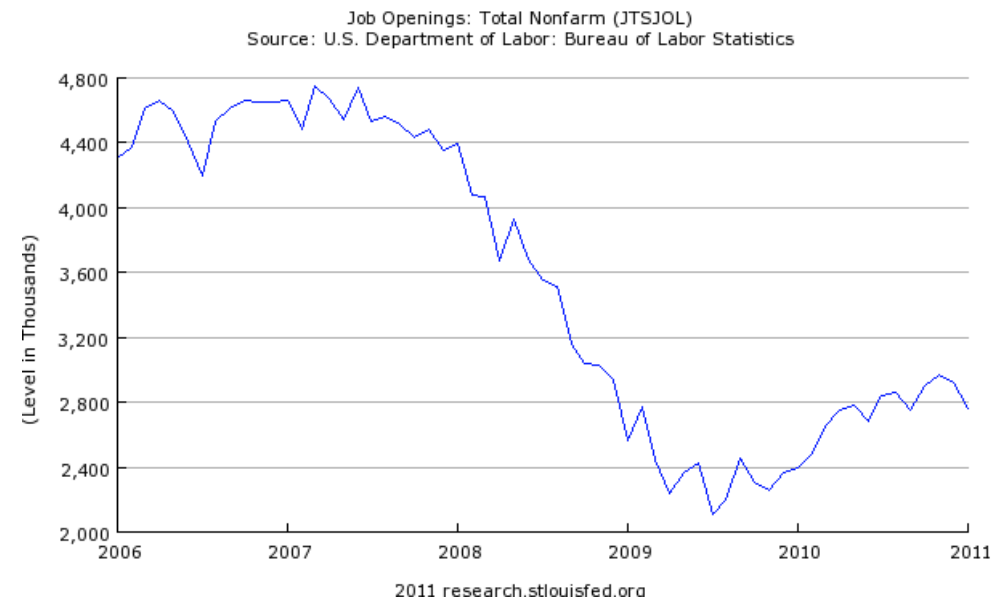
# Low Marginal Product Workers II

- Q: But all these workers were employed in 2007...
- A: That was because we thought they were productive building houses—but they weren't, really...
- Q: But construction employment has only fallen by 2 million while total employment has fallen by 8 million. If LMP workers in irrationally-exuberant construction were the problem, the fall in construction employment would be greater than the fall in total employment...



