Economics 493/593
Winter 2010
Final Exam

1. During the mercantilist era, production was mainly by inefficient guilds (especially during the early period). Because of this, there wasn't much value added in production and, hence, little room to make profit by competing to be the lowest cost (and hence the lowest price) producer. Inefficient production led mercantilists to focus on exchange – buy low, sell high – as the source of wealth. The source of profit during this era was twofold: (1) large regional price differentials allowed for many profitable arbitrage opportunities. (2) the inflation of the 1500s and 1600s caused inventories to appreciate before they were sold (simply transporting goods between regions could take a long time, and inflation in the interim would raise the value of the goods, at least in nominal terms which was all they cared about). So, in summary, inefficient production caused most capitalists to be primarily merchants, and they saw exchange, not production, as the source of wealth.

By Smith's time, guilds had lost much of their influence and power, and factory type production was beginning to take hold. Smith's goal analytical goal was to understand production, and Smith focused on issues such as division of labor and the keys to capital accumulation. He wanted to understand what made a nation wealthy, and understanding production was a means of explaining the determinants of the wealth of nations.

By Ricardo's time, there had been substantial growth in the ability to produce goods and services, enough so that it appeared people might escape the Malthusian trap. Hence, the key question become one of understanding how and why goods were distributed in particular patterns, and how the distribution would change over time (e.g. due to the rapid population growth they were observing).

2. (a) Wages differ across occupations because (we call these compensating wage differentials today):

1. The agreeableness of the occupation (more disagreeable → higher wages).
2. The cost of acquiring skills and knowledge (higher cost → higher wages).
3. The regularity of employment (less regular → higher wages).
4. The level of responsibility (more responsibility → higher wages).
5. The probability of success (lower probability → higher wages).

Smith was able to show that in a primitive economy goods would sell for a price equal to their labor values in a simple example. But then he realized that if there were differences in the skill required, agreeableness of the job, etc., that result would no longer hold (even in a primitive economy). The five reasons why wages differ across occupations listed above is an attempt to resolve this inconsistency, i.e. to explain why output prices might differ when these factors are present. But he never connects the differences in wages/prices to the underlying labor exertions, so in the end this is not sufficient. (b) For Smith, international trade is one part of his general notion that increases in productivity depend upon (among other things) the division of labor. By allowing free and open trade, labor can be divided on an international basis, and everyone can be made better off through specialization and exchange (though he only recognized absolute advantage, Ricardo discovers comparative advantage later).

3. Malthus developed a theory of the potential insufficiency of effective demand. He assumed that workers receive a subsistence wage. Employers hire these workers because they produce a value greater than that which they receive as wages; that is, the employer makes a profit. Because workers cannot buy back the total output, others must.

So who will purchase the extra output? Capitalists will buy some of it in the form of capital goods. Capitalists have the power to consume all of profits, but it is not their habit to do so. The central object of their lives is to amass a fortune, and they are too busy in the counting-house to consume it all:

There must therefore be a considerable class of persons who have both the will and power to consume more material wealth than they produce, or the mercantile classes could not continue profitably to produce so much more than they consume. In this class the landlords no doubt stand preeminent; but if they were not assisted by the great mass of individuals engaged in personal services, whom they maintain, their own consumption would of itself be insufficient to keep up and increase the value of the produce, and enable the increase of its quantity more than to counterbalance the fall of its price. Nor could the capitalist in that case continue with effect the same habits of savings.

Spending by landlords is essential to avoid a glut of goods on the market that in turn would produce economic stagnation. Rent, said Malthus, is a surplus based on the difference between the price of agricultural produce and the costs of production (wages, interest, and profits). Its expenditure therefore adds to effective demand without adding to the cost of production.

Policy Implications

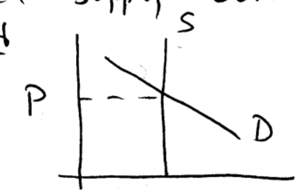
This theory of market gluts and the need for unproductive consumption had several policy implications. The most important one, according to Malthus, was that the corn laws must be retained. These tariffs on imported grain enrich the landlords and consequently promote unproductive consumption. The latter is necessary to avoid economic stagnation.

In extreme cases, Malthus implied that war offered another stimulus that could eliminate gluts, and he also recommended government spending on public works.

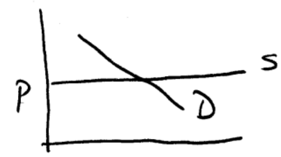
Ricardo did not agree with Malthus, he believed in Say’s law and hence that general gluts were impossible.

4.

(4) (a) Mill believed there were three types of goods. The first is Absolute limited Quantity goods (e.g. rare art). These goods have a vertical supply curve, so price is determined by demand



The second type is goods of unlimited production (essentially constant cost).
For these goods, price is determined by supply.



Mill believed these were the most common type of good. The rest fall in between, mainly ag, minerals. These have ↑ costs and have a positively sloped supply curve.

