

# Economics 1: Fall 2010

J. Bradford DeLong, Michael Urbancic, and a  
cast of thousands...

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# The Course Nears Its End...

- 12/06: Applying economics to policy
- 12/10: 9-12 FSM Café office hours
- 12/10: Sample final review
- 12/13: 10-3, Evans 601 office hours
- 12/14: FINAL 11:30-2:30
  - At the Recreational Sports Facility

# Economics 1: Fall 2010: Course Review

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Wheeler Auditorium, U.C. Berkeley

# What Do We Want You to Remember from This Course?

- Some neuronal circuits we want engraved: we want you to keep these in the forefront of your brain for the rest of your life
- Some neuronal circuits we want traced: we want you to be able to reactivate them and think “oh yeah!” when you run across them in the future
- Some neuronal circuits we don’t want you to waste brain capacity remembering—but we do want you to know where to look to learn

# The First Thing We Really, Really Want You to Remember

- **The market economy is an extraordinarily effective societal instrumentality for planning and coordinating the production and distribution of scarce, rival, excludable commodities.**
- This requires some elucidation...

# The Economic Problem

- Economics deals with those things that we want but that are "scarce":
  - There are not enough of them for all of us to be satisfied that we have all that we want.
  - Societies then have to--we have to--figure out whether it is worth making more of these scarce commodities.
  - Then, if we do make more of them, we then need to figure out who is going to get to use them.
- Where things are both scarce and where we care, we have the economic problem
  - Where things are not scarce (the air, for example), that is not economics.
  - Where we do not, care that is not economics either.
- So how ought we to decide whether it is worth our while to make more of any particular commodity? And if we do decide to make more of them, how ought we to decide who is been going to get use them?

# Relevant Facts About the World

- Most scarce things that we care about are "rival."
  - By "rival" I mean the only one person can use it at a time.
  - I am now using this iPad to read my lecture notes.
  - Because I am now using it, you cannot be.
- Most scarce things that we care about are "excludable."
  - By "excludable" I mean that it is relatively easy to keep someone from making use of a commodity.
  - I can keep your cows from eating my grass by putting up a barbed-wire fence.
- Because commodities are "rival," somebody's use of a particular good imposes an opportunity cost on the rest of society.
  - Because I am using this iPad, there is one fewer iPad for the rest of you to use.
  - My use restricts your opportunities.
  - A good economic system would make me take account in my decision-making of any reduction in your opportunities and resources that might be caused by my actions.

# This Is Where the Market Economy Comes In

- Let us assign each newly-produced commodity an "owner."
  - Let the owner decide who is going to get to use the commodity.
    - Let the owner exclude all others who from using the commodity.
    - And let the owner charge the designated user he or she has decided upon a "price" for the right to make use of this commodity.
- This simple institutional arrangement has a huge number of advantages—five, as I count them

# Advantage #1

- It solves the problem of determining what commodities we should try to make more of.
  - Individuals look forward into the future
  - They recognize that others will be willing to pay them high prices for commodities they greatly desire.
  - That gives individuals an incentive
    - An incentive figure out how to make more of those scarce, rival, excludable commodities that are scarcest and hence most highly valued.

## Advantage #2

- It solves the problem of how to get people to economize on their own consumption
  - And thus not hog too great a share of society's total resources for themselves.
  - Users have to pay the owners the prices the owners ask.
  - Their eyes may be bigger than their stomachs.
  - But their wallets generally will not be.

# Advantage #3

- It solves the problem of determining who is going to get to use newly-produced commodities.
  - The owner has an incentive to choose the person willing to pay the highest price
  - The person willing to pay the highest price is, in some sense:
    - The person who values it the most
    - The person to whom it is scarcest.

# Advantage #4

- It solves the problem of coordination.
  - As long as market prices are free to move to equalize quantities supplied and demanded...
  - ...there does not need to be any huge centralized computer bureaucracy keeping track of everything and making sure that plans add up.
- The market will coordinate itself.

# Advantage #5

- It solves the problem of information.
  - In a market economy with commodities with owners, decision-making is pushed out to the periphery
  - At the periphery people already know what is going on.
  - You don't need any huge centralized computer bureaucracy collecting and processing information
- What if people do discover that there are things that they don't know but need to learn?
  - Knowledge of something and that somebody else would like to learn it is also a commodity.
  - Those who know those two facts are the owners of that commodity.
  - And they can sell it to the highest bidder as well.