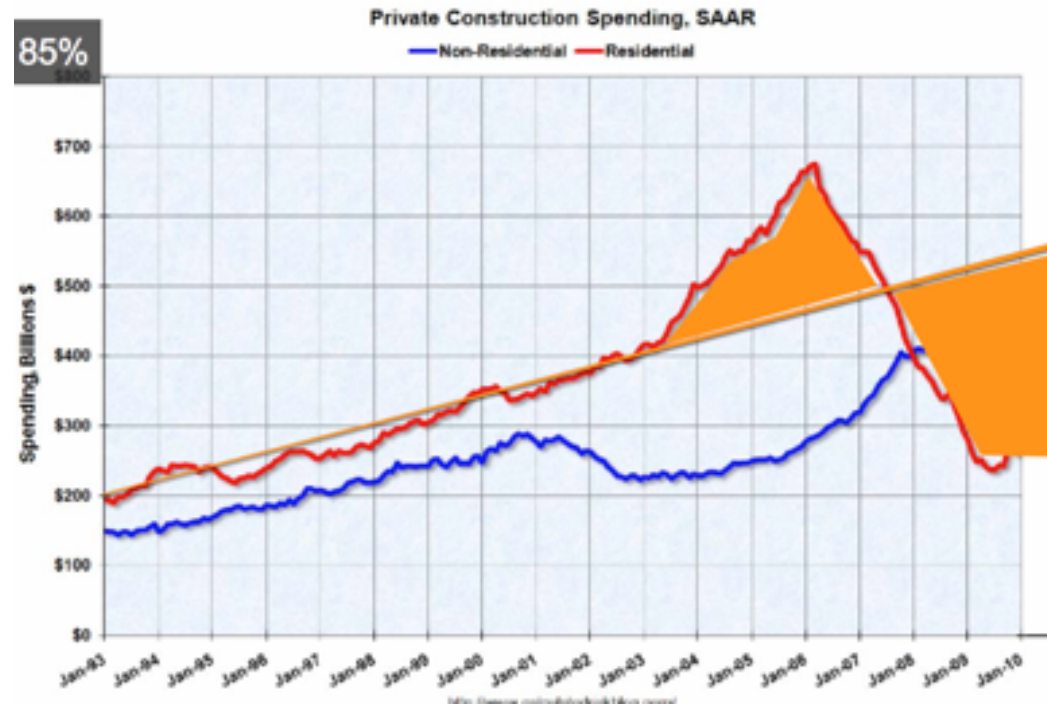
# Structural Unemployment

- The unemployed workers don't have the skills to get the jobs in expanding industries
- We need to retrain them
- That takes time...
- Q: If there are expanding industries that are having a hard time finding workers, we should be seeing vacancies and wage increases in some industries. Where are they?



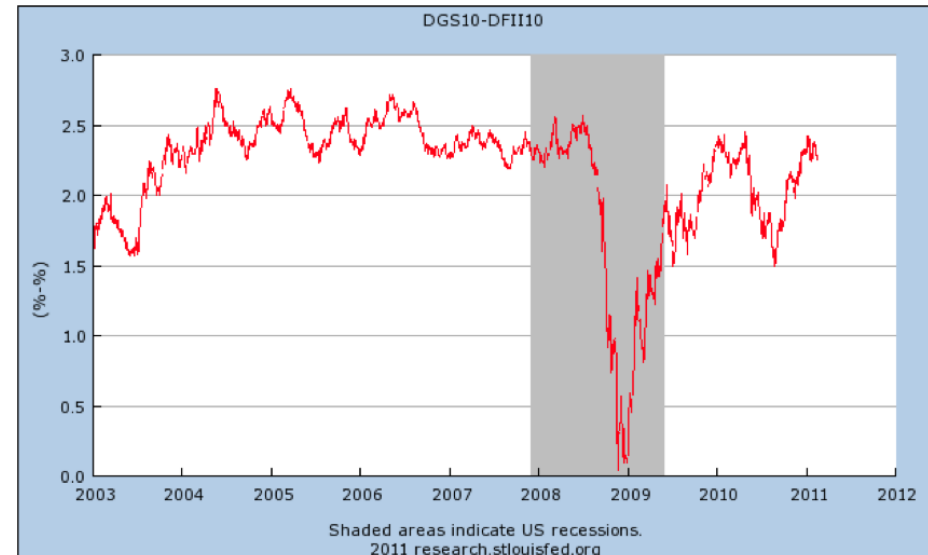
# Overaccumulation of Capital

- Overaccumulation of capital
- Marx-Mellon-Hayek-Hoover
- Q: Why does the switch of workers out of making capital goods create mass unemployment, while the switch of workers out of making consumption goods when there is a capital shortage does not?
- Q: What evidence is there for a current capital surplus? It looks like there is now a shortage of housing.

