

17th Class

2/28/11

discuss rising food prices and how this reflects both changes in supply and demand
e.g.: <http://www.bloomberg.com/news/2011-01-05/global-food-prices-climb-to-record-on-cereal-sugar-costs-un-agency-says.html>

and

<http://www.smartmoney.com/investing/economy/what-to-make-of-rising-food-prices-1297117508303/>

consider how governments may be under political pressure in poor countries to cap food prices—
how to do so?

up until now we have been doing what is known as microeconomic theory, considering single consumers, single firms, or single markets

today we start our foray into macroeconomics, where we consider the market system as a whole

an economy consists of a set of interrelated markets that draw from common factor markets, so we can speak of the market for labor, for capital etc.

we'll start with what is called closed economy macroeconomic theory where we at first assume that there are no other countries with which to interact, so we cannot import or export products

later in the course we'll consider open economy macroeconomic theory.

our two unifying mathematical concepts of optimization and equilibrium continue to be important

however we will often see cases of what is known as the fallacy of composition, where actions that may be optimal for a single firm or individual to take turn out to be bad for everyone if everyone does these actions

Thus for example the economy may persist in an equilibrium that is suboptimal even though everyone individually is following optimizing behavior

this will lead to the argument that something (e.g., the government) will sometimes need to intervene in the market economy in order to move the economy as a whole to a better equilibrium

we'll follow the same pedagogical approach as in microeconomics, first starting with the top level (in this case the macroeconomy as a whole, with the two sides of the economy known as AD – aggregate demand, and AS – aggregate supply), then building back up to the top level piece by piece on each side (first demand, and then supply), then putting the two sides back together and analyzing

We might again ask what the goals are of the macroeconomy, or of whoever (the government?) controls the macroeconomy

recall in microeconomics that individuals had the goal of maximizing utility, while firms had the goal of maximizing profit

We might say that the government has two goals for an economy: stability and growth, in other words steady growth without much year-to-year fluctuation around the long-run growth path

and thus the types of macroeconomic policies we will analyze later in the course will either be towards reducing fluctuations (in particular, avoiding recessions and depressions)

later this week we'll look at data for the U.S. that illustrates both growth and fluctuations

It's pretty clear why we might like growth, where growth in particular is defined as growth in output, or total product of the economy (usually measured as growth in GDP – gross domestic product)

After all, if utility is increased by consuming more stuff, then if we make more stuff, we have more stuff to consume
but there are some issues with that which might lead us to modify either our definition of what we're trying to grow, or question the focus on growth at all

why do we want stability? We don't have as clear a story about what we want stable growth, but a simple answer is that we want in particular to avoid unemployment. Unemployment is inefficient, because people who want to work aren't working, and once time goes by we can't get those potential work hours back. So if instability is measured by increases in unemployment, then that seems like something we'd want to avoid.

It is less clear why we might care about having a stable price level, but there are certainly potential negative effects to some people and firms of having either rapidly rising or falling prices, particularly if the rate of change is unanticipated or not shared equally across all markets

consider a case in which all markets in the economy are in simultaneous equilibrium, both product and factor markets

we would call this general equilibrium

of course this is just a theoretical state since there's always something changing.

Instead of drawing all the different product markets, we could draw a single diagram to indicate that they are in this equilibrium, namely an AS-AD diagram [draw graph]

Here the price level (to be defined more carefully later) is on the vertical axis and output (often designated as either Q or Y) on the horizontal axis

Y is often used to stand for income, because in a closed economy, the monetary value of output (which is how we measure output when we have to add it up across markets) is equal to the total income in the economy (i.e., payments to the factors of production, including labor, capital, and land)

It is also important to realize that the equilibrium in this market also implies an equilibrium in the economy's overall labor market, which we would draw with the wage level on the vertical axis and total labor hours or workers on the horizontal axis [draw graph]

That means that any move away from this equilibrium point implies either a decrease or an increase in output, but also therefore a matching decrease or increase in employment

in addition, any move away from this equilibrium implies either a rise or a fall in the price level, and thus either price inflation or price deflation (with an eventual settling at a new higher or lower level)

Moves can occur either as shifts of the AD curve or the AS curve

what things shift the AD curve? Changes in the components of demand
demand in the closed economy comes from three sources: consumers, firms, and the government
consumers are responsible for the consumption component of demand
firms for the investment component of demand
and the government for the government

what things shift the AS curve? Things that affect the costs of production
changes in the prices of inputs/factors for one thing
that could include changes in the price of energy or raw materials
we'll allow for AS shifters to come from outside the closed economy, and they could include changes in the availability of key inputs, and shocks from noneconomic source such as the weather or political unrest in another country (i.e., reducing the supply of some key input)

Just as with the supply curve for any one firm, the AS curve rises if factor prices increase, and falls if factor prices decrease (and if technology improves)

Note that an increase in labor supply will lead to a decrease in the price of labor, i.e., the wage, and thus will show up as a rightward shift in the AS curve. For example, if there is an increase in immigration, or women start working outside the home

As with microeconomics, we'll spend more time on AD and analyzing the components of AD separately before reassembling the AD curve from the components. We'll spend less time on AS and won't be as interested in its components, but we'll differentiate between SR AS and LR AS as we did with SR and LR for the firm's behavior

On the problem set handed out this week, we'll spend time simply analyzing what is a cause of a curve shift, and what is a consequence (generally measured in terms of changes in inflation and unemployment) of a curve shift.