It is hard to imagine a simpler institutional framework—owners, markets, and prices--that could solve those five problems so very well.

# Owners, Markets, and Prices Fit Our Psychology

- That we believe that things are ours and that we own them is perhaps not so surprising:
  - It appears deeply deeply engraved in mammalian psychology.
  - Squirrels certainly act as though they believe that they "own" nut-foraging sites.
  - Dogs believe that they "own" bones.
- We East African Plains Apes, however, not only believe that we own things--we like to trade them away.
  - We are animals that solidify our own societal bonds via relationships of gift-exchange.
  - It is this psychological propensity to engage in gift-exchange--what Adam Smith called our “natural propensity to truck, barter, and exchange” in such a way that both sides are happy because they feel that they have gained something from the deal--that serves as the psychological underpinning of our market economy.

# Thus the Very First Thing I Want You to Remember from This Course

- **The market economy is an extraordinarily effective societal instrumentality for planning and coordinating the production and distribution of scarce, rival, excludable commodities.**

# The Second Thing We Really, Really Want You to Remember

- **the requirements for any form of "market efficiency" are very stringent: there are many ways a market economy can go wrong and go badly wrong.**
- I count seven ways that market economies can and do go badly wrong

# If the Wealth Distribution Is Wrong

- The market judges value by willingness to pay.
- The rich are much more willing to pay than the poor
- Those without wealth or income have no willingness to pay at all.
  - If your wealth and income are zero, then the market literally does not care whether you live or die--it is of no interest to it at all.
- If the wealth distribution does not conform to what it ought to be, the market allocation of production and distribution will be wrong

# If Commodities Have the Wrong Shape

- Remember: the market works because it fits rivalry and excludability
- The market also works because of information—people knowing what they are buying and selling.
- If these are not there, the market will not work well:
  - An absence of or imperfect rivalry
    - Increasing returns to scale in production or consumption of any sort
    - And the market will go wrong.
  - An absence of or imperfect excludability
    - Free-rider problems of any sort
    - Or any failure of property rights definition or enforcement
    - And the market will go wrong.
  - An absence of good information about exactly what you are buying or selling
    - Adverse selection or moral hazard problems of any sort
    - And the market will go wrong.

# If There Is Market Power

- For the market to work well agents need to take the prices at which they buy and sell as data shaping their choices
  - Not as decision variables they can manipulate
  - Market power makes the market economy crank out the wrong allocation.

# If There Are Sticky Prices

- The psychological underpinnings of gift-exchange mean that prices do not just balance supply and demand at the moment
  - They perform other functions as well
- But the market will go wrong if prices do not equalize quantities supplied and quantities demanded at every moment.
  - "Price stickiness" for any sociological or psychological reasons disrupts the market's ability to function.

# If Say's Law Breaks Down

- If there is substantial downward pressure on spending on currently-produced goods and services because of an excess demand for financial assets...
  - ...then the market will go wrong
  - We will have a downturn and a depression.
- If there is substantial upward pressure on spending on currently-produced goods and services because of an excess supply of financial assets...
  - then the market will go wrong
  - We will have a burst of inflation
  - That will disrupt the functioning of the price system.

# When the Market Tries to Peer Into the Future

- A proper forecasting mechanism would weigh each individual's opinion by the precision of his or her knowledge.
- A market tends on the contrary to weigh each individual's opinion by his or her wealth.
  - Whenever economic processes tend to revert to some average level
  - Then the market is likely to get things wrong,
- When prices rise above average those who are optimistic become richer
  - Their opinions then carry more weight
  - And so prices tend to rise further above their likely long-run fundamental values.
- Bubbles and crashes, manias and panics, are thus built into the system.

# Whenever Individuals Are Bad Judges of Their Own Long-Run Interests

- When, not if.
- Humans are very bad at assessing and dealing with risk.
- Humans are not that great at appropriately weighting different conflicting pieces of information.
- Humans are absolutely horrible at dealing with substances or patterns of behavior that can in any sense be addictive.