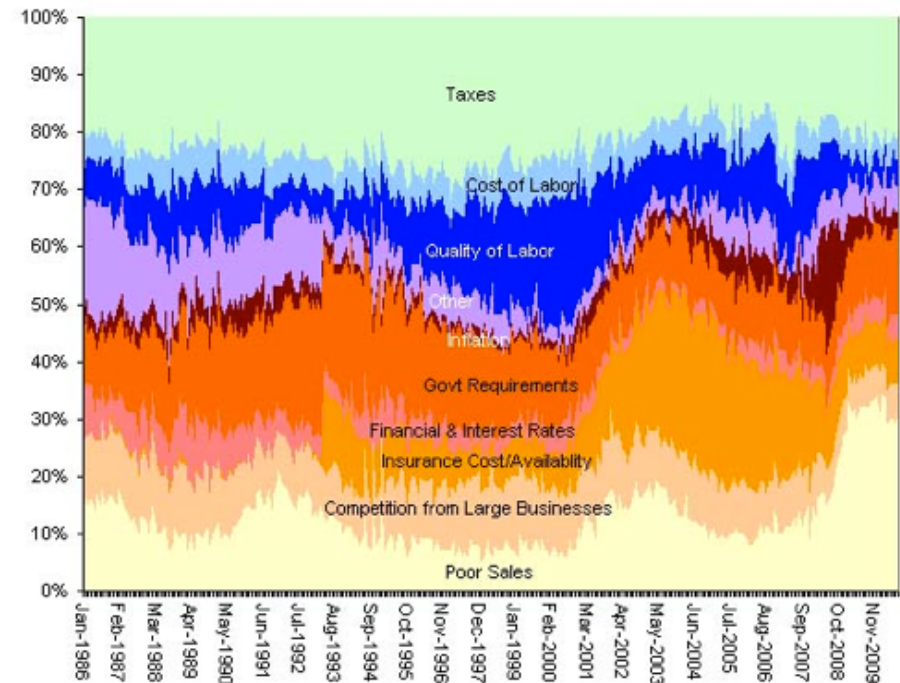


# Uncertainty

- Government deficits and overregulation create uncertainty.
- Uncertainty makes businesses cut back on their spending.
- Q: If businesses are uncertain and are worried about overregulation and overtaxation, shouldn't they say so?
- Q: If businesses are worried about inflation due to government deficits, shouldn't we see this in financial markets?

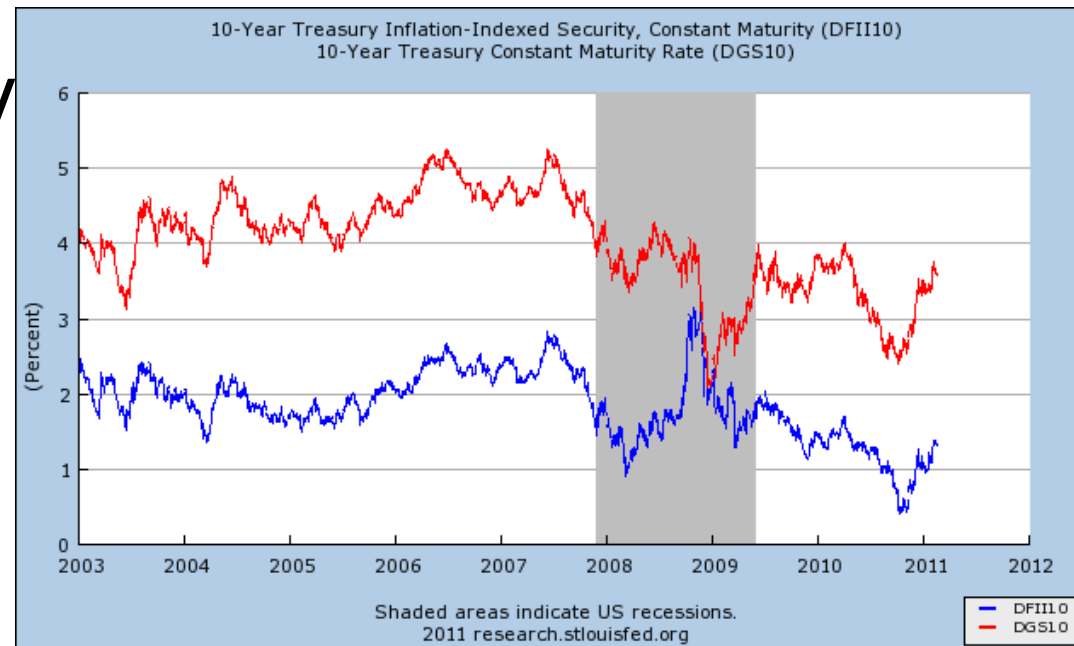


Percent of Small Businesses Naming Each Issue as "Single Most Important Problem"