(b) There were two main differences. Bentham believed that all motives can be reduced to self-interest, and that each person is the best judge of their own pleasure (utility). Mill believed self-interest dominated economic decisions, but not all decisions (e.g. people can be altruistic). He also believed that Quality matters, i.e. that there is a higher principle that can be used to judge actions. If pushpin makes someone as happy as poetry, that doesn't mean pushpin is just as good (so gov. may need to intervene to improve choices).

5. (a) Under slavery, it is very clear that workers do not get to keep any of their own output except for what is necessary for subsistence (which is essentially their wage). Thus they are paid a subsistence amount, but nothing beyond that. This lack of motivation eventually limits slavery as a mode of production, and it is replaced by feudalism.

Under feudalism, workers (serfs) are allowed to work part of the time for themselves, the rest for the overlord, and the workers gets to keep whatever is produced on their own time. So they work harder when they are working for themselves. But, since tax rates and time spent working for the overlord can be adjusted, in the end the worker still only gets to keep a subsistence wage. But total output is higher.

Under capitalism, workers believe they are paid according to how hard and long they work. If they work harder and are more efficient, they will be paid more. But, since the total value of their pay will always be at subsistence because they are paid for their labor power, not their labor time, and because the reserve army of the unemployed holds wages at the subsistence level. Thus, under capitalism workers are motivated to work harder, but they still only receive a subsistence wage (just like under slavery). (b) For Marx, the rate of profit was s/(c+v), where is is the surplus, c is constant capital (e.g. machinery) and v is variable capital (labor). Over time, due to technological change, there is an incentive to replace variable capital with constant capital. As the individual firm does this, it realizes higher profit. However, when all firms follow and install the same equipment (so as to stay in business), the aggregate surplus, s, falls. Why? Because variable capital is the source of surplus, constant capital does not yield any surplus. So when there is less variable capital in use, profit goes down (100 workers giving up three hours of surplus a day picking a crop gives more profit than the surplus from just one person riding a tractor). Therefore, as v is replaced by c holding c+v constant, s falls and the rate of profit falls.

6. The first part of this is answered in hw7, problem 3:

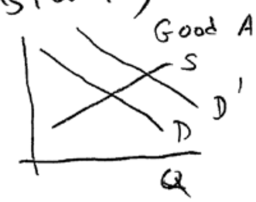
[see next page]

(3) Under partial equilibrium analysis, a firm, market, household, or some other economic unit is examined in isolation (all else is held equal). Under general equilibrium analysis, all prices, quantities, etc. in all markets are allowed to change simultaneously. Generally (and even then, not always), Tastes/preferences, technology, and the institutional structure (i.e. the laws, etc.) are held constant, but that is all.

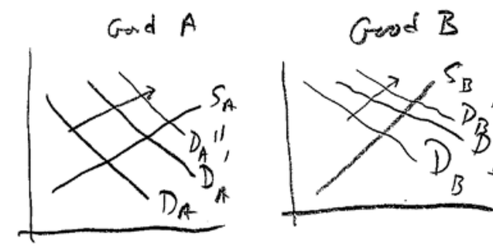
Partial

$D\uparrow \to P\uparrow$ and $Q\uparrow$

end of story



But what if A and B are subs.? Can have ripple effects between industries



When $D_A \to D_A'$

$\to P_A\uparrow \to D_B\uparrow$

to $D_B' \to P_B\uparrow$

$\to D_A'\uparrow$ to D_A''

$\to P_A\uparrow$ again $\to D_B'\uparrow$ to $D_B'' \to$ etc. (eventually converges as each shift gets smaller and smaller)

Walras noted that in Genl Equil., everything is simultaneously determined (depends upon conditions simultaneously throughout the system). Since P's, Q's simultaneously determined, we can't say that input prices cause output prices (as with labor theory of value), or that output Demand causes input prices (as w/ some neoclassicals)

As for how previous thinkers thought about this, those who believe in the labor theory of value thought that input prices, i.e. the value of labor, determined output prices. Early neoclassical writers turned this around. They argued that it's the value of the product that labor produces that determines how much labor is paid. That is, the value of output determines the value of the inputs used to produce it. Walras is arguing that neither is correct since prices are determined simultaneously.

7. (a) Fisher believed that there were two forces determining the rate of interest, the impatience rate and the investment opportunity rate. Impatience (essentially the rate of discount) yields the incentive to consume more today and save less. As more is consumed and less is saved, the rate of impatience falls since there is less waiting. However, since saving is low, the rate of investment in capital is similarly low, and this causes the investment opportunity rate (essentially the marginal product of capital) to rise. With a higher investment opportunity rate, the rewards from saving (being patient) are higher, and there will be an incentive to save more and consume less today. Now, each of these depends upon the rate of interest, and the interest rate moves to equalize these two competing forces (e.g. when the interest rate goes up, saving is higher). (b) The Fisher equation says that $i = r + \pi^e$, here i is the nominal interest rate, r is the real interest rate, and π^e is the expected rate of inflation. The Fisher hypothesis says that the nominal interest rate moves one to one with expected inflation, i.e. the real interest rate does not change with changes in expected inflation.