# The Seven Types of Market Failure

- Whenever the system falls into any one of these seven arenas of psychological, behavioral, or institutional myopia and market failure
  - The market will go wrong.
- A good government will put its thumb on the scale in order to offset all of these seven forms of market failure.
- A great government will have foresight and take care to structure political-economic institutions to make these seven arenas of myopia and market failure as small as possible.

# REMEMBER THIS TOO!!

- Keep this as an active process running on your wetware always.
  - Lay up this idea in your heart and in your soul.
    - Bind it for a sign upon your hand, that they may be as frontlets between your eyes.
  - Teach it to your children
    - when thou sittest in thine house,
    - when thou walkest by the way,
    - when thou liest down,
    - and when thou risest up.
  - And write them upon the door posts of thine house, and upon thy gates
- That thy days and the days of thy children--or at least the commodities they own--may be multiplied.

# Things We Don't Expect You to Remember Forever

- But we do expect you to remember them through a week from Tuesday
- Why? So that whenever you see them again, you will say “oh yeah...” and be able to relearn them quickly
- And so that you will know that you once knew this, and know where to look

# Macroeconomic Fundamentals

1. Understand the accounting system we use to assess the overall state of the economy, the National Income and Product Accounts, and use it.
2. Explain why real GDP per capita, the unemployment rate, and the inflation rate are economic variables of especial interest.
3. Understand why nominal interest rates, real interest rates, and stock prices are also key economic variables.

# Depression Economics

1. Explain why Jean-Baptiste Say was so confident in 1803 that a general glut-- a situation in which there seemed to be deficient demand for pretty much every currently-produced commodity and excess demand for none, leading to high unemployment and idle factories--was impossible.
2. Explain what had made Jean-Baptiste Say change his mind and admit the possibility of a general glut of deficient economy-wide demand by 1829.
3. Explain the hole in Say's Law: how you can have deficient demand for pretty much every currently-produced commodity if you have excess demand for financial assets.
4. List the three types of excess demand for financial assets that have, historically, led to large downturns in employment and capacity utilization.
5. Explain how to use observations of the pattern of asset prices to understand what type of excess financial asset demand is generating any particular economic downturn.

# Depression Economics II

6. Explain how the type of downturn determines the most effective cure--an excess demand for liquid cash money being best cured by a monetarist expansion of the money stock, an excess demand for bonds to serve as long-term savings vehicles being best cured by a Keynesian expansionary fiscal policy, and an excess demand for safety being best cured by banking policy that provides government guarantees to shaky private assets.
7. Explain the two parts of the "Bagehot rule" for dealing with a Minskyite excess-demand-for-safe-financial-assets downturn.
8. Evaluate the policies followed by the Bush and Obama administrations toward the current downturn in light of the "Bagehot rule."
9. Calculate the likely size of the deflationary gap produced by an excess demand for bonds in the Keynesian income-expenditure model.
10. Calculate the likely size of the deflationary gap produced by an excess demand for money in the monetarist quantity-theory-of-money model.

# Inflation Economics

1. Calculate the likely size of the inflationary gap produced by an excess supply of money in the monetarist quantity-theory-of-money model.
2. Explain the reasons behind the Phillips Curve downward-sloping inverse relationship between inflation and unemployment.
3. Explain how changes in the natural rate of unemployment and expected inflation affect the position of the Phillips Curve.
4. List the three types of inflation expectations.
5. Calculate how the inflation rate will evolve over time in response to changes in the money stock under static, adaptive, and rational inflation expectations.
6. Explain the circumstances under which inflation expectations are likely to be static, adaptive, or rational.

# Government Budget Economics

1. Explain why, as far as the government is concerned, Milton Friedman always said: "To spend is to tax."
2. List and evaluate the arguments for running a government deficit and a government surplus.
3. Explain why the long-term budget outlook for the U.S. government looks grim.
4. Explain why the long-term budget outlook for the U.S. government looks a lot better after the passage of PPACA--the 2010 Health Care Reform.
5. Explain why the long-term budget outlook including the estimated effects of PPACA may well be overly rosy.