# Need to Control Inflation/Avoid Crowding Out

- Further stimulative policies will set off a burst of inflation that will harm the economy in the long run
- Further stimulative policies will raise interest rates and crowd-out private investment and so slow long-term economic growth



# Banking and Fiscal Policy Unnecessary

- Robert Lucas:
  - Christina Romer--here's what I think happened. It's her first day on the job and somebody says, you've got to come up with a solution to this--in defense of this fiscal stimulus, which no one told her what it was going to be, and have it by Monday morning.... [I]t's a very naked rationalization for policies that were already, you know, decided on for other reasons..." and "If we do build the bridge by taking tax money away from somebody else, and using that to pay the bridge builder--the guys who work on the bridge -- then it's just a wash... there's nothing to apply a multiplier to. (Laughs.) You apply a multiplier to the bridge builders, then you've got to apply the same multiplier with a minus sign to the people you taxed to build the bridge. And then taxing them later isn't going to help, we know that.
  - I avoided this bank bailout issue in my 15 minutes and there's a reason for it. I don't really get it. Some of the problems you're talking about about deciding who gets paid and who doesn't, that's the whole function of bankruptcy law is to deal with that in an effective way. Now, it may be that the kind of neighborhood effects of the bankrupt banks are sufficiently different from the neighborhood effects of a bankrupt auto company—that they need some kind of special treatment. But then it seems like the right public policy is something that— maybe some kind of accelerated bankruptcy proceedings. Just to say make them well on all the money they've lost over this thing, I just—I do not get it...

# Banking and Fiscal Policy Ineffective

- Eugene Fama:
  - In a "fiscal stimulus," the government borrows and spends the money on investment projects or gives it away as transfer payments to people or states.... [G]overnment infrastructure investments must be financed -- more government debt. The new government debt absorbs private and corporate savings, which means private investment goes down by the same amount...
- Myron Scholes:
  - Myron Scholes, the Nobel Prize-winning retired Stanford University finance economist, contemplates... quantitative easing, and wonders if it'll work as well as the Fed hopes: "Maybe... QE reduces the risk premium.... The problem is that this isn't a rational argument. The risk premium can't be affected by flows. Investors will sell risky assets to government and buy bonds. The Fed could end up holding all risky assets; investors will hold safe assets. The risk premium stays the same..."

# Economic Consequences of Milton Friedman

- Libertarianism
  - Establish property rights
  - Establish courts to enforce contracts
  - Get out of the way
- Friedman: “Oh, by the way, keep the money stock growing smoothly. If you do that, you don’t have to worry about either high inflation or mass unemployment...”
- Consequence: an awful lot of economists who don’t know anything about depression economics macro because they never studied it
  - Yet they feel compelled to opine on it—with consequences that are, I think, destructive
  - Compelled because they are talkative, because they are of a libertarian orientation, or because they are playing on Team Republican

# Expected Returns as of March 30, 2009

- Robert Lucas interviewed by Tom Keene on March 30, 2009:
  - LUCAS: Our economy's got a remarkable ability to return to its long term growth trend. And for most of the depressions we've had or recessions, the return has been quick. Two or three, four years...
  - [...]
  - LUCAS: [T]here is no question that fear is what this liquidity crisis is. I mean the reason I got into money [with my portfolio] is that I got afraid to leave my pension fund in other securities. So I'm sitting there with a portfolio full of zero-yield stuff just because I'm afraid to do anything else. I think there are millions of people like me...

# Expected Returns as of March 30, 2009 II

- At the end of March 2009 Lucas says the U.S. economy will be back to normal in four years, with a normal level of unemployment, a normal share of profits in national income, a normal level of dividends and capital gains, and a normal level of stock prices
- That means a year-2013 S&P of 2000 or so, compared to its March 30, 2009 low of 667.
- Investing in the S&P 500 for a four-year horizon now is risky, certainly, but the expected return is high: 20%/year or so.
- So what is Robert Lucas doing holding his entire portfolio in cash? Reducing the equities share of his portfolio down from 70% to 0% when his expected four-year return on equities over Treasuries is 20%/year?