# Growth Economics

1. Understand the different paces of economic growth before the Neolithic Revolution, in the Agrarian Age, since the Commercial Revolution, and since the Industrial Revolution.
2. Explain why the pace of economic growth has sped up so much over time.
3. Explain why before the Industrial Revolution increases in GDP went essentially 100% into increases in population and not at all into increases in GDP per capita.
4. Explain why this pre-industrial pattern was broken by the Demographic Transition.
5. Project the population of the world forward.
6. Assess the relative importance of accumulation and innovation in accounting for economic growth.
7. Explain the sources of differences across countries in GDP per capita levels.
8. List factors and policies likely to accelerate economic growth.
9. List factors and policies likely to retard the pace of economic growth.

# Choice, Supply, and Demand

1. Understand that every choice is a choice between alternatives.
2. Calculate what market demand for a commodity is likely to be as a function of price
3. Calculate what market supply is likely to be as a function of price
4. Calculate how changes in outside options are likely to affect market supply and demand

# Market Equilibrium

1. Explain why the price will rise if the quantity demanded is greater than the quantity supplied.
2. Explain why the price will fall if the quantity demanded is less than the quantity supplied.
3. Calculate what the market equilibrium price is
4. Calculate how changes in the supply and demand curves will change the market equilibrium price

# Welfare Gains

1. Calculate the consumer surplus from a market in equilibrium.
2. Calculate the producer surplus from a market equilibrium.
3. List the reasons that we should and the reasons that we should not treat producer surplus and consumer surplus as equally good.
4. Explain how differently-shaped supply and demand curves lead to different divisions of the surplus between producers and consumers
5. Explain why total surplus is and is not a good thing to aim to maximize.

# Market Distortions

1. Calculate the effects of a price ceiling
2. Calculate the effects of a price maximum
3. Calculate the effects of a quantity maximum
4. Calculate the effects of a draft
5. Explain why the effects of market distortions differ depending on what the process for allocating the rationed side of the market is
  1. Do those who value it the most get it?
  2. Or is it distributed to a random assortment of potential buyers

# Short Run and Long Run

1. Explain why demand curves are flatter in the long run than in the short run
2. Explain why supply curves are flatter in the long run than in the short run
3. Calculate the effects of a change on market equilibrium in three runs:
  1. The market day
  2. The short run
  3. The long run

# Monopoly

1. Calculate the quantity supplied, the price charged, the producer surplus, and the consumer surplus under monopoly
2. Explain why we would and would not want to treat monopoly profits and consumer surplus equally in our welfare calculations.
3. Explain why there are some circumstances under which we might want to encourage monopoly profits

# Monopolistic Competition

1. Explain why producers earn no (or very little) profits under monopolistic competition
2. Explain why consumers receive relatively little consumer surplus under monopolistic competition

# Externalities

1. Explain why markets go wrong when there are externalities
2. Calculate the optimal Pigovian tax or subsidy to deal with externalities
3. Explain why governments seem to find it very hard to impose these optimal Pigovian taxes and subsidies

# Asymmetric Information

1. Explain why markets go wrong in the presence of moral hazard/adverse selection
2. Calculate whether or not a market equilibrium can be sustained in the presence of moral hazard/adverse selection
3. Explain why a mandate might be a good thing to impose on a market riddled with AS/MH
4. List some of the devices that might diminish the magnitude of AS/MH problems

# Risk

1. Explain why the existence of Las Vegas tells us that people are lousy decision-makers under risk.
2. Explain why the persistent stock market return premium tells us that people are lousy decision-makers under risk.

# Silicon Valley

1. Explain why competitive market equilibrium is not sustainable when the commodities produced have a substantial information goods component.
2. Explain why we do not rely purely on any one of the possible alternatives that is sustainable, but rather choose a mix of institutions to develop and produce commodities with a substantial information-goods component

# Poverty and Income Distribution

1. Explain why from behind the veil of ignorance income inequality at the top is valued only as a means to increasing living standards at the middle and at the bottom
2. List the major changes in income distribution in the U.S. since 1776
3. Understand that there seems to be little sign that a more unequal American society produces faster economic growth

# Political Economy

1. Understand that the post-WWII North Atlantic mixed economies are, so far, the best that we have done in balancing the advantages and deficiencies of markets
2. Understand the inadequacies of voting systems as societal decision-making mechanisms
3. Understand why a two-party system will tend to produce policies that hug the middle of the electorate's views
  1. Or perhaps the middle of the campaign contributors' views.

**GOOD LUCK!!**